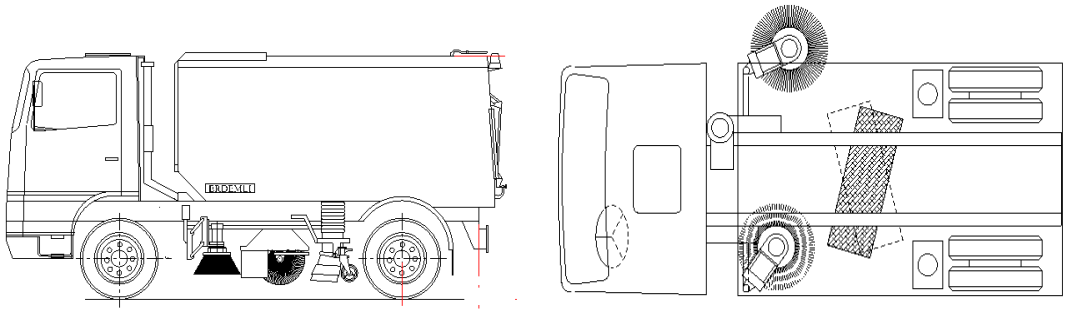

1. **General Specifications**
   - **1.1.** It will sweep both right and left side by the control of the operator.
   - **1.2.** It will be able to brush the ground by spraying water against dusting.
   - **1.3.** It is to empty the garbage tank by tilting the body hydraulically.
   - **1.4.** Sweeping and vacuuming sets can do sweeping widths of **2.20 m**. When using a side brush to sweep on the left or right side with a middle brush work together. And has a dual sweeping mode using a sweeping side brush on the left and right sides with a middle brush work together. Sweeping widths up to **3.40 m**.
   - **1.5.** Sweeping equipment's will be driven by an auxiliary engine.
   - **1.6.** The auxiliary engine, fan, brushes and spraying equipment's will be controlled from the driver's cab.
   - **1.7.** The rear gate of the garbage tank will be opened/closed by hydraulically.
   - **1.8.** It will be possible to raise the body manually when needed.
   - **1.9.** The production of the sweeper will be suitable for highway traffic.
   - **1.10.** There will be a camera and monitor system for the operator to examine the right side and left side equipment's of the truck.

2. **Auxiliary Engine.**
   - **2.1.** Auxiliary engine Separate from the truck will be **diesel engine type 4 stoke 4 cylinders**.
   - **2.2.** It will produce power supply from 85 HP up to 115 HP.
   - **2.3.** Displacement capacity according to the brand and model of the auxiliary engine.
   - **2.4.** When the oil pressure decreases, it will be able to stop itself automatically and if the temperature rises, the speed of the engine will turn to idling by disengaging the fan automatically**.**

3. **Fuel Tank**
   - **3.1.** Capacity of the fuel tank will be 200 liters (nominal).
   - **3.2.** Truck's engine and the auxiliary engine will use the same fuel tank

4. **Blower and Drive**
   - **4.1.** It will be made of carbon steel and have multi-vane and self-cleaning type impeller approx. air flow rate **15,600 m^3/h up to 31,800 m^3/h**
   - **4.2.** The blower impeller will be driven by the auxiliary engine via a disc type clutch and belt or gear box. The clutch will be of automotive type for availability.

5. **Auxiliary Engine Room.**

5.1. It will cover the engine and blower during working.

5.2. It will be an integral of the body and raises with it, so that the engine and the blower could be reached well.

5.3. In lowered position, there will be sealing to exclude all dust from auxiliary engine compartment. At the top of the engine room, there will be vents, supplying clear air, for the use of auxiliary engine and cooling of the room.

6. **Suction System**

6.1. The suction mouth Is a metal covered with a square shaped rubber with a width of **250 mm**, a length of **650 mm** and the suction hose is a good rubber hose with a diameter of **250 mm**.

6.2. To reduce the noise of the suction unit, the blower room will be isolated.

6.3. It will be carried by a couple of castor wheels and has the feature of increasing the gap to the ground by driver's control.

