MAJOR REPAIR OF BUILDING "A" OF THE CIRCUS FROM CHISINAU CITY
(Project title)

LOCAL BILL OF QUANTITIES No. 2-1-1
Structural interventions

No. -	Standard code and Resource code	Works and costs	UOM	Design quantity	Estimated cost, $	
					Unit cost ——— incl. wages	Total ——— incl. wages
1	2	3	4	5	6	7
		1.Seismic consolidation of existing columns (10 columns C-DWG-27)				
1	RCsB03C	Reinforced concrete for existing buildings, conventional pouring of ready mix concrete prepared in batch plants, reinforced concrete of grade C30/37 (Rck 37 N/mm2) Small materials (boards, wire, nails, etc.) = 1.0250	m3	7.56		
2	RCsC02C	Mixed formwork, from reusable panels, made of plywood, excluding supports, for reinforced concrete, for additions or restorations to existing constructions, columns with 15 mm plywood Small materials (clamps, screws, rags, etc.) = 1.0200	m2	108.00		
3	RCsD02D1	Reinforcing steel B450C, with a diameter of over 8 mm, prepared on site workshops for straight floors, columns, beams, etc.	kg	3 174.82		
4	RCsB30A	Drilling open-end holes in constructions made of concrete with a grade up to 500, using a diamond core drilling machine with a diameter up to: 20 mm	pcs	120.00		
5	CF17D as applicable	Chemical anchors for fastening embedded reinforcements	l	10.80		
		Total	$			
		Total 1. Seismic consolidation of existing columns (10 columns C-DWG-27) **Including wages**				
		2. Construction of the new steel parapet on the roof (SA-DWG-96)				
6	CL17B	Various metal constructions, surface mounted: railing made of technical stainless steel AISI 430/W1.4016	kg	1 356.48		
7	RCsB30A k = 2.25	Drilling open-end holes in constructions made of concrete with a grade up to 500, using a diamond core drilling machine with a diameter up to: 20 mm, L=250mm Coefficient of labour = 2.2500 Coefficient of materials = 2.2500 Coefficient of plant = 2.2500	pcs	960.00		
8	CF17D as	Chemical anchors for fastening	l	86.40		

1	2	3	4	5	6	7
	applicable	embedded reinforcements				
9	CK35B	Anchoring rod HAS-U 8.8 M12x160 fixed in reinforced concrete walls	pcs	960.00		
		Total	$			
		Total 2. Construction of the new steel parapet on the roof (SA-DWG-96) **Including wages**				
		3. Construction of the steel structure for the new curtain wall and (C-DWG-54)				
10	CL26A	Metal frames made of S275 JR steel as per EN 10025-2/2004	kg	11 323.23		
11	RCsB30A k = 1.35	Drilling open-end holes in constructions made of concrete with a grade up to 500, using a diamond core drilling machine with a diameter up to: 20 mm, L=150mm Coefficient of labour = 1.3500 Coefficient of materials = 1.3500 Coefficient of plant = 1.3500	pcs	860.00		
12	CK35B	Anchoring rod HAS-U 8.8 M8x150 fixed in reinforced concrete walls	pcs	860.00		
13	CF17D as applicable	Chemical anchors for fastening embedded reinforcements	l	77.40		
14	IzD05B	Manual priming with one-layer primer GF-021 of metal constructions related to technological equipment (supports, fasteners, tie rods, consoles, platforms)	t	11,324		
15	CL31A	Coating of metal constructions with fire retardant expanded paint. Note: * R90 - Fire resistance	m2	269.12		
		Total	$			
		Total 3. Construction of the steel structure for the new curtain wall and (C-DWG-54) **Including wages**				
		4. Demolition and construction of the cladding of external existing "y-shape" columns (100%)				
16	RpCJ35F	Dismantling interior or exterior anti-condensation plasters, metal frame and Rabitz type steel-wire plaster fabric	m2	5 895.61		
17	RpCO56C	Dismantling: wooden lining, asbestos cement on the walls	m2	5 895.61		
18	RpCP44A	Dismantling metal constructions and recovering materials Small materials (Vaseline, gasoline, rags, etc.) = 1.0500	kg	32 132.00		
19	TsH92B	Loading in the truck	t	341.00		
20	TsI50B3	Transportation of soil with a 5 ton dump truck to a distance of 13 km	t	341.00		
21	TsC51B	Unloading of soil to the warehouse, 2nd class land	100 m3	1.90		
22	RpIzA01B	Sandblasting, in order to apply anti-corrosion protection, on large metal surfaces (vats, tanks, containers, columns, bunkers, pipes and the like)	m2	3 155.20		

