# Lote 1 (Inert)

Description	Specifications	Units	As for.	Value
Sand	Granulometry [0.15– 4.75 mm]; Clay theor ≤ 2%; [SECTION 1083, SECTION 201]	m3	400	
British 3/4"	Granulometry [9.5–19 mm]; Crushing strength $\leq$ 29% [SANS 1083, SANS 201]	m3	150	
Cement	CEM II 32.5N [EN 197-1]	And	1200	
Pave	Zig Zag, 80mm, 35Mpa, natural color, abrasion wear [TMH 9]	m2	1000	
Lancel	Fig 3 or equivalent;≥25 MPA [sabs 927]	ME	1500	
Fine sand	Granulometry [0.05–1.18 mm]; Theor em clay 2%; [SECTION 1083, SECTION 201]	m3	300	
Clay	Solos G7 ou superior; CBR (at 93%)≥ 15% [COLTO]	m3	2000	
Rachão	Gramulometry (200- 320 mm) SATCC 2502(a)(i)	m3	300	
Boulder/Pebbles 500kg	Granulometry (330- 1200mm); Resistance to abrasion and corrosion Saline, COTO	Ton	500	
Tout Venant	Coarse aggregate with extensive particle size, G3, PI<6, Granulometry (0.00-37.5 mm)(COLTO)	m3	200	
Total				

# Lote 2 (Asphalt)

Amount	Designation of the asset	Technical Specifications	
		Marshall Stability (kN)	3,5-12,5
		Marshall deformation (mm)	2-4
		Voids in the mixture (%)	3-6
1200 Ton	Bituminous	Stability/deformation (KN/mm)	2-3,5
	Concrete	Filler/bitumen ratio	1,0-1,5
		Granulometry (mm) [SATCC Table 4202/3]	00-9.5
		10% FACT [TMH1 B2] (kN)	180
10 And	Bituminous	Anionic emulsion SS60; Minimum 12 degrees Engle	
	Emulsion	20°C [SANS 4001-BT3]	

#### Lote 1

Amount	Designation of the asset	Technical specifications (minimum) of the asset
01	Bulldozer	Deforestation and leveling;     Engine power: ≥ 180 HP;     Blade: Straight or semi-U,     with hydraulic control;     Operational weight: ≥ 18     tons;     Track system with wide     shoes.     Cabin: Closed, air-     conditioned (A/C), with     protection
		ROPS/FOPS Minimum warranty: 1 year

### Lote 2

Amount	Designation of the asset	Technical specifications (minimum) of the asset
01	Milling machine	Milling width: ≥ 1000 mm; Adjustable cutting depth: ≥ 30 cm; Automatic leveling control system; Material conveyor: Articulated front conveyor; High traction wheels or tracks; Engine power: ≥ 300 HP; Air-conditioned cabin with dust protection.

Amount	Designation of the asset	Technical specifications
		(minimum) of the asset
		Type: Self-propelled;
		Operational weight: $\geq 10$ ton;
		Drum width: $\geq 2.0$ meters;
01	Compactor Roller (Smooth	Vibration: Yes, with double
	Drum)	frequency and amplitude;
		Motor: Diesel, $\geq$ 100 HP;
		Cabin: Open or closed, with
		ROPS/FOPS protection.

Lote 4

Amount	Designation of the asset	Technical specifications (minimum) of the asset
01	Asphalt Paver	Adjustable paving width: 2.5 to 6 meters; Layer thickness: Adjustable ≥ 300 mm; Feeding system: By belt/conveyor belt + distributor screw; Motor: Diesel, ≥ 150 HP; High traction tracks or wheels; Table heating system: Gas or electric; Automatic leveling and tilt control.

### Lote 5

Amount	Designation of the asset	Technical specifications
		(minimum) of the asset
02	Road Marker Cold	Ink tank capacity: ≥ 100 L; Type: Self-propelled or towable; Spray system: Pneumatically controlled gun; Number of pistols: Minimum 2; Double and single lines; Marking with reflectivity; Engine: Gasoline or diesel.

Amount	Designation of the asset	Technical specifications
		(minimum) of the asset
		Drum capacity: 500 liters;
		Type: Towable with hitch;
02	Concrete mixer	Engine: Gasoline (25 HP);
		Tilt system: Hydraulic;
		Reinforced steel structure,
		with wheels
		pneumatics.

Lote 7

Amount	Designation of the asset	<b>Technical specifications</b>
		(minimum) of the asset
		Power: 60 HP;
		Operational weight: 2 to 3
		tons;
		Bucket capacity: ≥ 500 liters;
		Auxiliary hydraulic system
02	Mini on - Skid loader	for accessories,
		Traction tires or tracks;
		Closed cabin with
		ROPS/FOPS protection;
		Optional accessories: Pallet
		fork, breaker hammer, mini
		milling machine, broom

### Lote 8

Load capacity Machine loadi Hitch type: Pin Reinforced	Amount	Designation of the asset  Technical specifications
01 12 Ton Lowbed Trailer Brakes: Pneun Floor: Metallic		(minimum) of the asset  Load capacity: 12 tons; Machine loading Hitch type: Pin; Reinforced carbon steel chassis;  12 Ton Lowbed Trailer  Brakes: Pneumatic; Floor: Metallic; Load tires with reinforced

Amount		Designation of the asset	Technical specifications
			(minimum) of the asset
02	Port	able emulsion sprayer (by drum)	Spraying >18 L/min (adjustable); Spray Width 500-1000 mm; Hose length 5 m; Nozzle Type Stainless steel, incl self-cleaning; Rotation speed 1500 rpm; Gear Pump Maximum Flow 310 L/min; Motor ≥ 5 HP.