6.4. The suction mouth and the brushes will be able to rise up together automatically at the reverse gear.

7. **Brushes**

Sweeping will be performed by means of disc brushes located on both sides and a cylindrical middle brush.

7.1. Side Brush:

7.1.1. Two set of side brush install at left and right side of the truck body. Diameter **780 mm**. Bristles made of metal. Which is a replaceable type powered by a hydraulic system by the auxiliary engine and can adjust the speed of rotation more than 2 levels

7.1.2. It will be equipped by kick-back mechanism and the pressure made by the brush to the ground is pneumatically adjustable.

7.1.3. It will be able to work independently from middle brush.

7.1.4. It will raise and lower by pneumatic cylinder.

7.1.5. It will have safety latch.

7.2. Middle Brush:

7.2.1. There are one set of middle brush under the truck. A diameter of **400 mm** with a total length of **1**200 **mm**. Bristles are made of polypropylene. Which is replaceable Driven by hydraulic system by auxiliary engine

7.2.2. To avoid conical wearing, the middle brush will have a unique design. It will not be carried by the truck chassis directly, but by a 3-point bracket, 2 points of which are carried by the axle of the truck.

7.2.3. It will be able to turn to the side swept automatically.

7.2.4. It will raise and lower by pneumatic cylinder.

7.2.5. It will have safety latch.

8. Water Tank:

8.1. It will be made of stainless steel (AISI 304) integrally with garbage tank. The water tank will be possible to enter in and clean the mud in it thoroughly which is very likely to precipitate in time, even the garbage tank is full with garbage**.**

8.2. It will have water volume approx. **1,000 liters** up to **2,000 liters** and Install the Baffle Plate to prevent water shock while the truck move

8.3. There will be a warning lamp and buzzer when the water level in the tank is too low Install at the control panel in the driver's cab.

9. Watering System

9.1. All of the watering parts will be made of corrosion proof materials such as copper brass, pig iron and plastic.

9.2. There is a water pump installed to suck water from the water tank to be distribute according to various nozzles Control operation at the control panel in the driver's cab and stop working automatically when lifting the sweep collection kit.

9.3. There will be a washing hose and a nozzle length of hose **10 m** for cleaning the garbage tank and equipment.

9.4. The watering system on the brushes at the suction mouth and spray bar will be controlled by the operator in the driver’s cab

9.5. There will be at least 15 pieces of spray nozzles on the brushes and Sweeping equipment’s.

9.6. There is a flushing system inside the blower.

10. Garbage Tank

10.1. Volumetric capacity of the garbage tank will be 5m3 (nominal). The floor will be made of stainless steel (AISI 304) and the other sides will be made of carbon steel.

10.2. The garbage tank floor will make an angle of 45 degrees at least to the ground when raised.

10.3. For the safety there will be a blocking valve on the hydraulic system of the raising and lowering cylinder of garbage tank.

10.4. In the garbage tank, there will be a screen big enough to be able to vent the air easily when preventing the sucked garbage to go into the fan

10.5. There would be a wandering hose flexible and easy to use of 6 inches in diameter and ca. 4.5 meters in length at the rear part of the sweeper.

11. Electrical System

11.1. It will have 12 volts, 2 units’ flash lights at the rear bottom sides of the body.

11.2. For safety, there will be a main switch disconnecting all electrical circuits on the superstructure when needed.

12. Hydraulically System

12.1. It will work independently from the engine of the truck.

12.2. The hydraulic circuit will be designed so that the hydraulic pumps, motors and control valves will work together in harmony.

12.3. The pressure will not exceed 150 kg /cm^2 in anywhere on the hydraulic system.

12.4. There will be filters in enough sizes on suction and pressure lines of the circuits.

12.5. There will be an efficient system to cool the hydraulic oil.

13. Painting

13.1. The body will be sand blasted before the painting and then will be primed and painted.

14. Safety Measures

CE regulations