1	2	3	4	5	6	7
		with quartz river sand with 2-3 mm granulation				
23	IzD07A	Manual priming and painting of tanks with ready-made paints, as follows: a layer of red lead paint	m2	3 155.20		
24	CE05B	Galvanized flat metal sheet covering, stapled, with double joints in both directions, on surfaces larger than 40 sqm with 1.0 mm thick metal sheets Small materials (mineral oil, white zinc, tin, alloy, ready-made red lead paint)= 1.0500	m2	5 895.43		
25	CL26A	Metal frames made of S275 JR steel as per EN 10025-2/2004	kg	8 700.00		
26	IzD05B	Manual priming with one-layer primer GF-021 of metal constructions related to technological equipment (supports, fasteners, tie rods, consoles, platforms)	t	8.70		
27	CC03B	Installation of welded nets d = 8.0 mm, with a weight over 3 kg/sqm, a 100x100 mm mesh, at heights less than or equal to 35 m, on walls and diaphragms	kg	23 582.43		
28	CB03J1	8 mm plywood formwork for pouring concrete in the outer flanges	m2	5 895.43		
29	RpCB11B k = 0.833	Shotcrete grade C 25/30 (Rck 30 N/mm2), small aggregates with a size of 1-3 mm, at the walls, with a thickness of 5 cm, ready-mix concrete from batch plants Small materials (boards, wire, nails, etc.)= 0.8750 Coefficient of labour = 0.8330 Coefficient of plant = 0.8330	m2	5 895.43		
30	CF17D	Various works - addition of polypropylene fibers to the mortar	kg	283.00		
31	CF57A	Manual application of cement-based putty, 1.0 mm thick, on surfaces of walls and columns	m2	5 895.43		
32	CN54B	Manual application of the one-layer quartz primer "Gleta" on facade exterior walls	m2	5 895.43		
33	CF30A	Exterior plaster, 2 mm thick, made by hand with decorative finishing material with silicone addition, identical in colour and structure to the one that exists on the building facade	m2	5 895.43		
		Total	$			
		Total 4. Demolition and construction of the cladding of external existing "y-shape" columns (100%) Including wages				
		5. Restoring existing tie rods				
34	RpCP44A	Dismantling metal constructions and recovering materials Small materials (Vaseline, gasoline, rags, etc.) = 1.0500	kg	3 278.32		
35	CL26A	Metal frames made of S275 JR steel as per EN 10025-2/2004	kg	3 278.32		
36	IzD05B	Manual priming with one-layer	t	3.279		

1	2	3	4	5	6	7
		primer GF-021 of metal constructions related to technological equipment (supports, fasteners, tie rods, consoles, platforms)				
		Total	$			
		Total 5. restoring existing tie rods Including wages				
		6. Restoring existing cover lantern				
37	RCsI41B	Dismantling roofing elements - sheet metal roofing	m2	591.10		
38	RpCP44A	Dismantling metal constructions and recovering materials Small materials (Vaseline, gasoline, rags, etc.) = 1.0500	kg	2 000.00		
39	CL26A	Metal frames made of S275 JR steel as per EN 10025-2/2004	kg	2 000.00		
40	IzD05B	Manual priming with one-layer primer GF-021 of metal constructions related to technological equipment (supports, fasteners, tie rods, consoles, platforms)	t	3,975		
		Total	$			
		Total 6. Restoring existing cover lantern Including wages				
		7. Scaffolding				
41	CB14E	Tubular metal scaffolding for ceiling finishing works at heights of 10 m <= H <15 m, fastening of scaffolding for 15 days (120 hours)	m2	2 650.00		
42	CB14A	Tubular metal scaffolding for works on vertical surfaces at heights up to 30 m, fastening of scaffolding for 25 days (200 hours)	m2	5 285.00		
43	CB14A1 k=100	Tubular metal scaffolding for works on vertical surfaces at heights up to 30 m, fastening of scaffolding for 25 days (200 hours), for each additional day of fastening (100 days) Coefficient of labour = 100,0000 Coefficient of materials = 100,0000 Coefficient of plant = 100,0000	m2	5 285.00		
		Total	$			
		Total 7. Scaffolding Including wages				
		Total	$			
		Social insurance	24 %			
		Transportation costs	%			
		Supply/storage costs	%			
		Total				
		Overhead costs	%			
		Total				
		Benefit	%			
		Total estimated cost: Including wages				

MAJOR REPAIR OF BUILDING "A" OF THE CIRCUS FROM CHISINAU CITY
(Project title)

LOCAL BILL OF QUANTITIES No. 2-1-2

Architectural solutions

Prepared in current prices: 01/08/2021

No. -	Standard code and Resource code	Works and costs	UOM	Design quantity	Estimated cost, $	
					Unit cost ——— incl. wages	Total ——— incl. wages
1	2	3	4	5	6	7
		1. Removals and demolitions				
1	RpCO56A	Disassembly: carpentry - doors, windows, stained glass windows	m2	1 462.00		
2	RpCG29C1	Mechanical demolition of masonry walls of solid brick, BCA, ceramic or light concrete blocks, GVP bricks, excluding scaffolding and cleaning of bricks, for mechanical demolition	m3	32.10		
3	RpCI42F	Dismantling roof elements - bituminous membranes	m2	1 072.00		
4	RpIzC45B	Dismantling insulating materials - expanded clay	m3	120.00		
5	RpCB18F	Demolition of the screed	m3	278.25		
6	RpCH32E	Dismantling wooden floors and roof elements	m3	0.37		
7	RpCH32B	Dismantling wooden floors and roof elements - roof truss, dismantling all components, and sorting the resulting materials	m2	102.50		
8	RpCI42B	Dismantling roofing elements – galvanized sheet- metal roofing	m2	102.50		
9	TsH92B	Loading in the truck	t	1 145.25		
10	TsI50B3	Transportation of soil with a 5 ton dump truck to a distance of 13 km	t	1 152.39		
11	TsC51B	Unloading of soil to the warehouse, 2nd class soil	100 m3	6.54		
		Total	$			
		Total 1 - Removals and demolitions Including wages				
		2. Internal works - walls (SA-DWG-121)				
12	CF60N	Covering surfaces with two layers of hydrophobic PGC 12.5 mm thick, preparation of identical metal frame, made of galvanized profiles CW100 and UW100, with curvilinear pattern (variable section for columns and pillars), with a height of up to 4 m: walls with mineral wool board 100 mm thick, density 45 kg/m3, conductivity = 0.028 Small materials (water, sandpaper, etc.)= 1.0050	m2	43.20		
13	CL54H	Ventilated facade system with fireproof metal siding (exterior	m2	43.20		

