**BILL OF QUANTITIES**

**1. Name of the beneficiary: Mayoralty of Cahul municipality**

**2. The organiser of the procurement procedure: UNDP Moldova/EU4Moldova Programme: Focal regions**

**3. Object of procurement: Revitalization of the Cahul Urban Center**

**Offer currency USD**

**2-3-1. Roads and communication routes. Development works.**

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| No | Symbol of norms and resource code | Name of works | Unit of measurement | Volume |

| 1 | 2 | 3 | 4 | 5 |
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|  |  | **1.1. Removal of curbing** | | |
| 1 | DG04B | Removal of stone or concrete kerbs of any size laid on concrete | m | 1 398.00 |
| 2 | TrI1AA02F1 | Loading of group A materials – heavy, in chunks, by transport, distance up to 10 m – from the ramp or ground, in cars, category 1 | t | 338.00 |
| 3 | TsI51A5 | Transportation by 10 t dump truck at a distance of 5 km | t | 338.00 |
| 4 | TRI1AA09F1 | Unloading of group A materials – heavy, in chunks, by transport, distance up to 10 m – from car, category 1, from ramp or ground | t | 338.00 |
|  |  | **1.2. Demolition of the pavement** | | |
| 5 | DI109 | Mechanized stripping of asphalt concrete surfacing | m3 | 195.00 |
| 6 | DG02B | Dismantling of paving | m2 | 1 588.00 |
| 7 | DG04B | Removal of stone or concrete kerbs of any size laid on concrete | m | 719.00 |
| 8 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II (loading of debris) | 100 m3 | 3.66 |
| 9 | TsI51A5 | Transportation by 10 t dump truck at a distance of 5 km | t | 879.02 |
| 10 | TsC51B | Unloading works | 100 m3 | 3.66 |
| 11 | Dl118 | Mechanized removal of crushed stone layer | m3 | 79.00 |
| 12 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II (loading of debris) | 100 m3 | 0.79 |
| 13 | TsI51A2 | Transporting soil by 10 t dump truck at a distance of: 2 km | t | 127.00 |
| 14 | TsC51B | Unloading works | 100 m3 | 0.79 |
|  |  | **1.3. Earthworks** | | |
| 15 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II (stripping of the soil) | 100 m3 | 10.25 |
| 16 | TsI51A10 | Transporting soil by 10 t dump truck at a distance of 10 km | t | 1 896.25 |
| 17 | TsC51B | Unloading works | 100 m3 | 10.25 |
| 18 | TsE05B | Levelling of the natural ground surface and embankment platforms with a grader of up to 175 hp, by cutting the ridges and moving the excavated soil into hollows, category II soil | 100 m2 | 3.15 |
| 19 | TsD08A1 | Mechanical compaction of backfill with a 10.1-16 t pneumatic tyre roller compactor, in successive layers of 15-25 cm thickness after compaction, excluding the watering of each layer, the fills being executed with non-cohesive soil (road bed – 315 m2) | 100 m3 | 0.95 |
| 20 | TsE05B | Levelling of the natural ground surface and embankment platforms with a grader of up to 175 hp, by cutting the ridges and moving the excavated soil into hollows, soil category II | 100 m2 | 7.16 |
| 21 | TsD08A1 | Mechanical compaction of backfill with a 10.1-16 t pneumatic tyre roller compactor, in successive layers of 15-25 cm thickness after compaction, excluding the watering of each layer, the fills being executed with non-cohesive soil (road bed – 716 m2) | 100 m3 | 2.15 |
|  |  | **1.4. Execution of green areas** | | |
| 22 | TsC03E1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category I | 100 m3 | 1.624 |
| 23 | TsI51A10 | Transporting soil by 10 t dump truck at a distance of 10 km | t | 227.36 |
| 24 | TsD01A | Shovelling of loosened soil, in uniform layers, 10-30 cm thick, throwing up to 3 m from the heaps, including the breaking up of clods, light soil | m3 | 162.40 |
| 25 | TsE01A | Manual levelling of land and platforms with 10-20 cm unevenness, light soil | 100 m2 | 11.16 |
| 26 | DE11A | Small, precast concrete kerbs with a 10x15 cm cross-section, for framing green spaces, sidewalks, alleys, etc., laid on a 10x20 cm concrete foundation (small kerb, 100х20x8 cm, on concrete foundation, C16/20) | m | 297.80 |
| 27 | TsH09A | Seeding lawn on horizontal or sloping surfaces below 30%. | 100 m2 | 11.16 |
| 28 | TsH12B | Watering surfaces with a hose from a water tank | 100 m2 | 11.16 |
|  |  | **1.5. Road infrastructure** | | |
| 29 | DI155D | Stripping with a milling machine of the worn asphalt concrete layer, with a drum width of 2,000 mm, layer depth of: 4 cm (k=0.8) | m2 | 1 565.00 |
| 30 | DI155F | Stripping with a milling machine of the worn asphalt concrete layer, with a drum width of 2,000 mm, layer depth of: 14 cm (k=0.933) | m2 | 735.00 |
| 31 | DI155E | Stripping with a milling machine of the worn asphalt concrete layer, with a drum width of 2,000 mm, layer depth of: 11 cm (k=1.1) | m2 | 1 170.00 |
| 32 | TsI51A10 | Transporting soil by 10 t dump truck at a distance of 10 km | t | 676.66 |
| 33 | TsC51B | Unloading works | 100 m3 | 2.94 |
| 34 | DI110 | Creation of the draining levelling layer (ballast, optimal homogeneous aggregate mixture, 0-32 mm, h=15 cm) | m3 | 154.76 |
| 35 | DA12B | Foundation layer or re-profiling of crushed stone, for roads, laid down mechanically, done by filling up, without spreading (crushed stone LA 30, fraction 0-63, h=25 cm) | m3 | 76.25 |
| 36 | DA12B | Foundation layer or re-profiling of crushed stone, for roads, laid down mechanically, done by filling up, without spreading (crushed stone LA 30, fraction 0-63, h=18 cm) | m3 | 174.55 |
| 37 | DA10B | Road surface made of granular material, stabilized with cement or lime and granulated slag, in fixed mixing stations, with mechanical asphalting (granular mixture of crushed stone LA30, fraction 0-31.5 mm – 50%, and 50% of milled asphalt treated with cement – 3.5%) h=8cm | m3 | 213.12 |
| 38 | Dl107 | Priming of base course surfaces for the application of asphalt concrete, 0.9 l/m2 | t | 3.775 |
| 39 | DB19G | 6.0 cm thick hot-mix asphalt concrete pavement with coarse aggregates, applied by mechanical means (open asphalt concrete with macadam, BAD 22.4 leg, bitumen 50/70) | m2 | 4 194.00 |
| 40 | Dl107 | Priming of base course surfaces for the application of asphalt concrete, 0.4 l/m2 | t | 1.678 |
| 41 | DB16H | 4.0 cm thick hot-mix asphalt concrete pavement with fine aggregates, applied by mechanical means (open asphalt concrete with macadam, MAS16 rul, bitumen 50/70) | m2 | 4 194.00 |
| 42 | material | Macadam asphalt concrete, MAS16, bitumen 50/70 (admixture to DB16H norm), according to design | t | 13.43 |
|  |  | **1.6. Installation of curbing** | | |
| 43 | DE10E | Precast concrete curbs, (concrete curb 100x30x18, on concrete foundation, monolithic concrete C12/15 | m | 1 509.00 |
| 44 |  | Concrete C12/15 (added to DE10E norm) | m3 | 7.54 |
|  |  | **1.7. Side roads** | | |
| 45 | DI155A | Stripping with a milling machine of the worn asphalt concrete layer, with a drum width of 1,000 mm, layer depth of: 4 cm (k=0.8) | m2 | 373.00 |
| 46 | TsI51A10 | Transporting soil by 10 t dump truck at a distance of 10 km | t | 34.32 |
| 47 | TsC51B | Unloading works | 100 m3 | 0.15 |
| 48 | Dl107 | Priming of base course surfaces for the application of asphalt concrete, 0.4 l/m2 | t | 0.149 |
| 49 | DB16H | 6.0 cm thick hot-mix asphalt concrete pavement with fine aggregates, applied by mechanical means (macadam asphalt concrete, BA16 rul, 50/70 bitumen, 2 cm levelling layer + 4 cm wearing course), k=1.5 | m2 | 373.00 |
| 50 | material | Macadam asphalt concrete, BA16, bitumen 50/70 (added to DB16H norm), according to design | t | 1.79 |
| 51 | DE18A | Pavements made of prefabricated concrete paving slabs laid on a layer of dry cement and sand mixture, proportion 1:6, grouted with dry cement and sand mixture, 5 cm thick layer (Tactile paving – direction indicator, 20x10, h=6 cm) | m2 | 68.00 |
| 52 | DE18A | Pavements made of prefabricated concrete paving slabs laid on a layer of dry cement and sand mixture, proportion 1:6, grouted with dry cement and sand mixture, 5 cm thick layer (Tactile paving – pedestrian crossing indicator, 20x10, h=6 cm) | m2 | 25.00 |
|  |  | **1.8. Sidewalk construction** | | |
| 53 | DE11A | Small, precast concrete kerbs with a 10x15 cm cross-section, for framing green spaces, sidewalks, alleys, etc., laid on a 10x20 cm concrete foundation (small kerb, 100х20x8 cm, on concrete foundation, C12/15) | m | 1 060.00 |
| 54 | TsC21B1 | Mechanical digging with a grader up to 175 hp, including soil spreading at 10 m distance, in category II soil (h=15 cm) | 100 m3 | 3.42 |
| 55 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II | 100 m3 | 3.42 |
| 56 | TsI51A5 | Transportation by 10 t dump truck at a distance of 5 km | t | 632.40 |
| 57 | TsC51B | Unloading works | 100 m3 | 3.42 |
| 58 | TsE05C | Levelling of the natural ground surface and embankment platforms with a grader of up to 175 hp | 100 m2 | 22.79 |
| 59 | DI110 | Creation of the draining levelling layer (ballast, optimal homogeneous aggregate mixture, 0-32 mm, h=15 cm) | m3 | 298.35 |
| 60 | Dl111 | Mechanized application of foundation layers, h=12 cm, LA 30 crushed stone, 16-32 mm fraction, at sidewalks | m2 | 1 989.00 |
| 61 | Dl111 | Mechanized application of foundation layers, h=12 cm, LA 30 crushed stone, 16-32 mm fraction, at sidewalks | m2 | 290.00 |
| 62 | DE18A | Pavements made of prefabricated concrete paving slabs laid on a layer of dry cement and sand mixture, proportion 1:6, grouted with dry cement and sand mixture, 5 cm thick layer (vibropressed paving, Brick type, h=6cm), grey colour. | m2 | 2 279.00 |
|  |  | **1.9. Bicycle path** | | |
| 63 | TsC21B1 | Mechanical digging with a grader up to 175 hp, including soil spreading at 10 m distance, in category II soil (h=33 cm) | 100 m3 | 0.73 |
| 64 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II | 100 m3 | 0.73 |
| 65 | TsI51A2 | Transporting soil by 10 t dump truck at a distance of: 2 km | t | 134.92 |
| 66 | TsC51B | Unloading works | 100 m3 | 0.73 |
| 67 | TsE05C | Levelling of the natural ground surface and embankment platforms with a grader of up to 175 hp | 100 m2 | 2.21 |
| 68 | DE11A | Small, precast concrete kerbs with a 10x15 cm cross-section, for framing green spaces, sidewalks, alleys, etc., laid on a 10x20 cm concrete foundation (small kerb, 100х20x8 cm, on concrete foundation, C12/15) | m | 136.00 |
| 69 | DI110 | Creation of the draining levelling layer (ballast, optimal homogeneous aggregate mixture, 0-32 mm, h=15 cm) | m3 | 33.20 |
| 70 | DA12B | Foundation layer or re-profiling of crushed stone, for roads, laid down mechanically, done by filling up, without spreading (crushed stone LA 30, fraction 0-63, h=18 cm) | m3 | 39.80 |
| 71 | Dl107 | Priming of base course surfaces for the application of asphalt concrete, 0.4 l/m2 | t | 0.088 |
| 72 | DB16H | 5.0 cm thick hot-mix asphalt concrete pavement with fine aggregates, applied by mechanical means (macadam asphalt concrete, BA16 rul, bitumen 50/70), k=1.25 | m2 | 221.00 |
| 73 | material | Macadam asphalt concrete, BA16, bitumen 50/70 (added to DB16H norm), according to design | t | 0.88 |
| 74 | DF57A | Installation of delineation elements – Bicycle lane separation elements, L = 1.0 m (according to design) | pcs. | 88.00 |
| 75 | DF57A | Installation of traffic signage elements – directional poles, h = 750 mm (according to design) | pcs. | 16.00 |
|  |  | **1.10. Reconstruction of the road infrastructure on Libertatii Street** | | |
|  |  | **1.10.1. Tree clearing works** | | |
| 76 | TsG08D | Mechanical felling of hardwood and fir trees with a mechanical saw, including the transportation of the wood material to storage areas, outside or in the area of the works, trees having a diameter of 10-30 cm. | pcs. | 1.00 |
| 77 | TsG06A | Removal by hand of resinous (except fir) or deciduous softwood logs and carrying of wood material to storage areas, outside or in the area of the works, carried by hand, diameter of logs or roots – 10-30 cm | pcs. | 1.00 |
| 78 | TrI1AG03G2 | Group G materials – round, thin, resinous or deciduous softwoods, loaded from the ground into category 2 cars | t | 0.45 |
| 79 | TsI51A10 | Transporting soil by 10 t dump truck at a distance of 10 km | t | 0.45 |
|  |  | **1.10.2. Demolition of the road infrastructure** | | |
| 80 | DI109 | Mechanized stripping of asphalt concrete surfacing, h = 8 cm | m3 | 63.20 |
| 81 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II (loading of debris) | 100 m3 | 0.63 |
| 82 | TsI51A10 | Transporting soil by 10 t dump truck at a distance of 10 km | t | 139.04 |
| 83 | TsC51B | Unloading works | 100 m3 | 0.63 |
| 84 | Dl118 | Mechanized removal of crushed stone layer, h = 15 cm | m3 | 118.50 |
| 85 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II (loading of debris) | 100 m3 | 1.185 |
| 86 | TsI51A2 | Transporting soil by 10 t dump truck at a distance of: 2 km | t | 201.45 |
| 87 | TsC51B | Unloading works | 100 m3 | 1.185 |
|  |  | **1.10.3. Demolition of the pavement** | | |
| 88 | DI109 | Mechanized stripping of asphalt concrete surfacing, h=3cm | m3 | 2.55 |
| 89 | Dl118 | Mechanized removal of crushed stone layer, h=5cm | m3 | 4.25 |
| 90 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II (loading of debris) | 100 m3 | 0.07 |
| 91 | TsI51A10 | Transporting soil by 10 t dump truck at a distance of 10 km | t | 12.33 |
| 92 | TsC51B | Unloading works | 100 m3 | 0.07 |
|  |  | **1.10.4. Earthworks** | | |
| 93 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II (stripping of the soil) | 100 m3 | 5.94 |
| 94 | TsI51A10 | Transporting soil by 10 t dump truck at a distance of 10 km | t | 1 098.00 |
| 95 | TsC51B | Unloading works | 100 m3 | 5.94 |
| 96 | TsE05B | Levelling of the natural ground surface and embankment platforms with a grader of up to 175 hp, by cutting the ridges and moving the excavated soil into hollows, category II soil | 100 m2 | 11.00 |
| 97 | TsD08A1 | Mechanical compaction of backfill with a 10.1-16 t pneumatic tyre roller compactor, in successive layers of 15-25 cm thickness after compaction, excluding the watering of each layer, the fills being executed with non-cohesive soil (road bed – 1,100 m2) | 100 m3 | 3.30 |
|  |  | **1.10.5. Road infrastructure** | | |
| 98 | DI110 | Creation of the draining levelling layer (ballast, optimal homogeneous aggregate mixture, 0-32 mm, h=15 cm) | m3 | 176.00 |
| 99 | DA12B | Foundation layer or re-profiling of crushed stone, for roads, laid down mechanically, done by filling up, without spreading (crushed stone LA 30, fraction 0-63, h=22 cm) | m3 | 202.00 |
| 100 | Dl107 | Priming of base course surfaces for the application of asphalt concrete, 0.9 l/m2 | t | 0.734 |
| 101 | DB19G | 6.0 cm thick hot-mix asphalt concrete pavement with coarse aggregates, applied by mechanical means (open asphalt concrete with macadam, BAD 22.4 leg, bitumen 50/70) | m2 | 815.00 |
| 102 | Dl107 | Priming of base course surfaces for the application of asphalt concrete, 0.4 l/m2 | t | 0.326 |
| 103 | DB16H | 4.0 cm thick hot-mix asphalt concrete pavement with fine aggregates, applied by mechanical means (open asphalt concrete with macadam, BA16 rul, bitumen 50/70) | m2 | 815.00 |
| 104 | material | Macadam asphalt concrete, BA16, bitumen 50/70 (added to DB16H norm), according to design | t | 2.61 |
|  |  | **1.11. Reconstruction of the road infrastructure on Hajdeu Street** | | |
|  |  | **1.11.1. Demolition of the road infrastructure** | | |
| 105 | DI109 | Mechanized stripping of asphalt concrete surfacing, h=12cm | m3 | 70.20 |
| 106 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II (loading of debris) | 100 m3 | 0.70 |
| 107 | TsI51A10 | Transporting soil by 10 t dump truck at a distance of 10 km | t | 154.44 |
| 108 | TsC51B | Unloading works | 100 m3 | 0.70 |
| 109 | Dl118 | Mechanized removal of crushed stone layer, h=12cm | m3 | 70.20 |
| 110 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II (loading of debris) | 100 m3 | 0.70 |
| 111 | TsI51A2 | Transporting soil by 10 t dump truck at a distance of: 2 km | t | 119.34 |
| 112 | TsC51B | Unloading works | 100 m3 | 0.70 |
|  |  | **1.11.2. Earthworks** | | |
| 113 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II (stripping of the soil) | 100 m3 | 2.59 |
| 114 | TsI51A10 | Transporting soil by 10 t dump truck at a distance of 10 km | t | 479.00 |
| 115 | TsC51B | Unloading works | 100 m3 | 2.59 |
| 116 | TsE05B | Levelling of the natural ground surface and embankment platforms with a grader of up to 175 hp, by cutting the ridges and moving the excavated soil into hollows, category II soil | 100 m2 | 9.54 |
| 117 | TsD08A1 | Mechanical compaction of backfill with a 10.1-16 t pneumatic tyre roller compactor, in successive layers of 15-25 cm thickness after compaction, excluding the watering of each layer, the fills being executed with non-cohesive soil (road bed – 954 m2) | 100 m3 | 2.86 |
|  |  | **1.11.3. Road infrastructure** | | |
| 118 | DI110 | Creation of the draining levelling layer (ballast, optimal homogeneous aggregate mixture, 0-32 mm, h=15 cm) | m3 | 143.00 |
| 119 | DA12B | Foundation layer or re-profiling of crushed stone, for roads, laid down mechanically, done by filling up, without spreading (crushed stone LA 30, fraction 0-63, h=22 cm) | m3 | 210.00 |
| 120 | Dl107 | Priming of base course surfaces for the application of asphalt concrete, 0.9 l/m2 | t | 0.765 |
| 121 | DB19G | 6.0 cm thick hot-mix asphalt concrete pavement with coarse aggregates, applied by mechanical means (open asphalt concrete with macadam, BAD 22.4 leg, bitumen 50/70) | m2 | 850.00 |
| 122 | Dl107 | Priming of base course surfaces for the application of asphalt concrete, 0.4 l/m2 | t | 0.34 |
| 123 | DB16H | 4.0 cm thick hot-mix asphalt concrete pavement with fine aggregates, applied by mechanical means (open asphalt concrete with macadam, BA16 rul, bitumen 50/70) | m2 | 850.00 |
| 124 | material | Macadam asphalt concrete, BA16, bitumen 50/70 (added to DB16H norm), according to design | t | 2.72 |
|  |  | **1.12. Reconstruction of the parking lot on Hajdeu Street** | | |
|  |  | **1.12.1. Demolition of the road infrastructure** | | |
| 125 | DI109 | Mechanized stripping of asphalt concrete surfacing, h=12cm | m3 | 81.60 |
| 126 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II (loading of debris) | 100 m3 | 0.82 |
| 127 | TsI51A10 | Transporting soil by 10 t dump truck at a distance of 10 km | t | 179.52 |
| 128 | TsC51B | Unloading works | 100 m3 | 0.82 |
| 129 | Dl118 | Mechanized removal of crushed stone layer, h=12cm | m3 | 81.60 |
| 130 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II (loading of debris) | 100 m3 | 0.82 |
| 131 | TsI51A2 | Transporting soil by 10 t dump truck at a distance of: 2 km | t | 138.72 |
| 132 | TsC51B | Unloading works | 100 m3 | 0.82 |
|  |  | **1.12.2. Earthworks** | | |
| 133 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II (stripping of the soil) | 100 m3 | 1.80 |
| 134 | TsI51A10 | Transporting soil by 10 t dump truck at a distance of 10 km | t | 333.00 |
| 135 | TsC51B | Unloading works | 100 m3 | 1.80 |
| 136 | TsE05B | Levelling of the natural ground surface and embankment platforms with a grader of up to 175 hp, by cutting the ridges and moving the excavated soil into hollows, category II soil | 100 m2 | 6.80 |
| 137 | TsD08A1 | Mechanical compaction of backfill with a 10.1-16 t pneumatic tyre roller compactor, in successive layers of 15-25 cm thickness after compaction, excluding the watering of each layer, the fills being executed with non-cohesive soil (road bed – 680 m2) | 100 m3 | 2.04 |
|  |  | **1.12.3. Road infrastructure** | | |
| 138 | DI110 | Creation of the draining levelling layer (ballast, optimal homogeneous aggregate mixture, 0-32 mm, h=15 cm) | m3 | 109.00 |
| 139 | DA12B | Foundation layer or re-profiling of crushed stone, for roads, laid down mechanically, done by filling up, without spreading (crushed stone LA 30, fraction 0-63, h=25 cm) | m3 | 170.00 |
| 140 | DE18A | Pavements made of prefabricated concrete paving slabs laid on a layer of dry cement and sand mixture, proportion 1:6, grouted with dry cement and sand mixture, 5 cm thick layer (vibropressed paving, Brick type, h = 10 cm) | m2 | 680.00 |
|  |  | **1.13. Reconstruction of the parking lot in the vicinity of the Palace of Culture** | | |
|  |  | **1.13.1. Demolition of the road infrastructure** | | |
| 141 | Dl118 | Mechanized removal of crushed stone layer, h=10cm | m3 | 177.00 |
| 142 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II (loading of debris) | 100 m3 | 1.77 |
| 143 | TsI51A2 | Transporting soil by 10 t dump truck at a distance of: 2 km | t | 300.90 |
| 144 | TsC51B | Unloading works | 100 m3 | 1.77 |
|  |  | **1.13.2. Earthworks** | | |
| 145 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II (stripping of the soil) | 100 m3 | 5.87 |
| 146 | TsI51A10 | Transporting soil by 10 t dump truck at a distance of 10 km | t | 1 086.00 |
| 147 | TsC51B | Unloading works | 100 m3 | 5.87 |
| 148 | TsE05B | Levelling of the natural ground surface and embankment platforms with a grader of up to 175 hp, by cutting the ridges and moving the excavated soil into hollows, category II soil | 100 m2 | 17.70 |
| 149 | TsD08A1 | Mechanical compaction of backfill with a 10.1-16 t pneumatic tyre roller compactor, in successive layers of 15-25 cm thickness after compaction, excluding the watering of each layer, the fills being executed with non-cohesive soil (road bed – 1,770 m2) | 100 m3 | 5.31 |
|  |  | **1.13.3. Road infrastructure** | | |
| 150 | DI110 | Creation of the draining levelling layer (ballast, optimal homogeneous aggregate mixture, 0-32 mm, h=15 cm) | m3 | 283.00 |
| 151 | DA12B | Foundation layer or re-profiling of crushed stone, for roads, laid down mechanically, done by filling up, without spreading (crushed stone LA 30, fraction 0-63, h=18 cm) | m3 | 319.00 |
| 152 | DE18A | Pavements made of prefabricated concrete paving slabs laid on a layer of dry cement and sand mixture, proportion 1:6, grouted with dry cement and sand mixture, 5 cm thick layer (vibropressed paving, Brick type, h = 8 cm) | m2 | 1 770.00 |
| 153 | DE10E | Precast concrete curbs, (concrete curb 100x30x18, on concrete foundation, monolithic concrete C12/15 | m | 275.00 |
|  |  | **1.14. Reconstruction in the area adjacent to the Palace of Culture** | | |
|  |  | **1.14.1. Earthworks** | | |
| 154 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II (stripping of the soil) | 100 m3 | 12.35 |
| 155 | TsI51A10 | Transporting soil by 10 t dump truck at a distance of 10 km | t | 2 284.00 |
| 156 | TsC51B | Unloading works | 100 m3 | 12.35 |
| 157 | TsE05B | Levelling of the natural ground surface and embankment platforms with a grader of up to 175 hp, by cutting the ridges and moving the excavated soil into hollows, category II soil | 100 m2 | 39.05 |
| 158 | TsD08A1 | Mechanical compaction of backfill with a 10.1-16 t pneumatic tyre roller compactor, in successive layers of 15-25 cm thickness after compaction, excluding the watering of each layer, the fills being executed with non-cohesive soil (road bed – 3,905 m2) | 100 m3 | 11.72 |
|  |  | **1.14.2. Road infrastructure** | | |
| 159 | DI110 | Creation of the draining levelling layer (ballast, optimal homogeneous aggregate mixture, 0-32 mm, h=15 cm) | m3 | 609.00 |
| 160 | DA12B | Foundation layer or re-profiling of crushed stone, for roads, laid down mechanically, done by filling up, without spreading (crushed stone LA 30, fraction 0-63, h=18 cm) | m3 | 422.00 |
| 161 | DA12B | Foundation layer or re-profiling of crushed stone, for roads, laid down mechanically, done by filling up, without spreading (crushed stone LA 30, fraction 0-63, h=25 cm) | m3 | 365.00 |
| 162 | DE18A | Pavements made of prefabricated concrete paving slabs laid on a layer of dry cement and sand mixture, proportion 1:6, grouted with dry cement and sand mixture, 5 cm thick layer (vibropressed pavement with Black Granite surface, h=6cm) | m2 | 780.00 |
| 163 | DE18A | Pavements made of prefabricated concrete paving slabs laid on a layer of dry cement and sand mixture, proportion 1:6, grouted with dry cement and sand mixture, 5 cm thick layer (vibropressed pavement with White Granite surface, h=6cm) | m2 | 1 565.00 |
| 164 | DE18A | Pavements made of prefabricated concrete paving slabs laid on a layer of dry cement and sand mixture, proportion 1:6, grouted with dry cement and sand mixture, 5 cm thick layer (vibropressed pavement with Black Granite surface, h=8cm) | m2 | 475.00 |
| 165 | DE18A | Pavements made of prefabricated concrete paving slabs laid on a layer of dry cement and sand mixture, proportion 1:6, grouted with dry cement and sand mixture, 5 cm thick layer (vibropressed pavement with White Granite surface, h=8cm) | m2 | 985.00 |
| 166 | DE10E | Precast concrete curbs, (concrete curb 100x30x15, on concrete foundation, monolithic concrete C12/15 | m | 360.00 |
| 167 | DE11A | Small, precast concrete kerbs with a 10x15 cm cross-section, for framing green spaces, sidewalks, alleys, etc., laid on a 10x20 cm concrete foundation (small kerb, 100х20x8 cm, on concrete foundation, C12/15) | m | 410.00 |
|  |  | **1.15. Road safety** | | |
| 168 | DF18A | Installation of metal traffic sign posts, industrially manufactured (CKM1.45) | pcs. | 11.00 |
| 169 | DF18A | Installation of metal traffic sign posts, industrially manufactured (CKM2.45) | pcs. | 28.00 |
| 170 | DF19A | Mounting of traffic signs made of steel or aluminium sheet on a ready-installed posts – A900 signs | pcs. | 11.00 |
| 171 | DF19A | Mounting of traffic signs made of steel or aluminium sheet on a ready-installed posts – B700 signs | pcs. | 47.00 |
| 172 | DF19A | Mounting of traffic signs made of steel or aluminium sheet on a ready-installed posts – D-700 signs | pcs. | 3.00 |
| 173 | DF19A | Mounting of traffic signs made of steel or aluminium sheet on a ready-installed posts – 350x700 signs | pcs. | 10.00 |
| 174 | DF17A | Longitudinal, transverse and miscellaneous markings, executed mechanically, with paint, on road surfaces | m2 | 236.00 |

