
M&E MAINTENANCE

NATIONAL ARMY MUSEUM
STEVENAGE

VOLUME III

MAINTENANCE SCHEDULE

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Client:

**National Army Museum
Royal Hospital Road
Chelsea
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DATE: FEBRUARY 2017

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Client

National Army Museum
Royal Hospital Road
Chelsea
SW3 4HT

GLP QA SYSTEM

Authorisation By:



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ELECTRICAL & MECHANICAL SCHEDULES - STEVENAGE

<u>CONTENTS</u>	<u>MAINTENANCE CODE</u>	<u>PRIORITY RATING</u>
1	SWITCHGEAR AND DISTRIBUTION	1
2	LIGHTING	2
3	EMERGENCY LIGHTING	3
4	GENERAL POWER	—
5	CONTROLS	3
6	SECURITY SERVICES	1
7	LIGHTNING PROTECTION	3
8	HEATING AND COOLING	2
9	VENTILATION	2
10	HOT AND COLD WATER	2
11	WC's/SINKS/BASINS	3
12	GAS	1
13	DRAINAGE	1
14	CCTV	2
15	FIRE ALARM EQUIPMENT	1
16	FIRE EXTINGUISHERS	3
17	FUME CUPBOARDS	2

For priority rating reference, refer to Volume 1 = Clauses 2.3 and 2.4

APPENDIX 1

ABBREVIATIONS

MCCB	Moulded Case Circuit Breaker
MCB	Miniature Circuit Breaker
TP & N	Triple Pole and Neutral
SP & N	Single Pole and Neutral
BS	British Standard
CIBSE	Chartered Institute of Building Services Engineers
LGB	Lighting Guide No. 3
PM	Preventative Maintenance
CPC's	Circuit Protective Conductors
TRV	Thermostatic Radiator Valve
WC's	Water Closets
LTHW	Low Temperature Hot Water
DB	Distribution Board
LU	Dustproof/Moisture Proof Luminaires
LB	Low Brightness Luminaires
PL	Compact Fluorescent
LV	Low Voltage

Planned Maintenance Schedules
Date of Inspection 24 May 2016

Building: -National Army Museum, Stevenage
Services:-Switchgear & Distribution

Equipment	Location	Quantity	Maintenance								Remarks
			Code	W	2H	M	Q	H	Y	2Y	
MCB Distribution Board Eaton - 12 Way TPN (DB1)	Unit 1 - In Plantroom	1	E1						X	X	
Schneider Distribution Board 6 Way TPN (DB3)	Unit 1 - In Plantroom	1	E1						X	X	
Eaton Distribution Board 10 Way TPN (DB2)	Unit 1 - Under Mezzanine	1	E1						X	X	
MCB Distribution Board (DB1) Eaton/MEM - 12 Way TPN	Unit 2 - In Plantroom	1	E1						X	X	
Schneider Distribution Board 8 Way TPN (DB2)	Unit 2 - In Plantroom	1	E1						X	X	
Schneider Distribution Board 6 Way TPN (DB3)	Unit 2 - Next to Roller Shutter	1	E1						X	X	
MEM 20A Isolator	Unit 2 - Next to Roller Shutter	1	E1						X	X	

Planned Maintenance Schedules Date of Inspection 24 May 2016											
Building: -National Army Museum, Stevenage Services:-Lighting											
Equipment	Location	Quantity	Maintenance								Remarks
			Code	W	2H	M	Q	H	Y	2Y	
400W Metal Halide High Bay	Unit 1 - Warehouse	6	E2					X	X	X	* Allowance for all where asterixed 25% Emergency self contained type luminaires
Twin 70W Fluorescent Luminaires*	Unit 1 - Warehouse	9	E2					X	X	X	
Twin 70W Fluorescent Luminaires*	Unit 1 - Mezzanine	24	E2					X	X	X	
400W Metal Halide High Bay	Unit 2 - Warehouse	6	E2					X	X	X	
28W 2D Luminaires	Warehouse Store/Plantroom areas	2	E2					X	X	X	
28W 2D Luminaire	Office Ground Floor Store	1	E2					X	X	X	
600 x 600 18W Luminaire *	Ground Floor Office Area	24	E2					X	X	X	
28W 2D Luminaire	Ground Floor Kitchen	1	E2					X	X	X	
28W 2D Luminaire *	Ground Floor Disabled WC	1	E2					X	X	X	
Twin 35W Fluorescent Luminaires *	First Floor Landing	4	E2					X	X	X	
28W 2D Luminaires	First Floor Kitchen/Ladies/Gents	3	E2					X	X	X	
600 x 600 18W Luminaires *	First Floor Offices	42	E2					X	X	X	
Canopy Lighting 18W PL Luminaires	Ground Floor Entrance	3	E2					X	X	X	
30W Floodlight with PIR	External Perimeter	17	E2					X	X	X	