1	2	3	4	5	6	7
		panelling) and metal siding (exterior panelling) without thermal insulation, on walls with curvilinear pattern. Note: RAL see chromatic solutions Small material (paronite gasket) = 1.0030				
14	CL53B	Installation of ventilated facade system with walls of buildings and constructions covered with linear metal panels in vertical arrangement with hidden fastening, with the area of architectural details up to 30% of the total area of the walls, with mineral wool board 30 mm thick, density of 45 kg/m3, conductivity = 0.028. Note: RAL see chromatic solutions Small material (self-tapping screws) = 1.0050	m2	46.00		
15	RCsR27C1	Painting of plumbing pipes, in two layers, with alkyd enamel, on pipes with an outer diameter up to 60 mm with two layers of enamel and a layer of varnish (existing DN50 pipe)	m	306.00		
16	CL53B	Installation of ventilated facade system with walls of buildings and constructions covered with linear metal panels in vertical arrangement with hidden fastening, with the area of architectural details up to 30% of the total area of the walls, with mineral wool board 30 mm thick, density of 45 kg/m3, conductivity = 0.028. RAL see chromatic solutions Small material (self-tapping screws) = 1.0050	m2	246.30		
		Total	$			
		Total 2 Internal works - walls (SA-DWG-121) **Including wages**				
		3. Curtain walls and windows				
17	CK11B	Ready-made window cases made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >= 39 dB, including heat-insulating stainless steel profiles with a section of 80x50 mm for external use, and a section of 105x50 mm for internal use. Curtain wall type RF.01 - 8 pcs., see SA - DWG - 120	m2	112.32		
18	CK11B	Ready-made window cases made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >= 39 dB, including heat-insulating stainless steel profiles with a section	m2	26.88		

1	2	3	4	5	6	7
		of 80x50 mm for external use, and a section of 105x50 mm for internal use. Curtain wall type RF.02a - 2 pcs, see SA - DWG - 120				
19	CK11B	Ready-made window cases made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >= 39 dB, including heat-insulating stainless steel profiles with a section of 80x50 mm for external use, and a section of 105x50 mm for internal use. Curtain wall type RF.02b - 2 pcs, see SA - DWG - 120	m2	26.88		
20	CK11B	Ready-made window cases made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >= 39 dB, including heat-insulating stainless steel profiles with a section of 80x50 mm for external use, and a section of 105x50 mm for internal use. Curtain wall type RF.03 - 1 pcs, see SA - DWG - 120	m2	13.42		
21	CK11B	Ready-made window cases made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >= 39 dB, including heat-insulating stainless steel profiles with a section of 80x50 mm for external use, and a section of 105x50 mm for internal use. Curtain wall type RF.04 - 1 pcs, see SA - DWG - 120	m2	13.66		
22	CK11B	Ready-made window cases made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >= 39 dB, including heat-insulating stainless steel profiles with a section of 80x50 mm for external use, and a section of 105x50 mm for internal use. Curtain wall type RF.05a - 1 pcs. with glass doors and with panic bars, see SA - DWG - 120	m2	33.96		
23	CK11B	Ready-made window cases made of	m2	28.39		

1	2	3	4	5	6	7
		50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >= 39 dB, including heat-insulating stainless steel profiles with a section of 80x50 mm for external use, and a section of 105x50 mm for internal use. Curtain wall type RF.05b - 1 pcs, with glass doors and with panic bars, see SA - DWG - 120				
24	CK11B	Ready-made window cases made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >= 39 dB, including heat-insulating stainless steel profiles with a section of 80x50 mm for external use, and a section of 105x50 mm for internal use. Curtain wall type RF.06 - 3 pcs, see SA - DWG - 120	m2	41.76		
25	CK11B	Ready-made window cases made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >= 39 dB, including heat-insulating stainless steel profiles with a section of 80x50 mm for external use, and a section of 105x50 mm for internal use. Curtain wall type RF.07b - 1 pcs, with glass doors and with panic bars, see SA - DWG - 120	m2	13.84		
26	CK11B	Door ready-made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >= 39 dB, including heat-insulating stainless steel profiles with a section of 80x50 mm for external use, and a section of 105x50 mm for internal use. Curtain wall type UE.01 - 1 pcs, glass doors and with panic bars, see SA - DWG - 120	m2	5.83		
27	CK11B	Ready-made window cases made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original	m2	277.65		