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**2-3-2. Building elements. Reconstruction of the existing water fountain**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Symbol of norms and resource code | Name of works | Unit of measurement | Volume |

| 1 | 2 | 3 | 4 | 5 |
| --- | --- | --- | --- | --- |
| 1 | RpCB18G | Demolition of old concrete by mechanical means, reinforced concrete | m3 | 3.3500 |
| 2 | TsD04C | Compaction by hand tamper of fills made in horizontal or 1/4 inclined diggings, including the watering of each layer of soil, 20 cm thick, non-cohesive soil. | m3 | 4.8600 |
| 3 | TsC54C | Gravel foundation layer | m3 | 2.4300 |
| 4 | CA03G | Reinforced concrete poured by conventional means, in foundations, plinths, retaining walls, walls below ground level, prepared with a concrete mixer or ready-mixed concrete as per norm CA01, poured by conventional means, reinforced concrete class C 25/30 | m3 | 52.5000 |
| 5 | CB03A | Reusable panel formwork with 15 mm plywood for pouring concrete into stem walls, pocket footings and foundation for equipment, including supports | m2 | 46.3000 |
| 6 | CC01E | Concrete steel reinforcement OB 37, fabricated at on-site workshops and installed, with bar diameters over and including 8 mm, in continuous and raft foundations (diam. 6 A240) | kg | 10.5500 |
| 7 | CC01F | Concrete steel reinforcement OB 37, fabricated at on-site workshops and installed, with bar diameters over and including 8 mm, in continuous and raft foundations (diam. 10 A240) | kg | 159.1000 |
| 8 | CC01F1 | Concrete steel reinforcement PC 52, fabricated at on-site workshops and installed, with bar diameters over and including 8 mm, in continuous and raft foundations (diam. 8 A500) | kg | 1 561,0000 |
| 9 | CC01F1 | Concrete steel reinforcement PC 52, fabricated at on-site workshops and installed, with bar diameters over and including 8 mm, in continuous and raft foundations (diam. 10 A500) | kg | 1 347,6500 |
| 10 | TsC54C | Foundation layer of gravel (inert material) | m3 | 1.6000 |

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**2-3-3. Building elements. SC-1 staircase and planter.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Symbol of norms and resource code | Name of works | Unit of measurement | Volume |

| 1 | 2 | 3 | 4 | 5 |
| --- | --- | --- | --- | --- |
|  |  | **1. Sc-1 staircase** | | |
| 1 | RpCK42D | Removal of cold floors made of bricks, acid-proof bricks or prefabricated pavers | m2 | 89.8500 |
| 2 | TsC54C | Gravel foundation layer | m3 | 18.7300 |
| 3 | CA04F | Concrete poured in slabs, beams, columns, prepared with a concrete mixer or ready-mixed concrete as per norm CA01 and poured by conventional means (concrete C 12/15) | m3 | 39.1000 |
| 4 | CB03E | Formwork of reusable panels with 15 mm plywood for pouring concrete into slabs and beams in buildings up to and including 20 m in height, except for supports | m2 | 54.6000 |
| 5 | CC03C | Mounting welded meshes at heights less than or equal to 35 m, in slabs (mesh diam. 5 Bp-1 150x150 ) | kg | 1 143,3000 |
| 6 | CC02L2 | PC 52 concrete steel reinforcement, fabricated in site workshops, with bar diameters over 8 mm, and mounted in beams and columns, at heights less than or equal to 35 m, except for structures with sliding formwork (diam. 10 A500 ) | kg | 94.4300 |
| 7 | CG19A | Marble floors, ready-cut and finished with a thickness of 5 cm, installed plain or according to pattern, including 3 cm adhesive layer of cement mortar M 100-T, including grouting with white cement, cleaning and washing with water, executed in rooms with surface areas greater than 16 sq.m, with strips | m2 | 220.0000 |
| 8 | CH06A | Stainless steel railing | m | 26.6000 |
|  |  | **2. Monolithic planter –13 pcs** | | |
| 9 | TsA02E | Manual digging of earth in confined spaces, less than or more than 1.00 m wide, executed without supports, with vertical slope, in foundations, canals, basements, drains, steps, in medium cohesive or very cohesive earth, depth < 1.5 m medium soil | m3 | 39.9000 |
| 10 | TsD01B | Shovelling of loosened soil, in uniform layers, 10-30 cm thick, throwing up to 3 m from the heaps, including the breaking up of clods, medium soil | m3 | 20.0000 |
| 11 | TsD04A | Compaction by hand tamper of fills made in horizontal or 1/4 inclined diggings, including the watering of each layer of soil, 10 cm thick, non-cohesive soil. | m3 | 19.9000 |
| 12 | TsC54C | Gravel foundation layer | m3 | 5.2000 |
| 13 | CA03F | Plain concrete poured by conventional means, in foundations, plinths, retaining walls, walls below ground level, prepared with a concrete mixer or ready-mixed concrete as per norm CA01, poured by conventional means, plain concrete class C 20/25 | m3 | 27.3000 |
| 14 | CB03D | Reusable panel formwork with 15 mm plywood for pouring concrete in walls and diaphragms in buildings up to and including 20 m in height, including supports. | m2 | 274.5600 |
| 15 | CC03A | Mounting welded meshes at heights less than or equal to 35 m, in walls and diaphragms, with mesh weight up to 3 kg/sqm (mesh Bp 5 150x150) | kg | 737.1000 |

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**2-3-3a. Building elements. Technical building**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Symbol of norms and resource code | Name of works | Unit of measurement | Volume |

