NHS
Shetland

Estates Maintenance Policy

Co-ordinator: Maintenance Manager	Reviewer: Estates Management Team	Approver: Head of Estates
Signature	Signature	Signature
Identifier:	Review Date: August 2011	Implementation Date: November 2008.

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VERSION 1.4

NHS Shetland
Estates Maintenance Policy

Policy History		
Date	**Version**	**Amendment**
Oct 2008	1	Draft for consultation
Nov 2008	1.1	Role descriptions changed. Addition of CoI references
Jun 2009	1.2	Addition of HAI & Role Titles changed
July 2009	1.3	Additional role changes
July 2010	1.4	Role changes

NHS Shetland
Estates Department

Maintenance Policy

Title: Estates Maintenance Policy

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Review Date: Ratification of policy + one year

Author: Estates Department

Policy Application: NHS Shetland

Purpose:

The aim of any maintenance regime or programme is to maximise the life and performance of an asset at minimum cost, whilst ensuring that those assets remain safe, and legally compliant.

In seeking to achieve the above, this policy sets out schedules and priorities to be applied across all NHS Shetland owned premises and equipment.

This document is not intended to cover all possible maintenance schedules, needs or permutations and is simply a guide to best operational practice at NHS Shetland.

RESPONSIBILITIES FOR IMPLEMENTATION

See Sections 4 - 7.

Policy Statement:
NHS Shetland recognises its duty as a public sector healthcare organisation to provide effective and efficient estates property & asset maintenance arrangements at their owned premises. NHS Shetland have introduced an effective system with continual assessment, monitoring and review arrangements set in place to ensure the provision and maintenance of a safe environment for all staff, patients and members of the public.

Review: *This policy will be reviewed annually by the Estates Management Team*

Approved by: _____ **Date:** _____

Signature: _____

Designation: _____

1. Aims of the Policy

The aim of any maintenance regime or programme is to maximise the life of an asset at minimum cost. In seeking to meet this aim, the whole life economics must be considered (ie: cost, carbon, value, etc).

This Policy is aimed at giving an overview of the maintenance requirements, frequencies, and arrangements within the Estates Department of NHS Shetland. All Estates staff should have an awareness and understanding of this Policy, and all maintenance arrangements across NHS Shetland sites should be based on the information contained in this document.

This document is not intended to cover all possible maintenance schedules, needs or permutations and is simply a guide to best operational practice at NHS Shetland. If in any doubt as to what action you should take regarding equipment maintenance, you should contact your line manager.

2. Maintenance Priorities

All assets require some form of maintenance activity. This may range from very simple checks when new, through to extremely complex tests and validation arrangements throughout the life of a more complex asset. In order to ensure that time and resources are not wasted on maintenance, it is necessary to identify asset groups or categories which require maintenance activities, and then to identify what needs doing, by whom, and how often.

Within NHS Shetland, planned maintenance activities are limited to essential maintenance only (ie: where a failure of the maintenance programme will render the asset either unsafe (to staff, patients, building or environment), illegal, or likely to result in high repair costs). It is clear that any asset may become unsafe in the absence of any maintenance programme, so it is vital to ensure that the level of maintenance undertaken reflects the practical and cost effective requirements for that asset. In very many cases, an annual safety inspection will be sufficient to ensure that a high level of safety is maintained. The minimum maintenance requirements for NHS Shetland are identified later in this document.

3. Records

All maintenance activities identified in this document will be scheduled within the Estates IT system. At the agreed predetermined frequency, the maintenance request will be printed authorising the work to commence. The task sheet will give details of the work to be done.

On completion of the task(s), the craftsperson must complete the task sheet to record the work done, along with any follow up actions required. The craftsperson should also sign the sheet and mark the ON/OFF date & times for archiving within the IT system. The task sheet should be returned to Estates clerical staff for onward processing within the Department.

Prior to leaving the ward / department / workplace, the craftsperson should inform staff and sign the locally retained log book.

4. Craftpersons, Maintenance Assistants, Contractors, etc

Are responsible for ensuring that:

a) on arrival and for the duration of the task, that the equipment, site conditions and specific location of task are within the parameters of the job specification.
b) they carry out an initial and ongoing mental Risk Assessment to identify new or enhanced hazards

c) they immediately stop any/all work should any hazard identified at (b) arise.
d) they immediately notify their line manager following (c) above.