Planned Maintenance Schedules
Date of Inspection 24 May 2016

Building: -National Army Museum, Stevenage
Services:-Emergency Lighting

Equipment	Location	Quantity	Maintenance								Remarks
			Code	W	2H	M	Q	H	Y	2Y	
Emergency Frogeye Luminaire	Unit 1 Warehouse	1	E4					X	X	X	
Emergency Exit Sign	Unit 1 Warehouse	3	E4					X	X	X	
Emergency Frogeye Luminaire	Unit 2 Warehouse	1	E4					X	X	X	
Emergency Exit Sign	Unit 2 Warehouse	4	E4					X	X	X	
Exterior Bulkhead Luminaires	Outside Emergency Exits	3	E4					X	X	X	
Emergency Exit Sign	Warehouse Ground Floor Office Area	1	E4					X	X	X	
Emergency Bulkhead	Ground Floor Lobby Area	2	E4					X	X	X	
Emergency Bulkhead	First Floor Landing	4	E4					X	X	X	

Planned Maintenance Schedules Date of Inspection 24 May 2016											
Building: -National Army Museum, Stevenage Services: -General Power											
Equipment	Location	Quantity	Maintenance								Remarks
			Code	W	2H	M	Q	H	Y	2Y	
230V Socket	Unit 2 Warehouse	1	E3					X		X	
400V Socket	Unit 2 Warehouse	1	E3					X		X	
Fused Spur	Unit 2 Warehouse	3	E3					X		X	
230V Socket	Ground Floor Office Areas	3	E3					X		X	
230V Socket	First Floor Areas	16	E3					X		X	
230V Socket	Ground Floor Areas	12	E3					X		X	

Planned Maintenance Schedules
Date of Inspection 24 May 2016

Building: -National Army Museum, Stevenage

Services:- Controls

Equipment	Location	Quantity	Maintenance								Remarks
			Code	W	2H	M	Q	H	Y	2Y	
Trend 1QE excite controller/panel for AHU 1 and 2 control c/w external temperature and humidity sensors and modem connection for remote access.	Unit 2 Plantroom	1	E6 E13				X X	X	X X		
AHU no.1 and 2 control panels and integral AHU controls.	Unit 2 Plantroom and AHU No.1 and 2	1	E6 E13				X X	X	X X		
Trend 1QE excite controller/panel for AHU 3 control c/w external temperature and humidity sensors and modem connection for remote access.	Unit 1 Handling Store/STEV17	1	E6 E13				X X	X	X X		
AHU no.1 and 2 control panels and integral AHU controls.	Unit 1 Handling Store/STEV17	1	E6 E13				X X	X	X X		
Ambi-rad Smartcon controller for radiant panels.	Unit 1 and Unit 2 Plantroom	2	E6 E13				X X	X	X X		Unit 2 Controller Isolated

Planned Maintenance Schedules
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Building: -National Army Museum, Stevenage
Services:-Security Services