| 1 | 2 | 3 | 4 | 5 |
| --- | --- | --- | --- | --- |
|  |  | **1. Earthworks** | | |
| 1 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II | 100 m3 | 0.4200 |
| 2 | TsA20B | Manual digging of soil, slopes, excavator or scraper excavated embankments, to complete digging the slope, in medium-hard soil | m3 | 0.8500 |
| 3 | TsI51A5 | Transporting soil by 10 t dump truck at a distance of: 5 km | t | 70.0000 |
| 4 | TsC50B | Repair and maintenance of earth roads when transporting soil, for every 0.5 km, soil category II ( K=2, per 1 km ) | 100 m3 | 0.4200 |
| 5 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II (quarry excavation for backfilling) | 100 m3 | 0.2450 |
| 6 | TsI51A5 | Transporting soil by 10 t dump truck at a distance of: 5 km | t | 40.4500 |
| 7 | TsD01B | Shovelling of loosened soil, in uniform layers, 10-30 cm thick, throwing up to 3 m from the heaps, including the breaking up of clods, medium soil | m3 | 2.4500 |
| 8 | TsD02B1 | Spreading of loose soil, soil category I or II, with a 65-80 HP crawler tractor, in layers 21-30 cm thick. | 100 m3 | 0.2200 |
| 9 | TsD08B1 | Mechanical compaction of backfill with a 10.1-16 t pneumatic tyre roller compactor, in successive layers of 15-25 cm thickness after compaction, excluding the watering of each layer, the fills being executed with cohesive soil. | 100 m3 | 0.2450 |
|  |  | **2. Foundation slab** | | |
| 10 | TsC54C | Gravel foundation layer | m3 | 1.3000 |
| 11 | CA02C | Plain concrete poured in levels, slopes, excavations at heights up to and including 35 m, prepared with a concrete mixer as per norm CA01 or ready-mixed concrete, poured by conventional means (concrete C 8/10). | m3 | 1.3000 |
| 12 | CA03G | Reinforced concrete poured by conventional means, in foundations, plinths, retaining walls, walls below ground level, prepared with a concrete mixer or ready-mixed concrete as per norm CA01, poured by conventional means, reinforced concrete class C 25/30 | m3 | 2.9400 |
| 13 | CB03A | Reusable panel formwork with 15 mm plywood for pouring concrete into stem walls, pocket footings and foundation for equipment, including supports | m2 | 3.6500 |
| 14 | CC01F1 | Concrete steel reinforcement PC 52, fabricated at on-site workshops and installed, with bar diameters over and including 8 mm, in continuous and raft foundations (diam. 8 A500) | kg | 137.3200 |
| 15 | CC01F1 | Concrete steel reinforcement PC 52, fabricated at on-site workshops and installed, with bar diameters over and including 8 mm, in continuous and raft foundations (diam. 10 A500) | kg | 8.5200 |
| 16 | CC02I | Concrete steel reinforcement OB 37, fabricated in site workshops, with bar diameters up to and including 8 mm, mounted in walls and diaphragms, at heights up to and including 35 m, excluding structures with sliding formwork (diam. 6 A240, wall ties). | kg | 4.0300 |
| 17 | CC02J2 | Concrete steel reinforcement PC 52, fabricated in site workshops, with bar diameters up to and including 8 mm, mounted in walls and diaphragms, at heights up to and including 35 m, excluding structures with sliding formwork (diam. 10 A500, wall ties). | kg | 96.7700 |
|  |  | **3. Walls** | | |
| 18 | CA03F | Plain concrete poured by conventional means, in foundations, plinths, retaining walls, walls below ground level, prepared with a concrete mixer or ready-mixed concrete as per norm CA01, poured by conventional means, plain concrete class C 20/25 | m3 | 6.2000 |
| 19 | CB03D | Reusable panel formwork with 15 mm plywood for pouring concrete in walls and diaphragms in buildings up to and including 20 m in height, including supports. | m2 | 62.0000 |
| 20 | CC02J2 | Concrete steel reinforcement PC 52, fabricated in site workshops, with bar diameters up to and including 8 mm, mounted in walls and diaphragms, at heights up to and including 35 m, excluding structures with sliding formwork (diam. 8 A500). | kg | 175.4200 |
| 21 | CC02J2 | Concrete steel reinforcement PC 52, fabricated in site workshops, with bar diameters up to and including 8 mm, mounted in walls and diaphragms, at heights up to and including 35 m, excluding structures with sliding formwork (diam. 10 A500). | kg | 52.5300 |
| 22 | CC02I | Concrete steel reinforcement OB 37, fabricated in site workshops, with bar diameters up to and including 8 mm, mounted in walls and diaphragms, at heights up to and including 35 m, excluding structures with sliding formwork (diam. 6 A240, flat frame C-1) | kg | 12.3200 |
| 23 | CC02J2 | Concrete steel reinforcement PC 52, fabricated in site workshops, with bar diameters up to and including 8 mm, mounted in walls and diaphragms, at heights up to and including 35 m, excluding structures with sliding formwork (diam. 10 A500, flat frame C-1) | kg | 145.0400 |
|  |  | **4. Ceiling** | | |
| 24 | CA04F | Concrete poured in slabs, beams, columns, prepared with a concrete mixer or ready-mixed concrete as per norm CA01 and poured by conventional means (concrete C 25/30) | m3 | 1.5000 |
| 25 | CB03E | Formwork of reusable panels with 15 mm plywood for pouring concrete into slabs and beams in buildings up to and including 20 m in height, except for supports | m2 | 8.0000 |
| 26 | CB11B | Supports with extendable formwork props from the stock, used for the assembly of prefabricated panels, prefabricated ceiling slabs, for the casting of partially or totally monolithic ceiling slabs, with beams, or for monolithic beams, with prefabricated ceiling slabs type PE 5100 R | pcs. | 24.0000 |
| 27 | CC02N2 | PC 52 concrete steel reinforcement, fabricated in site workshops, with bar diameters over 8 mm, mounted in slabs, at heights less than or equal to 35 m, excluding structures with sliding formwork (diam. 8 A500) | kg | 140.3400 |
| 28 | CC02N2 | PC 52 concrete steel reinforcement, fabricated in site workshops, with bar diameters over 8 mm, mounted in slabs, at heights less than or equal to 35 m, excluding structures with sliding formwork (diam. 10 A500) | kg | 7.4000 |
| 29 | CC02N2 | PC 52 concrete steel reinforcement, fabricated in site workshops, with bar diameters over 8 mm, mounted in slabs, at heights less than or equal to 35 m, excluding structures with sliding formwork (diam. 14 A500) | kg | 115.9700 |

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**2-3-4. Dendrological solutions.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Symbol of norms and resource code | Name of works | Unit of measurement | Volume |

| 1 | 2 | 3 | 4 | 5 |
| --- | --- | --- | --- | --- |
|  |  | **1. Fertile plant substrate, gravel for drainage**  **Lawn** | | |
| 1 | TsC03E1 | Mechanical excavation with the excavator of 0.4 - 0.7 m3, in soil with natural moisture, unloading in vehicles, land category 1. | 100m3 | 3,3420 |
| 2 | TsI51A10 | Transporting soil with a 10 ton dump truck at a distance of 10 km | ton | 467,8800 |
| 3 | RpCA06A | Soil filling, made in horizontal layers of 20-30 cm, watered and well beaten with the hand pestle, including the spreading of the soil in layers | m3 | 34,2000 |
| 4 | TsC54C | Gravel foundation layer | m3 | 24,7800 |
| 5 | TsH41A apl | Protection and stabilization of slopes with a maximum slope of 2:3, exposed to erosion, with polyethylene geocells on h=50mm anchors | m2 | 35,4000 |
| 6 | TsH05C | Manual levelling of land and platforms with 10-20 cm unevenness, light soil | m2 | 2 000,0000 |
| 7 | TsH09A | Seeding lawn on horizontal or sloping surfaces below 30%. | 100 m2 | 20.0000 |
| 8 | TsH12B | Watering surfaces with a hose from a water tank | 100 m2 | 20.0000 |
|  |  | **2. Deciduous shrubs** | | |
| 9 | TsH238B | Manual digging of pits for planting trees and shrubs in unfrozen soil, depth up to 0.4 m, medium soil | pcs. | 349.0000 |
| 10 | TsC54C | Gravel foundation layer | m3 | 17.4500 |
| 11 | TsH24A | Planting shrubs without burlap | pcs. | 349.0000 |
| 12 | Supplier price | Berberis x ottawensis Superba ( Dracila ) | pcs. | 4.0000 |
| 13 | Supplier price | Berberis Thumbergii ( Dracila ) | pcs. | 14.0000 |
| 14 | Supplier price | Buxus sempervirens, glod ( Cimsir ) | pcs. | 15.0000 |
| 15 | Supplier price | Chaenomeles superba Orange Trail (Japanese quince) (Japanese quince) | pcs. | 2.0000 |
| 16 | Supplier price | Cornus alba Elegantissima ( Corn ) | pcs. | 33.0000 |
| 17 | Supplier price | Cotoneaster suecicus Coral Beauty | pcs. | 45.0000 |
| 18 | Supplier price | Forsythia intermedia Minigold | pcs. | 7.0000 |
| 19 | Supplier price | Hibiscus syriacus Flower Tower Purple ( Zamosita de Siria ) | pcs. | 10.0000 |
| 20 | Supplier price | Mahonia aguifolium | pcs. | 9.0000 |
| 21 | Supplier price | Philadelphus Coronarius | pcs. | 6.0000 |
| 22 | Supplier price | Prunus laurocerasus rotundifolia | pcs. | 80.0000 |
| 23 | Supplier price | Physocarpus opulifolius Luteus ( Fizocarp ) | pcs. | 12.0000 |
| 24 | Supplier price | Physocarpus opulifolius Diabolo ( Fizocarp ) | pcs. | 20.0000 |
| 25 | Supplier price | Spiraea japonica Little Princess | pcs. | 92.0000 |
|  |  | **3. Conifers** | | |
| 26 | TsH238E | Manual digging of pits for planting trees and shrubs in unfrozen soil, depth between 0.4 and 0.7 m, medium soil | pcs. | 49.0000 |
| 27 | TsC54C | Gravel foundation layer | m3 | 2.4000 |
| 28 | TsH110B | Planting trees in ready dug pits: resinous trees | pcs. | 49.0000 |
| 29 | Supplier price | Cupressocyparis leylandii Gold Rider | pcs. | 13.0000 |
| 30 | Supplier price | Juniperus virginiana Hetz | pcs. | 2.0000 |
| 31 | Supplier price | Juniperus horizontalis Blue Forest | pcs. | 5.0000 |
| 32 | Supplier price | Juniperus media/pfitzeriana Mint Juler | pcs. | 5.0000 |
| 33 | Supplier price | Thuja orientalis Aurea Nana | pcs. | 1.0000 |
| 34 | Supplier price | Thuja occidentalis Wagneri | pcs. | 12.0000 |
| 35 | Supplier price | Thuja occidentalis Little Gem | pcs. | 11.0000 |
|  |  | **4. Perennials and ornamental grasses** | | |
| 36 | TsH238B | Manual digging of pits for planting trees and shrubs in unfrozen soil, depth up to 0.4 m, medium soil | pcs. | 516.0000 |
| 37 | TsH30B | Planting flowers and perennials over 15 cm tall in the ground | 100 pcs. | 5.1600 |
| 38 | Supplier price | Geranium macrorrhizum | pcs. | 107.0000 |
| 39 | Supplier price | Echinacea purpurea Magnus | pcs. | 42.0000 |
| 40 | Supplier price | Lavandula angustifolia ( Lavanda ) | pcs. | 59.0000 |
| 41 | Supplier price | Miscanthus sinensis Morning Light | pcs. | 16.0000 |
| 42 | Supplier price | Paeonia | pcs. | 8.0000 |
| 43 | Supplier price | Pennisetum alopecuroides Hameln | pcs. | 67.0000 |
| 44 | Supplier price | Rosa Hybrid Tea | pcs. | 58.0000 |
| 45 | Supplier price | Sedum spectabile Stardust | pcs. | 28.0000 |
| 46 | Supplier price | Sedum spectabile Brilliant | pcs. | 15.0000 |
| 47 | Supplier price | Stachys byzantina | pcs. | 83.0000 |
| 48 | Supplier price | Hosta | pcs. | 8.0000 |
| 49 | Supplier price | Yucca filamentosa variegata | pcs. | 25.0000 |
|  |  | **5. Perennial groundcovers** | | |
| 50 | TsH238B | Manual digging of pits for planting trees and shrubs in unfrozen soil, depth up to 0.4 m, medium soil | pcs. | 207.0000 |
| 51 | TsH30A | Planting flowers and perennials up to 15 cm tall in the ground | 100 pcs. | 2.0700 |
| 52 | Supplier price | Thymus serpyllum | pcs. | 72.0000 |
| 53 | Supplier price | Vinca minor | pcs. | 135.0000 |
|  |  | **6. Decorative groundcover** | | |
| 54 | RpDD27B | Reinforcement of weak or unstable foundation soils in single or multi-layer, executed with geotextiles (in plantings and around walls) | m2 | 383,3000 |
| 55 | TsC54C | Gravel foundation layer (white decorative gravel, 10-20 mm fraction) | m3 | 61,7000 |
| 56 | TsC54C | Gravel foundation layer (grey decorative gravel, 10-20 mm fraction) | m3 | 4,7000 |
| 57 | Supplier price | Country Line lawn edging, polyethylene, H=10 cm, brown | m | 115.2000 |

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**2-3-5. Automated irrigation solutions**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Symbol of norms and resource code | Name of works | Unit of measurement | Volume |

| 1 | 2 | 3 | 4 | 5 |
| --- | --- | --- | --- | --- |
|  |  | 1. **Equipment** | | |
| 1 | market price | Irrigation solenoid valve, 1 Inch FI, solenoid 9V with flow regulator 100-DVF 9V | pcs. | 25.0000 |
| 2 | market price | Bluetooth irrigation controller – 9V battery operation – Solem Lo-Ra / Bluetooth programmer, 1-Station | pcs. | 1.0000 |
| 3 | market price | Bluetooth irrigation controller – 9V battery operation – Solem Lo-Ra / Bluetooth programmer, 2 Stations | pcs. | 5.0000 |
| 4 | market price | Bluetooth irrigation controller – 9V battery operation – Solem Lo-Ra / Bluetooth programmer, 4 Stations | pcs. | 4.0000 |
| 5 | market price | 9V battery | pcs. | 10.0000 |
| 6 | market price | Rain sensor | pcs. | 1.0000 |
| 7 | market price | Standard boxes, HDPE RB series (50x36x31) | pcs. | 10.0000 |
| 8 | market price | Flow 8 mc/h, 6 bar, stainless steel mesh cartridge 1” (130 microns) | pcs | 1,0000 |
|  |  | **2. Installation works** | | |
| 9 | AcB01A | Installation of manually or mechanically operated fittings (solenoid valves, taps, valves) in water supply or sewerage pipes with a diameter of 50-100 mm (solenoid valves) | pcs. | 25.0000 |
| 10 | AcB09A | Installation of solenoid valve actuators | pcs. | 25.0000 |
| 11 | SE56A | Drinking water filter, with threaded pipe fitting, 1 inch, filter 8 mc/h, 6 bar, stainless steel mesh cartridge, 1 Inch (130 microns) | pcs. | 1.0000 |
| 12 | 11-02-001-02 | Device installed on threaded joints, weight up to 5 kg (Bluetooth irrigation controller – 9V battery operation – Solem Lo-Ra / Bluetooth programmer, 1-Station) | pcs. | 1.0000 |
| 13 | 11-02-001-02 | Device installed on thread joints, weight up to 5 kg (Bluetooth irrigation controller – 9V battery operation – Solem Lo-Ra / Bluetooth programmer, 2 Stations) | pcs. | 5.0000 |
| 14 | 11-02-001-02 | Device installed on thread joints, weight up to 5 kg (Bluetooth irrigation controller – 9V battery operation – Solem Lo-Ra / Bluetooth programmer, 4 Stations) | pcs. | 4.0000 |
| 15 | AcB06A | Installation of the solenoid valve box | pcs. | 10.0000 |
| 16 | 11-02-001-01 | Device installed on threaded joints, mass, kg, up to 1.5 kg (installation of the rain sensor) | pcs | 1,0000 |
| 17 | 08-02-141-1 | Cable up to 35 kV, in trenches, unprotected, mass per metre up to 1 kg | 100 m | 0.5000 |
| 18 | market price | Cable VVG 3x4 mm2 | m | 50.0000 |
|  |  | **3. Construction works** | | |
|  |  | **3.1. Earthworks** | | |
| 19 | TsC58B | Mechanical excavation of soil in a warehouse with a backhoe bucket, with a bucket volume of 0.15 m3: category 2 soil | 100 m3 | 2.7000 |
| 20 | TsA20B | Manual digging of soil, slopes, excavator or scraper excavated embankments, to complete digging the slope, in medium-hard soil | m3 | 13.5000 |
| 21 | TsD02A1 | Spreading of loose soil, soil category I or II, with a 65-80 HP crawler tractor, in layers 15-20 cm thick. | 100 m3 | 2.7500 |
| 22 | TsD05B | Mechanical compaction with vibratory tamper (150-200 kg), in successive layers of 20-30 cm thickness, excluding the watering of each layer, backfill of cohesive soil | 100 m3 | 2.7500 |
|  |  | **3.2. Pipes and fittings** | | |
| 23 | SD21A | Spray nozzle type Pluvio, Pn 6, 1/2 Inch diameter | pcs. | 265.0000 |
| 24 | market price | Spray type fixed sprinklers, 10cm (4 Inch) lift, with nozzle; spray radius 0.6 – 7.4 m, 1800 TM series ( FI - 1/2 Inch) | pcs. | 265.0000 |
| 25 | market price | VAN nozzles with spray area adjustment, 4/6/8 – VAN=0-330°, 10/12/15/18 – VAN=0-360° ( No 4-VAN, yellow, trajectory 0° ) | pcs. | 6.0000 |
| 26 | market price | VAN nozzles with spray area adjustment, 4/6/8 – VAN=0-330°, 10/12/15/18 – VAN=0-360° ( No 6-VAN, orange, trajectory 0° ) | pcs. | 6.0000 |
| 27 | market price | VAN nozzles with spray area adjustment, 4/6/8 – VAN=0-330°, 10/12/15/18 – VAN=0-360° ( No 8-VAN, green, trajectory 5° ) | pcs. | 20.0000 |
| 28 | market price | VAN nozzles with spray area adjustment, 4/6/8 – VAN=0-330°, 10/12/15/18 – VAN=0-360° ( No 10-VAN, blue, trajectory 10° ) | pcs. | 20.0000 |
| 29 | market price | VAN nozzles with spray area adjustment, 4/6/8 – VAN=0-330°, 10/12/15/18 – VAN=0-360° ( No 12-VAN, brown, trajectory 15°) | pcs. | 50.0000 |
| 30 | market price | VAN nozzles with spray area adjustment, 4/6/8 – VAN=0-330°, 10/12/15/18 – VAN=0-360° (No 15-VAN, black, trajectory 23°) | pcs. | 87.0000 |
| 31 | market price | VAN nozzles with spray area adjustment, 4/6/8 – VAN=0-330°, 10/12/15/18 – VAN=0-360° (No 18-VAN, brown, trajectory 26°) | pcs. | 33.0000 |
| 32 | market price | MPR nozzle, series 10 – Blue, trajectory 15°, angle 360° | pcs. | 7.0000 |
| 33 | market price | MPR nozzle, series 10 – Blue, trajectory 15°, angle 180° | pcs. | 6.0000 |
| 34 | market price | MPR nozzle, series 10 – Blue, trajectory 15°, angle 90° | pcs. | 5.0000 |
| 35 | market price | MPR Spray fixed nozzles, series 8 – green, trajectory 10°, angle 180° | pcs. | 11.0000 |
| 36 | market price | MPR Spray fixed nozzles, series 8 – green, trajectory 10°, angle 90° | pcs. | 10.0000 |
| 37 | market price | MPR Spray fixed nozzles, series 5 – red, trajectory 5°, angle 90° | pcs. | 2.0000 |
| 38 | market price | MPR Spray fixed nozzles, left corner strip pattern | pcs. | 1.0000 |
| 39 | market price | MPR Spray fixed nozzles, right corner strip pattern | pcs. | 1.0000 |
| 40 | SD21A | Spray nozzle type Pluvio, Pn 6, 1/2 Inch diameter | pcs. | 9.0000 |
| 41 | market price | Medium-range rotary sprinkler (4.6-16.8 m), 3504 TM series ( FI – 1/2 Inch ) | pcs. | 9.0000 |
| 42 | AcA52A | Polyethylene pipe for water supply pipes, trench laid, diameter 40 mm. (Polyethylene water pipe PE80 D40 x 2.0 mm SDR21 PN6 ) | m | 500.0000 |
| 43 | AcA53A | Installation of electrofusion fittings. Welding by electrofusion of pipes and fittings (couplers, tees, elbows) made of polyethylene, 40 mm diameter pipes (90° compression elbow, diam. 40 mm). | pcs. | 30.0000 |
| 44 | AcA53A | Installation of electrofusion fittings. Welding by electrofusion of pipes and fittings (couplers, tees, elbows) made of polyethylene, 40 mm diameter pipes (compression coupler, diam. 40 mm). | pcs. | 5.0000 |
| 45 | AcA53A | Installation of electrofusion fittings. Welding by electrofusion of pipes and fittings (couplers, tees, elbows) made of polyethylene, 40 mm diameter pipes (compression fitting D 40x1”, type FE). | pcs. | 53.0000 |
| 46 | AcA53A | Installation of electrofusion fittings. Welding by electrofusion of pipes and fittings (couplers, tees, elbows) made of polyethylene, 40 mm diameter pipes (compression fitting D 40x1”, type FI). | pcs. | 1.0000 |
| 47 | AcA53A | Installation of electrofusion fittings. Welding by electrofusion of pipes and fittings (couplers, tees, elbows) made of polyethylene, 40 mm diameter pipes (compression tee, diam. 40 mm). | pcs. | 2.0000 |
| 48 | AcA53A | Installation of electrofusion fittings. Welding by electrofusion of pipes and fittings (couplers, tees, elbows) made of polyethylene, 40 mm diameter pipes (compression branch tee, FE type, diam. 40 mm). | pcs. | 6.0000 |
| 49 | AcA52A | Polyethylene pipe for water supply pipes, trench laid, diameter 32 mm. (Polyethylene water pipe PE80 D 32 x 1.8 mm SDR21 PN6 ) | m | 1 400,0000 |
| 50 | AcA53A | Installation of electrofusion fittings. Welding by electrofusion of pipes and fittings (couplers, tees, elbows) made of polyethylene, 32 mm diameter pipes (coupler, D 32 x 3/4"). | pcs. | 304.0000 |
| 51 | AcA53A | Installation of electrofusion fittings. Welding by electrofusion of pipes and fittings (couplers, tees, elbows) made of polyethylene, 32 mm diameter pipes (compression tee, D 2 x 1" x 32 mm). | pcs. | 24.0000 |
| 52 | AcA53A | Installation of electrofusion fittings. Welding by electrofusion of pipes and fittings (couplers, tees, elbows) made of polyethylene, 32 mm diameter pipes (compression tee, diam. 32 mm). | pcs. | 16.0000 |
| 53 | AcA53A | Installation of electrofusion fittings. Welding by electrofusion of pipes and fittings (couplers, tees, elbows) made of polyethylene, 32 mm diameter pipes (compression elbow, diam. 32 mm). | pcs. | 10.0000 |
| 54 | AcA53A | Installation of electrofusion fittings. Welding by electrofusion of pipes and fittings (couplers, tees, elbows) made of polyethylene, 32 mm diameter pipes (compression elbow, D 32 x 3/4"). | pcs. | 10.0000 |
| 55 | AcA53A | Installation of electrofusion fittings. Welding by electrofusion of pipes and fittings (couplers, tees, elbows) made of polyethylene, 32 mm diameter pipes (compression plug, diam. 32 mm). | pcs. | 3.0000 |
| 56 | AcA53A | Installation of electrofusion fittings. Welding by electrofusion of pipes and fittings (couplers, tees, elbows) made of polyethylene, 32 mm diameter pipes (compression coupler, diam. 32 mm). | pcs. | 14.0000 |
| 57 | AcA53A | Installation of electrofusion fittings. Welding by electrofusion of pipes and fittings (couplers, tees, elbows) made of polyethylene, 25 mm diameter pipes (1 Inch tee, FE x FE x FI, diam. 25 mm). | pcs. | 15.0000 |
| 58 | AcA53A | Installation of electrofusion fittings. Welding by electrofusion of pipes and fittings (couplers, tees, elbows) made of polyethylene, 25 mm diameter pipes (threaded nipple, diam. 25 mm). | pcs. | 10.0000 |
| 59 | AcA07A | Installation of SPX-Flex swing pipes, extension pipe for sprinkler, DN-16 mm, maximum pressure – 5.5 bar, in the ground, outside buildings. | m | 180.0000 |
| 60 | AcA07A | PVC elbow SBE-050, FE 1/2'' elbow x hose fitting for SPX-FLEX (extension pipe for sprinkler) Operating pressure up to 5.5 bar | pcs. | 274.0000 |
| 61 | AcA07A | PVC elbow SBE-075, FE 3/4'' elbow x hose fitting for SPX-FLEX (extension pipe for sprinkler) Operating pressure up to 5.5 bar | pcs. | 274.0000 |
| 62 | AcA07A | Installation in the ground, outside buildings, of PVC pipes type 4(G) or 3(M), with a diameter of 17 mm (17 mm drip pipe with pressure compensation, brown, double layer, distance between nozzles – 30 cm). | m | 1 800,0000 |
| 63 | SA37B | Bracket for mounting water and gas supply pipes, made of steel or PVC, mounted by embedding, 3/4" diameter pipes (drip pipe support, diam. 17 mm). | pcs. | 900.0000 |
| 64 | AcA53A | Installation of electrofusion fittings. Welding by electrofusion of pipes and fittings (couplers, tees, elbows) made of polyethylene, 17 mm diameter pipes (straight fitting FE 17x3/4 mm). | pcs. | 40.0000 |
| 65 | AcA53A | Installation of electrofusion fittings. Welding by electrofusion of pipes and fittings (couplers, tees, elbows) made of polyethylene, 17 mm diameter pipes (straight fitting FE 17x3/4 mm). | pcs. | 100.0000 |
| 66 | AcA53A | Installation of electrofusion fittings. Welding by electrofusion of pipes and fittings (couplers, tees, elbows) made of polyethylene, 17 mm diameter pipes (drip tube elbow fitting). | pcs. | 25.0000 |
| 67 | AcA53A | Installation of electrofusion fittings. Welding by electrofusion of pipes and fittings (couplers, tees, elbows) made of polyethylene, 17 mm diameter pipes (drip tube tee fitting). | pcs. | 100.0000 |
| 68 | AcA53A | Installation of electrofusion fittings. Welding by electrofusion of pipes and fittings (couplers, tees, elbows) made of polyethylene, 17 mm diameter pipes (drip irrigation compression end plug). | pcs. | 50.0000 |
| 69 | market price | PTFE tape for sealing thread joints, 19 mm x 15 ml | pcs. | 50.0000 |
| 70 | market price | Rain Bird marker flag – green | pcs. | 100.0000 |
| 71 | AcF11C | Flushing of drinking water pipes made of PVC, cast iron, asbestos cement, polyethylene, etc., D 20-75 mm, after fitting and coupling, before putting into operation | m | 3 880,0000 |
| 72 | AcF12A | Pressure testing of trench-laid polyethylene pipes for water supply and sewerage networks up to 100 mm diameter | m | 3 880,0000 |
| 73 | AcB01A | Installation of manually or mechanically operated fittings (solenoid valves, taps, valves) in water supply or sewerage pipes with a diameter of 25 mm (PVC ball valve, D 1 Inch FI x 1 Inch FI, for cold water). | pcs. | 10.0000 |

