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1 CAFM System

MFM CAFM has a comprehensive strategy to enhance a facility's reliability, value and operating efficiency. The programme relies on an inspection of the complete building component inventory and the assessment of replacement measures based on expected useful service life, criticality, reliability, efficiency, and reduction of risk due to failures.

MFM as the FM Service Provider will be responsible for all preventative maintenance routines for CLIENTS Facilities. MFM role is to ensure that asset integrity is consistently maintained and improved by monitoring the preventative maintenance routines and the result of the preventative maintenance plans as carried out by the Service Providers.

The Computer Aided Facilities Management (CAFM) system will enable MFM to help maximize return on clients Facility assets, by enabling us to develop comprehensive programmes for preventive, predictive, routine, and unplanned maintenance in which to effectively deliver and report on the performance the FM services.

The key benefits to clients will be

Improve return on assets Facilitate regulatory compliance efforts • Decrease costs and risk Manage risk . Lower total cost of ownership. Increase productivity Increase asset service delivery, Improve asset related decision making responsiveness, and revenue

1.1 **CAFM Approach**

Our experience as the FM Service Provider in other high-profile maintenance contracts will inform our management approach for CLIENTS requirements, ensuring the procedures used are the best in the industry and that the work instructions are followed explicitly.

Many of the initial building maintenance procedures and instructions are established at the time of the building design. Through the commissioning process, when the equipment is turned over to operations our Value Engineering team will be present. They will provide valuable input into the operating practices and preventative maintenance requirements to the Service Providers and our staff.

The data will then be transferred to the CMMS system. At that time information on maintenance activities relating to equipment warranties will also be captured.

We will also oversee compliance related to preventive maintenance and inspections (for legal, regulatory, Health & Safety or insurance purposes). For routine preventive maintenance, MFM

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will implement consistent audit specifications based on service levels and requirements and provide oversight on prudent maintenance management practices. Replacement and renewal programmes will be carefully monitored to minimize the impact on day-to-day operations and provide fully functional facilities.

The performance standards to be overseen by CLIENTS must establish a number of parameters that will be continually monitored and measured to ensure that the building is always operating at a level in conformance with the requirements. We will use a programme of inspections, Help Desk call statistics, Integrated Building Management System, and site inspections to validate and monitor the performance standards.

Some of the elements considered in the monitoring of the building performance will include:

- HVAC systems operations, including air quality, temperature, humidity, and capacity to meet the space conditioning requirements
- Lighting levels, types, and suitability
- Vertical transportation systems efficiency
- Integrity of structural and architectural components including doors, windows, roof, etc.
- Energy efficiency of the building

MFM will carry out Needs Analysis, Specifications, Implementation and Operations for BMS, IT CAFM, Command and Control Centre, and Call Centre solutions for CLIENTS facilities and FM operations before the start of operations.

We will ensure that all staff is experienced and qualified and will provide the opportunity for further education and development through in-house Training & Development Centre.

MFM will develop optimum FM solutions and efficient mobilization plans. We will focus on continuous improvement while the proposed plans have been processed.

1.2 CAFM Implementation

MFM will perform the following:

- Uploading of all assets in the CAFM system which is provided by CLIENTS
- Regular updating of the asset list

Day to day administration and management of the CAFM system and production of the following reports:

- Process Measurement analysis & Report
- Backlog
- Overtime (%)
- Execution (%)
- Emergencies (%)

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- Rush Maintenance Purchases (%)
- Regulatory Compliance (%)
- Technical Training per month (Hours/Employee)
- Productivity (%)
- Overdue Maintenance (%)
- Cost Measurement analysis & Report
- Maintenance Hour (Cost/Hour)
- Reactive Maintenance (%)
- Preventive Maintenance (%)
- Corrective Maintenance (%)
- Predictive Maintenance (%)
- Controlled Inventory (%)
- Equipment Measurement analysis & report
- Critical Asset Availability (%)
- Critical Asset Maintainability (Hours)
- Critical Asset Reliability or Mean Time Between Failure (MTBF) (Hours)
- Critical Asset Mean Time to Repair (MTTR) (Hours)
- Root Cause Analysis (RCA) (%)
- Energy Utilization Index (BTU/FT2)
- Condition Assessment (Average)
- Sustainability analysis & Reporting
- Carbon footprint analysis
- Energy consumption analysis

