ANNEXURE 8

CIVIL INFRASTRUCTURE MAINTENANCE SCHEDULE AND INVENTORY

TDR FOR PROVISION OF INTEGTARED FACILITIES

MANAGEMENT AT TRANSNET ISANDO, SENTRA RAND

& ELANDSFONTEIN PRECINCT

FOR A PERIOD OF 3 YEARS

INVENTORY SUMMARY

| # | Item | Qty | Size |
|---|---|-----|---|
| 1 | PUMPS | | |
| A | Storm water Pumps | 6 | TBC |
| В | Sewer pumps | 5 | TBC |
| С | Fresh water (Booster) pumps | 6 | TBC |
| 2 | Geysers | 177 | 200L |
| | | 3 | 250L |
| | | 2 | 6000L |
| 3 | Building structures and roof | | As per Annexure 1 (Asset Inventory) |
| 4 | Ablution, kitchen facilities and equipment (basins, sinks, toilets, urinals, etc) | | As per Annexure 1 (Asset Inventory) and 5 (Hygiene) |

1. PUMPS

| Quantity | 17 | | |
|-------------|---|--|--|
| Frequency | Activity | | |
| Maintenance | Maintenance | | |
| Weekly | Visual inspection | | |
| 3 Monthly | Remove all external and internal dirt | | |
| 6 Monthly | Major service (check the impellers, greasing and cutting disc etc | | |
| 6 Monthly | | | |
| 6 Monthly | | | |
| 6 Monthly | | | |

2. GEYSERS

| Quantity | |
|--------------------|--|
| Specification | |
| Frequency | Activity |
| Piping | |
| Monthly | Inspect water piping and equipment for water leaks and repair leaks where required Safety valves must be flushed to ensure that there is no blockage Insert pipe work, pipe joints, pipe work insulation and pipe support and rectify where required Insert valves, steam traps, water gauges, temperature controls sight glasses thermometer etc. for water leaks, and repair where necessary Flush clean all pipe work to remove any wild scale, stones or other debris which may damage the tank living. Check and ensure that all electrical connections are tight and tighten any loose electrical connections |
| Industrial geysers | |
| 12 Monthly | Check and ensure that all electrical connections are tight and tighten any loose electrical connections Drain water from the industrial geysers and check any internal defects and ensure that corrosion protection is still intact Check and service sacrificial anode thermostat and burnt element after geyser water drainage. Replace all items if required. Sample and test cold water supply for foreign particles which may damage the geyser systems, purify cold water supply if necessary. Check and clean electrical control panel and check for correct operation. |

3. BUILDING STRUCTURES AND ROOFS

| Quantity | | | |
|--------------------|--|--|--|
| Frequency | Activity | | |
| Building Structure | | | |
| | Check paint work and re-paint with suitable paint if necessary Check all bolts, nuts and studs for high mast structure. Check for the cracks on the walls and slap. Check for structural damage around. | | |
| Doors and windows | | | |
| | Check for the cracks and patty Check for all moving parts for free movement and grease when needed. Tighten locks and handles where necessary | | |
| Roofs and gutters | | | |
| | Clean all gutters to be free of dirt and leave Check the down pipes if they are not blocked and they are secured. Check the water proofing if it is not lifting. Check for the water proofing joints | | |

4. ABLUTION, KITCHEN FACILITIES AND EQUIPMENT (BASINS, SINKS, TOILETS, URINALS, ETC)

| Quantity | | | | |
|---------------------------------|---|--|--|--|
| Frequency | Activity | | | |
| Basins and Sinks | | | | |
| 12 Monthly | - Check for the leaks. | | | |
| | Check the p/trap and S/trap. | | | |
| | Check the silicon around the sink. | | | |
| | - Check the sink tap if it is tight. | | | |
| Toilets and flushing mechanisms | | | | |
| Monthly | - Check that all doors are closing properly. | | | |
| | - Check for cistern if is functional. | | | |
| | - Check for leaks. | | | |
| Urinals and mechanisms | | | | |
| Monthly | - Check and clean a bottle trap. | | | |
| | Check for water pressure when flushing. | | | |
| | - Check for the water leaks. | | | |

8. MINIMUM STOCK HOLDING

The bidder should, at all times, stock any replacement part necessary for the execution of Works. The principle that applies to stock keeping is that downtime on equipment should be kept to a minimum. Therefore, all consumables that might be necessary for the execution of the works shall be readily available. The bidders should list exclusions, if any, to the above with the maximum time necessary to acquire this spare part.

| Item name/ description | Time to acquire |
|------------------------|-----------------|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

ISANDO, SENTRA RAND & ELANDSFONTEIN CIVIL INFRASTRUCTURE Inventory, planned maintenance, frequency and activities

9. MINIMUM SPECIAL EQUIPMENT

The bidder should list any special equipment, if any, that might be necessary for the execution of the Works, that will not be, either on site, or at the premises on daily basis. The bidder should indicate the maximum time necessary to acquire this equipment.

| Item name/ description | Time to acquire |
|------------------------|-----------------|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

Staffing requirements:

- Civil maintenance will require a minimum of 4 personnel comprising of 3 multi skilled technical workers and 1x a qualified, multi skilled Plumber (Supervisor or similar skill) to attend to planned, day to day civil maintenance, breakdowns, repairs and upgrades.
- It is the responsibility of the bidder to provide tools, PPE, etc for the above staff.

Material:

- Material required for day to day and unplanned maintenance will be sourced under pass through costs as the works cannot be predetermined.
- Material (lubricants, oils, seals, anti-freeze, etc) and labour (internal or outsourced) for all
 periodic planned maintenance will form part of fixed costs and hence should be included in
 the quote on the pricing schedule, any unforeseen or additional work during periodic
 maintenance should be reported to TFR Facilities Management team and if additional spares
 are required they will form part of pass through costs.