

UNICEF WATER & SANITATION PHASE XII

Subproject 1: Urban Household Water Security
2- Rehabilitation/Maintenance of Water Supply Systems

Code	Description	Quantity	Unit of measurement
03-04-00001	Submersible pump with direct coupled electrical motor and with non-return valve, control panel, 150 m three core cable, electrode to avoid dry running and cable termination kit , MS 6000 380 V, 50 Hz, 3 Ph. TO BE INSTALLED ON NEW BORE WELLS. ALL CABLES TO BE PACKED SEPARATELY WITH EACH PUMP, Qmin.=7M3/H, Hmax= 260M. Each set should have 40Nos (3ML) each of red oxide threaded column assemblies.	5	set
03-04-00002	Ditto as above but, Qmin.= 12M3/H, Hmax= 160M. MS 6000	5	set
03-04-00003	Ditto as above but, Qmin=22M3/H, Hmax=215M. MS 6000	9	set
03-04-00004	Ditto as above but, Qmin= 14M3/H, H=370M. MS 4000	6	set
03-04-00005	Ditto as above but Qmin= 8M3/H, Hmax=380M. MS 6000	6	set
03-04-00006	Ditto as above but, Qmin=20M3/H, Hmax=270M. MS 6000	4	set
03-04-00007	Ditto as above but, Qmin=22M3/H, Hmax=290M	4	set
03-04-00008	Solar powered submersible pump Q= 180m3/day, Head =200. Each set should have 40Nos (3ML) each of red oxide threaded column assemblies.	4	set
03-04-00009	Pre-fabricated compact unit of out put capacity 150 cubic meter per hour for water turbidity ranging between 10 to 750 including clarifying tanks which could be open type all internal components should be made of hot dip galvanized or coated with non-toxic black bituminous paints, intermediate storage tank made of pressed steel, Alum dosers, filters, chemical sterilization & intermediate pumps to pump the water through filters against static head 8M, the motor of pump should be 1450 RPM, 3 phase, 50 HZ.	10	set
03-04-00010	Motor set for Grundfos submersible pump with tail cable and cable joint and control panel, 400V, 50HZ, 3PH, capacity 3.7KW.	5	set
03-04-00011	Motor set for Grundfos submersible pump with tail cable and cable joint and control panel, 400V, 50HZ, 3PH, capacity 5.5KW.	9	set
03-04-00012	Ditto as above but capacity 7.5KW.	4	set
03-04-00013	Ditto as above but capacity 11.0KW	10	set
03-04-00014	Ditto as above but capacity 18.5KW	10	set
03-04-00015	Ditto as above but capacity 22.0KW	5	set
03-04-00016	Ditto as above but capacity 30.0KW	4	set
03-04-00017	Ditto as above but capacity 37.0KW "	2	set
03-04-00018	Flexible electrical power cable for deep well submersible motors size 4x16 mm ²	1500	ML
03-04-00019	Ditto as above but size 4x10 mm ²	1000	Each
03-04-00020	Ditto as above but size 4x25 mm ²	1500	Each
03-04-00021	Ditto as above but size 4x4 mm ²	500	Each
03-04-00022	Control panel for submersible 11.00 KW Grundfos motor with main switch circuit breaker phase failure relay, timer relay, over load relay, ammeter, and voltmeter, 380 Volt, 50 Hz, 3 PH, auto-transformer starter.	9	Each

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Code	Description	Quantity	Unit of measurement
03-04-00023	Ditto as above but capacity Grundfos motor 18.5KW	7	Each
03-04-00024	Ditto as above but 22.0kw	7	Each
03-04-00025	Ditto as above but capacity Grundfos motor 30.0 KW	5	Each
03-04-00026	Ditto as above but capacity Grundfos motor 37.0 KW	1	Each
03-04-00027	Ditto as above but capacity Grundfos motor for 75.0 KW	3	Each