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Estimator \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2-3-6. General Plan**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Symbol of norms and resource code | Name of works | Unit of measurement | Volume |

| 1 | 2 | 3 | 4 | 5 |
| --- | --- | --- | --- | --- |
|  |  | **1. Construction works** | | |
|  |  | **1.1. Demolition of existing structures** | | |
| 1 | TsH91A K=0.5 | Demolition of 2-legged bench (K=0.5) | pcs. | 4.0000 |
| 2 | TsH91B K=0.5 | Trash can demolition (K=0.5 ) | pcs. | 6.0000 |
|  |  | **1.2. Small forms** | | |
| 3 | TsH91A | Installation of 2-legged benches (benches B-7 – B12) | pcs. | 49.0000 |
| 4 | TsH91A apl | Installation of 2-legged benches(Planter bench) | pcs. | 13.0000 |
| 5 | TsH91B | Trash can installation | pcs. | 29.0000 |
| 6 | TsH91A apl | Installation of 2-legged bicycle racks | pcs. | 2.0000 |
| 7 | TsH91A apl | Parking stopper installation | pcs. | 8.0000 |
|  |  | **2. Installation works** | | |
| 8 | Supplier price | Chess table installation | pcs. | 2.0000 |
| 9 | Supplier price | Trash platform installation | pcs. | 1.0000 |
|  |  | **3. Equipment** | | |
| 10 | Supplier price | B-7 concrete bench with backrest and wooden seat (L=2.000 m) | pcs. | 3.0000 |
| 11 | Supplier price | B-8 concrete bench with backrest and wooden seat (L=1.800 m) | pcs. | 24.0000 |
| 12 | Supplier price | B-9 backless concrete bench with wooden seat (L=2.300 m) | pcs. | 4.0000 |
| 13 | Supplier price | Individual bench B-10 consisting of rigid metal elements and wooden elements R=10500 | pcs. | 10.0000 |
| 14 | Supplier price | Individual bench B-11 consisting of rigid metal elements and treated wood elements R=3500 | pcs. | 6.0000 |
| 15 | Supplier price | Individual bench B-12 consisting of rigid metal elements and treated wood elements R=10500 | pcs. | 2.0000 |
| 16 | Supplier price | Planter bench | pcs. | 13.0000 |
| 17 | Supplier price | Trash can | pcs. | 29.0000 |
| 18 | Supplier price | Bicycle racks | pcs. | 2.0000 |
| 19 | Supplier price | Parking stopper | pcs. | 8.0000 |
| 20 | Supplier price | Trash platform | pcs. | 1.0000 |
| 21 | Supplier price | Chess table | pcs. | 2.0000 |

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**2-3-7. Playground for children**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Symbol of norms and resource code | Works and expenditure | M.U. | Quantity as per project data |
|

| 1 | 2 | 3 | 4 | | 5 | |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **1. Construction works** |  | |  | |
|  |  | **1.1. Installation of playground equipment for children** |  | |  | |
| 1 | TsA02B | Manual digging of earth in confined spaces, less than or more than 1.00 m wide, executed without supports, with vertical slope, in foundations, canals, basements, drains, steps, in unconsolidated or weakly cohesive soil, depth < 0.75 m, medium-hard soil | m3 | | 5.8000 | |
| 2 | CA03D2 | Concrete poured in foundations, plinths, retaining walls, walls below ground level, prepared with a concrete mixer on site and poured by conventional means, reinforced concrete class C 15/12 (Bc 15/B 200) | m3 | | 5.8000 | |
| 3 | TsH91A apl | Installation of children's playground equipment (labour only) | pcs. | | 9.0000 | |
|  |  | **1.2. Acoperire cu cauciuc** |  | |  | |
| 4 | TsD05B Supplier price | Compaction with a 150-200 kg mechanical screed of the fillings in successive layers of 20-30 cm thickness, excluding the watering of each layer separately, the fillings being made of cohesive soil | 100 m3 | | 0,7500 | |
| 5 | TsC54C | Gravel foundation layer | m3 | | 45.0000 | |
| 6 | TsC54A | Sand foundation layer | m3 | | 9.0000 | |
| 7 | CG47D apl | Floors made of rubber tiles, including the support layer of adhesives (dry mix), tile dimensions: 500 x 500 x 30 mm (does not use resources - glue, grout, mechanisms) | m2 | | 156.0000 | |
| 8 | CG47D apl | Floors made of rubber tiles, including the support layer of adhesives (dry mix), tile dimensions: 500 x 500 x 30 mm (does not use resources - glue, grout, mechanisms) | m2 | | 144.0000 | |
| 9 | DE10A | Precast concrete curbs, for sidewalks 20x25 cm, on concrete foundation 30x15 cm | m | | 91.0000 | |
|  |  | **1.3 Forme mici** |  | |  | |
| 10 | TsH91B | Instalarea urne | pcs | | 4.0000 | |
| 11 | CO04A apl | Imprejmuiri din lemn executate cu stilpi avind 2.5 m distanta din ax in ax, montate pe stilpi metalice ( nu foloseste resurse - materiale ) | m | | 67.0000 | |
| 12 | Supplier price | Gard din lemn pentru teren de joaca | m | | 67.0000 | |
|  |  | **2. Installation works** |  | |  | |
| 13 | Supplier price | Installation of playset with slide | pcs | | 1.0000 | |
| 14 | Supplier price | Installation of the playhouse | pcs | | 1.0000 | |
|  |  |  |  |  | |
|  |  | **3. Equipment** |  | |  | |
| 15 | Supplier price | Playset with slide | pcs. | | 1.0000 | |
| 16 | Supplier price | Sandpit with lid | pcs. | | 1.0000 | |
| 17 | Supplier price | Double wooden/steel swing SW-24 | pcs. | | 2.0000 | |
| 18 | Supplier price | Wooden Seesaw | pcs. | | 2.0000 | |
| 19 | Supplier price | Duck spring rider | pcs. | | 1.0000 | |
| 20 | Supplier price | Dear spring rider | pcs. | | 1.0000 | |
| 21 | Supplier price | Car spring rider | pcs. | | 1.0000 | |
| 22 | Supplier price | Playhouse | pcs. | | 1.0000 | |
| 23 | Supplier price | 5 seats merry-go-round with wheel | pcs. | | 1.0000 | |
| 24 | Supplier price | Trash can | pcs | | 4.0000 | |

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**2-3-8. Technological solutions. Water fountain technology**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Symbol of norms and resource code | Name of works | Unit of measurement | Volume |