Equipment	Location	Quantity	Maintenance								Remarks
			Code	W	2H	M	Q	H	Y	2Y	
Security PIR Devices	Ground Floor Lobby, Unit 1	2	E15					X	X		
Security PIR Devices	Ground Floor Lobby, Unit 2	2	E15					X	X		
Security PIR Devices	Ground Floor Offices, Unit 1	4	E15					X	X		
Security PIR Devices	Ground Floor Offices, Unit 2	4	E15					X	X		
Security PIR Devices	Warehouse, Unit 1	3	E15					X	X		
Security PIR Devices	Warehouse, Unit 2	3	E15					X	X		
Security PIR Devices	First Floor Landing, Unit 1	1	E15					X	X		
Security PIR Devices	First Floor Landing, Unit 2	1	E15					X	X		
Security PIR Devices	First Floor Offices, Unit 1	3	E15					X	X		
Security PIR Devices	First Floor Offices, Unit 2	2	E15					X	X		
Cam's Security Intruder Keypad	Ground Floor Lobby, Unit 1	1	E15					X	X		
Door Contacts	All external doors (incl. roller doors)	8	E15					X	X		
Internal Alarm Sounders	Ground Floor Lobby, Unit 1 & Unit 2	2	E15					X	X		
Sliding Gates	Rear Entrance	2	E15					X	X		
Roller Shutter Doors	Warehouse	2	E15					X	X		
Car Park Barrier	Front Entrance	1	E15					X	X		
Rhino Security Bollards	Rear Entrance	6	E15					X	X		

Planned Maintenance Schedules Date of Inspection 24 May 2016											
Building: -National Army Museum, Stevenage											
Services:-Lightning Protection System											
Equipment	Location	Quantity	Maintenance								Remarks
			Code	W	2H	M	Q	H	Y	2Y	
Lightning Protection System	Roof	1	E9						X		

Planned Maintenance Schedules Date of Inspection 24 May 2016											
Building: -National Army Museum, Stevenage											
Services:-Heating & Cooling											
Equipment	Location	Quantity	Maintenance								Remarks
			Code	W	2H	M	Q	H	Y	2Y	
Gas-fired combination boiler Model: Potterton Performa 24 with powered flue serving LTHW radiators and HWS to offices.	Unit 1 and 2 Plantrooms	2	M2 E6 M14				X X X	X	X		Unit 2 ambi-rads currently isolated.
Direct gas-fired ambi-rad radiant strips at high level c/w burner and flue to external.	2 in Unit 1 2 in Unit 2	4									
LTHW steel panel radiators.	Unit 1 and 2 offices, toilets and common areas.	All	M30 M16						X X		
Split heat-pump air-conditioning systems with indoor cassette and external condenser. Model: Mitsubishi SV2-KA71YA2-R410A with heating and cooling capability.	Unit 1 offices x 4	4	M31 E12			X	X	X	X X		
Close-central A/C units with heating, cooling and humidity control. Model: Marstair.	Unit 1 First Floor Office	1	M31 E12			X	X	X	X X		
Refer to 'Ventilation' section for AHU no.1 and 2 to unit 2	Unit 2										Including maintenance to humidifier to manufacturers requirements.

Planned Maintenance Schedules
Date of Inspection 24 May 2016

Building: -National Army Museum, Stevenage

Services:-Ventilation

Equipment	Location	Quantity	Maintenance								Remarks
			Code	W	2H	M	Q	H	Y	2Y	
AHU No.1: Packaged air handling unit serving Unit 2 painting store and warehouse storage facility. Unit comprises motorised fresh air, extract air and mixing air dampers, heat pump DX coil for heating or cooling, humidifier, supply and extract air fans and sound attenuators.	External at Roof of Unit 2	1	M27 E12			X	X	X X	X X		Plant includes humidifier.
Supply and extract air ductwork distribution system including fire dampers, valve control dampers, supply air jet diffusers and return air grilles.	High Level in Unit 2	All	M21						X		
AHU No.2: Packaged air handling unit serving Unit 2 office/artefacts stores. Unit comprises motorised fresh air, extract air and mixing air dampers, heat pump DX coil for heating or cooling, humidifier, supply and extract air fans and sound attenuators.	Internal at Roof of Unit 2	1	M27 E12			X	X	X X	X X		Plant includes humidifier.
Supply and extract air ductwork distribution system including fire dampers, valve control dampers, supply air diffusers and return air grilles.	Unit 2	All	M21						X		
AHU No.3: Packaged air handling unit serving Mezzanine. Unit comprises motorised fresh air, extract air and mixing air dampers, heat pump DX coil for heating or cooling, humidifier, supply and extract air fans and sound attenuators.	External Unit 1	1	M27 E12			X	X	X X	X X		Plant includes humidifier.
Supply and extract air ductwork distribution system including fire dampers, valve control dampers, supply air diffusers and return air grilles.	Mezzanine, Unit 1	All	M21						X		
Toilet, shower room and kitchenette extract air ventilation systems comprising extract air fan(s) ducted to external c/w light switch operation and run-on timer.	All Office toilet, shower room and kitchenette rooms	9	M19 E12				X	X X	X X		