03-04-00028	Deep well turbine pump capacity Q=14cum/hr(min), head=160M (max), preferably BP27-16 type or equivalent from Grundfos. Complete with bowl assembly, pump head and discharge flange with 3 inch BSP thread, electric motor 3x380/660V, 50Hz, with housing guard direct coupled with pump head, top column pipe 3 inch length 0.485M threaded with 8 threads per inch, complete with 3/4 inch line shaft, mechanical shaft seal and coupling, intermediate column pipe 3 inch line shaft, column bearing and liner, suction pipe 3 inch, length 1.64M with 3 inch spring loaded foot-valve with strainer 50M cable 4x6MM2 and 4 PCS cable gland, spare parts for two years operation, O&M manual in English with appropriate packing. Each set should have 40Nos (3ML) each of red oxide threaded column assemblies.	4	set
03-04-00029	Ditto as above but, Q=22cum/hr (min), H=165m (max), (BP 45-16), or equivalent	3	set
03-04-00030	Ditto as above but, Q=14cum/hr), H=95m (max), (BP 45-15)	3	set
03-04-00031	Ditto as above but, Q=22cum/hr (min), H=155m (max), (BP 45-13)	3	set
03-04-00032	Vertical motor complete set for Grundfos vertical turbine pumps, 380V, 50Hz, 2900 rpm, 3PH and capacity 15KW for BP 27-15	2	set
03-04-00033	Ditto as above but capacity 22KW for BP 45-12	2	set
03-04-00034	Diesel engine for operating vertical turbine pump, capacity 45 HP, 2900 rpm, complete set with centrifugal clutch, 50 degrees Celcius max; and 1,200m max altitude	1	set
03-04-00035	Right angle gear for Grundfos vertical turbine pump,type 2GS25/3GS26, 20HP complete set	1	set
03-04-00036	Ditto as above but type 2GS45/3GS46 for 45HP, complete set	1	set
03-04-00037	Column bearing with vulcanized rubber outer sleeve and rubber linings with bushes of synthetic material for Grundfos vertical turbine pumps, size 3 x 1/2 inch	130	Each
03-04-00038	Ditto as above but size 3 x 5/8 inch	120	Each
03-04-00039	Ditto as above but size 3 x 3/4 inch	120	Each
03-04-00040	Ditto as above but size 4 x 3/4 inch	100	Each
03-04-00041	Ditto as above butt size 4 x 7/8 inch	120	Each
03-04-00042	Ditto as above but size 5 x 7/8 inch	130	Each
03-04-00043	Sealing set for shaft seal for Grundfos vertical turbine pumps size 5/8 inch	30	Each
03-04-00044	Ditto as above but size 3/4 inch	30	Each
03-04-00045	Ditto as above but size 7/8 inch	30	Each
03-04-00046	Dittoas above but size 1 inch	20	Each

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Code	Description	Quantity	Unit of measurement
03-04-00047	Shaft coupling for Grundfos vertical turbine pumps size 5/8 inch	50	Each
03-04-00048	Ditto as above but size 3/4 inch	50	Each
03-04-00049	Ditto as above but size 7/8 inch	30	Each
03-04-00050	Driver for Grundfos vertical turbine pump type BP 16/27/45 size 3/4 inch	30	Each
03-04-00051	Ditto as above but size 5/8 inch	50	Each
03-04-00052	Ditto as above but size 7/8 inch	30	Each
03-04-00053	Pump discharge head, complete set consisting of pump head, gasket, bolt & nut, stay bolts, nuts, pipe plug for BP 27-15, BP 27-12 , size 3.0 inch	22	Each
03-04-00054	Ditto as above but size 4.0 inch	22	Each
03-04-00055	Line shaft with shaft with coupling for Grundfos vertical turbine pumps, size 5/8 inch x 1.8 m	50	Each
03-04-00056	Dittoas above but size 3/4 inch x1.8m	50	Each
03-04-00057	Ditto as above but size 7/8 inch x1.8m	40	Each
03-04-00058	Column pipes for Grundfos vertical turbine pumps, size 4.0 inch x 1.8 m	120	Each
03-04-00059	Bottom column pipe complete with shaft, coupling and bearing with thread in bottom end, size 3 x 5/8 inch	30	Each
03-04-00060	Ditto as above but size 3 x 3/4 inch	30	Each
03-04-00061	Ditto as above but size 4 x 3/4 inch	30	Each
03-04-00062	Ditto as above but size 4 x 7/8 inch	30	Each
03-04-00063	Diesel engine for operating vertical turbine pump complete set with clutch, MWM D-3011; max altitude 1,200m. RPM 2900	2	Each
03-04-00064	Gland packing for ingersoll dressor pumps type 10 UZD	20	ML