5. Estates Supervisors

Are responsible for ensuring that:

a) staff resources are allocated in such a way as to ensure that the minimum requirements of this Policy are adhered to. This should take account of staff absences, vacancies and any other factors which may affect maintenance planning.
b) maintenance schedules are entered into the Estates IT system at the frequencies defined within this document, and for ensuring that these are actioned at the scheduled intervals.
c) all craftspersons engaged on maintenance activities are competent for the task(s) identified.
d) maintenance activities are carried out in a safe and efficient manner, taking account of any other Estates Policy or guidance as appropriated (eg: Control of Infection, Permits to Work etc)
e) ensuring that any delayed or missed maintenance activities are rescheduled without delay.
f) reviews of maintenance costs and downtime are undertaken at intervals not exceeding 3 months, and making recommendations to the Head of Estates following any such review.

6. Maintenance Manager:

Is responsible for ensuring that:

a) reviews of maintenance needs are undertaken at intervals not exceeding 12 months.
b) reviews of maintenance costs and downtime are undertaken at intervals not exceeding 3 months, and making recommendations to the Head of Estates following any such review.
c) maintenance schedules are agreed and implemented when any new asset is brought into service within the NHS Shetland.
d) training needs analyses are completed for all staff on an annual basis, in order to identify the gaps created by new technologies, equipment, etc.
e) management arrangements are adequate to ensure the effective achievement of this Policy.

7. Head of Estates:

Is responsible for ensuring that:

a) this Policy is reviewed on an annual basis, taking account of any legislative, NHS Shetland and/or other changes.
b) adequate resources are made available for the effective achievement of this Policy.
c) the Director of Service Improvement is advised on all relevant maintenance matters which may affect NHS Shetland's functions.

8. Specific Planned Maintenance Guidance

The following table highlights the critical NHS Shetland systems which MUST be maintained at the frequencies indicated. This list is **not** intended to be an exhaustive list of all systems / assets which require maintenance. The table highlights two priorities, namely (1) where the maintenance has a statutory / mandatory component, and (2) where the maintenance is a critical / essential hospital system. Many systems are of course both.

SYSTEM	PTY	FREQUENCY	TRADE(S)
Boilerhouse Chimneys	1	▪ Annual Inspection	Contractor
Boilerhouses	1	▪ Daily, weekly and quarterly checks, Statutory inspections & annual clean	Any Trade
Control of Legionella	1	▪ Daily BMS Checks ▪ Monthly graph prints / review ▪ Monthly "sentinel tap" checks ▪ 6 monthly drain/clean routine ▪ 6 monthly manual water temp checks ▪ 6 monthly calibration of dosing equipment ▪ 12 monthly water tank / cistern chlorination	As per Legionella Safety Policy
DHW Mixing Valves	1	▪ 6 monthly	Plumber / Ass
Electrical Testing	1	▪ Annual earth loop impedance test ▪ Annual thermal image non-contact tests ▪ 5 yearly inspection & test	Electrical
Emergency Fire Doors	1	▪ 13 weekly	Any Trade
Emergency Generators	1	▪ Weekly 15 min off load tests ▪ 6 Weekly 1 hour load test ▪ Annual 4 hour load test ▪ Annual discharge of lead acid batteries	Elect / Mech
Emergency Lighting	1	▪ 6 weekly test ▪ 6 monthly 1 hour test ▪ Annual 3 hour test	Elect / Mech / Ass
Fire Alarm Systems	1	▪ Weekly testing ▪ Annual & 5 year inspections	Any trade Contractor
Fire Fighting Equipment	1	▪ Annual inspection & test	Fire Specialist
Fire Interlock Devices	1	▪ 13 weekly	Elect / Mech
Industrial Laundry Equipment	1	▪ Weekly safety & cleans, quarterly and annual checks. ▪ Statutory inspections	Any Trade
Lightning Conductors	1	▪ Annual inspection & test	Contractor
Medical Gas Plant	1	▪ Daily checks and drain ▪ Weekly tests ▪ 3, 6 & 12 monthly maintenance ▪ Statutory inspections	Competent Person
Medical Gas Systems	1	▪ Annual inspection of all terminal units ▪ 4 weekly test of 1st line trolleys	Competent Person
Portable Appliance Testing	1	▪ Annual tests	Elect / Ass
Pressure Vessels & Lifting Equipment (Statutory)	1	▪ 6, 12, 24 monthly inspections, as per ACOP	Mechanical