1	2	3	4	5	6	7
		window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >= 39 dB, including heat-insulating stainless steel profiles with a section of 80x50 mm for external use, and a section of 105x50 mm for internal use. Curtain wall type RF.08 - 9 pcs, see SA - DWG - 120				
28	CK11B	Ready-made window cases made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >= 39 dB, including heat-insulating stainless steel profiles with a section of 80x50 mm for external use, and a section of 105x50 mm for internal use. Curtain wall type RF.09 - 4 pcs, see SA - DWG - 120	m2	196.36		
29	CK11B	Ready-made window cases made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >= 39 dB, including heat-insulating stainless steel profiles with a section of 80x50 mm for external use, and a section of 105x50 mm for internal use. Curtain wall type RF.10a - 2 pcs, with glass doors and with panic bars, see SA – DWG -120	m2	104.28		
30	CK11B	Ready-made window cases made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >= 39 dB, including heat-insulating stainless steel profiles with a section of 80x50 mm for external use, and a section of 105x50 mm for internal use. Curtain wall type RF.10b - 2 pcs, with glass doors and with panic bars, see SA – DWG -120	m2	104.28		
31	CK11B	Ready-made window cases made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >=	m2	75.00		

1	2	3	4	5	6	7
		39 dB, including heat-insulating stainless steel profiles with a section of 80x50 mm for external use, and a section of 105x50 mm for internal use. Curtain wall type RF.11a - 3 pcs, with glass doors and with panic bars, see SA - DWG -120				
32	CK11B	Ready-made window cases made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >= 39 dB, including heat-insulating stainless steel profiles with a section of 80x50 mm for external use, and a section of 105x50 mm for internal use. Curtain wall type RF.11b - 1 pcs, with glass doors and with panic bars, see SA - DWG -120	m2	15.75		
33	CK11B	Ready-made window cases made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >= 39 dB, including heat-insulating stainless steel profiles with a section of 80x50 mm for external use, and a section of 105x50 mm for internal use. Curtain wall type RF.12a - 1 pcs, see SA – DWG-120	m2	40.37		
34	CK11B	Ready-made window cases made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >= 39 dB, including heat-insulating stainless steel profiles with a section of 80x50 mm for external use, and a section of 105x50 mm for internal use. Curtain wall type RF.12b - 1 pcs, see SA – DWG -120	m2	27.17		
35	CK11B	Ready-made window cases made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W / m2 / K. Sound insulation - Rw> = 39 dB. Curtain wall type RF.13a - 1 pcs, see SA – DWG -120	m2	22.49		
36	CK11B	Ready-made window cases made of 50 mm thick heat-insulating stainless	m2	22.49		

1	2	3	4	5	6	7
		steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W / m2 / K. Sound insulation - Rw> = 39 dB. Windows frame type RF.13b - 1 pcs, see SA – DWG -120				
37	CK11B	Ready-made window cases made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >= 39 dB, including heat-insulating stainless steel profiles with a section of 80x50 mm for external use, and a section of 105x50 mm for internal use. Curtain wall type RF.14a - 1 pcs, with glass doors and with panic bars, see SA - DWG - 120	m2	23.17		
38	CK11B	Ready-made window cases made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >= 39 dB, including heat-insulating stainless steel profiles with a section of 80x50 mm for external use, and a section of 105x50 mm for internal use. Curtain wall type RF.14b - 1 pcs, with glass doors and with panic bars, see SA - DWG - 120	m2	23.17		
39	CK11B	Ready-made window cases made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >= 39 dB, including heat-insulating stainless steel profiles with a section of 80x50 mm for external use, and a section of 105x50 mm for internal use. Curtain wall type RF.15 - 4 pcs, with glass doors and with panic bars, see SA - DWG - 120	m2	47.32		
40	CK11B	Ready-made window cases made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >= 39 dB, including heat-insulating	m2	93.66		

1	2	3	4	5	6	7
		stainless steel profiles with a section of 80x50 mm for external use, and a section of 105x50 mm for internal use. Curtain wall type RF.16 - 6 pcs, with glass doors and with panic bars, see SA - DWG - 120				
41	CK11B	Ready-made window cases made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >= 39 dB, including heat-insulating stainless steel profiles with a section of 80x50 mm for external use, and a section of 105x50 mm for internal use. Curtain wall type RF.17 - 2 pcs, with glass doors and with panic bars, see SA - DWG - 120	m2	31.22		
42	CK19B	Ready-made windows made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >= 39 dB. Windows type RF.18 - 2 pcs, see SA - DWG - 120	m2	10.58		
43	CK19B	Ready-made windows made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >= 39 dB. Windows type RF.19 - 2 pcs, see SA - DWG - 120	m2	6.82		
44	CK19B	Ready-made windows made of 50 mm thick heat-insulating stainless steel profiles, exterior profile with the same geometry as the original window. 8 + 10 mm Low-E glass, 18 mm multiple glazing with argon filling. Thermal transmittance = 1.40 W/m2/K. Sound insulation - Rw >= 39 dB. Windows type RF.20 - 1 pcs, see SA - DWG - 120	m2	5.61		
45	CF60N	Covering surfaces with two layers of hydrophobic PGC 12.5 mm thick, preparation of identical metal frame, made of galvanized profiles CW100 and UW100, with curvilinear pattern (variable section for columns and pillars), with a height of up to 4 m: walls with mineral wool board 100 mm thick, density 45 kg/m3, conductivity = 0.028 Small materials (water, sandpaper, etc.)= 1.0050	m2	118.20		