| 1 | 2 | 3 | 4 | 5 |
| --- | --- | --- | --- | --- |
|  |  | **1. Construction works** | | |
|  |  | **1.1. Water supply and sewerage** | | |
| 1 | SA14F | Polyfusion welded plastic pipe, for industrial structures, with a diameter of 50 mm (PVC-U pipe d50) | m | 30.0000 |
| 2 | SA14G | Polyfusion welded plastic pipe, for industrial structures, with a diameter of 63 mm (PVC-U pipe d63) | m | 55.0000 |
| 3 | SB08C | Plastic pipe for sewerage, fitted with rubber gasket, surface-mounted or buried under the floor, with a diameter of 50 mm (Flexible reinforced PVC pipe d50). | m | 30.0000 |
| 4 | SB09C | Plastic sewer coupling fitted with rubber gasket, diameter 50 mm (coupler, diam. 50 mm) | pcs. | 3.0000 |
| 5 | SB09C | Plastic sewer coupling fitted with rubber gasket, diameter 50 mm (elbow, diam. 50 mm, 90°) | pcs. | 5.0000 |
| 6 | RpSA35E | Fitting of unplasticised PVC cap, bonded to heavy PVC pipes with a diameter of 50 mm | pcs. | 4.0000 |
| 7 | SB08D | Plastic pipe for sewerage, fitted with rubber gasket, surface-mounted or buried under the floor, with a diameter of 63 mm (Flexible reinforced PVC pipe d63). | m | 10.0000 |
| 8 | SB10D | Plastic sewer coupling (single branch), fitted with rubber gasket, diameter 63 mm (tee, diam. 63 mm) | pcs. | 9.0000 |
| 9 | SB09D | Plastic sewer coupling fitted with rubber gasket, diameter 63 mm (coupler, diam. 63 mm) | pcs. | 1.0000 |
| 10 | SB09D | Plastic sewer coupling fitted with rubber gasket, diameter 63 mm (elbow, diam. 63 mm, 90°) | pcs. | 17.0000 |
| 11 | SB09D | Plastic sewer coupling fitted with rubber gasket, diameter 63 mm (adapter, diam. 63/50 mm) | pcs. | 9.0000 |
| 12 | RpSA35F | Fitting of unplasticised PVC cap, glued to heavy PVC pipes with a diameter of 63 mm | pcs. | 52.0000 |
| 13 | SA15B | Polyfusion welded plastic pipe, in connecting piping, in sanitary, residential and public buildings, with a diameter of 20 mm (PEXb/AL/PEXb pipe D26x3, grey sheathing). | m | 20.0000 |
| 14 | SD07G apl | Shut-off valve with adapter, with or without outlet, for steel pipe, diameter 63 mm (PVC valve) | pcs. | 5.0000 |
| 15 | SD20C apl | Adapter and adapter elbow, galvanized, flat-sealing, with internal-external thread, diameter 63 mm (spring check valve D63 mm) | pcs. | 1.0000 |
| 16 | SA35A apl | Malleable cast iron fittings, screwed to steel pipes, for galvanized installations, to columns for internal hydrants, pipe diameter 2 Inch (M/F, D50/11/2", external thread) | pcs. | 59.0000 |
| 17 | SA35B apl | Malleable cast iron fittings, screwed to steel pipes, for galvanized installations, to columns for internal hydrants, pipe diameter 63 Inch (M/F, D63/75/50, external thread) | pcs. | 2.0000 |
| 18 | Supplier price | PVC glue, packaged | kg | 3.0000 |
| 19 | Supplier price | PVC cleaner, packaged | kg | 3.0000 |
| 20 | SA37F | Bracket for mounting water and gas supply pipes, made of steel or PVC, mounted by embedding, 2" diameter pipes (diam. 50 mm). | pcs. | 30.0000 |
| 21 | SA37F | Bracket for mounting water and gas supply pipes, made of steel or PVC, mounted by embedding, 2" diameter pipes (diam. 52 mm). | pcs. | 57.0000 |
| 22 | SA37G | Bracket for mounting water and gas supply pipes, made of steel or PVC, mounted by embedding, 2 1/2" diameter pipes (diam. 63 mm). | pcs. | 10.0000 |
| 23 | Supplier price | Stainless steel stud dia. 8x1000 | pcs. | 12.0000 |
|  |  | **1.2. Surface preparation** | | |
| 24 | CN53A | Interior priming of walls and ceilings (Ceresit CT17 primer, consumption 0.47 kg/m2) | m2 | 297.0000 |
| 25 | CN54A | Manual application of Rofix AP320 Haftgrund quartz primer in one coat on interior walls and ceilings | m2 | 297.0000 |
| 26 | CF50B | Interior plastering of 5 mm thickness, manually applied, with gypsum-based dry mixture, on walls and partitions, manual preparation of plaster (SV 75 Grey plaster, average thickness 35 mm) | m2 | 297.0000 |
| 27 | CF51B | Interior plastering of 5 mm thickness, manually applied, with gypsum-based dry mixture, on walls and partitions, manual preparation of plaster. Plus or minus deviation for every 1,0 mm (add to item CF50 30 mm, K=30 ) | m2 | 297.0000 |
|  |  | **1.3. Surface waterproofing** | | |
| 28 | IzF31A | Waterproofing of concrete surfaces (vertical, horizontal, including ceilings) with Elastocem mixture in 2 layers: smooth surface (Elastocem A consumption – 1.3 kg/m2, Elastocem B – 0.43 kg/m2) | m2 | 297.0000 |
| 29 | CF17C | Miscellaneous works – fiberglass membrane applied on the surface of precast concrete elements, glued with adhesive, including priming layer | m2 | 165.0000 |
| 30 | Supplier price | Sikaflex-11FC sealant, 600 ml | pcs. | 40.0000 |
| 31 | CN10A apl | Interior painting with polyurethane paint, applied in 3 coats, on concrete surfaces, manually applied (Desmopol waterproof paint, consumption – 1 kg/m2) | m2 | 297.0000 |
|  |  | **1.4. Ceramic tile works** | | |
| 32 | CG45D | Removable raised floors with 600 x 600 mm modules, height 80-450 mm: with reinforced uprights | m2 | 193.0000 |
| 33 | CI21A | Tiling the walls with ceramic granite tiles: size up to 400 x 400 mm. | m2 | 99.0000 |
|  |  | **1.5. Installation of embedded parts** | | |
| 34 | SD21A apl | Frothy fountain nozzle, D 50 mm | pcs. | 1.0000 |
| 35 | SD21A apl | Finger fountain nozzle, 12 mm/DN 25F | pcs. | 56.0000 |
| 36 | CL20A apl | Decorative stainless steel grate, mounted in masonry, for fountain nozzle | pcs. | 56.0000 |
| 37 | SD21A apl | Drain strainer cover | pcs. | 4.0000 |
| 38 | SB24B apl | Front access skimmer | pcs. | 2.0000 |
| 39 | SB24A apl | bottom drain, D 50 mm | pcs. | 1.0000 |
| 40 | IC30R apl | Stainless steel nozzle extension, mounted on steel pipe with 3 crews, 2 1/2" in diameter. | pcs. | 1.0000 |
|  |  | **2. Installation works** | | |
|  |  | **2.1. Installation of embedded parts** | | |
| 41 | 11-02-022-02 apl | Measuring devices, primary converters (flowmeters), installed on the technological pipeline: rotameter, meter, converter, installed on flange connections, nominal diameter: up to 20 mm (skimmer water level float valve) | pcs. | 1.0000 |
| 42 | 08-03-596-1 | Spotlight, separately mounted on ground-mounted steel structure, with lamp, power, W: 500 500 | 100 pcs. | 0.5700 |
| 43 | Supplier price | Installation of fountain spotlights | pcs. | 57.0000 |
| 44 | 08-02-409-1 | Vinylplast pipe on installed structures, on walls and columns, mounted with straps, diameter up to 25 mm | 100 m | 3.3800 |
| 45 | Market price | PVC pipe, diam. 20 mm | m | 338.0000 |
| 46 | 08-02-412-1 | Insertion of wires into laid metal pipes and hoses: first single-wire or multi-wire conductor in common braid, total cross-section up to 2.5 mm2 | 100 m | 3.6000 |
| 47 | Market price | Underwater cable, FTP, 6х0.5 mm2 | m | 260.0000 |
| 48 | Market price | Underwater cable, ПВС, 3х1,5 mm2 | m | 100.0000 |
| 49 | 08-02-148-1 | Cable up to 35 kV, in conduits, blocks and boxes installed, mass per metre up to 1 kg | 100 m | 15.0700 |
| 50 | Market price | Water fountain cable, IP68, 4x1.5 mm2 | m | 2 400,0000 |
| 51 | Market price | Water fountain cable, IP68, 2x2.5 mm2 | m | 1 382,0000 |
| 52 | 08-02-156-2 apl | Ports and casings for sealing cables passing through walls in explosive rooms: separable port | pcs. | 114.0000 |
| 53 | Supplier price | SP20 IP68 4 pin connector | pcs. | 114.0000 |
| 54 | 08-02-411-4 apl | Flexible connection, external diameter of metal hose up to 27 mm (crimp cable gland for cable, 6-10 mm) | pcs. | 156.0000 |
| 55 | Supplier price | Crimp cable gland for cable, 6-10 mm | pcs. | 156.0000 |
| 56 | 11-02-042-03 | Valves and flaps with lever actuator: control valve, nominal diameter: 25 mm (solenoid valve, 1 Inch, 0.5-16 bar) | pcs. | 1.0000 |
| 57 | Supplier price | Solenoid valve, 1 Inch, 0.5-16 bar | pcs. | 1.0000 |
|  |  | **2.2. Functional equipment** | | |
| 58 | SE54D apl | Installation of the LX 25 m3/h filter | pcs. | 1.0000 |
| 59 | SB30C apl | Stands for supporting sewer pipes and fittings weighing 11-30 kg (stand for electric filter pump) | kg | 16.0000 |
| 60 | Supplier price | Quartz sand, 25 kg/bag | bags | 9.0000 |
| 61 | 11-02-022-05 apl | Measuring devices, primary converters (flowmeters), installed on the technological pipeline: rotameter, meter, converter, installed on flange connections, nominal diameter: up to 20 mm 80 (submersible pump installation) | pcs. | 56.0000 |
| 62 | AcC03A | Mounting on the existing stand of electric motors driving pumps or other apparatus, having a power of 0.25-2.8 kw (installation of submersible pump motor) | pcs. | 1.0000 |
| 63 | 11-04-004-01 | Wall-mounted unit, weight between 0.15 t and 0.2 t (control unit for fountain) | pcs. | 1.0000 |
| 64 | 11-04-004-01 | Wall-mounted unit, weight between 0.15 t and 0.2 t (control unit for the fountain filtration system) | pcs. | 1.0000 |
| 65 | 11-02-032-01 | Primary level gauge converter, installed on tank, working at atmospheric pressure, weight up to 10 kg (fountain water level control unit) | pcs. | 1.0000 |
| 66 | 11-06-001-01 | Panel, weight up to 50 kg (dosing station automation kit) | pcs. | 1.0000 |
| 67 | SE55A | Compact pressure boosting and pumping unit, consisting of electric pump, hydropneumatic diaphragm container and pressure switch, with a maximum flow rate of 2 l/sec (installation of Seko dosing pumps) | pcs. | 2.0000 |
| 68 | 11-02-001-01 | Device installed on thread joints, weight up to 1.5 kg (PH/RX sensor gland for dosing pump) | pcs. | 2.0000 |
| 69 | 10-02-016-07 apl | Communication devices (extension desksets): Separately installed audio amplifier | pcs. | 1.0000 |
| 70 | 10-04-101-07 | Customer-premises and miscellaneous equipment: Megaphone or loudspeaker: for indoor use | pcs. | 16.0000 |
| 71 | 10-04-067-23 | Colour TV monitor: video camera for fountain remote monitoring | pcs. | 2.0000 |
| 72 | 11-03-011-01 | Devices for physicochemical composition analysis: device complexity category: I (wind sensor) | set | 1.0000 |
| 73 | 11-03-011-01 | Devices for physicochemical composition analysis: device complexity category: I (rain sensor) | set | 1.0000 |
| 74 | SE59A1 apl | FDC 32 dehumidifier, mounted on concrete wall | pcs. | 1.0000 |
| 75 | AcC05A | Mounting on existing stands of wastewater pumps with horizontal shaft, with suction connection diameter of 2"-4” (Karcher SP7 submersible pump) | pcs. | 1.0000 |
| 76 | 11-01-002-06 | Structures for floor mounted mechanisms, weight up to 35 kg (access panels for technical rooms) | pcs. | 2.0000 |
|  |  | **3. Equipment** | | |
|  |  | **3.1. Functional equipment** | | |
| 77 | Supplier price | LX 25m3/h filtration unit | set | 1.0000 |
| 78 | Supplier price | Stand for electric filtration pump made of polypropylene | pcs. | 1.0000 |
| 79 | Supplier price | Brushless submersible pump, 150W, 24V DC, Variable Speed DMX Control | pcs. | 56.0000 |
| 80 | Supplier price | SX30-1 submersible pump inverter | pcs. | 1.0000 |
| 81 | Supplier price | Submersible pump motor HY04-110 T/50Hz/400V/2000N/1.1kW | pcs. | 1.0000 |
| 82 | Supplier price | Control unit for the fountain – HP Compaq PRO 6300 License – 1 pc., Windows 7Pro – 1 pc., Fountain Control soft oval V4.02.2 – 1 pc., DMX Controller box, 1 Digital out, 1 Power 24VDC in, 8 Lights out – 1 pc., box with electronic control equipment based on the automation execution project | pcs. | 1.0000 |
| 83 | Supplier price | Filtration control panel | pcs. | 1.0000 |
| 84 | Supplier price | Fountain water level controller | pcs. | 1.0000 |
| 85 | Supplier price | Dosing station automation kit | pcs. | 1.0000 |
| 86 | Supplier price | Dosing pump RX-PoolOne RX, 1.5 l/h, 1.5 bar ( Seko ) | pcs. | 1.0000 |
| 87 | Supplier price | Dosing pump pH-PoolOne pH, 1.5 l/h, 1.5 bar ( Seko ) | pcs. | 1.0000 |
| 88 | Supplier price | PH/RH sensor probe gland for dosing pump | pcs. | 2.0000 |
| 89 | Supplier price | Sensor probe holder | pcs. | 2.0000 |
| 90 | Supplier price | Audio amplifier T-61000D 1000W | pcs. | 1.0000 |
| 91 | Supplier price | Loudspeaker 45-90W, IP65 | pcs. | 16.0000 |
| 92 | Supplier price | 5 MP video camera for remote fountain monitoring | pcs. | 2.0000 |
| 93 | Supplier price | Wind sensor for fountain | pcs. | 1.0000 |
| 94 | Supplier price | Rain sensor for fountain | pcs. | 1.0000 |
| 95 | Supplier price | Dehumidifier FDC 32 | pcs. | 1.0000 |
| 96 | Supplier price | Submersible pump Karcher SP7 | pcs. | 1.0000 |
| 97 | Supplier price | Access cover HAGODECK BVA 88 - 80x80 ( 92x92 ) Aluminium | pcs. | 1.0000 |
| 98 | Supplier price | HAGODECK BVA 108 - 100x80 ( 112x92 ) Aluminium access cover | pcs. | 1.0000 |
|  |  | **3.2. Installation of embedded parts** | | |
| 99 | Supplier price | Skimmer water level float valve | pcs. | 1.0000 |
| 100 | Supplier price | LED RGB inox fountain spotlight, IP68, 27W, DMX512 control | pcs. | 57.0000 |

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**2-3-9. Power supply for water fountain**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Symbol of norms and resource code | Name of works | Unit of measurement | Volume |

| 1 | 2 | 3 | 4 | 5 |
| --- | --- | --- | --- | --- |
|  |  | **1. Construction works** | | |
|  |  | **1.1. Earthworks** | | |
| 1 | TsC58B | Mechanical earth excavation, reverse bucket excavator with a volume of 0.15 m3, in limited spaces, for electric cables in the ground with natural moisture without supports, width < 1 m, depth < 1.5 m, land category 2 | 100 m3 | 0.3900 |
| 2 | TsD18B | Compaction of trench backfill for buried cables of high-voltage power lines with medium-hard soil | m3 | 26.0000 |
| 3 | TsD05A | Mechanical compaction with vibratory tamper (150-200 kg), in successive layers of 20-30 cm thickness, excluding the watering of each layer, backfill of non-cohesive soil | 100 m3 | 0.2600 |
| 4 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II | 100 m3 | 0.1300 |
| 5 | TsI51A5 | Transporting soil by 10 t dump truck at a distance of: 5 km | t | 21.4500 |
|  |  | **1.2. Stripping and re-laying asphalt pavement** | | |
| 6 | DG05A | Stripping of layers up to 3 cm thick of permanent asphalt pavement, asphalt concrete (thickness 9 cm, K=3) | m2 | 14.0000 |
| 7 | DI118 | Mechanized removal of crushed stone layer | m3 | 2.5200 |
| 8 | TrI1AA01C1 | Loading of group A materials (heavy and small) by throwing, from ramp or ground, into category 1 car | t | 6.3000 |
| 9 | TsI51B5 | Transporting soil by 10 t dump truck at a distance of: 15 km | t | 6.3000 |
| 10 | DA06A1 | Layer of rounded natural aggregates, with filtering, insulating, ventilating function, frost-proof and non-penetrating, by hand, with ballast | m3 | 2.5200 |
| 11 | DB19B | 5.0 cm thick hot-mix asphalt concrete pavement with coarse aggregates, hand-laid | m2 | 14.0000 |
| 12 | DB16D | 4.0 cm thick hot-mix asphalt concrete pavement with fine aggregates, hand-laid | m2 | 14.0000 |
|  |  | **1.3. Pipes for cable ducting** | | |
| 13 | 34-02-003-1 | Laying cable conduits made of polyethylene pipes: max. 2 openings | 1 km | 0.0380 |
| 14 | AcA11B1 | For each crossing of cables, ducts, telecommunication cables, etc., add | pcs. | 10.0000 |
|  |  | **2. Installation works** | | |
| 15 | 08-03-521-1 | Onload changeover switch, on board, with front or side handle or bar handling, mounted on metal support, single pole, current up to 250 A (Switch with handle and fuse IL=250A РПС-2 ) | pcs. | 1.0000 |
| 16 | 08-03-523-2 | Fuse, installed on insulating support, current up to 250 A (fuse ППНИ-35) | pcs. | 3.0000 |
| 17 | 08-03-572-4 | Electrical switch panel or distribution board cabinet, wall mounted, height and width up to 1200х1000 mm (BZUM panel, TF-250A, У1, IP65) | pcs. | 1.0000 |
| 18 | 08-03-521-2 | Onload changeover switch, on board, with front or side handle or bar handling, mounted on metal support, single pole, current up to 400 A (Switch with handle ВР32И-35В71250) | pcs. | 1.0000 |
| 19 | 08-03-600-2 | Meters, mounted on ready-made support, three-phase Unom - 380, I - 5A | pcs. | 1.0000 |
| 20 | 08-01-053-1 | Current transformer, voltage up to 10 kV ( ТТИ-А Кmp=100/5 ) | pcs. | 3.0000 |
| 21 | 08-03-545-1 apl | Terminal box for cables and conductors, section up to 6 mm2, wall or column mounted, quantity of wire connectors: 10 (test terminal block КИП-Л ) | pcs. | 1.0000 |
| 22 | 08-03-575-1 | Device or unit disassembled before transportation (automatic circuit breaker BA88-35 IL=100А ) | pcs. | 1.0000 |
| 23 | 08-02-142-1 | Laying single cable trunking in trenches | 100 m | 1.9800 |
| 24 | 408-93 | Sand | m3 | 13.0000 |
| 25 | 08-02-141-6 | Cable up to 35 kV, in trenches, unprotected, mass per metre up to 13 kg | 100 m | 2.5000 |
| 26 | Supplier price | Cable АПвББШп-0,66 4x120 mm2 | m | 250.0000 |
| 27 | 08-02-163-3 | Heat shrink polyethylene breakout boot for 3-4 core cables with paper insulation, voltage up to 1 kV, conductor cross-section up to 240 mm2 | pcs. | 4.0000 |
| 28 | Supplier price | Cable termination 4ПКТп(б)-1-70/120(Б) | pcs. | 4.0000 |
| 29 | 08-02-143-1 | Covering of single cable, laid in trenches, with brick | 100 m | 1.9800 |
| 30 | 404-232 | Bricks | pcs. | 650.0000 |
| 31 | 08-02-396-6 | Metal conduit on walls and ceilings, length 3 m | 100 m | 0.0500 |
| 32 | Supplier price | Galvanized conduit 50x50 | m | 4.0000 |
| 33 | Supplier price | Galvanized conduit 50x100 | m | 1.0000 |
| 34 | 08-02-472-5 | Grounding conductor, concealed in floor levelling layer, made of round steel, diameter 12 mm (д=20мм) | 100 m | 0.1800 |
| 35 | 08-02-472-2 | Earthing conductors: earth clamp, horizontal, flat steel bar, cross-section – 160 mm2 | 100 m | 0.3000 |
|  |  | **3. Equipment** | | |
| 36 | Supplier price | Switch with handle and fuse In=250A РПС-2 | pcs. | 1.0000 |
| 37 | Supplier price | Fuse ППНИ-35 Iпл.вст.=160А | pcs. | 3.0000 |
| 38 | Market price | Panel BZUM TF-250A, У1, IP65 | pcs. | 1.0000 |
| 39 | Supplier price | Switch with handle ВР32И-35В71250 | pcs. | 1.0000 |
| 40 | Supplier price | Unom three-phase electricity meter - 380/220B, I - 5A ZMG410CR | pcs. | 1.0000 |
| 41 | Supplier price | Current transformer ТТИ-А Кmp=100/5 | pcs. | 3.0000 |
| 42 | Supplier price | Test transfer box КИП-Л | pcs. | 1.0000 |
| 43 | Supplier price | Automatic circuit breaker BA88-35 IL=100А | pcs. | 2.0000 |

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**2-3-10. Outdoor electric lighting**