Sterilizers & Decontamination Equipment	1	▪ Weekly, 12 weekly, annual checks	Competent Person
Water Tanks Chlorination	1	▪ Annual drain and chlorinating	Contractor
Wire-line / Anchor Systems	1	▪ Annual checks / tests	Contractor
Workshop / Portable Safety Machine Checks	1	▪ Before use ▪ Weekly safety checks	Any Trade
Automatic Doors	2	▪ 6 monthly checks ▪ Annual service contract	Elect / Mech Contractor
Batteries	2	▪ 6 weekly & annual clean ▪ Annual discharge of lead acid batteries	Electrical
Beds & Patient Furniture	2	▪ Annual checks	Mechanical
Blood Fridge Alarm Test	2	▪ Weekly test	Maint Assistant
		▪	
Dust Extractor Units	2	▪ Weekly clean filters & clean ▪ 14 month checks as per COSHH	Joiner Contractor
Gas Equipment (Catering & Heating)	2	▪ Annual checks	Contractor
Grille cleaning	2	▪ Annual Clean / as required	Maint Assistant
Gutters & Drain Gulleys	2	▪ Annual clean	Plumber / Ass
Lifts	2	▪ As per contract	Contractor
Lift Alarms & telephone	2	▪ Weekly checks	Maint Assistant
Light Diffuser Cleaning	2	▪ Annual Clean / as required	Maint Assistant
Local Extract Ventilation (LEV)	2	▪ 14 month checks as per COSHH	Contractor
Nurse Call Systems & Staff Alarms	2	▪ Weekly test (emergency locations only) ▪ 6 monthly checks	Elect / Mech
Oil & Fuel Storage	2	▪ 6 monthly checks	Any Trade
Sluicemaster & Waste Disposal Units Safety Checks	2	▪ 4 weekly checks	Plumber
Street Lighting	2	▪ Weekly drive round	Any trade
Suction Pumps	2	▪ DC type 4 weekly checks ▪ AC type 6 weekly checks	Electrical
Theatre Equipment	2	▪ Weekly checks ▪ 6 monthly & annual maintenance	Elect / Mech
Toilet Door Locks	2	▪ Annual inspection	Any Trade
Ventilation Air Flow Checks (Theatres)	2	▪ Annual checks	Contractor
Ventilation Supply & Extract Systems	2	▪ 6 monthly & annual checks	Elect / Mech

9. Reactive Maintenance

In addition to planned maintenance activities, staff of the Estates Department are required to react to faults or breakdowns in systems, plant, or assets at any time. All such activities will be generated by user calls to the Estates HelpDesk. With correct planned maintenance activities, this type of reactive maintenance should be kept to a minimum. However, breakdowns do occur, necessitating some form of corrective action. Where this occurs, reference should be made to the planned maintenance schedules / tasks to ensure that cost effective operation and maintenance are being achieved. Where necessary, a review (either increase or decrease) in schedule frequencies may be required. The Estates HelpDesk details and performance targets are shown at the end of this document.

10. Asset Replacements

The decision to replace an asset may be based on a number of factors including asset condition, technological changes, availability of spare parts, frequency of breakdown, etc. Any such decision should be taken on a whole life economic basis (ie: cost, carbon, value, etc).

The Estates maintenance budget is intended to support the repair, maintenance and exceptional replacement of assets. The decision to replace an asset from the maintenance budget may be taken if the ongoing cost of maintaining an asset is greater than the cost to replace that asset. Such a decision will be taken by NHS Shetland's Head of Estates in consultation with senior managers and finance department officers as necessary. Where an asset has been purchased from a non-estates budget (ie: direct by a service), then that same funding source should be used to seek replacement budget for that asset.