03-04-00065	Gland packing size 1/2 inch; pH 5-8.5 RPM = 2440 H = 80m	200	ML
03-04-00066	Gland packing size 3/4 inch pH 5-8.5 RPM = 2440 H = 150m	240	ML
03-04-00067	Gland packing size 3/8 inch pH 5-8.5. RPM = 2900, 20 bar	140	ML
03-04-00068	Gland packing size 5/8 inch pH 5-8.5 RPM = 2440 H = 40m	140	ML
03-04-00069	Centrifugal booster pump for pumping treated water Q=100 cum/hr, H= 60m Coupled with electrical driven motor with soft starter and automatic circuit breaker connection and with control panel. 380V, 50Hz, 3 phase, 1450 RPM. Max altitude 1,000m. With spare parts for 2 years operation, spare parts/operation manual in English, and necessary valves, non-return valves, flanges, elbows, reducers.	3	Each
03-04-00070	Centrifugal booster pump for pumping treated water Q=200 cum/hr, H= 100m Coupled with electrical driven motor with soft starter and automatic circuit breaker connection and with control panel. 380V, 50Hz, 3 phase, 1450 RPM. Max altitude 1,000m. With spare parts for 2 years operation, spare parts/operation manual in English, and necessary valves, non-return valves, flanges, elbows, reducers	6	Each
03-04-00071	Ditto as above but: Q=60 cum/hr, H=60m	1	Each
03-04-00072	Ditto as above but Q=50 cum/hr, H=80m	1	Each
03-04-00073	Ditto as above but Q=100 cum/hr, H=100m	1	Each
03-04-00074	Ditto as above but Q=150 cum/hr, H=120m	3	Each

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Code	Description	Quantity	Unit of measurement
03-04-00075	Ditto as above but Q=200 cum/hr, H=170m	2	Each
03-04-00076	Ditto as above but Q=82 cum/hr, H=380m	2	Each
03-04-00077	Ditto as above but Q=55 cum/hr, H=120m	2	Each
03-04-00078	Ditto as above but Q=200 cum/hr, H=200m	3	Each
03-04-00079	Ball bearing 7317	50	Each
03-04-00080	Ball bearing type SKF 6312, 2RS	20	Each
03-04-00081	Ball bearing type 7309	40	Each
03-04-00082	Ball bearing type 6218 C3/SKF	24	Each
03-04-00083	Ball bearing type SKF 6311, 2RS	20	Each
03-04-00084	Ball bearing type 6322	10	Each
03-04-00085	Ball bearing type 6328C3	20	Each
03-04-00086	Ball bearing type 2317	10	Each
03-04-00087	Ball bearing type 7317 BG	20	Each
03-04-00088	Ball bearing type 6322C3	50	Each
03-04-00089	Ball bearing type 7216	10	Each
03-04-00090	Ball bearing type 6310	60	Each
03-04-00091	Ball bearing type 6309	60	Each
03-04-00092	Ball bearing type 6320 C3	15	Each
03-04-00093	Ball bearing type SKF 7310, 2RS	40	Each
03-04-00094	Ball bearing type NU 218	10	Each
03-04-00095	Ball bearing type 7314	100	Each
03-04-00096	Ball bearing type N216 MC3/SKF 217 C3	10	Each
03-04-00097	Ball bearing type 6217 C3/SKF 5217 C3	15	Each
03-04-00098	Ball bearing type 6319 C3	50	Each
03-04-00099	Ball bearing type 6316 C3	50	Each
03-04-00100	Ball bearing type 6315	10	Each
03-04-00101	Ball bearing type 6316	60	Each
03-04-00102	Ball bearing type 5407	10	Each
03-04-00103	Ball bearing type 7410	10	Each
03-04-00104	Electrical Motor with control panel for booster pump. P=185 KW at 2960 RPM, V=400V, 50 HZ, 3P, mounting position	2	Each
03-04-00105	Electrical Motor with control panel for high lift pump. P=320 KW at 1450 RPM, V=400V, 50 HZ, 3P, mounting position: IM 1001 (IM B3), IP23/IC01	2	Each
03-04-00106	Electrical motor 570KW, 1491 min, cos=0.86, A= 957 with pair coupling for motor and pump, type of pump = 10UZD1 (No. CO 17 203) with control panel soft starter and copper cable size 240mm single core flexible cable 500 ml and spare parts for 2 years operation including spares for control panel.	1	Each