1.3 Business Process Model

The business process model MFM utilizes on its FM projects in the KSA is illustrated in the process diagram below:

System Modules	Maintenance and Repair, Asset and Inventory Management, Financial Management							
	Data Integration							
CAFM System	Call Centre / Helpdesk, Task Auditing, KPIs, Service Level Agreement Control, Planning and Scheduling							
	Policy Alignment							
Tailored Policies and Procedures	Health and Safety, Corporate Policies, project Development and Directives, Energy Management Policies, Government Legislation							
	Policy Selection and Customization							
Operating Procedures	Health and Safety, Human Resources, Risk Management, Asset Management and Life Cycle							

The process model is used as the overarching model to guide and direct the delivery of the FM solution as the project moves from the set-up stage through to the operational stage.

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Supporting this business model are the MFM's business procedures, processes, systems, procurement and contractual mechanisms and methodologies. Various planning and forecasting tools will be used by the MFM to support each step in developing the business model which includes:

- CAFM system & Call Centre statistics, trend analysis and reports.
- MFM's asset life cycle software tool.

In addition to the above, MFM would ensure the 'Target Cost Book' is aligned to all the models we use within our business and would hold fortnightly reviews with all contractors to ensure they are aligned as well.

MFM will provide all of the services described in this proposal to the highest standards. These standards are achieved through good industry practices, training, and clear audit trails.

MFM has developed these practices over time due to its growth within the Middle East Facilities Management market, also from client feedback and reviews and establishing long-term partnerships. We also work closely with any third-party suppliers to ensure all are aligned in our objectives and goals.

1.4 Help Desk and CAFM System

We have recognized in facilities management, in this area of service the client requires a more innovative solution that will reduce cost, report on a more realistic scale and allow us to partner our customers with a transparent relationship that benefits both parties.

The computer-Aided Facilities Management (CAFM) System proactively monitors the progress of each and every request and sounds alarm with enough warning to meet service levels targets, displaying potential problems in time for their resolution without breaking Service Level Agreements.

Further, MFM CAFM provides a comprehensive set of management information reports and graphs, allowing management staff to maintain quality of service, compare departments, buildings, staff, and identify areas of excellence and areas requiring attention and future improvement.

1.5 Methodology and Computer Aided Facilities Management

MFM will deploy a combination of planned preventative and reactive maintenance strategies at all infrastructure assets. The on-site contact center will provide the core interface for the services delivered by MFM. Our contemporary maintenance methodologies will deliver value and efficiency using systems and tools commonly found in more advanced economies such as

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Australia and the UK. Through a full integration with MFM, the commonwealth will achieve its vision for a one-stop-shop that adds value and is commercial in its approach.

MFM believes that CLIENTS will benefit from our 24/7 involvement at CLIENTS in the following ways:

Benefits to Client	Features of MFM' Service
Compliance	 Proactive SLA monitoring with warning signals to resolve issues before SLA failure. Allowance to meet the required user defined help All-embracing site management information reporting that shows real time performance against KPIs across all operational levels and within all operational spheres. Job costing and invoicing for S&Q services Ability to add notes at any stage including post completion Simple graphical performance monitoring Complaints and user re-submissions Email integration
Value	 Improved customer service. Multiple help desks through a single system Improved transparency in management information Cost and time efficiency Reduced completion times
Convenience	MFM CAFM System will be integrated with the present Microsoft suite with import/export capabilities that provides convenient and fast data exchange capabilities



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