**Electrical networks and installations of the Palace of Culture square**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Symbol of norms and resource code | Name of works | Unit of measurement | Volume |

| 1 | 2 | 3 | 4 | 5 |
| --- | --- | --- | --- | --- |
|  |  | **1. Construction works** | | |
|  |  | **1.1. Earthworks** | | |
| 1 | TsC58B | Mechanical earth excavation, in limited spaces with an inverted bucket excavator with a volume of 0.15 m3, for electric cables, trenches < 1 m wide, < 1.5 m deep, category 2 land | 100m3 | 1.0050 |
| 2 | TsD18B | Compaction of trench backfill for buried cables of high-voltage power lines with medium-hard soil | m3 | 67.0000 |
| 3 | TsD05A | Mechanical compaction with vibratory tamper (150-200 kg), in successive layers of 20-30 cm thickness, excluding the watering of each layer, backfill of non-cohesive soil | 100 m3 | 0.6700 |
| 4 | CA03F | Plain concrete poured by conventional means, in foundations, plinths, retaining walls, walls below ground level, prepared with a concrete mixer or ready-mixed concrete as per norm CA01, poured by conventional means, plain concrete class B 25 for concreting lighting poles. | m3 | 6.0000 |
| 5 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II | 100 m3 | 0.3400 |
| 6 | TsI51B5 | Transporting soil by 10 t dump truck at a distance of: 15 km | t | 55.2800 |
|  |  | **1.2. Stripping and re-laying asphalt pavement** | | |
| 7 | DG05A | Stripping of layers up to 3 cm thick of permanent asphalt pavement, asphalt concrete (thickness 9 cm, K=3) | m2 | 2.0000 |
| 8 | DI118 | Mechanized removal of crushed stone layer | m3 | 0.3600 |
| 9 | TrI1AA01C1 | Loading of group A materials (heavy and small) by throwing, from ramp or ground, into category 1 car | t | 1.3000 |
| 10 | TsI51B5 | Transporting soil by 10 t dump truck at a distance of: 15 km | t | 1.3000 |
| 11 | DA06A1 | Layer of rounded natural aggregates, with filtering, insulating, ventilating function, frost-proof and non-penetrating, by hand, with ballast | m3 | 0.3600 |
| 12 | DB19B | 5.0 cm thick hot-mix asphalt concrete pavement with coarse aggregates, hand-laid | m2 | 2.0000 |
| 13 | DB16D | 4.0 cm thick hot-mix asphalt concrete pavement with fine aggregates, hand-laid | m2 | 2.0000 |
|  |  | **1.3. Pipes for cable ducting** | | |
| 14 | 34-02-003-1 | Laying cable conduits made of polyethylene pipes: max. 2 openings (pipe ПНД 450N D50 mm) | 1 km | 0.2400 |
| 15 | 34-02-003-1 | Laying cable conduits made of polyethylene pipes: max. 2 openings (pipe ПНД 450N D63 mm) | 1 km | 0.5700 |
| 16 | AcA10A1 | For each crossing of cables, ducts, telecommunication cables, etc., add | pcs. | 6.0000 |
|  |  | **2. Installation works** | | |
|  |  | **2.1. Lighting panel for the square** | | |
| 17 | 08-03-572-6 | Electrical switch panel or distribution board cabinet, wall mounted, height and width up to 1200х1000 mm (panel OS 40x50+F) | pcs. | 1.0000 |
| 18 | 08-03-575-1 | Device or unit disassembled before transportation (automatic circuit breaker BН-32/1Р/40А) | pcs. | 1.0000 |
| 19 | 08-03-575-1 | Device or unit disassembled before transportation (automatic circuit breaker ВA47-29/1P/В/10A) | pcs. | 2.0000 |
| 20 | 08-03-575-1 | Device or unit disassembled before transportation (automatic circuit breaker АBДT 32/B/10A/30mA) | pcs. | 2.0000 |
|  |  | **2.2. Cables** | | |
| 21 | 08-02-142-1 | Laying single cable trunking in trenches | 100 m | 7.4800 |
| 22 | 408-93 | Sand | m3 | 33.5000 |
| 23 | 08-02-148-1 | Cable up to 35 kV, in conduits, blocks and boxes installed, mass per metre up to 1 kg | 100 m | 8.5000 |
| 24 | Supplier price | Cable АПвБбШв-0,66/1кВ 4x16 mm2 | m | 600.0000 |
| 25 | Supplier price | Cable BБбШв-0,66/1кВ 3x1.5 mm2 | m | 250.0000 |
| 26 | 08-02-148-1 | Cable up to 35 kV, in conduits, blocks and boxes installed, mass per metre up to 1 kg | 100 m | 2.0000 |
| 27 | Market price | Cable ВВГнг-LSLTx-0.66/1 kB 3x1.5 mm2 | m | 200.0000 |
|  |  | **2.3. Lighting** | | |
| 28 | RpEN05A | Installation of poles | pcs. | 24.0000 |
| 29 | Supplier price | Lighting poles, Fumagalli Tabor, 3 m | pcs. | 24.0000 |
| 30 | Supplier price | Anchor for poles, Fumagalli, Type D 182x400x18 | pcs. | 24.0000 |
| 31 | 08-02-364-1 apl | Lamp post arm | pcs. | 24.0000 |
| 32 | Supplier price | Fumagalli Adam Lantern | pcs. | 24.0000 |
| 33 | 08-02-369-1 | Outdoor lighting fixture with incandescent bulbs | pcs. | 48.0000 |
| 34 | Supplier price | Fumagalli Simon lighting fixture 50 Вт E27 IP55 4000 K | pcs. | 48.0000 |
| 35 | Supplier price | LED lamp E27 50Bm 5000лм | pcs. | 48.0000 |
| 36 | 08-02-370-1 | Panel up to three groups, installed in the column body | pcs. | 24.0000 |
| 37 | Supplier price | Fumagalli HBOXCON cable connection panel | pcs. | 24.0000 |
| 38 | 08-03-593-9 | Lighting fixture for incandescent light bulbs for local lighting | 100 pcs. | 0.2700 |
| 39 | Supplier price | Lighting fixture Fumagalli CECI 120 Square 120mm, 3Bm, IP67 | pcs. | 24.0000 |
| 40 | Supplier price | Lighting fixture Fumagalli MINITOMMY EL SPIKE 4.5Bm, IP66 | pcs. | 3.0000 |
| 41 | 08-03-545-1 | Terminal box for cables and conductors, section up to 6 mm2, wall or column mounted, quantity of wire connectors: 10 | pcs. | 2.0000 |
| 42 | Supplier price | Junction box with connectors, IP65 | pcs. | 2.0000 |
|  |  | **2.4. Materials** | | |
| 43 | 08-02-409-3 apl | Vinylplast pipe on installed structures, on walls and columns, mounted with straps, diameter up to 100 mm | 100 m | 0.0300 |
| 44 | Supplier price | PVC pipe, diam. 63 mm | m | 3.0000 |
| 45 | Supplier price | Stainless steel banding strap F207 | m | 3.0000 |
| 46 | Supplier price | NС20 Buckle | pcs. | 3.0000 |
| 47 | Supplier price | Piercing Connector Р 635 | pcs. | 2.0000 |
| 48 | 08-02-472-2 | Earthing conductors: earth clamp, horizontal, flat steel bar, cross-section – 160 mm2 | 100 m | 0.1200 |
| 49 | 08-02-471-4 | Earth clamp, vertical, round steel, diameter 20 mm | 10 pcs | 0.3000 |
|  |  | **3. Equipment** | | |
|  |  | **3.1. Lighting panel for the square** | | |
| 50 | Market price | Panel OS 40x50+F | pcs. | 1.0000 |
| 51 | Market price | Isolating switch BH32/1P/40A | pcs. | 1.0000 |
| 52 | Market price | Automatic circuit breaker ВA47-29/1P/В/10A | pcs. | 2.0000 |
| 53 | Market price | Automatic circuit breaker АВДТ 32/10А/B/30mA | pcs. | 2.0000 |

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**6-1-1. Reconstruction of the existing fountains located in Independence Square of Cahul.**

**Outdoor water supply and sewerage networks**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Symbol of norms and resource code | Name of works | Unit of measurement | Volume |

| 1 | 2 | 3 | 4 | 5 |
| --- | --- | --- | --- | --- |
|  |  | **1. Equipment** | | |
| 1 | Market price | Water meter, class С, R-160, d 15 mm | pcs. | 1.0000 |
|  |  | **2. Installation works** | | |
| 2 | AcB04D | Installation of buried public-supply tap water meter, in existing position, on 50 mm diameter steel pipes | pcs. | 1.0000 |
|  |  | **3. Construction works** | | |
|  |  | **3.1. System A1 – water networks** | | |
|  |  | **3.1.1. Earthworks** | | |
| 3 | TsC03B1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in storage yard, soil category II | 100 m3 | 0.7800 |
| 4 | TsA20B | Manual digging of soil, slopes, excavator or scraper excavated embankments, to complete digging the slope, in medium-hard soil | m3 | 2.0000 |
| 5 | TsA16E1 | Manual digging of soil, in confined spaces, in trenches up to 4 m deep, for high-voltage electrical cables, in soil with natural moisture, with shoring, width < 1 m, depth < 1.51-3 m, medium soil | m3 | 13.0000 |
| 6 | TsD05B | Mechanical compaction with vibratory tamper (150-200 kg), in successive layers of 20-30 cm thickness, excluding the watering of each layer, backfill of cohesive soil (tamping of the soil bed at a depth of H=0.6 m) | 100 m3 | 0.3600 |
| 7 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II (displaced soil) | 100 m3 | 0.0600 |
| 8 | TsI50A5 | Transporting soil by 5 t dump truck at a distance of 5 km | t | 9.3500 |
| 9 | TsC51B | Unloading of soil in the storage yard, category II soil | 100 m3 | 0.0600 |
| 10 | TsD01B | Shovelling of loosened soil, in uniform layers, 10-30 cm thick, throwing up to 3 m from the heaps, including the breaking up of clods, medium soil | m3 | 11.3000 |
| 11 | TsD04B | Compaction by hand tamper of fills made in horizontal or 1/4 inclined diggings, including the watering of each layer of soil, 10 cm thick, cohesive soil. | m3 | 11.3000 |
| 12 | TsD02A1 | Spreading of loose soil, soil category I or II, with a 65-80 HP crawler tractor, in layers 15-20 cm thick. | 100 m3 | 0.4000 |
| 13 | TsD05B | Mechanical compaction with vibratory tamper (150-200 kg), in successive layers of 20-30 cm thickness, excluding the watering of each layer, backfill of cohesive soil | 100 m3 | 0.4000 |
|  |  | **3.1.2. Pipes and fittings** | | |
| 14 | AcA10A | In-ground installation of high-density polyethylene pressure pipes for water supply, assembled by butt welding, PE100 PN10 SDR17 D63 mm | m | 99.5000 |
| 15 | AcF11C | Flushing of drinking water pipes made of PVC, cast iron, asbestos cement, polyethylene, etc., D 20-75 mm, after fitting and coupling, before putting into operation | m | 99.5000 |
| 16 | AcF12A | Pressure testing of trench-laid polyethylene pipes for water supply and sewerage networks up to 100 mm diameter | m | 99.5000 |
| 17 | Supplier price | Warning tape | m | 99.5000 |
| 18 | AcA54B | Mechanical coupling of fittings (screwing). Mechanical coupling of pipes and fittings (connectors, tees, elbows) made of polyethylene, pipes having a diameter of 50-110 mm. Note: the type of polyethylene fitting (connector, tee, elbow) will be included in accordance with the project ( PE100 D110/63 mm connector ) | pcs. | 1.0000 |
| 19 | AcA53A | Installation of electrofusion fittings. Welding by electrofusion of pipes and fittings (couplers, tees, elbows) made of polyethylene, 63 mm diameter pipes (straight tee, PE100, D 63 mm). | pcs. | 1.0000 |
| 20 | AcA53A | Installation of electrofusion fittings. Welding by electrofusion of pipes and fittings (couplers, tees, elbows) made of polyethylene, 63 mm diameter pipes (adapter, PE100, D 63 mm) | pcs. | 5.0000 |
| 21 | AcB01A | Installation of manually or mechanically operated fittings (solenoid valves, taps, valves) in water supply or sewerage pipes with a diameter of 50 mm (brass t-handle ball valve, FI-FI) | pcs. | 1.0000 |
| 22 | AcB01A | Installation of manually or mechanically operated fittings (solenoid valves, taps, valves) in water supply or sewerage pipes with a diameter of 50 mm (brass check valve) | pcs. | 1.0000 |
| 23 | SE56A | Drinking water filter with 2" threaded pipe connection (brass Y-type water filter) | pcs. | 1.0000 |
| 24 | AcA25A | Mounting in position by electric welding of fittings (concentric steel reducer D50/15 mm) | pcs. | 2.0000 |
| 25 | SA33A | Manufacture and installation of protection pipes at the passage of the pipelines through the ceilings, with a diameter of 1/2" (steel pipe, D 15 mm, L=0.11 m). | pcs. | 1.0000 |
| 26 | SA33G | Manufacture and installation of protection pipes at the passage of the pipelines through the ceilings, with a diameter of 4" (steel pipe, D 108 x 4.0 mm, L=0.2 m). | pcs. | 2.0000 |
|  |  | **3.1.3. Inspection chambers, D 1.5 m** | | |
| 27 | AcE11A | Execution of inspection chambers made of prefabricated reinforced concrete elements, for water supply, circular (annular), 1.5 m in diameter, in soil without underground water (concrete for the foundations – 0.11 m3) | m3 | 1.2200 |
| 28 | AcE11A1 | Prefabricated reinforced concrete elements of circular (annular) inspection chambers with a diameter of 1.5 m, for water supply, in soil without groundwater, КЦД-15 (0.38 m3) | pcs. | 1.0000 |
| 29 | AcE11A1 | Prefabricated reinforced concrete elements of circular (annular) inspection chambers with a diameter of 1.5 m, for water supply, in soil without groundwater, КЦ-15-6 (0.265 m3) | pcs. | 1.0000 |
| 30 | AcE11A1 | Prefabricated reinforced concrete elements of circular (annular) inspection chambers with a diameter of 1.5 m, for water supply, in soil without groundwater, КЦ-15-9 (0.4 m3) | pcs. | 1.0000 |
| 31 | AcE11A1 | Prefabricated reinforced concrete elements of circular (annular) inspection chambers with a diameter of 1.5 m, for water supply, in soil without groundwater, КЦП1-15-1 (0.27 m3) | pcs. | 1.0000 |
| 32 | AcE11A1 | Prefabricated reinforced concrete elements of circular (annular) inspection chambers with a diameter of 1.5 m, for water supply, in soil without groundwater. Cover slab, КЦО-1 (0.02 m3) | pcs. | 1.0000 |
| 33 | AcE11A1 | Prefabricated reinforced concrete elements of circular (annular) inspection chambers with a diameter of 1.5 m, for water supply, in soil without groundwater, КЦ-7-3 (0.05 m3) | pcs. | 1.0000 |
| 34 | AcE11A1 | Prefabricated reinforced concrete elements of circular (annular) inspection chambers with a diameter of 1.5 m, for water supply, in soil without groundwater. ( Ductile iron cover C-250 ) | pcs. | 1.0000 |
| 35 | DA06A1 | Layer of rounded natural aggregates, with filtering, insulating, ventilating function, frost-proof and non-penetrating, by hand, with ballast | m3 | 0.5300 |
| 36 | DE12C | Asphalt pavement on an existing 3.0 cm thick foundation | m2 | 5.3000 |
| 37 | Supplier price | Ladder | kg | 20.3000 |
| 38 | Supplier price | Metal for the reinforcement of built chambers | kg | 21.1200 |
| 39 | IzD10A | Anticorrosive painting with a paintbrush of metalwork and metal structures with one coat of anticorrosive primer based on red lead and two coats of chlorine rubber enamel, of metalwork and metal structures, made of profiles with thickness between 8 mm up to and including 12 mm | t | 0.0400 |
|  |  | **3.2. System C1 – sewerage networks** | | |
|  |  | **3.2.1. Earthworks** | | |
| 40 | TsC03B1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in storage yard, soil category II | 100 m3 | 4.6100 |
| 41 | TsA20B | Manual digging of soil, slopes, excavator or scraper excavated embankments, to complete digging the slope, in medium-hard soil | m3 | 15.0000 |
| 42 | TsA16E1 | Manual digging of soil, in confined spaces, in trenches up to 4 m deep, for high-voltage electrical cables, in soil with natural moisture, with shoring, width < 1 m, depth < 1.51-3 m, medium soil | m3 | 131.0000 |
| 43 | TsD05B | Mechanical compaction with vibratory tamper (150-200 kg), in successive layers of 20-30 cm thickness, excluding the watering of each layer, backfill of cohesive soil (tamping of the soil bed at a depth of H=0.6 m) | 100 m3 | 0.3900 |
| 44 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II (displaced soil) | 100 m3 | 0.1200 |
| 45 | TsI50A5 | Transporting soil by 5 t dump truck at a distance of 5 km | t | 20.4000 |
| 46 | TsC51B | Unloading of soil in the storage yard, category II soil | 100 m3 | 0.1200 |
| 47 | TsD01B | Shovelling of loosened soil, in uniform layers, 10-30 cm thick, throwing up to 3 m from the heaps, including the breaking up of clods, medium soil | m3 | 40.0000 |
| 48 | TsD04B | Compaction by hand tamper of fills made in horizontal or 1/4 inclined diggings, including the watering of each layer of soil, 10 cm thick, cohesive soil. | m3 | 40.0000 |
| 49 | TsD02A1 | Spreading of loose soil, soil category I or II, with a 65-80 HP crawler tractor, in layers 15-20 cm thick. | 100 m3 | 0.5500 |
| 50 | TsD05B | Mechanical compaction with vibratory tamper (150-200 kg), in successive layers of 20-30 cm thickness, excluding the watering of each layer, backfill of cohesive soil | 100 m3 | 0.5500 |
|  |  | **3.2.2. Piping** | | |
| 51 | AcA07B | Installation in the ground, outside buildings, of multilayer PVC pipes PN4, D 160 mm | m | 62.0000 |
| 52 | AcA52A | Polyethylene pipe for water supply pipes, trench laid, PE 80 mm, PN10 SDR26, D 63 mm | m | 46.0000 |
|  |  | **3.2.3. Inspection chambers** | | |
| 53 | AcE13A | Execution of inspection chambers made of prefabricated reinforced concrete elements, for sewerage, circular (annular), 1.0 m in diameter, in soil without underground water (concrete for the foundations – 1.92 m3) | m3 | 3.3800 |
| 54 | AcE13A1 | Prefabricated reinforced concrete elements of circular (annular) inspection chambers with a diameter of 1.0 m, for sewerage, in soil without groundwater. Prefabricated slabs for inspection chambers КЦД-10 (0.18 m3) | pcs. | 4.0000 |
| 55 | AcE13A1 | Prefabricated reinforced concrete elements of circular (annular) inspection chambers with a diameter of 1.0 m, for sewerage, in soil without groundwater. Prefabricated ring for inspection chambers КЦ-10-6 (0.16 m3) | pcs. | 2.0000 |
| 56 | AcE13A1 | Prefabricated reinforced concrete elements of circular (annular) inspection chambers with a diameter of 1.0 m, for sewerage, in soil without groundwater. Prefabricated ring for inspection chambers КЦ-10-9 (0.24 m3) | pcs. | 4.0000 |
| 57 | AcE13A1 | Prefabricated reinforced concrete elements of circular (annular) inspection chambers with a diameter of 1.0 m, for sewerage, in soil without groundwater. Prefabricated slabs for inspection chambers КЦП1-10-1 (0.10 m3) | pcs. | 4.0000 |
| 58 | AcE13A1 | Prefabricated reinforced concrete elements of circular (annular) inspection chambers with a diameter of 1.0 m, for sewerage, in soil without groundwater (Cover slab КЦО-1, 0.02 m3) | pcs. | 5.0000 |
| 59 | AcE13A1 | Prefabricated reinforced concrete elements of circular (annular) inspection chambers with a diameter of 1.5 m, for water supply, in soil without groundwater, КЦ-7-3 (0.05 m3) | pcs. | 4.0000 |
| 60 | AcE13A1 | Prefabricated reinforced concrete elements of circular (annular) inspection chambers with a diameter of 1.0 m, for sewerage, in soil without groundwater ( ductile iron cover C-250 ) | pcs. | 4.0000 |
| 61 | DA06A1 | Layer of rounded natural aggregates, with filtering, insulating, ventilating function, frost-proof and non-penetrating, by hand, with ballast | m3 | 1.0600 |
| 62 | DE12C | Asphalt pavement on an existing 3.0 cm thick foundation | m2 | 10.6000 |
| 63 | Supplier price | Ladder | kg | 81.2000 |
| 64 | Supplier price | Metal for the reinforcement of built chambers | kg | 124.6400 |
| 65 | IzD10A | Anticorrosive painting with a paintbrush of metalwork and metal structures with one coat of anticorrosive primer based on red lead and two coats of chlorine rubber enamel, of metalwork and metal structures, made of profiles with thickness between 8 mm up to and including 12 mm | t | 0.2100 |
|  |  | **3.3. Removal and reinstatement of asphalt surfacing** | | |
|  |  | **3.3.1. Asphalt road ( 12 m )** | | |
| 66 | DC04B | Cutting of shrinkage and expansion joints in wear layer concrete by diamond cutting machine | m | 24.0000 |
| 67 | DI109 | Mechanized stripping of asphalt concrete surfacing | m3 | 1.2200 |
| 68 | TsC03C1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in storage yard, soil category III | 100 m3 | 0.0600 |
| 69 | TsC54A | Sand foundation layer | m3 | 3.0600 |
| 70 | TsC54B | Crushed stone foundation layer | m3 | 3.2600 |
| 71 | DB19A | 4.0 cm thick hot-mix asphalt concrete pavement with coarse aggregates, hand-laid | m2 | 20.4000 |
|  |  | **3.3.2. Sidewalk** | | |
| 72 | DC04B | Cutting of shrinkage and expansion joints in wear layer concrete by diamond cutting machine | m | 8.0000 |
| 73 | DG05A | Stripping of up to 3 cm thick layers of permanent asphalt concrete pavement | m2 | 4.0000 |
| 74 | DA12B | Foundation layer or re-profiling of crushed stone, for roads, laid down mechanically, done by filling up, without spreading | m3 | 0.4000 |
| 75 | DE12C | Asphalt pavement on an existing 3.0 cm thick foundation | m2 | 4.0000 |
| 76 | DG04B | Removal of stone or concrete kerbs of any size laid on concrete | m | 2.0000 |
| 77 | DE09A | Stone kerbs for sidewalks, with dimensions of 30x25 cm, on concrete foundation of 35x15 cm | m | 4.0000 |
|  |  | **3.3.3. Trash transportation** | | |
| 78 | TsC03G1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category III | 100 m3 | 0.0100 |
| 79 | TsI50A5 | Transporting soil by 5 t dump truck at a distance of 5 km | t | 2.6200 |
| 80 | TsC51B | Unloading of soil in the storage yard, category II soil | 100 m3 | 0.0100 |