1	2	3	4	5	6	7
		Total	$			
		Total 3 Curtain walls and windows Including wages				
		4. Roof Garden				
46	IzF18B	Levelling or protective support layer for insulation, including the related scaffolding, made with ready-mixed cement mortar, grade M100-T, without added lime, smooth, on horizontal or inclined surfaces up to 40%, applied with an average thickness of 2 cm	m2	1 072.00		
47	IzF04J1	Waterproofing layer made of vapour barrier, placed with stick overlays	m2	1 072.00		
48	IzF53A	Manual production of the floor support with thermal insulation layer made of extruded foam polystyrene boards, 35 kg/m3 density, 120 mm thickness, in one layer Small materials (metal bars, D = 6-8 mm, 400 mm long) = 1.0150	m2	1 072.00		
49	IzF53A	Manual production of the floor support with a layer of rubber plates, thickness = 25 mm, conductivity = 0.022, in one layer Small materials (metal bars, D = 6-8 mm, 400 mm long) = 1.0150	m2	1 072.00		
50	CC03C	Installation of welded nets, d = 5.0 mm, mesh of 200x200 mm, at heights less than or equal to 35 m, for boards	kg	2 148.02		
51	IzF18E k = 4.48	Levelling or protective support layer for insulation, including the related scaffolding, made with ready-mixed cement mortar, grade M100-T, without added lime, smooth, on surfaces inclined over 40% or vertical surfaces, applied with an average thickness of 3 cm (k = 4.48, mortar 144.16 m3) Coefficient of labour = 4.4800 Coefficient of materials = 4.4800 Coefficient on plant = 4.4800	m2	1 072.00		
52	IzF31B	Lightweight, multilayer elastomeric system, based on high-performance polyurethane resins, with a thickness of 2.0 - 3.0 mm (consumption of 2.75 kg/m2)	m2	1 072.00		
53	CF15A	Troweled internal and external plastering, made by hand, with cement mortar, grade M 100-T, with a medium thickness of 2 cm, for concrete or brick walls, with flat surfaces	m2	119.00		
54	CF17B k=4	Various works - difference in thickness, + 5 mm for the primer layer applied to the walls, made with cement mortar, grade M100 Coefficient of labour = 4.0000 Coefficient of materials = 4.0000 Coefficient of plant = 4.0000	m2	119.00		
55	CF17D	Various works - addition of	kg	5.70		

1	2	3	4	5	6	7
		polypropylene fibres to the mortar				
56	CN11A	Exterior painting with dispersion paint for facades, applied in 3 layers to facades, executed on existing plaster	m2	119.00		
57	DE16A	Installation of prefabricated concrete gutters with a grid of 500x100x100 (h) mm	pcs	341.00		
58	CE30B1	Lathing for roofs or roof valleys made of rough softwood planks planed on one side, for regular constructions	m2	102.50		
59	CN50C	Fireproofing of timber, battens for coatings	100m2	1,025		
60	CN51E	Antiseptic treatment of timber, on visible surfaces with antiseptic pastes: roof structure	100m2	1,025		
61	CE05B	Galvanized flat metal sheet covering, stapled, with double joints in both directions, on surfaces larger than 40 sqm with 1.0 mm thick metal sheets Small materials (mineral oil, white zinc, tin, alloy, ready-made red lead paint)= 1.0500	m2	161.00		
		Total	$			
		Total 4 - Roof Garden Including wages				

		Total	$	
		Social insurance	24 %	
		Transportation costs	%	
		Supply/storage costs	%	
		Total		
		Overhead costs	%	
		Total		
		Benefit	%	
		Total estimated cost: Including wages		

MAJOR REPAIR OF BUILDING "A" OF THE CIRCUS FROM CHISINAU CITY
(Project title)

Form no.1
WinCmeta

LOCAL BILL OF QUANTITIES No. 2-1-3
Restoration works

Prepared in current prices

No. -	Standard code and Resource code	Works and costs	UOM	Design quantity	Estimated cost, $	
					Unit cost ——— incl. wages	Total ——— incl. wages
1	2	3	4	5	6	7
		1. Artistic stained glass				
1	RCsQ09D1 applicable	Repair of glass modules, which will be reconstructed by thermoforming in a refractory mould specially made as an original element and melted at 700 ° - 800 ° degrees, which will later be bound by the traditional technique of lead weaving, welded, stuccoed and placed on construction site, see sheet SA-DWG-145 Small materials (rags, decofrol etc.) = 1.0100	m2	48.20		
2	RCsM29A	Finishing glass modules by waxing and polishing Small materials (rags, water, etc.) = 1.0200	m2	192.80		
3	R10A23A	Washing the windows	10 m2	19.28		
		Total	$			
		Total Artistic stained glass Including wages				
		2. External porch				
4	RCsM14A	Artificial marble slabs, up to 5 cm thick, mounted with adhesive, on vertical surfaces, including application of putty - careful removal of small areas of marble or granite, only those disconnected or broken that can no longer be recovered, including the underlying layer of material, with due care not to damage neighbouring parts. It is planned to clean recoverable parts, which are not damaged or which are not composite (30% of the area) Small materials (rags, straightening tools, etc.)= 1.0100	m2	74.36		
5	R4D13A	Restoration of damaged areas of dense natural stone with epoxy resin grout: smooth surface Small materials = 1.0100	m2	247.86		
		Total	$			
		Total External porch Including wages				
		3. Graffiti on the porch				
6	R4D05A	Cleaning of easily removable pollutants from stone surfaces with neutral paint removers: smooth surface Small materials = 1.0100	m2	43.28		