03-04-00107	Control panel for Grundfos submersible motor with main switch, circuit breaker, illuminated selector switch, contactor, phase failure relay, timing relay, overload relay, sequence and asymmetry relay, fuse holder, auto transformer, ammeter and voltmeter, 380V, 50Hz, 3Ph. in addition to that single phase to neutral (220 V, 50Hz) must also be available for the control panel components such as ammeter, voltmeter, etc. Capacity 22 Kw, pump type Sp (30-26)	6	Each
03-04-00108	Ditto as above but capacity 37 Kw, Grundfos SP (30-43) Franklin 6"	4	Each

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Code	Description	Quantity	Unit of measurement
03-04-00109	Control panel for star-delta motor with main switch, circuit breaker, illuminated selector switch, contactor, phase failure relay, timing relay, overload relay, fuse holder, auto transformer, ammeter and voltmeter, 380V, 50Hz, 3Ph. Capacity 55 Kw, 83 Ampere, RPM 2900	2	Each
03-04-00110	Dittoas above but capacity 75 Kw, 137 A, 2960 RPM, induction motor	7	Each
03-04-00111	Ditto as above but capacity 110 Kw, 267 A, 1480 RPM , WEG 500 D250 M, CFA 6743/1	2	Each
03-04-00112	Ditto as above but capacity 200 Kw	2	Each
03-04-00113	Automatic air-circuit breaker, MCCB, 500V, 50Hz & 3P. Capacity 630-800.	6	Each
03-04-00114	Dittoas above but capacity 150-200.	6	Each
03-04-00115	Ditto as above but capacity 400-500 amps.	6	Each
03-04-00116	Ditto as above but capacity 80-120amps.	260	Each
03-04-00117	Ditto as above but capacity 50-63 amps.	210	Each
03-04-00118	Ditto as above but capacity 30-40 amps.	10	Each
03-04-00119	Flexible electrical power cable for 400V, size 1x240 mm2	100	ML
03-04-00120	Dittoas above but size 1x95 mm2	100	ML
03-04-00121	Ball bearing type 7412	2	ML
03-04-00122	Ball bearing type 6216	4	ML
03-04-00123	Flexible electrical power cable for 400V, size 4*35 mm2	700	ML
03-04-00124	Oil for high tension transformers, 33/11KV and 11/0.4 KV	1000	litter
03-04-00125	Electric contactors, 500V, 50 Hz, coil voltage 380V, Telemecanic, France made, 60 Amper	40	Each
03-04-00126	Ditto as above but, 80 Ampere	20	Each
03-04-00127	Ditto as above but, 100 Ampere	20	Each
03-04-00128	Phase failure, three phase asymmetry and sequence relay, 380 V, 50 Hz. Type BA 9041	110	Each
03-04-00129	Self-emulating electrical tape 19mm x 10m. for high tension voltage-moister resistant, ozone resistant.	100	ML
03-04-00130	Insulating tape, low voltage, 19mm x 33m.	100	Each
03-04-00131	Shrinkable terminations (12,000V) three core for cable size (50-95)mm, 60 cm long.	10	Each
03-04-00132	GI pipe for drinking Water supply, to be of mild steel, medium series, standard, longitudinally welded, (high induction frequency welding), hot dipped galvanized and passivated. Each pipe to be hydro tested or tested as per current method. To be manufactured as per ISO 65-1981. Both ends male threaded ISO 7, socked one end (female threaded socket), duly galvanized and chamfered, and the other end protected with a HDPE threaded protector, covering entire thread of pipe, male threads to be protected with anti-rust zinc aluminum paste, socket threads to be protected with anti-rust varnish Pipe/socket to adequately zinc coated to satisfy copper sulfate test as prescribed in appendix A of BS 1387 / 67 or equivalent ISO standard. Steel, zinc, anti-rust paste and varnish to be made from food grade material. Pipe length (excluding socket length): 5.8 meters. PN 25, Nominal diameter: ND 2.0 inch.	1500	Each
03-04-00133	Ditto as above but, PN 25, size 3.0 inch	3000	Each
03-04-00134	Ditto as above but, PN 25, size 4.0 inch	3000	Each

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Code	Description	Quantity	Unit of measurement