11. Backlog Maintenance

It is essential that the physical condition of the NHS Shetland estate is accurately assessed and maintained to ensure that it is fit for purpose and safe for patients, staff and all who enter our premises. Backlog is defined as the cost to bring estate assets that are below acceptable standards (in terms of their physical condition or compliance with mandatory fire safety and other statutory safety legislation) up to an acceptable condition. Estate assets deemed "acceptable" should therefore:

- Comply with statutory legislation.
- Comply with Control of Infection legislation and guidance.
- Comply with Firecode[1] and relevant fire safety legislation.
- Be maintained at a fully operational state within normal revenue allocations and planned capital investment.
- Meet public expectations, reflected in a safe, clean, secure and welcoming environment.

The methodology for assessment and prioritisation of backlog within NHS Shetland follows that described by NHS Estates "A Risk Based Methodology for Establishing and Managing Backlog[2]", 2004. This approach follows tried and tested methods and is in use across many NHS organisations within the UK. This approach requires assessment across five main facets as follows:

1. Physical Condition
2. Fire Safety & Statutory Compliance
3. Energy Performance
4. Functional Suitability
5. Space Utilisation

[1] HDL(2005)53, Fire Safety Policy for NHSScotland
[2] A Risk Based Methodology for Establishing and Managing Backlog - http://www.dh.gov.uk/en/Policyandguidance

Physical Condition

This is assessed on the basis of 16 specific building and engineering elements (see Appendix A) which are then broken down into a series of sub-elements. A technical assessment is made regarding the condition of each assessed element, and the cost to bring up to an acceptable standard.

Fire Safety & Statutory Compliance

This is assessed on the basis of the compliance gap(s) of each topic area, and the cost to meet the current standards. The following key areas are assessed in terms of compliance with current legislation, standards, guidance, etc.

- Fire safety, including doors, compartmentation, means of escape, alarms, etc.
- Electrical services – supply and distribution
- Control of Asbestos
- Control of Legionella
- Compliance with Health & Safety at Work etc Act 1974
- Compliance with Control of Substances Hazardous to Health (COSHH) Regulations 2002
- Compliance with safety provisions for the disabled (see Access to Health Service Premises: Audit Checklist')
- Pressure Systems Regulations
- Maintenance and operation of equipment in confined spaces
- Surface temperature of surface heat-emitting devices and/or mixers (safe temperatures)
- Control of Infection

Energy Performance

This is assessed against standard measures of energy use (normally gigajoules per square meter (GJ/m^2). Ratings are then applied to buildings or significant blocks in order to provide comparisons. National data is collected annually and this allows comparison of similar building types (and uses) across Scotland.

NHS Shetland is committed to delivery of challenging carbon reduction targets as part of its Carbon Management Implementation Plan (CMIP). This Plan requires an assessment of the carbon impact of any/all significant changes and investments across the Board area, but specifically focussing on six key elements (1) new build & refurbishments, (2) service changes, (3) energy utilisation, (4) transportation, (5) waste & recycling & (6) procurement.

12. Healthcare Associated Infection

NHS Shetland recognises the serious nature of healthcare associated infections (HAI), and will introduce and implement policies & procedures aimed at reducing HAI incidences to the lowest levels possible. It is recognised that physical developments including construction, refurbishment, ongoing maintenance and property demolition and/or disposal activities, have the potential to create an increased risk of HAI before, during and after that activity.

A specific NHS Shetland Policy, in accordance with CEL 18 (2007) outlines the NHS Shetland approach to the management of HAI during such activities. The policy can be accessed via the NHS Shetland intranet or via the Maintenance Manager.

This section deals specifically with ongoing maintence activities (planned and reactive) and the steps that must be taken in support of minimising or eliminating HAI risks from such activities. This can be further referenced in Sections 3 & 4 of the HAI Scribe Policy.

When a building is fully opertational and/or is being maintained, the three (3) stages to HAI-SCRIBE are by their nature ongoing and involve:

1. Identifying hazards (this may be an actual or potential hazard)
2. Assessing the risks
3. Managing the risk (either elimination of risk or reducing risks to minimise their impact)

Risk assessment

It cannot be over emphasised that a full risk assessment requires to be carried out to identify the nature of any risks from maintenance activities which may affect existing patients already in the premises, many of whom will be immunocompromised due to ongoing complex medical treatments.