1	2	3	4	5	6	7
7	R4D03A	Cleaning of pollutants difficult to remove with carborundum Small materials = 1.0100	m2	43.28		
8	R4D13A	Restoration of damaged areas of dense natural stone with protective product based on fluorinated copolymers: smooth surface Small materials = 1.0100	m2	43.28		
		Total	$			
		Total Graffiti on the porch Including wages				
		4. Ceiling external porch				
9	R8B01C	Restoration and reconstruction of facade plaster on areas of bricks with lime and cement mortar: walls in grooved lines with deep joints	m2	304.00		
10	CN54B	Manual application of the one-layer quartz primer "Gleta" on facade external walls	m2	304.00		
11	CF30A	External plastering, 2 mm thick, made by hand with decorative finishing material with silicone addition, identical in colour and structure to the one that exists on the building facade	m2	304.00		
		Total	$			
		Total Ceiling external porch Including wages				
		5. Dome				
12	IzA03A	Removal of old paint, improper primer or various deposits from metal surfaces	m2	1 760.00		
13	RCsI30A	Additional sealing, on the contour, at the roof joints, with polymeric mastics Small materials (accessories, adhesives, solvents) = 1.0550	m	3 177.60		
14	CL40A	Cold galvanizing in two layers of the galvanized surfaces, of the new galvanizations and the restoration of the old ones in the metallic constructions on the site	m2	1 760.00		
		Total	$			
		Total Dome Including wages				
		6. Cover lantern				
15	CE05B	Galvanized flat metal sheet covering, stapled, with double joints in both directions, on surfaces larger than 40 sqm with 1.0 mm thick metal sheets Small materials (mineral oil, white zinc, tin, alloy, ready-made red lead paint)= 1.0500	m2	491.10		
16	CE05B	Galvanized flat metal sheet covering, stapled, with double joints in both directions, on surfaces larger than 40 sqm with 4.0 mm thick aluminium sheets Small materials (mineral oil, white zinc, tin, alloy, ready-made red lead paint)= 1.0500	m2	100.00		
		Total	$			

1	2	3	4	5	6	7
		Total Cover lantern Including wages				
		7. Facade 7.1. Marble surfaces (SA-DWG-151)				
17	CN54B	Consolidation of stone artefacts by impregnation with ethyl silicate solution	m2	148.20		
18	RCsM14A	Artificial marble slabs, up to 5 cm thick, mounted with adhesive, on vertical surfaces, including application of putty - careful removal of small areas of marble or granite, only those disconnected or broken that can no longer be recovered, including the underlying layer of material, with due care not to damage neighbouring parts. It is planned to clean recoverable parts, which are not damaged or which are not composite Small materials (rags, straightening tools, etc.)= 1.0100	m2	148.20		
19	R4D06A	Cleaning of stone surfaces from air pollution with concentrated detergent: smooth surface Small materials = 1.0100	m2	494.00		
20	R4D13A	Restoration of damaged areas of dense natural stone with epoxy resin grout: smooth surface Small materials = 1.0100	m2	494.00		
		Total	$			
		Total Marble surfaces (SA-DWG-151) Including wages				
		7.2. Remote of the graffiti on the facade (SA-DWG-152)				
21	R4D05A	Cleaning of easily removable pollutants from stone surfaces with neutral paint removers: smooth surface Small materials = 1.0100	m2	8.20		
22	R4D03A	Cleaning of pollutants difficult to remove with carborundum Small materials = 1.0100	m2	8.20		
23	R4D13A	Restoration of damaged areas of dense natural stone with protective product based on fluorinated copolymers: smooth surface Small materials = 1.0100	m2	8.20		
		Total	$			
		Total Remote of the graffiti on the facade (SA-DWG-152) Including wages				
		7.3. Plaster surfaces on the facade (SA-DWG-161)				
24	R4D06A	Cleaning of stone surfaces from air pollution with concentrated detergent: smooth surface Small materials = 1.0100	m2	26.20		
25	CN53A	Application of biocides to remove	m2	26.20		

1	2	3	4	5	6	7
		slightly rooted vegetation by spraying				
26	R4D03A	Cleaning of pollutants difficult to remove with carborundum Small materials = 1.0100	m2	26.20		
27	R8B01C	Restoration and reconstruction of facade plaster on areas of bricks with lime and cement mortar (or lime): walls in grooved lines with deep joints	m2	39.30		
28	CN11A	Exterior painting with dispersion paint for facades, applied in 3 layers to facades, on existing plaster	m2	39.30		
		Total	$			
		Total Plaster surfaces on the facade (SA-DWG-161) Including wages				
		7.4. Plaster cladding of the "Y" columns (SA-DWG-154)				
29	R4D06A	Cleaning of stone surfaces from air pollution with concentrated detergent: smooth surface Small materials = 1.0100	m2	315.00		
30	CN53A	Application of biocides to remove slightly rooted vegetation by spraying	m2	315.00		
31	R4D03A	Cleaning of pollutants difficult to remove with carborundum Small materials = 1.0100	m2	315.00		
32	CN54B	Consolidation of stone artefacts by impregnation with methyl silicate solution	m2	94.50		
33	R8B01C	Restoration and reconstruction of facade plaster on areas of bricks with lime and cement mortar (or lime): walls in grooved lines with deep joints	m2	94.50		
34	CN11A	Exterior painting with dispersion paint for facades, applied in 3 layers to facades, on existing plaster	m2	315.00		
		Total	$			
		Total Plaster cladding of the "Y" columns (SA-DWG-154) Including wages				
		Total	$			
		Total Facade Including wages				
		8. Downspouts				
35	SB08E	SN4 PVC sewerage pipe, with rubber gasket, surface mounted or buried under the floor, with a diameter of 110 mm	m	540.00		
36	SB09E	SN4 45* PVC elbow, for sewerage, with rubber gasket, with a diameter of 110 mm	pcs	108.00		
37	SA37I	Collar clamps for fastening water and gas pipes, made of steel or PVC, mounted by embedding, for pipes with a diameter of 110 mm	pcs	540.00		

