## ANNEX 1 (Specification for Barrier Gate)

Total No of barrier Gate	03 Gates (Should be suitable to install at outdoors)
Swing Type	Vertical
Access Control Software	Yes
	500 long range cards (min 08-meter range) 50 long range tag (min 08-meter range)
	All the entry/exit report should able to take from control software
Reader	Long range reader for vehicles
Arm	Telescopic (arm length should be between 04 to 05 meter)
	Aluminum hollow
	Form lining underneath to reduce dent damage in the event top-down collision with vehicle
Direction	Bi-directional to allow entry from both sides
Travel Range	At least 90 degrees
Speed	Opening/ Closing time shall not be longer than 1.8 second.
	Should support multi speed control
Arm motion	Should include Dual Spring mechanism to achieve two times smoother arm motion
	Should include Dual Sensor Detection to achieve double safety. Auto Reverse if blocked by vehicle.
Sensor	Should use magnet sensor instead of optical.
Motor	Smart motor system to achieve swift arm movement to reduce bouncing at end position
Barrier design	No mechanical limit switch in entire barrier design to ensure lesser wear and tear and maintenance cost is reduced.
Barrier design Gate	Should be able to customize to be used together with any autopay ticketing parking or access control system
	Should be equipped with technologies that reduces mechanical wear and effectively eliminates any maintenance servicing on the motor
	Gate foundation and pedestal
Gate Control System	The gate must have a travel range of 90 degrees.
	Control panel, power supply, battery and all relevant components must be integrated in to single control system
Control System safety usage	Control panel should be microprocessorbased board and transformer housed in a weather resistant plastic casing. It controls the operation of the barrier system.
Safety usage	Auto close after a preset delay time to avoid unauthorized access
	Traffic light (red & green) can be added to indicate permission to pass through and further enhance safety usage
Power consumption	< 80W, should include backup battery for the system.
Spare parts availability	Spare parts of barrier gate should be available locally, to ensure servicing and replacing of barrier can be done in short time.