Some points for consideration. Have you:

- Identified the specific area of the healthcare premises intended for maintenance?
- Confirmed the exact nature of the maintenance work to be carried out?
- Identified the patient population in the premises?
- Identified the degree of risk to all groups of patients?
- Discussed the possibility of patients being moved to another healthcare location for the duration of the work period?
- Identified dedicated entry and exit points for use by healthcare staff and visitors during the maintenance activity?

If any actual or potential hazards are identified during the maintenance work, it is important that full risk assessments are carried out and documented to identify the nature of the risk. If risks are highlighted, remedial measures need to be identified in order that systems and processes can be designed into the maintenance activity, so that the impact of the risk can either be eliminated, or its impact reduced.

Section 3 of the HAI Scribe Policy should be referenced for HAI risk categorisation and mitigation measures.

13. Risk Based Approach

When estimating the likelihood and potential consequences of an undesirable event or potential failure occurring, NHS Shetland staff use standard risk analysis techniques. This includes the use of relevant historical data and professional/technical judgements.

Analysis of the potential consequences considers:

- the increased risk to patients;
- potential for legal enforcement notices;
- corporate manslaughter charges in the event of serious incidents;
- significant disruption to clinical activity;
- escalation of capital investment requirements due to accelerated deterioration.

Currently NHS Scotland and NHS Shetland evaluate risks in a consistent fashion, simplifying prioritisation and enabling common understanding. NHS Shetland defines risk using the 5x5 National Risk Matrix endorsed by Quality Improvement Scotland . All formal risk assessments in NHS Shetland should therefore describe risk using these risk levels whatever the topic area being considered. In due course, all 4x3 backlog risks will migrate to the 5x5 matrix.

It should be noted that the assessment of risk can only ever be a judgment based on relevant historical data and professional/technical knowledge relating to the assessed estate. As such, it is

entirely possible for unknown, non-assessed and/or lower priority risk issues to emerge and present an escalated risk(s). NHS Shetland needs to be able to respond and react effectively, efficiently and safely in any such circumstances. As asset deprecation increases beyond investment levels, we should expect the incidence and frequency of such circumstances and events to increase.

14. Key Risks

It must be noted that this policy does not seek to highlight any specific individual property risk within NHS Shetland, but rather seeks to highlight the extent of generic risk within the entire property portfolio. The line by line detail of all assessed backlog is available on request to the Estates Department, with the master list being reviewed at least annually.

15. Distribution List – Approved Policy

Estates Management Team
Facilities Manager
Head of Estates
Maintenance Manager
Estates Supervisors
Estates Workshops
Staff Side Representatives
Induction Trainers
Risk Management
Web Site

16. Useful Links

a) NHS Estates http://www.nhsestates.gov.uk/property_management/index.asp
b) Relevant British Standards http://bsonline.techindex.co.uk
c) Relevant Scottish Health Technical Memoranda http://www.show.scot.nhs.uk/pef
d) Health & Safety Executive Publications http://www.hse.gov.uk
e) HSE Direct www.hsedirect.com
f) NHS Scotland Environmental Policy http://www.sehd.scot.nhs.uk/mels/HDL2006_21.pdf
g) NHS Scotland Fire Policy http://www.sehd.scot.nhs.uk/mels/HDL2005_53.pdf

17. Relevant Regulations, Guidance and Publications

Acts and Regulations

- **Health & Safety at Work etc Act 1974.** HMSO, 1974.
- **Confined Spaces Regulations. SI 1713: 1997.** TSO, 1997. http://www.legislation.hmso.gov.uk/si/si1997/97171301.htm
- **Control of Asbestos at Work Regulations. SI 2675:2002.** TSO, 2002. http://www.legislation.hmso.gov.uk/si/si2002/20022675.htm
- **Control of Substances Hazardous to Health (COSHH) Regulations. SI 2677: 2002.** TSO, 2002. http://www.legislation.hmso.gov.uk/si/si2002/20022677.htm
- **Electricity at Work Regulations. SI 635: 1989.** TSO,1989. http://www.legislation.hmso.gov.uk/si/si1989/Uksi_19890635_en_1.htm
- **Gas Safety (Installation and Use) Regulations. SI 2451: 1998.** TSO, 1998. http://www.legislation.hmso.gov.uk/si/si1998/19982451.htm
- **Health and Safety (Safety Signs and Signals) Regulations. SI 341: 1996.** TSO, 1996. http://www.legislation.hmso.gov.uk/si/si1996/Uksi_19960341_en_1.htm
- **Pressure Systems Safety Regulations. SI 128: 2000.** TSO, 2000. http://www.legislation.hmso.gov.uk/si/si2000/20000128.htm
- **Workplace (Health, Safety and Welfare) Regulations. SI 3004: 1992.** HMSO, 1992. http://www.legislation.hmso.gov.uk/si/si1992/Uksi_19923004_en_1.htm