1	2	3	4	5	6	7
		Total	$			
		Total Downspouts Including wages				
		Total	$			
		Social insurance	24 %			
		Transportation costs	%			
		Supply/storage costs	%			
		Total				
		Overhead costs	%			
		Total				
		Benefit	%			
		Total estimated cost: Including wages				

MAJOR REPAIR OF BUILDING "A" OF THE CIRCUS FROM CHISINAU CITY
(Project title)

LOCAL BILL OF QUANTITIES No. 2-1-4
Electrical networks

Prepared in current prices:

No. -	Standard code and Resource code	Works and costs	UOM	Design quantity	Estimated cost, $	
					Unit cost ——— incl. wages	Total ——— incl. wages
1	2	3	4	5	6	7
		1. Erection works				
1	08-03-572-7	Control panel, cabinet type or distribution unit (cabinet), floor mounted, height and width, mm, up to 1700x1100 - Floor cabinet	pcs	1.00		
2	08-03-575-1	Device or apparatus - 8-channel KNX actuator	pcs	3.00		
3	08-03-575-1	Device or apparatus - KNX power supply	pcs	1.00		
4	08-03-575-1	Device or apparatus - Contactor, coil power supply 230 V or 24 V, compliant with IEC 1095	pcs	5.00		
5	08-03-575-1	Device or apparatus - Switch disconnector, operating voltage 400 V ac	pcs	3.00		
6	08-03-575-1	Device or apparatus - Automatic thermal magnetic circuit breaker	pcs	28.00		
7	08-03-575-1	Device or apparatus - Digital network analyser	pcs	1.00		
8	08-03-575-1	Device or apparatus - Lightning current arrester	pcs	3.00		
9	08-03-575-1	Device or apparatus - PHD socket group	pcs	32.00		
10	08-02-148-1	Cable up to 35 kV in pipes, blocks and boxes laid, weight of 1 m up to: 1 kg	100 m	1.15		
11		Flexible cable compliant with the requirements of the European Regulation EU Regulation 305/2011 - CPR Construction Products and CEI UNEL 35324 with very low emission of fumes and toxic gases compliant with CEI 20-38, class Cca - s1b, d1, a1, insulated with ethylene propylene rubber high modulus with sheath of thermoplastic compound, rated voltage 0.6 / 1 kV, fire retardant compliant with CEI 60332-1-2: five-pole FG16OM16 - 0.6 / 1 kV: section 10 sqmm	m	75.00		
12		Flexible cable compliant with the requirements of the European Regulation EU Regulation 305/2011 - CPR Construction Products and CEI UNEL 35324 with very low emission of fumes and toxic gases	m	20.00		

1	2	3	4	5	6	7
		compliant with CEI 20-38, class Cca - s1b, d1, a1, insulated with ethylene propylene rubber high modulus with sheath of thermoplastic compound, rated voltage 0.6 / 1 kV, fire retardant compliant with CEI 60332-1-2: three-pole FG16OM16 - 0.6 / 1 kV: section 10 sqmm				
13		Flexible cable compliant with the requirements of the European Regulation EU Regulation 305/2011 - CPR Construction Products and CEI UNEL 35324 with very low emission of fumes and toxic gases compliant with CEI 20-38, class Cca - s1b, d1, a1, insulated with ethylene propylene rubber high modulus with sheath of thermoplastic compound, rated voltage 0.6 / 1 kV, fire retardant compliant with CEI 60332-1-2: three-pole FG16OM16 - 0.6 / 1 kV: section 2.5 sqmm	m	20.00		
14	08-02-148-3	Cable up to 35 kV in pipes, blocks and boxes laid, weight of 1 m up to: 3 kg	100 m	0.00		
15		Flexible cable compliant with the requirements of the European Regulation EU Regulation 305/2011 - CPR Construction Products and CEI UNEL 35324 with very low emission of fumes and toxic gases compliant with CEI 20-38, class Cca - s1b, d1, a1, insulated with ethylene propylene rubber high modulus with thermoplastic compound sheath, rated voltage 0.6 / 1 kV, fire retardant compliant with CEI 60332-1-2: four-pole FG16OM16 - 0.6 / 1 kV: section 50 sqmm	m	70.00		
16		Flexible cable compliant with the requirements of the European Regulation EU Regulation 305/2011 - CPR Construction Products and CEI UNEL 35324 with very low smoke and toxic gas emissions compliant with CEI 20-38, class Cca - s1b, d1, a1, insulated with ethylene propylene rubber high modulus with sheath of thermoplastic compound, rated voltage 0.6 / 1 kV, fire retardant compliant with CEI 60332-1-2: single pole FG16M16 - 0.6 / 1 kV: section 25 sqmm	m	70.00		
17	08-02-409-1	Vinyl plastic pipe on installed constructions, on walls and columns, fastened with clamps, diameter up to 25 mm	100 m	4.00		
18		Rigid insulating tube in self-extinguishing plastic material, with low toxic emissions in case of fire, halogen-free in accordance with	m	400.00		