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**2-1-1. Reconstruction of the existing fountains located in Independence Square of Cahul. Monolithic reinforced concrete structures. Fountain No 1**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Symbol of norms and resource code | Name of works | Unit of measurement | Volume |

| 1 | 2 | 3 | 4 | 5 |
| --- | --- | --- | --- | --- |
| 1 | TsC03B1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in storage yard, soil category II | 100 m3 | 3.0000 |
| 2 | TsD32A | Soil cushions on compactable soils by compacting the soil with a roller (soil cushion made of compacted sandy clay) | 100 m3 | 0.8600 |
| 3 | TsD02A1 | Spreading of loose soil, soil category I or II, with a 65-80 HP crawler tractor, in layers 15-20 cm thick. | 100 m3 | 1.1300 |
| 4 | TsD05A | Mechanical compaction with vibratory tamper (150-200 kg), in successive layers of 20-30 cm thickness, excluding the watering of each layer, backfill of non-cohesive soil | 100 m3 | 1.1300 |
| 5 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II | 100 m3 | 1.0100 |
| 6 | TsI50A1 | Transporting soil by 5 t dump truck at a distance of 1 km | t | 171.7000 |
| 7 | CA02C | Plain concrete M 100 poured in levels, slopes, excavations at heights up to and including 35 m, prepared with a concrete mixer as per norm CA01 or ready-mixed concrete, poured by conventional means | m3 | 5.0000 |
| 8 | CA03G | Reinforced concrete poured by conventional means, in foundations, plinths, retaining walls, walls below ground level, prepared with a concrete mixer or ready-mixed concrete as per norm CA01, poured by conventional means, reinforced concrete class M 300 | m3 | 66.0000 |
| 9 | CB02B | Formwork from reusable panels made of short and shortened softwood planks for pouring concrete into selevations, straight walls and diaphragms, including supports at heights up to and including 20 m | m2 | 335.0000 |
| 10 | CC02I | Concrete steel reinforcement OB 37, fabricated in site workshops, with bar diameters up to and including 8 mm, mounted in walls and diaphragms, at heights up to and including 35 m, excluding structures with sliding formwork | kg | 832.0000 |
| 11 | CC02J | Concrete steel reinforcement OB 37, fabricated in site workshops, with bar diameters up to and including 8 mm, mounted in walls and diaphragms, at heights up to and including 35 m, excluding structures with sliding formwork | kg | 3 379,0000 |

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**2-1-2. Reconstruction of the existing fountains located in Independence Square of Cahul. Monolithic reinforced concrete structures. Fountain No 2**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Symbol of norms and resource code | Name of works | Unit of measurement | Volume |

| 1 | 2 | 3 | 4 | 5 |
| --- | --- | --- | --- | --- |
| 1 | TsC03B1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in storage yard, soil category II | 100 m3 | 3.0000 |
| 2 | TsD32A | Soil cushions on compactable soils by compacting the soil with a roller (soil cushion made of compacted sandy clay) | 100 m3 | 0.8600 |
| 3 | TsD02A1 | Spreading of loose soil, soil category I or II, with a 65-80 HP crawler tractor, in layers 15-20 cm thick. | 100 m3 | 1.1300 |
| 4 | TsD05A | Mechanical compaction with vibratory tamper (150-200 kg), in successive layers of 20-30 cm thickness, excluding the watering of each layer, backfill of non-cohesive soil | 100 m3 | 1.1300 |
| 5 | TsC03F1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category II | 100 m3 | 1.0100 |
| 6 | TsI50A1 | Transporting soil by 5 t dump truck at a distance of 1 km | t | 171.7000 |
| 7 | CA02C | Plain concrete M 100 poured in levels, slopes, excavations at heights up to and including 35 m, prepared with a concrete mixer as per norm CA01 or ready-mixed concrete, poured by conventional means | m3 | 5.0000 |
| 8 | CA03G | Reinforced concrete poured by conventional means, in foundations, plinths, retaining walls, walls below ground level, prepared with a concrete mixer or ready-mixed concrete as per norm CA01, poured by conventional means, reinforced concrete class M 300 | m3 | 66.0000 |
| 9 | CB02B | Formwork from reusable panels made of short and shortened softwood planks for pouring concrete into selevations, straight walls and diaphragms, including supports at heights up to and including 20 m | m2 | 335.0000 |
| 10 | CC02I | Concrete steel reinforcement OB 37, fabricated in site workshops, with bar diameters up to and including 8 mm, mounted in walls and diaphragms, at heights up to and including 35 m, excluding structures with sliding formwork | kg | 832.0000 |
| 11 | CC02J | Concrete steel reinforcement OB 37, fabricated in site workshops, with bar diameters up to and including 8 mm, mounted in walls and diaphragms, at heights up to and including 35 m, excluding structures with sliding formwork | kg | 3 379,0000 |

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**2-1-3 Reconstruction of the existing fountains located in Independence Square of Cahul. Technical and sanitary works. Fountain No 1 and No 2**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Symbol of norms and resource code | Name of works | Unit of measurement | Volume |
|  | 2 | 3 | 4 | 5 |
|  |  | **1. Equipment** |  |  |
| 1 | Market price | Pump type PSH ND 2.28 1.5kw 2HP | pcs. | 14.0000 |
| 2 | Market price | Continuous recirculating system pump SACI OPTIMA 75 0.55 kw | pcs. | 2.0000 |
| 3 | Market price | Nozzles type FRS 12 mm | pcs. | 78.0000 |
| 4 | Market price | Suction nozzles for basic system D63 mm | pcs. | 14.0000 |
| 5 | Market price | Suction nozzles for continuous recirculation system D50 mm | pcs. | 14.0000 |
| 6 | Market price | Sand filter EMAUX V650, 16 m3/h | pcs. | 2.0000 |
| 7 | Market price | EMAUX mechanical linear filter | pcs. | 2.0000 |
| 8 | Market price | Automatic chlorine dosing machine CL-02 EMAUX | pcs. | 2.0000 |
| 9 | Market price | Air dehumidifier | pcs. | 2.0000 |
|  |  | **2. Installation works** |  |  |
| 10 | AcC06A | Installation of piston vacuum pumps with a flow rate of up to 150 mc/h on existing stands | pcs. | 16.0000 |
| 11 | AcC03A | Mounting on the existing stand of electric motors driving pumps or other apparatus, having a power of 0.25-2.8 kw | pcs. | 16.0000 |
| 12 | SD21A | Spray nozzle type Pluvio, Pn 6, 1/2 Inch diameter ( nozzles ) | pcs. | 78.0000 |
| 13 | SD21A | Spray nozzle type Pluvio, Pn 6, 1/2 Inch diameter ( Suction nozzles ) | pcs. | 28.0000 |
| 14 | AcC09A | Mounting on existing stands of coagulant dosing devices, dry type (Filter) | pcs. | 4.0000 |
| 15 | AcC09A | Mounting on existing stands of coagulant dosing devices, dry type ( Doser ) | pcs. | 2.0000 |
| 16 | VC08A | Air filter installation, type V, with automatic cleaning, fan, dust container, weighing 200-600 kg (Air Cleaner) | pcs. | 2.0000 |
|  |  | **3. Sanitary works** |  |  |
| 17 | SD07G | Shut-off valve with adapter, with or without outlet, for steel pipe, diameter 2 1/2" ( PVC-U tap, D63 mm ) | pcs. | 28.0000 |
| 18 | SD07F | Shut-off valve with adapter, with or without outlet, for steel pipe, diameter 2" ( PVC-U tap, D50 mm ) | pcs. | 12.0000 |
| 19 | SB05D | Unplasticized PVC pipe, light type (U), for sewerage, joined by gluing, surface mounted or buried under the floor, ( PVC-U PN, D63 mm ) | m | 168.0000 |
| 20 | SB05C | Unplasticized PVC pipe, light type (U), for sewerage, joined by gluing, surface mounted or buried under the floor, with a diameter of 50 mm ( PVC-U PN, D50 mm ) | m | 44.0000 |
| 21 | SF01C | Pressure tightness test of hot or cold water installation made of heavy polyvinyl chloride pipe or plastic material with a diameter of 16-110 mm. | m | 212.0000 |
| 22 | SB06C | Connecting piece (elbow, inspection fitting, double socket, expansion and reduction compensator) made of PVC pipe, light type (U), mounted by gluing, ( PVC-U elbow D63 mm ) | pcs. | 84.0000 |
| 23 | SB06B | Connecting piece (elbow, inspection fitting, double socket, expansion and reduction compensator) made of PVC pipe, light type (U), mounted by gluing, with a diameter of 50 mm ( PVC-U elbow D50 mm ) | pcs. | 18.0000 |
| 24 | SB06C | Connecting piece (elbow, inspection fitting, double socket, expansion and reduction compensator) made of PVC pipe, light type (U), mounted by gluing, ( PVC-U tee D63x50 mm ) | pcs. | 64.0000 |
| 25 | SB06B | Connecting piece (elbow, inspection fitting, double socket, expansion and reduction compensator) made of PVC pipe, light type (U), mounted by gluing, with a diameter of 50 mm ( PVC-U tee D50 mm ) | pcs. | 8.0000 |
| 26 | SA38G | Bracket for mounting water and gas supply pipes, made of steel or PVC, mounted by anchoring, 2 1/2" diameter pipes (metal brackets for positioning pumps) | pcs. | 16.0000 |

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**2-1-4. Reconstruction of the existing fountains located in Independence Square of Cahul. Electrical power equipment. Fountain No 1 and No 2**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Symbol of norms and resource code | Name of works | Unit of measurement | Volume |

| 1 | 2 | 3 | 4 | 5 |
| --- | --- | --- | --- | --- |
|  |  | **1. Installation works** | | |
| 1 | 08-03-573-4 | Distribution board, wall-hung, 12p Hager | pcs. | 2.0000 |
| 2 | 08-03-526-2 | Mono-, bi-, tripolar automatic switch, wall or column mounted, current up to 100, 3f 40A ( ШУН-1, ШУН-2 ) Hager | pcs. | 2.0000 |
| 3 | 08-03-525-2 | Metal-enclosed, panel-mounted, wall or column-mounted switch or knife switch, BH32-3P/25A | pcs. | 2.0000 |
| 4 | 08-03-526-1 | Mono-, bi-, tripolar automatic switch, wall or column mounted, 1ф 16А ( ШАУФ ) Hager | pcs. | 2.0000 |
| 5 | 08-03-526-1 | Mono-, bi-, tripolar automatic switch, wall or column mounted, 1ф 10А ( ШАУФ ) Hager | pcs. | 2.0000 |
| 6 | 08-03-596-1 | Fountain spotlight FRS-006-1F, RGB/IP68/12vDC | 100 pcs | 0.7800 |
| 7 | 08-03-603-1 | Box with step-down transformers ЯТП-0,25/12В | pcs. | 2.0000 |
| 8 |  | Flashlight (portable hand lamp) | pcs. | 2.0000 |
| 9 | 08-03-594-1 | Lighting fixture with luminescent lamps mounted separately on pivots, quantity of lamps in luminaire – 1 ( К200/109-1х9 ) | 100 pcs | 0.0600 |
| 10 | Supplier price | Lighting fixture К200/109-1х9 | pcs. | 6.0000 |
| 11 | 08-02-148-1 | Cable up to 35 kV, in conduits, blocks and boxes installed, mass per metre up to 1 kg | 100 m | 2.1200 |
| 12 | 08-02-401-1 | Cable, fixed with staples, with junction box installation, with 2-4 wires, wire cross-section up to 16 mm2 | 100 m | 1.1000 |
| 13 | 590-4010 | Cable КГГ-5х1,5 | m | 10.0000 |
| 14 | 590-4011 | Cable КГ-4х1,5 | m | 12.0000 |
| 15 | 590-4012 | Cable КГГ-3х1,5 | m | 66.0000 |
| 16 | 590-4013 | Cable КГГ-2х1,5 | m | 21.0000 |
| 17 | 590-4014 | Cable КГ-4х2,5 | m | 150.0000 |
| 18 | 590-4015 | Cable КГ-2х2,5 | m | 60.0000 |
| 19 | 590-4016 | Cable КГ-5х6 | m | 3.0000 |
| 20 | 08-02-412-1 | Insertion of wires into laid metal pipes and hoses: first single-wire or multi-wire conductor in common braid, BBП 1.5 mm2 | 100 m | 18.5200 |
| 21 | 08-02-409-1 | Vinylplast pipe on installed structures, on walls and columns, mounted with straps, diameter up to 25 mm | 100 m | 2.1200 |
| 22 | 08-02-409-2 | Vinylplast pipe on installed structures, on walls and columns, mounted with straps, diameter 32 mm | 100 m | 1.5000 |
| 23 | 08-02-471-4 | Earth clamp, vertical, round steel, diameter 20 mm | 10 pcs | 0.8000 |
| 24 | 08-02-472-6 | Grounding conductor, open, on structural supports, made of steel, cross-section 100 mm2 | 100 m | 0.5000 |
| 25 | 08-02-472-7 | Grounding conductor, open, on structural supports, made of flat steel bar, cross-section 160 mm2 | 100 m | 1.1000 |
|  |  | **2. Equipment** |  |  |
| 26 | Supplier price | Distribution board, 12p Hager | pcs. | 2.0000 |
| 27 | Supplier price | Automatic switch 3f 40A ( ШУН-1, ШУН-2 ) Hager | pcs. | 2.0000 |
| 28 | Supplier price | Automatic switch BH32-3P/25A | pcs. | 2.0000 |
| 29 | Supplier price | Automatic switch 1ф 16А ( ШАУФ ) Hager | pcs. | 2.0000 |
| 30 | Supplier price | Automatic switch 1ф 10А ( ШАУФ ) Hager | pcs. | 2.0000 |
| 31 | Supplier price | Fountain spotlight FRS-006-1F, RGB/IP68/12vDC | pcs. | 78.0000 |

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**4-1-1. Reconstruction of the existing fountains located in Independence Square of Cahul. Energy Supply. Fountain No 1 and No 2**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Symbol of norms and resource code | Name of works | Unit of measurement | Volume |

| 1 | 2 | 3 | 4 | 5 |
| --- | --- | --- | --- | --- |
|  |  | **1. Construction works** | | |
| 1 | TsA16D1 | Manual digging of soil, in confined spaces, in trenches up to 4 m deep, for high-voltage electrical cables, in soil with natural moisture, without shoring, width < 1 m, depth < 1.5 m, very hard soil | m3 | 70.2000 |
| 2 | TsD18B | Compaction of trench backfill for buried cables of high-voltage power lines with medium-hard soil | m3 | 70.2000 |
| 3 | 34-02-003-1 | Laying cable conduits made of polyethylene pipes: max. 2 openings | 1 km | 0.0960 |
| 4 | TsA16D1 | Manual digging of soil, in confined spaces, in trenches up to 4 m deep, for high-voltage electrical cables, in soil with natural moisture, without shoring, width < 1 m, depth < 1.5 m, very hard soil (for grounding) | m3 | 2.7000 |
| 5 | TsD18B | Compaction of trench backfill for buried cables of high-voltage power lines with medium-hard soil (for grounding) | m3 | 2.7000 |
|  |  | **2. Installation works** |  |  |
| 6 | 08-01-026-3 | Exterior distribution panel ЩО 70-1-01 | pcs. | 1.0000 |
| 7 | 08-03-573-4 | Distribution board, wall-hung, height, width and depth up to 600х600х350 mm, BZUM-TF-02-100-17 | pcs. | 1.0000 |
| 8 | 08-03-525-2 | Switch BP32-3P-100A | pcs. | 1.0000 |
| 9 | 08-03-526-2 | Mono-, bi-, tripolar automatic switch, wall or column mounted, 3ф, 50А, Hager | pcs. | 2.0000 |
| 10 | 08-03-526-1 | Mono-, bi-, tripolar automatic switch, wall or column mounted, 3ф 16А Hager | pcs. | 1.0000 |
| 11 | 08-03-600-2 | Three-phase meters mounted on already installed supports | pcs. | 1.0000 |
| 12 | 08-02-142-1 | Laying single cable trunking in trenches | 100 m | 3.2000 |
| 13 | 08-02-141-1 | Cable up to 35 kV, in trenches, unprotected, mass per metre up to 1 kg | 100 m | 3.2000 |
| 14 | 08-02-148-1 | Cable up to 35 kV, in conduits, blocks and boxes installed, mass per metre up to 1 kg | 100 m | 0.9600 |
| 15 | 08-02-148-1 | Cable up to 35 kV, in conduits, blocks and boxes installed, mass per metre up to 1 kg | 100 m | 0.0800 |
| 16 | 08-02-145-1 | Cable up to 35 kV, laid on the bottom of the channel without fasteners, weight of 1 m up to 1 kg 1 kg | 100 m | 0.1000 |
| 17 | Supplier price | Cable ПвзБбШп-4х10 mm2 | m | 98.0000 |
| 18 | Supplier price | Cable BBБ-5х10 mm2 | m | 187.0000 |
| 19 | Supplier price | Cable BBБ-5х6 mm2 | m | 66.0000 |
| 20 | 08-02-471-4 | Earth clamp, vertical, round steel, diameter 20 mm | 10 pcs | 0.3000 |
| 21 | 08-02-472-1 | Earthing conductors: earth clamp, horizontal, round steel bar, diameter 20 mm | 100 m | 0.0300 |
| 22 | 08-02-472-7 | Grounding conductor, open, on structural supports, made of flat steel bar, cross-section 160 mm2 | 100 m | 0.0600 |
|  |  | **3. Equipment** |  |  |
| 23 | Supplier price | Distribution panel ЩО 70-1-01 | pcs. | 1.0000 |
| 24 | Supplier price | Distribution panel BZUM-TF-02-100-17 | pcs. | 1.0000 |
| 25 | Supplier price | Switch BP32-3P-100A | pcs. | 1.0000 |
| 26 | Supplier price | Automatic switch 3ф, 50А, Hager | pcs. | 2.0000 |
| 27 | Supplier price | Automatic switch 3ф, 16А, Hager | pcs. | 1.0000 |
| 28 | Supplier price | Electric meter 5-60A 380B | pcs. | 1.0000 |