03-04-00135	Ditto as above but, PN 25, size 6.0 inch	1000	Each
03-04-00136	Bronze heavy type gate valve set with hand wheel, clockwise closing, FxF, threaded to BS21 (ISO R7), size 2.0 inch, PN 25. Food quality.	75	Each
03-04-00137	Ditto as above but, PN 25, size 3.0 inch, PN 25	80	Each
03-04-00138	Ditto as above but, size 4.0 inch, PN 25	80	Each
03-04-00139	Ditto as above but, PN 25, size 6.0 inch, PN 25	50	Each
03-04-00140	Brass non-return valve set, FxF, threaded to BS21 (ISO R7), PN 25, size 2.0 inch. Food quality.	20	Each
03-04-00141	Ditto as above but, size 3.0 inch, PN 25	30	Each
03-04-00142	Ditto as above but, size 4.0 inch, PN 25	50	Each
03-04-00143	Malleable cast iron, hot dip galvanized equal elbows for drinking water supply conforming to ISO R49 and threaded to BS21 (ISO R7), 90 degree, FxF, size 2.0 inch, PN 25. Food quality. 2"*2"	100	Each
03-04-00144	Ditto as above but, size 3.0 inch, PN 25	150	Each
03-04-00145	Ditto as above but, size 4.0 inch, PN 25	150	Each
03-04-00146	Ditto as above but, size 6.0 inch, PN 25	50	Each
03-04-00147	Malleable cast iron, hot dip galvanized equal Tee-joints for drinking water supply conforming to ISO R49 and threaded to BS21 (ISO R7), FxFxF, size 2.0 inch, PN 25. 2"*2"*2"	50	Each
03-04-00148	Ditto as above but, size 3.0 inch, PN 25	130	Each
03-04-00149	Ditto as above but, size 4.0 inch, PN 25	150	Each
03-04-00150	Ditto as above but, size 6.0 inch, PN 25	75	Each
03-04-00151	Malleable cast iron, hot dip galvanized equal unions for drinking water supply conforming to ISO R49 and threaded to BS21 (ISO R7), FxF, size 2.0 inch, PN 25. 2"*2"	60	Each
03-04-00152	Ditto as above but, size 3.0 inch, PN 25	150	Each
03-04-00153	Ditto as above but, size 6.0 inch, PN 25	45	Each
03-04-00154	Ditto as above but, size 4.0 inch, PN 25	150	Each
03-04-00155	Malleable cast iron, hot dip galvanized reducer joints for drinking water supply conforming to ISO R49 and threaded to BS21 (ISO R7), FxF, size 6.0 x 4.0 inch, PN 25	60	Each
03-04-00156	Ditto as above but, size 6.0 x 3.0 inch.	50	Each
03-04-00157	Ditto as above but, size 6.0 x 2.0 inch.	10	Each
03-04-00158	Ditto as above but, size 4.0 x 3.0 inch.	90	Each
03-04-00159	Ditto as above but, size 4.0 x 2.0 inch	10	Each
03-04-00160	Ditto as above but, size 3.0 x 2.0 inch	10	Each
03-04-00161	Viking Johnson coupling for 90 mm, PN 25, Standard length pipe	600	Each
03-04-00162	Ditto as above but for 110 mm pipe.	600	Each
03-04-00163	Ditto as above but for 160 mm pipe.	140	Each
03-04-00164	V. J. Easy clamps for 90 mm, PN 25, Standard length pipe	520	Each
03-04-00165	Ditto as above but for 110 mm pipe.	520	Each
03-04-00166	Ditto as above but for 160 mm pipe.	120	Each
03-04-00167	Ditto as above but, but for 220 mm pipe.	20	Each
03-04-00168	Stainless steel repair clamps, quality A131304 with waffled rubber seal according to DIN 3535. Double section for 80 mm pipe. PN 24. Required length is (30-40) cm	10	Each
03-04-00169	Ditto as above but for 100mm pipe.	10	Each
03-04-00170	Ditto as above but for 150mm pipe.	10	Each
03-04-00171	Ditto as above but for 200mm pipe.	10	Each
03-04-00172	Ditto as above but for 300mm pipe.	10	Each

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Code	Description	Quantity	Unit of measurement
03-04-00173	Ductile iron pipe with rubber gasket joints (Tighten joints) with rubber gaskets, 6 meters nominal length, 3 inch diameter. PN 25	3250	Each
03-04-00174	Ditto as above but 4 inch dia.	4000	Each
03-04-00175	Ditto as above but 6 inch dia.	1700	Each
03-04-00176	Ditto as above but 8 inch dia.	1000	Each
