



SCOPE OF WORKS

1. Background and scope of work	
<p>KSIA is equipped with a Booster Pump Housing. The Booster pump Station consists of Diesel engine booster pumps, jockey pump, Control Panels, Diesel Fuel Tanks, Carbon steel piping, Isolation Valves, that varies in sizes and batteries.</p> <p>The purpose of this business case is to source a competent, qualified, and experienced service provider to do repairs on our Fire Booster Pump Stations. These repairs are based on the report that was issued after annual service was conducted to both Fire Booster Pumps Station Setup in accordance with ASIB, SABS ISO 9001 and ACSA standards to ensure compliance to ASIB requirements and ensuring operability of fire booster pumps.</p>	
2. Detailed specifications or scope of Works	
Technical Specification:	
ITEM	SPECIFICATION
DIESEL ENGINE	Make: John Deere 4045T Capacity: 4 Cylinder 4.5L Diesel Engine
FIRE PUMP	Make: Lowara Type: FHF 100-400
JOCKEY PUMP	Make: Lowara CE Type: 5SV12F022 Output: 2.2 KW
Scope of Work	
Passenger Terminal:	
<ul style="list-style-type: none"> • Replace two exhaust end pieces out side the Pump House. • Replace Air filter elements. • Replace heat exchanger cap. • Replace cooling line gauges 0-250kPa. • Wrap around lag exhaust as per ASIB regulations. 	

- Replace faulty pump run light.
- Replace 12 volts battery for bell and siren set.
- Replace Siren set.
- Replace Gauge cocks.
- Repair exhaust bracket for hydrant pump 2.
- Repair cooling line for Hydrant pump 1.
- Replace starter and cable on Hydrant Pump 1.
- Calibrate abortive start on all 4 pumps

Control Tower:

- Replace two exhaust end pieces out side the Pump House.
- Replace Air filter elements.
- Replace heat exchanger cap.
- Replace battery boots.
- Replace 40mm sight glasses.
- Wrap around lag exhaust as per ASIB regulations.
- Replace faulty pump run light.

3. Identified Risks

- Over pressurized pumps
- Cavitation
- Mechanical Seal failure
- Fire
- Reduced of low flow.
- Loose wiring
- Oil Spillages

Figure 1: Diesel Engine



Figure 2: Exhaust end Piece



Figure 3: Air Filter Elements



Figure 4: Heat Exchanger Cap



Figure 5: Cooling line Gauges

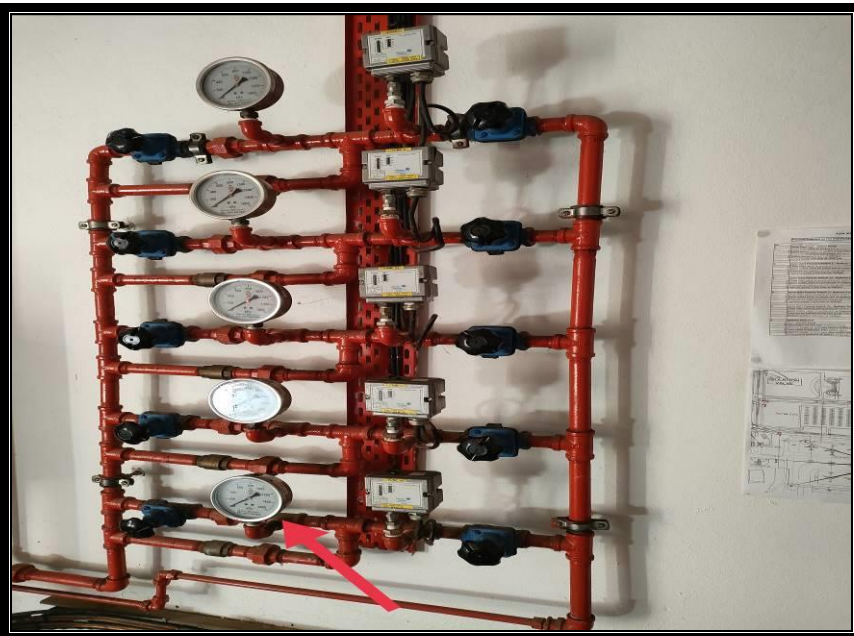


Figure 6: Sigh Glass (40mm)



Figure 7: Lag Exhaust



Figure 8: Siren and Bell Set



Figure 9: Gauges Cocks



Figure 10: Exhaust Bracket



Figure 11: Annunciator Card