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**6-2-1. Reconstruction of the existing fountains located in Independence Square of Cahul. Outdoor water supply and sewerage networks. Sewage pumping station. Fountain No 1 and No 2**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Symbol of norms and resource code | Name of works | Unit of measurement | Volume |

| 1 | 2 | 3 | 4 | 5 |
| --- | --- | --- | --- | --- |
|  |  | **1. Equipment** | | |
| 1 | Supplier price | Rainparc pumping station D=1.0 m, H=3.7 m, equipped with Grundfos SEG 40.12.E.2.50B Autoadapt pump, made of fiberglass reinforced polyester | set | 1.0000 |
|  |  | **2. Installation works** |  |  |
| 2 | Supplier price | Pumping station, made of fiberglass reinforced polyester – Assembly ( 60.1 hours ) | set | 1.0000 |

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**7-1-1. Reconstruction of the existing fountains located in Independence Square of Cahul. Territory development. Fountain No 1**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Symbol of norms and resource code | Name of works | Unit of measurement | Volume |

| 1 | 2 | 3 | 4 | 5 |
| --- | --- | --- | --- | --- |
|  |  | **1. Demolition works** | | |  |  |
| 1 | RpCB18G | Demolition of old concrete by mechanical means, reinforced concrete ( artesian well No. 1 ) | m3 | 36.3500 |
| 2 | RpDB36A | Removal of concrete or basalt paving stones and stone or concrete kerbs, of any size, laid on concrete (stone or concrete paving stones) | m2 | 330.1000 |
| 3 | TsC03G1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category III | 100 m3 | 1.3200 |
| 4 | RpDB36C | Removal of concrete or basalt paving stones and stone or concrete kerbs, of any size, laid on concrete (stone or concrete kerbs) | m | 137.0500 |
| 5 | RpCP44B | Dismantling of metal structures without material recovery | kg | 250.0000 |
| 6 | TsC03G1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category III (waste loading) | 100 m3 | 0.6000 |
| 7 | TsI51A10 | Transporting soil by 10 t dump truck at a distance of 10 km | t | 303.8000 |
|  |  | **2. Development** |  |  |
| 8 | DA12B | Foundation layer or re-profiling of crushed stone, for roads, laid down mechanically, done by filling up, without spreading ( 200 - 250 mm ) | m3 | 122.5000 |
| 9 | DE18A | Pavements made of prefabricated concrete paving slabs laid on a layer of dry cement and sand mixture, proportion 1:6, grouted with dry cement and sand mixture, 5 cm thick layer (Radial-Plus vibro-pressed paving, type ‘White washed brick’, 60 mm thick). | m2 | 213.8000 |
| 10 | DE18A | Pavements made of prefabricated concrete paving slabs laid on a layer of dry cement and sand mixture, proportion 1:6, grouted with dry cement and sand mixture, 5 cm thick layer (Radial-Plus vibro-pressed paving, type ‘Black washed brick’, 60 mm thick). | m2 | 61.1000 |
| 11 | DE11A | Small, precast concrete kerbs with a 10x15 cm cross-section, for framing green spaces, sidewalks, alleys, etc., laid on a 10x20 cm concrete foundation (sidewalk kerb, B4 Radial-Plus, 1000x80x200) | m | 158.0000 |
| 12 | CG01A | Leveling layer for flooring, prepared from M 100-T cement mortar, 3 cm thick, sanded surface | m2 | 188.2100 |
| 13 | CG17D | Flooring made of fiber concrete slabs (600x600), concrete type ‘LuxConstruct’, thickness 20 mm, fixed with adhesive Ceresit CM29 Multi Xpress | m2 | 148.2500 |
| 14 | CG17D | Flooring made of fiber concrete slabs (600x600), concrete type ‘LuxConstruct’, thickness 20 mm, grey colour, fixed with adhesive Ceresit CM29 Multi Xpress | m2 | 39.9600 |
| 15 | CG17D | Flooring made of fiber concrete slabs (30x900, 30x870), concrete type ‘LuxConstruct’, thickness 20 mm, (on the perimeter of the grates), grey colour, fixed with adhesive Ceresit CM29 Multi Xpress | m2 | 28.3500 |
| 16 | AcE06A | Installation of cast-iron gratings on the drain outlets (metal grating for drainage L=1000, manufacturer VAMORA GRUP SRL) | pcs. | 49.0000 |
| 17 | CK18C | Mounting of skirting to aluminium panelling (defence strip between pavement and LPPS 40 fibrobeton slabs, metal, 40x1000, Supraten, code 1830875 ) | m | 68.0000 |
| 18 | IzF31A | Waterproofing of concrete surfaces (vertical, horizontal, including ceilings) with Penetron mixture in 2 layers: smooth surface | m2 | 142.3000 |

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**7-1-2. Reconstruction of the existing fountains located in Independence Square of Cahul. Territory development. Fountain No 2**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Symbol of norms and resource code | Name of works | Unit of measurement | Volume |

| 1 | 2 | 3 | 4 | 5 |
| --- | --- | --- | --- | --- |
|  |  | **1. Demolition works** | | |  |  |
| 1 | RpCB18G | Demolition of old concrete by mechanical means, reinforced concrete ( artesian well No 2 ) | m3 | 36.1000 |
| 2 | RpDB36A | Removal of concrete or basalt paving stones and stone or concrete kerbs, of any size, laid on concrete (stone or concrete paving stones) | m2 | 359.5000 |
| 3 | TsC03G1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category III | 100 m3 | 1.4400 |
| 4 | RpDB36C | Removal of concrete or basalt paving stones and stone or concrete kerbs, of any size, laid on concrete (stone or concrete kerbs) | m | 137.0500 |
| 5 | RpCP44B | Dismantling of metal structures without material recovery | kg | 250.0000 |
| 6 | TsC03G1 | Mechanical digging with excavator of 0.40-0.70 cubic meters, with internal combustion engine and hydraulic control, in soil with natural humidity, unloading in vehicles, soil category III (waste loading) | 100 m3 | 0.6000 |
| 7 | TsI51A10 | Transporting soil by 10 t dump truck at a distance of 10 km | t | 322.4000 |
|  |  | **2. Development** |  |  |
| 8 | DA12B | Foundation layer or re-profiling of crushed stone, for roads, laid down mechanically, done by filling up, without spreading ( 200 - 250 mm ) | m3 | 135.0000 |
| 9 | DE18A | Pavements made of prefabricated concrete paving slabs laid on a layer of dry cement and sand mixture, proportion 1:6, grouted with dry cement and sand mixture, 5 cm thick layer (Radial-Plus vibro-pressed paving, type ‘White washed brick’, 60 mm thick). | m2 | 232.6000 |
| 10 | DE18A | Pavements made of prefabricated concrete paving slabs laid on a layer of dry cement and sand mixture, proportion 1:6, grouted with dry cement and sand mixture, 5 cm thick layer (Radial-Plus vibro-pressed paving, type ‘Black washed brick’, 60 mm thick). | m2 | 66.4000 |
| 11 | DE11A | Small, precast concrete kerbs with a 10x15 cm cross-section, for framing green spaces, sidewalks, alleys, etc., laid on a 10x20 cm concrete foundation (sidewalk kerb, B4 Radial-Plus, 1000x80x200) | m | 153.0000 |
| 12 | CG01A | Leveling layer for flooring, prepared from M 100-T cement mortar, 3 cm thick, sanded surface | m2 | 188.2100 |
| 13 | CG17D | Flooring made of fiber concrete slabs (600x600), concrete type ‘LuxConstruct’, thickness 20 mm, fixed with adhesive Ceresit CM29 Multi Xpress | m2 | 148.2500 |
| 14 | CG17D | Flooring made of fiber concrete slabs (600x600), concrete type ‘LuxConstruct’, thickness 20 mm, grey colour, fixed with adhesive Ceresit CM29 Multi Xpress | m2 | 39.9600 |
| 15 | CG17D | Flooring made of fiber concrete slabs (30x900, 30x870), concrete type ‘LuxConstruct’, thickness 20 mm, (on the perimeter of the grates), grey colour, fixed with adhesive Ceresit CM29 Multi Xpress | m2 | 28.3500 |
| 16 | AcE06A | Installation of cast-iron gratings on the drain outlets (metal grating for drainage L=1000, manufacturer VAMORA GRUP SRL) | pcs. | 49.0000 |
| 17 | CK18C | Mounting of skirting to aluminium panelling (defence strip between pavement and LPPS 40 fibrobeton slabs, metal, 40x1000, Supraten, code 1830875 ) | m | 68.0000 |
| 18 | IzF31A | Waterproofing of concrete surfaces (vertical, horizontal, including ceilings) with Penetron mixture in 2 layers: smooth surface | m2 | 142.3000 |

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**6-1-2. External water and sewage networks**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| №  crt. | Simbol norme şi Cod resurse | Denumire lucrărilor | Unitatea de masura | Volum |

| 1 | 2 | 3 | 4 | 5 |
| --- | --- | --- | --- | --- |
|  |  | **1.1. Construction works**  **1.1.1. Earthworks** | | |
|  |  |  | | |
|  |  |  | | |
| 1 | TsC03B1 | Mechanical excavation with the 0.40-0.70 mc excavator, with internal combustion engine and hydraulic control, in soil with natural moisture, unloading in land storage catg. II | 100 m3 | 0,4000 |
| 2 | TsA20B | Manual excavation of soil, in slopes, at pits excavated with an excavator or scraper, to complete the excavation of the slope profile, in middle ground | m3 | 0,8000 |
| 3 | TsD01B | Spreading with a shovel the refined soil, in uniform layers, 10-30 cm thick, by throwing up to 3 m from the piles, including crushing the clods of earth, the soil coming from the middle ground | m3 | 3,9600 |
| 4 | TsD02A1 | The spreading of fine soil from category I or II land, carried out with a bulldozer on a 65-80 CP tracked tractor, in layers with a thickness of 15-20 cm | 100 m3 | 0,3600 |
| 5 | TsD05A | Compaction with a 150-200 kg mechanical screed of the fillings in successive layers of 20-30 cm thickness, excluding the watering of each layer separately, the fillings being made of non-cohesive soil | 100 m3 | 0,4000 |
|  |  | **1.1.2.** **Pipes and accessories** | | |
| 6 | AcA52A | Polyethylene pipe, for water supply pipes mounted in the ditch, with a diameter of 63 mm. | m | 20,0000 |
| 7 | AcF11C | Washing pipes made of PVC, cast iron, asbestos cement, polyethylene, etc. 110 mm, with potable water after assembly and joining, before reception | m | 20,0000 |
| 8 | AcF12A | Pressure test of polyethylene pipes installed in trenches for water supply and sewage networks, with a diameter of up to 100 mm | m | 20,0000 |
| 9 | AcA53A | Installation of fittings by electrofusion. Electrofusion welding between pipe and fitting | pcs | 1,0000 |
| 10 | AcA53C | Installation of fittings by electrofusion. Electrofusion welding between pipe and fitting | pcs | 1,0000 |
| 11 | AcA53A | Installation of fittings by electrofusion. Electrofusion welding between pipe and fitting, d=32 | pcs | 2,0000 |
| 12 | AcA31A | Installation by electric welding of steel flanges or connecting parts at the end of pipes, having a diameter of 50-100 mm | pcs | 1,0000 |
| 13 | AcB12B | Installation on the steel pipe of a water meter, with vanes, of a line valve with discharge, made of bronze, at the connections, with a diameter of Dn=25 mm | pcs | 2,0000 |
| 14 | AcE50C | Connection to the existing pipe made of cast iron pipe, (with cast iron tee) having a pipe diameter of 100 mm | piesa | 1,0000 |
|  |  | **1.2. Profil K1** | | |
|  |  | **1.2.1.**  **Earthworks** | | |
| 15 | TsC03B1 | Mechanical excavation with the 0.40-0.70 mc excavator, with internal combustion engine and hydraulic control, in soil with natural moisture, unloading in land storage catg. Il | 100 m3 | 0,1800 |
| 16 | TsA20B | Manual excavation of soil, in slopes, at pits excavated with an excavator or scraper, to complete the excavation of the slope profile, in middle ground | m3 | 0,8800 |
| 17 | AcF03A | Filling in ditches for water supply or sewage pipes, as a substrate, protective layer, insulation layer or filter layer for drainage pipes, made with sand | m3 | 0,7000 |
| 18 | TsD01B | Spreading with a shovel the refined soil, in uniform layers, 10-30 cm thick, by throwing up to 3 m from the piles, including crushing the clods of earth, the soil coming from the middle ground | m3 | 1,6400 |
| 19 | TsD02A1 | The spreading of fine soil from category I or II land, carried out with a bulldozer on a 65-80 CP tracked tractor, in layers with a thickness of 15-20 cm | 100 m3 | 0,1500 |
| 20 | TsD05A | Compaction with a 150-200 kg mechanical screed of the fillings in successive layers of 20-30 cm thickness, excluding the watering of each layer separately, the fillings being made of non-cohesive soil | 100 m3 | 0,1600 |
|  |  | **1.2.2. Pipes and accessories** | | |
| 21 | AcA07B | Installation in the ground, outside the buildings, of PVC pipes type 4(G) or 3(M), having a diameter of 160 mm | m | 22,0000 |
| 22 | AcF12C | Pressure test of polyethylene pipes installed in trenches for water supply and sewage networks, with a diameter of 160 mm | m | 22,0000 |
|  |  | **1.2.3. Fîntîni** | | |
| 23 | TsA05B1 | Manual earth excavation in limited spaces, over 1.00 m wide, executed with an inclined slope, without supports, up to 6 m deep, with manual evacuation at foundations, basements, canals, etc., in earth with natural moisture, digging depth 0 -2 m middle ground | m3 | 3,5300 |
| 24 | TsD01B | Spreading with a shovel the refined soil, in uniform layers, 10-30 cm thick, by throwing up to 3 m from the piles, including crushing the clods of earth, the soil coming from the middle ground | m3 | 1,9600 |
| 25 | TsD05A | Compaction with a 150-200 kg mechanical screed of the fillings in successive layers of 20-30 cm thickness, excluding the watering of each layer separately, the fillings being made of non-cohesive soil | 100 m3 | 1,9600 |
| 26 | TsC59B | Mechanical excavation of the soil with an excavator with a bucket of 0.15 m3 with unloading in a dump truck: category 2 land | 100 m3 | 0,0200 |
| 27 | TsI50A5 | Transporting the soil with a dump truck at a distance of 5 km | t | 2,6000 |
| 28 | TsC51B | Land unloading works in the warehouse, land category II | 100 m3 | 0,0200 |
| 29 | CA02C | Simple concrete poured in equalizations, slopes, trenches at heights up to 35 m inclusive, prepared with the concrete plant according to art. CA01 or commodity concrete, casting with classical means (concrete B 7.5) | m3 | 0,0200 |
| 30 | AcE13A | Construction of manholes made of prefabricated reinforced concrete elements, for sewerage, circular (annular) with a diameter of 1.0 m, in land without underground water | m3 | 0,8100 |
| 31 | AcE13A1 | Prefabricated reinforced concrete elements of the visitation chambers, circular (rings) with a diameter of 1.0 m, for sewerage, КЦД-10 (0,18 m3) | pcs | 1,0000 |
| 32 | AcE13A1 | Prefabricated reinforced concrete elements of the visitation chambers, circular (rings) with a diameter of 1.0 m, for sewerage, in land without underground water. Pre-made ring for fireplaces КЦ-10-9 (0.24 m3) | pcs | 2,0000 |
| 33 | AcE13A1 | Prefabricated reinforced concrete elements of the visitation chambers, circular (rings) with a diameter of 1.0 m, for sewerage, in land without underground water. Prefabricated tiles for fireplaces КЦП1-10-1 (0.10 m3) | pcs | 1,0000 |
| 34 | AcE13A1 | Prefabricated reinforced concrete elements of the visiting chambers, circular (rings) with a diameter of 1.5 m, for water supply, in land without underground water. КЦ-7-3 (0.05 m3) | pcs | 1,0000 |
| 35 | AcE13A1 | Prefabricated reinforced concrete elements of the visitation chambers, circular (annular) with a diameter of 1.5 m, for sewerage, in land without underground water (Cap with cast iron frame\*) | pcs | 1,0000 |
| 36 | CD50A | Simple brick masonry, format 250 x 120 x 65 for exterior walls up to 4 m high | m3 | 0,0100 |
| 37 | TsA02A | Manual earth excavation in limited spaces, under 1.00 m or over 1.00 m wide, performed without supports, with a vertical slope, at foundations, canals, basements, drains, twinning steps, in non-cohesive or weakly cohesive soil at depth < 0.75 m easy terrain | m3 | 0,5500 |
| 38 | TsC53A | Soil compaction with gravel | 100m2 | 0,0550 |
| 39 | DA06A1 | Layer of cylindrical natural aggregates, having the function of filter resistance, insulation, ventilation, anti-freeze and anti-capillary, with manual bedding with ballast | m3 | 0,5500 |
| 40 | DB19A | Asphalt concrete clothing with large aggregate, executed hot, 4.0 cm thick, with manual laying | m2 | 5,5000 |
|  |  |  | | |
|  |  | **2. Utilaj** | | |
| 41 | Supplier price | Ultrasonic water meter diam. 25 mm | pcs | 1,0000 |

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