03-04-00177	Ditto as above but 12 inch dia.	500	Each
03-04-00178	Ditto as above but 16 inch dia.	1000	Each
03-04-00179	Equal elbows for ductile pipes with rubber gasket joints, bolts & spigot, 90 degree, FxF, 3 inch dia, PN 25.	200	Each
03-04-00180	Ditto as above but 4 inch dia.	450	Each
03-04-00181	Flanged equal elbow size 6", 90 degree with socket, spigot, bolts and rubber.	260	Each
03-04-00182	Ditto as above but 8 inch dia.	160	Each
03-04-00183	Ditto as above but 10 inch dia.	160	Each
03-04-00184	Ditto as above but 12 inch dia.	70	Each
03-04-00185	Equal elbows for ductile pipes with rubber gasket joints, bolts, spigot & rubber, 45 degree, FxF, 3 inch diam, PN 25. 3"*3"	75	Each
03-04-00186	Ditto as above but 4 inch diam	150	Each
03-04-00187	Flanged equal elbow size 6"*6", 45 degree with socket, spigot, and rubber.	30	Each
03-04-00188	Ditto as above but 8 inch diam	20	Each
03-04-00189	Ditto as above but 10 inch diam	10	Each
03-04-00190	Ditto as above but 12 inch diam	10	Each
03-04-00191	Equal Tees for ductile pipes with rubber gasket joints, bolts & spigot, FxFxF, 3 inch diam, PN 25.3"*3"*3"	200	Each
03-04-00192	Ditto as above but 4 inch diam	270	Each
03-04-00193	Ditto as above but 6 inch diam	95	Each
03-04-00194	Ditto as above but 8 inch diam	45	Each
03-04-00195	Ditto as above but 10 inch diam	13	Each
03-04-00196	Ditto as above but 12 inch diam	30	Each
03-04-00197	Ductile Socket with rubber, bolts & spigot 3x3 inch dia, PN 25.	30	Each
03-04-00198	Ditto as above but 4x4 inch dia	50	Each
03-04-00199	Ditto as above but 4x3 inch dia	30	Each
03-04-00200	Ductile Socket with rubber, bolts & spigot 3x3 inch dia, PN 25.	20	Each
03-04-00201	Ditto as above but 6x3 inch dia	115	Each
03-04-00202	Ditto as above but 6x6 inch dia	115	Each
03-04-00203	Ditto as above but 8x8 inch dia	8	Each
03-04-00204	Ductile reducer size 8x6 inch dia	8	Each
03-04-00205	Ditto as above but 8x4 inch dia	7	Each
03-04-00206	Ditto as above but 8x3 inch dia	3	Each
03-04-00207	Ditto as above but 10x4 inch dia	7	Each
03-04-00208	Ditto as above but 10x6 inch dia	7	Each
03-04-00209	Ditto as above but 10*8 inch dia	5	Each
03-04-00210	Ductile equal socket size 10x10 inch dia	7	Each
03-04-00211	Ditto as above but 12x12 inch dia	7	Each
03-04-00212	Flanged Parallel reducers for ductile pipes with rubber gasket joints, bolts & spigot FxF, 12x10 inch dia, PN 25.	12	Each
03-04-00213	Ditto as above but 12 x 8 inch dia	12	Each
03-04-00214	Ditto as above but 12 x 6 inch	2	Each
03-04-00215	Ditto as above but 10 x 8 inch dia	2	Each
03-04-00216	Ditto as above but 10 x 6 inch dia	2	Each
03-04-00217	Ditto as above but 10 x 4 inch dia	12	Each

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Code	Description	Quantity	Unit of measurement
03-04-00218	Ditto as above but 8 x 6 inch dia	56	Each
03-04-00219	Ditto as above but 8 x 4 inch dia	14	Each
03-04-00220	Ditto as above but 6 x 4 inch dia	104	Each
03-04-00221	Ditto as above but 6 x 3 inch dia	56	Each
03-04-00222	Ditto as above but 4 x 3 inch dia	55	Each
03-04-00223	Ductile Equal push in sockets for ductile pipes with rubber gasket joints, FxF, 4 inch dia, PN 25.	10	Each
03-04-00224	Ditto as above but 6 inch dia, flanged with bolts, nuts & spigot	10	Each
03-04-00225	Ditto as above but 8 inch dia	3	Each
03-04-00226	Standard socket & spigot joints for ductile pipes with rubber gasket joints, FxM, 3 inch dia, PN 25.	170	Each
03-04-00227	Ditto as above but 4 inch dia	340	Each
03-04-00228	Ditto as above but 6 inch dia	165	Each
03-04-00229	Ditto as above but 8 inch dia	115	Each
03-04-00230	Ditto as above but 10 inch dia	60	Each