Planned Maintenance Schedules
Date of Inspection 24 May 2016

Building: -National Army Museum, Stevenage

Services:- Hot and Cold Water

Equipment	Location	Quantity	Maintenance								Remarks
			Code	W	2H	M	Q	H	Y	2Y	
Cold water direct off mains and hot water from respective unit 1 and 2 combination boiler.	Unit 1 an 2	All	M16					X	X		Hot and cold water services to be ACOP L8 compliant with bi-annual risk assessment.
Hot and cold water distribution pipework including all	Unit 1 and 2 Offices	All	M16					X	X		
Hot and cold water taps.	Unit 1 and 2 kitchen and toilet facilities	All	M16					X	X		

Planned Maintenance Schedules Date of Inspection 24 May 2016											
Building: - National Army Museum, Stevenage Services:- WCs Sinks Basins											
Equipment	Location	Quantity	Maintenance								Remarks
			Code	W	2H	M	Q	H	Y	2Y	
1 x shower 2 x WC with cistern 2 x wash hand basin	Unit 2 - First Floor Offices	All	M36 M37					X X	X X		
1 x disabled WC with cistern 1 x disabled wash hand basin 1 x WC with cistern 1 x wash hand basin 1 x sink	Unit 2 - Ground Floor Offices	All	M36 M37					X X	X X		
2 x WC with cistern 2 x wash hand basin 1 x sink	Unit 1 - First Floor Offices	All	M36 M37					X X	X X		
1 x disabled WC with cistern 1 x disabled wash hand basin 1 x sink	Unit 1 - Ground Floor Offices	All	M36 M37					X X	X X		

Planned Maintenance Schedules Date of Inspection 24 May 2016											
Building: -National Army Museum, Stevenage Services:Gas											
Equipment	Location	Quantity	Maintenance								Remarks
			Code	W	2H	M	Q	H	Y	2Y	
Incoming gas supply to gas meter R5 c/w governor and distribution pipework to combi-boilers and radiant strips at high level.	Unit 1 and 2 Plantrooms (2 x separate supplies)	2	M5	X		X	X				No Emergency Solenoid. Only Lever Ball Valve
Gas meter reader - Cello 6.	Unit 1 and 2 Plantrooms (2 x separate supplies)	2	M5			X	X				
Gas distribution pipework including all valves, fittings and brackets.	Unit 1 and 2	All	M9				X	X	X		

Planned Maintenance Schedules
Date of Inspection 24 May 2016

Building: -National Army Museum, Stevenage
Services:- Drainage

Equipment	Location	Quantity	Maintenance								Remarks
			Code	W	2H	M	Q	H	Y	2Y	
Soil and waste drainage stacks from toilet/shower/kitchenette facilities including all soil and waste connections and connection to foul sewer.	Offices in Unit 1 and 2	All	M37 M42					X X	X X		
Rainwater gutters and down pipes with below ground discharge through all gullies to storm water manholes.	Unit 1 and 2	All	M37 M42					X X	X X		

Planned Maintenance Schedules
Date of Inspection 24 May 2016

Building: -National Army Museum, Stevenage
Services:- CCTV

Equipment	Location	Quantity	Maintenance								Remarks
			Code	W	2H	M	Q	H	Y	2Y	
CCTV Fixed Camera	Unit 1 Warehouse	3	E14					X	X		
CCTV Fixed Camera	Unit 1 Warehouse/ Mezzanine	1	E14					X	X		
CCTV Fixed Camera	Unit 1 Foyer	1	E14					X	X		
CCTV Fixed Camera	Unit 1 First Floor	1	E14					X	X		
CCTV Dome Camera	Unit 1 External Front	1	E14					X	X		
CCTV Dome Camera	Unit 1 External Rear	1	E14					X	X		
CCTV Fixed Camera	Unit 2 Warehouse	2	E14					X	X		
CCTV Fixed Camera	Unit 2 Foyer	1	E14					X	X		
CCTV Fixed Camera	Unit 2 First Floor	1	E14					X	X		
CCTV Dome Camera	Unit 2 External Front	1	E14					X	X		
CCTV Dome Camera	Unit 2 External Rear	1	E14					X	X		