Lote 10

Amount	Designation of the asset	Technical specifications
		(minimum) of the asset
03	Jumping	Operational weight ≥ 65 kg Operational coverage ≥ 250m2/h Impact force 2 13 KN

Amount	Designation of the asset	Technical specifications
		(minimum) of the asset
		Drum capacity ≥ 3500lit
		Lid for emergency discharge;
		4-wheel drive;
		Capacity per load min 600 liters;
		production
		hourly $\geq 18m3$ ;
		Electronic scale;
		High pressure water pump;
		2 extra gutters included;
02	Autobetoneiras 3,5m3	Maximum external turning radius
		4m;
		Cabin with ROPS-FOPS, rea
	view camera and AC;	view camera and AC;
		Mixing and discharge speed
		independent of engine speed;
		Electronic drum probe (optional);
		Discharge on all four sides of the
		vehicle.

Lote 12

Amount	Designation of the asset	Technical specifications (minimum)
		of the asset
02	Skid loader/ Bobcat	Power: ≥ 60 HP Skid loader/ Bobcat Operating weight: 2 to 3 tons Bucket capacity: ≥ 500 liters Auxiliary hydraulic system for attachments Traction tires or tracks Enclosed cabin with ROPS/FOPS protection Optional accessories: Pallet fork, breaker hammer, backhoe, broom and milling machine.

Lote 13

Amount	Designation of the asset	Technical specifications (minimum) of the asset
01	Vibratory tandem roller - asphalt	Type: Self-propelled, tandem Operational weight: ≥ 2.70 tons Drum width: ≥ 1.1 meters Vibration: Yes, with double frequency and amplitude Motor: Diesel, ≥ 30 HP Cabin: Open or closed, with protection ROPS/FOPS

Lote 1

Amount of	Designation of the asset	<b>Technical specifications of the asset</b>
03	Pick-Up Cabine Simples (4x4)	<ul> <li>Engine: Diesel, minimum 2.2L, turbo intercooler</li> <li>Power: Minimum 120 HP</li> <li>Traction: 4x4</li> <li>Transmission: Manual, 5 or 6 speeds</li> <li>Payload capacity: ≥ 1000 kg</li> <li>Power steering</li> <li>Air conditioning</li> <li>Electric windows</li> <li>Radio with USB/Bluetooth</li> <li>Mixed-use tires (on/off road)</li> <li>Spare wheels (minimum 1)</li> <li>Color: White (preferred)</li> <li>Warranty: minimum 3 years or 100,000 km</li> <li>Tool kit and warning triangle included</li> </ul>
02	Pick-Up Cabine Dupla (4x4)	<ul> <li>Engine: Diesel, minimum 2.2L, turbo intercooler</li> <li>Power: Minimum 120 HP</li> <li>Traction: 4x4</li> <li>Transmission: Manual, 5 or 6 speeds</li> <li>Payload capacity: ≥ 750 kg</li> <li>Power steering</li> <li>Air conditioning</li> <li>Electric windows (front and rear)</li> <li>ABS braking system</li> <li>Front airbags (driver and passenger minimum)</li> <li>Basic entertainment system (USB/Bluetooth)</li> <li>Fabric or synthetic leather seats (easy to clean)</li> <li>Mixed-use tires</li> <li>Spare wheel</li> <li>Color: White (preferred)</li> <li>Warranty: minimum 3 years or 100,000 km</li> <li>Tool kit, hydraulic jack and emergency accessories</li> </ul>

Lote 2

Amount of	Designation of the asset	Technical specifications of the
		asset
01	Tricycle	<ul> <li>Purpose: Internal logistical support or light transport of materials.</li> <li>Minimum specifications:</li> <li>Type: Gasoline powered</li> <li>Load capacity: ≥ 300 kg</li> <li>Number of passengers: 1 to 2</li> <li>Cargo compartment: Closed</li> <li>Brakes: Disc</li> <li>Headlights and direction indicators</li> </ul>
03	Motorbikes	Type: Utility motorcycle, new, zero kilometer  • Engine: 110cc to 160cc  • Fuel: Gasoline  • Starting system: Electric  • Transmission: Manual (minimum 4 speeds)  • Brakes: Front disc, rear drum (minimum)  • Tank capacity: ≥ 8 liters  Maximum speed: ≥ 90 km/h  • Average consumption: ≥ 35 km/l  • Tires: 17" or compatible with road use  • Panel: Digital

Amount of	<b>Designation of the asset</b>	Technical specifications of the asset
		8x4 dump truck or equivalent
		- Volumetric capacity of the cargo box: Minimum
		$28 \text{ m}^3$
		- Payload capacity: ≥ 15,000 kg
		Engine: Diesel, minimum power of 350 HP
		- Curved box, bottom and sides with a minimum
		of 5mm
		Hydraulic support cylinder and PTO

05	20 m³ Garbage Compactor Trucks	- Hydraulic device lock Sewage tank: Side suspended Rubber Seal Type Transmission: Manual or automatic Tilting system: Rear hydraulic reinforced- Cabin: Closed, with air conditioning Power steering Tires: Reinforced radials for heavy loads Fuel tank: ≥ 400 liters Equipped with spare wheel, triangle, fire extinguisher, and kit of tools Complete documentation for circulation within the national territory Cabin with bed
05	20 m³ Dump Trucks	6x4 or larger dump truck Volumetric capacity of the cargo box: Minimum 20 m³ Payload capacity: ≥ 15,000 kg Engine: Diesel, minimum power of 350 HP Transmission: Manual or automatic Tilting system: Rear hydraulic Cabin: Closed, with air conditioning Power steering Tires: Radials, suitable for operations mixed (urban and rural) - Fuel tank: ≥ 300 liters - Equipped with spare wheel, triangle, extinguisher, and kit of tools - Complete documentation for circulation within the national territory