03-04-00231	Ditto as above but 12 inch dia	60	Each
03-04-00232	Ductile Iron Adapters from socket unit rubber joint to , PN 25 flanged end, 3 inch dia	20	Each
03-04-00233	Ditto as above but, 4 inch dia	20	Each
03-04-00234	Ditto as above but, 6 inch dia	20	Each
03-04-00235	Ditto as above but, 8 inch dia	6	Each
03-04-00236	Bolted flanged spigot joint for ductile pipes, with bolts, nuts & gaskets, 3 inch dia, PN 25, ISO flanges	10	Each
03-04-00237	Ditto as above but 4 inch dia	20	Each
03-04-00238	Ditto as above but 6 inch dia	10	Each
03-04-00239	Ditto as above but 8 inch dia	5	Each
03-04-00240	Ditto as above but 10 inch dia	5	Each
03-04-00241	Gate valves for ductile pipes with bolts, nuts & gaskets, 3 inch dia, PN 25, ISO flanges	130	Each
03-04-00242	Ditto as above but 4 inch dia	240	Each
03-04-00243	Ditto as above but 6 inch dia	170	Each
03-04-00244	Ditto as above but 8 inch dia	100	Each
03-04-00245	Ditto as above but 10 inch dia	60	Each
03-04-00246	Ditto as above but 12 inch dia	58	Each
03-04-00247	Flanged non-return valves for ductile pipes with bolts, nuts & gaskets, 3 inch dia, PN 25, ISO flanges	20	Each
03-04-00248	Ditto as above but 4 inch dia	50	Each
03-04-00249	Ditto as above but 6 inch dia	10	Each
03-04-00250	Ditto as above but 8 inch dia	5	Each
03-04-00251	Ditto as above but 10 inch dia	2	Each
03-04-00252	Flanged air valves for ductile pipes with bolts, nuts & gaskets, 3 inch dia, PN 25, ISO flanges	20	Each
03-04-00253	Flanged foot valves with strainers 4 inch dia	20	Each
03-04-00254	Ditto as above but 6 inch dia	15	Each
03-04-00255	Ditto as above but 8 inch dia	15	Each
03-04-00256	Ditto as above but 10 inch dia	2	Each
03-04-00257	Ditto as above but 12 inch dia	10	Each
03-04-00258	Blank flanges for 100 mm dia ductile pipes	90	Each
03-04-00259	Same as above but for 150 mm dia ductile pipes.	30	Each
03-04-00260	Ditto as above but 200 mm dia ductile pipes.	10	Each
03-04-00261	Casing pipe, mild steel, commercial grade st-37 as per DIN 17100, food grade, for lining of water bore hole One end male threaded, heavy duty female socket on the other end , To be produced according to DIN 4922 in lengths of 6 m, outer diameter 8 5/8 inch.	150	Each

Subproject 1: Urban Household Water Security
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Code	Description	Quantity	Unit of measurement
03-04-00262	As above but pipe with slots of 2.3 mm width, length of 6 m, outer diameter 8 5/8 inch	50	Each
03-04-00263	Ball bearing type 6314	20	Each
03-04-00264	Ball bearing type 7314	20	Each
03-04-00265	Gate valves for ductile pipes with bolts, nuts & gaskets, 4 inch dia, PN 38, ISO flanges	10	Each
03-04-00266	Gate valves for ductile pipes with bolts, nuts & gaskets, 6 inch dia, PN 38, ISO flanges	20	Each
03-04-00267	Flanged non-return valves for ductile pipes with bolts, nuts & gaskets, 4 inch dia, PN 38, ISO flanges	10	Each
03-04-00268	Flanged non-return valves for ductile pipes with bolts, nuts & gaskets, 6 inch dia, PN 38, ISO flanges	20	Each
03-04-00269	Same as above but, Q=22cum/hr (min), H=165m (max), (BP 45-16).	3	Set
03-04-00270	Spare part for Ingrsoll -Dresser pump Q=300m ³ /hr , H=220m ,V= 380v ,50Hz,1460 RPM No. 1720027-08/02 Drawing No. 1973563 year 1998/SP pump type 152 NM61 .Shaft Sleeve =4No.Drawing No. 2450 Space sleeve =4 No. Drawing No. 2460-02 Space sleeve for bearing =2 no. Drawing No. 2461 Inner race centering sleeve with collar =2 No. Drawing No. (2472-01) Innerrace centering Sleeve with color =2 no. drawing no. (2472-02) Gasket = 2no. drawing no. 45490 pump shaft (with keys)=1 no. drawing no. 2110 Sleeve =2 set Drawing no.2420 Radial flow impeller shrouded =2 set drawing no. 2250. wear ring =2 set drawing no. 1500-01 Radial flow impeller Shrouded =2 set drawing no. 1500-02. flower =4 no. drawing no. 4131. lock washer =4 no. drawing no. 6541.	6	Set