Planned Maintenance Schedules
Date of Inspection 24 May 2016

Building: -National Army Museum, Stevenage
Services:-Fire Alarm Equipment

Equipment	Location	Quantity	Maintenance								Remarks
			Code	W	2H	M	Q	H	Y	2Y	
Smoke Detectors	Ground Floor Lobby & Offices, Unit 1	5	E5				X		X		
Heat Detector	Kitchen, Ground Floor Unit 1	1	E5				X		X		
Smoke Detectors	Ground Floor Lobby & Offices, Unit 2	6	E5				X		X		
Heat Detector	Kitchen, Ground Floor Unit	1	E5				X		X		
Heat Detectors	Warehouse, Unit 1	8	E5				X		X		
Smoke Detector	Plant Room, Unit 1	1	E5				X		X		
Heat Detectors	Warehouse, Unit 2	8	E5				X		X		
Smoke Detector	Plant Room, Unit 2	1	E5				X		X		
Smoke Detectors	Mezzanine, Unit 1	4	E5				X		X		
Smoke Detectors	First Floor, Unit 1	4	E5				X		X		
Heat Detector	Kitchen, First Floor Unit 1	1	E5				X		X		
Smoke Detector	First Floor, Unit 2	4	E5				X		X		
Heat Detector	Shower Room, First Floor Unit 2	1	E5				X		X		

Planned Maintenance Schedules
Date of Inspection 24 May 2016

Building: -National Army Museum, Stevenage
Services:-Fire Alarm Equipment

Equipment	Location	Quantity	Maintenance								Remarks
			Code	W	2H	M	Q	H	Y	2Y	
Manual Call Point	Ground Floor Lobby, Unit 1	1	E5				X		X		
Manual Call Point	Warehouse, Unit 1	2	E5				X		X		
Manual Call Point	Ground Floor Lobby, Unit 2	1	E5				X		X		
Manual Call Point	Warehouse, Unit 2	2	E5				X		X		
Manual Call Point	Mezzanine, Unit 1	2	E5				X		X		
Manual Call Point	First Floor, Unit 1	1	E5				X		X		
Manual Call Point	First Floor, Unit 2	1	E5				X		X		
Flashing Xenon Beacon	Ground Floor Disabled WC, Unit 1 & 2	2	E5				X		X		
Haes Surveyor Excel Main Fire Alarm Panel	Ground Floor Lobby, Unit 1	1	E5				X		X		
Main Fire Alarm Panel	Ground Floor Lobby, Unit 1	1	E5				X		X		

Planned Maintenance Schedules
Date of Inspection 24 May 2016

Building: -National Army Museum, Stevenage
Services:-Fire Extinguishers

Equipment	Location	Quantity		Maintenance							Remarks
			Code	W	2H	M	Q	H	Y	2Y	
9 litre water	Unit 1 and 2 rear personnel exit doors	4	M40			X			X		
9 litre water	External to plantroom in Unit 1 and 2	2	M40			X			X		
9 litre water	First Floor corridor, Unit 1	4	M40			X			X		
9 litre water	First floor corridor, Unit 2	4	M40			X			X		
9 litre water	Unit 1 and 2 next to door leading to ground floor offices	2	M40			X			X		
2KG CO²	Outside First Floor kitchen, Unit 1	1	M40			X			X		
2KG CO²	Ground floor kitchen, Unit 1	1	M40			X			X		
2KG CO²	Security Office, First Floor, Unit 1	1	M40			X			X		
2KG CO²	Ground floor kitchen, Unit 1	1	M40			X			X		
2KG CO²	External to plantroom in Unit 1 and 2	2	M40			X			X		

Planned Maintenance Schedules Date of Inspection 24 May 2016											
Building: -National Army Museum, Stevenage Services:-Fume Cupboards											
Equipment	Location	Quantity		Maintenance							Remarks
			Code	W	2H	M	Q	H	Y	2Y	
Safelab FC640	Conservation Area	1							X		To be serviced to manufacturers requirements.
Safelab Airone 1500R	Conservation Area	1							X		