1	2	3	4	5	6	7
		standard EN 50267-2-2, in compliance with CEI EN 50086 heavy series class. 4422: visible installed in systems with protection degree IP 40, fixed on supports (every 40-50 cm), connection and fixing accessories included, with a nominal diameter of: 25 mm				
19	10-08-019-01	Branch box - Wall-mounted junction box	pcs	35.00		
20	08-03-575-1	Device or apparatus - Switch disconnector in insulating box	pcs	2.00		
21	08-03-575-1	Device or apparatus - control unit for managing and activating heating cables	pcs	1.00		
22	08-02-146-1	Cable up to 35 kV, fastened with applied clamps, weight of 1 m up to: 0.5 kg	100 m	8.00		
23		Self-regulating heating cable for maintaining the water temperature inside the meteoric drain pipes and in the drainage channel on the roof above the freezing limit. Complete with integrated thermostat, electrical supply pipes and accessories, in place	m	800.00		
		Total	$			
		Social insurance	24 %			
		Transportation costs	%			
		Supply/storage costs	%			
		Total				
		Overhead costs	%			
		Total				
		Benefit	%			
		Total Erection works Including wages				
		2. Equipment				
24		Floor cabinet in fiberglass reinforced polyester with hinged blind door complete with key lock and lower plinth, protection degree IP 65, class II insulation, including front panels and fixing accessories for boxed or modular equipment, of the following dimensions (h x l x p): 1800 x 800 x 400 mm	pcs	1.00		
25		8-channel KNX actuator, in modular insulated container for installation on DIN rail, 230 V AC power supply, including system activation	pcs	3.00		
26		KNX power supply, in modular insulated container for installation on DIN rail, 230 V AC power supply, including system activation	pcs	1.00		
27		Contactor, coil power supply 230 V or 24 V, compliant with IEC 1095, in modular plastic enclosure, degree of protection IP 20, designed for lateral attachment of auxiliary contacts, installed on a DIN35 rail, this	pcs	5.00		

1	2	3	4	5	6	7
		excluded: bipolar capacity 25 A				
28		Switch disconnector, operating voltage 400 V a.c .: short duration current for 1 sec equal to 5 kA: bipolar, range up to 80 A	pcs	3.00		
29		Automatic thermal magnetic circuit breaker, modular series, rated voltage 230/400 V ac: breaking capacity 10 kA, characteristic trip curve type "C" (CEI-EN 60947-2): bipolar 10? 80 A + automatic differential module to be associated to the modular series circuit breakers, rated voltage 230/400 V AC: sensitivity 0.03 or 0.3 A or 0.5 A, type "A" or "B": instantaneous or selective, bipolar, for thermal magnetic circuit breakers with capacity up at 80 A	pcs	22.00		
30		Automatic thermal magnetic circuit breaker, modular series, rated voltage 230/400 V ac: breaking capacity 15 kA, characteristic tripping curve "C" (CEI-EN 60898), installed on DIN35 rail, this excluded: four-pole 10 - 32 A + module automatic differential to be associated with the modular series magnetothermic switches, rated voltage 230/400 V ac: sensitivity 0.03 or 0.3 A or 0.5 A, type "A" or "B": instantaneous or selective, four-pole, for circuit breakers with capacity up to 63 A	pcs	6.00		
31		Digital network analyser, for single-phase and three-phase systems, precision in class 1, for measuring voltage, current, active and reactive power, power factor, connection on line with current transformers, selectable transformation ratio, serial interface, in plastic container with IP 20 protection degree, installed on DIN rail: 7 LCD displays for measurements, direct insertion with internal current transformers, phase and three-phase active energy meters, power supply 230 V 50 Hz	pcs	1.00		
32		Lightning current arrester, type 1 + 2, operating voltage 255 V - 50/60 Hz, insulation resistance > 1000 M ohm, technopolymer casing, installed on DIN rail this excluded: single pole.	pcs	3.00		
33		PHD socket group, consisting of: 1 box with a universal UNEL P40 socket, IN WATERPROOF CASE. Including false poles and all accessories.	pcs	32.00		
34		Wall-mounted junction box, in self-extinguishing plastic material, including accessories for cable junctions, cover and fixing screws: protection degree IP 44 or higher,	pcs	32.00		

1	2	3	4	5	6	7
		medium resistance (75 ° C), with cable glands, dimensions in mm: 120 x 80 x 50				
35		Switch disconnector in insulating box, rated operational current from 125 A to 160 A (CEI EN 60947-3), rated insulation voltage 800 V ac, rated making capacity in dc 2.8 kA: four-pole fixed version	pcs	2.00		
36		control unit for managing and activating heating cables with multiple outputs including temperature probe, on site	pcs	1.00		
		Total	$			
		Supply/storage costs	%			
		Total Equipment Including wages				
		Total	$			
		Total estimated cost: Including wages				