03-04-00271	Over load range about (18-28) A	100	Each
03-04-00272	Same as above but (28-35) A	100	Each
03-04-00273	Same as above but (30-40) A	100	Each
03-04-00274	Same as above but (40-50) A	100	Each
03-04-00275	Same as above but (50-63) A	100	Each
03-04-00276	Electrical transformer according to IEC76 standard 1000 KVA 11/0.4 KV oil immersed distribution transformer furnished with conservation and off-load tap changer including the following accessories:DILA TYPE THERMOMETER WITH TWO CONTACTS WHEELSSILICAGEL BREATHER MAGNETIC OIL LEVEL.	2	Each
03-04-00277	Same as above but size 800 KVA	1	Each

Subproject 1: Urban Household Water Security
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Code	Description	Quantity	Unit of measurement
03-04-00278	Electrical transformer (out door type) according to IEC 76 standard 1250 KVA 33/0.4 KV oil impressed distribution transformer furnished with conservation & off-load tap changer including the following accessories :Dial type thermometer with two contacts ,wheel silica gel breather magnetic oil level gauge.	1	Each
03-04-00279	Change over switch 3 ph ,400V, 50A for generator & main electrical power	110	Each
03-04-00280	Ditto but 63 A	70	Each
03-04-00281	Ditto but 100 A	210	Each
03-04-00282	Ditto but 125 A	110	Each
03-04-00283	Ditto but 150 A	110	Each
03-04-00284	Ditto but 200 A	10	Each
03-04-00285	Ditto but 250 A	10	Each
03-04-00286	Ball bearing type 62142 RS	10	Each
03-04-00287	Ball bearing type 51216	10	Each
03-04-00288	Ball bearing type 6015	20	Each
03-04-00289	Ball bearing type 5205 Z	10	Each
03-04-00290	Ball bearing type 6302	6	Each
03-04-00291	Ball bearing type N 1306	6	Each
03-04-00292	Ball bearing type MJ 1.1/4	10	Each
03-04-00293	Ball bearing type 6305	6	Each
03-04-00294	Ball bearing type 7312	6	Each
03-04-00295	Ball bearing type MJ 1.3/8	6	Each
03-04-00296	Ball bearing type 2312	10	Each
03-04-00297	Ball bearing type 62082 Z	6	Each
03-04-00298	Ball bearing type 62072 Z	6	Each
03-04-00299	Ball bearing type 7307	6	Each
03-04-00300	Ball bearing type RMS 12 MS 13	4	Each
03-04-00301	Water flow meter to be installed on discharge pipes of size ND 3 inch	25	Each
03-04-00302	Water flow meter to be installed on discharge pipes of size ND 4 inch	25	Each
03-04-00303	Water flow meter to be installed on discharge pipes of size ND 28 inch	1	Each
03-04-00304	Water flow meter to be installed on discharge pipes of size ND 32 inch	1	Each
03-04-00305	Impeller for Grundfos pump size 4"*7/8	100	Each
03-04-00306	Same as item above size 5"*7/8	50	Each
03-04-00307	Same as item above size 3"*3/4	50	Each
03-04-00308	Same as item above size 4"*3/4	50	Each
03-04-00309	Timer relay (delay by off) 0.1 to 35, with 1 NO & 1 NC contact, type LA3 DRO	50	Each
03-04-00310	Grundfos submersible pump with direct coupled electrical motor and with non-return valve, control panel, 150 m three core cable, electrode to avoid dry running and cable termination kit type KM, Qmin= 14M3/H,Hmax=135M , MS 6000 380 V, 50 Hz, 3 Ph. TO BE INSTALLED ON NEW BORE WELLS. ALL CABLES TO BE PACKED SEPARATELY WITH EACH PUMP. Each set should have 40Nos (3ML) each of red oxide threaded column assemblies.	6	Set
03-04-00311	Ditto as above but:Qmin=10M3/H, Hmax=260M,Ms 6000	3	Set
03-04-00312	Ditto as above but Qmin=12M3/H, Hmax=220M, Ms 6000	3	Set