NHS Estates

- **Safe hot water and surface temperatures'.** TSO, 1998.
- **SHTM 81 – 'Fire precautions in new hospitals'.** TSO,1996.
- **SHTM 82 – 'Alarm and detection systems'.** TSO, 1996.
- **SHTM 85 – 'Fire precautions in existing hospitals'.** HMSO, 1994.
- **SHTM 87 – 'Textiles and furniture'.** TSO, 1999.
- **SHTM 2010 – 'Sterilization'.** TSO, 1994/1995/1997.
- **SHTM 2020 – 'Electrical safety code for low voltage systems'.** TSO, 1998.
- **SHTM 2022 – 'Medical gas pipeline systems'.** TSO, 1997/2003.
- **SHTM 2027 – 'Hot and cold water supply, storage and mains services'.** HMSO, 1995.
- **SHTM 2030 – 'Washer-disinfectors'.** TSO, 1997.
- **SHTM 2040 – 'The control of legionellae in healthcare premises'.** HMSO, 1994.
- **Firecode: Policy and principles.** HMSO, 1994.
- **Estatecode – Essential guidance on estates and facilities management.** TSO, 2002.
- **Access to Health Service Premises: Audit Checklist.** TSO, 1999.
- **Approved code of practice (ACOP) L8 – 'Legionnaires' disease: the control of legionella bacteria in water systems'.** HSE, 2000.

Property Related Circulars

A full list of relevant property related circulars can be accessed at:

http://www.pcpd.scot.nhs.uk/PDFs/PropertyCirculars.pdf

18. NOTES

Appendix A – Assessed Building & Engineering Elements

ELEMENT		SUB-ELEMENT	
1.	**STRUCTURE**	FOUNDATIONS WALLS FRAMES FLOORS ROOFS	All below-ground work, foundations, ducts, structural frame, walls, DPC, floors (structure), roof structure All external structures *DPC = damp proof course*
2.	**EXTERNAL FABRIC**	WALLS & FINISHES	Brickwork, all external wall finishes, facade surface treatment – stone, brick, concrete, pointing, cement rendering, flashings etc
		WINDOWS	All windows
		DOORS	All doors
		EXTERNAL TIMBER/PVCu DETAIL	Cladding, timber/PVCu boarding, cladding panels and sealants *PVCu = Polypropylene with ultraviolet protection*
		DECORATION	Decoration quality
3.	**ROOFS**	COVERINGS – PITCH	Pitched roofs: slates, tiles, copper, aluminium etc, including insulation
		COVERINGS – FLAT	Flat roofs: bituminous felt, reinforced felt, asphalt, proprietary coverings
		ROOF LIGHTS	All types
		RAIN WATER GOODS	All types
4.	**INTERNAL FABRIC & FIXTURES**	WALLS & FINISHES	All internal finishes to walls, floors plus internal windows, glazed partitions, including plasterwork
		CEILINGS	All internal finishes ceilings, suspended ceilings
		FLOOR COVERINGS	All floor coverings including ceramic/quarry tiles
		DOORS	All internal doors and door furniture
		DOOR FURNITURE	
		UNIT FURNITURE	All built-in fitments: cupboards, cabinets, worktops, shelving
		DECORATION	Decoration quality
5.	**EXTERNAL BUILDING WORKS**	DRAINAGE	Surface water drainage gullies, main site sewers, treatment plants and drainage within the building infrastructure
		ROADS/CAR PARKS	All internal roads, parking areas, paved areas, tarmac For local blocks include only the immediate perimeter of the building
		PATHS	
		BLOCK/PAVED AREAS/ TARMAC AREAS/CONCRETE AREAS	
		WALLS	All types of boundary walls
		FENCING/GATES	All types of fences, gates
6.	**ENERGY CENTRE SYSTEMS**	FUEL SUPPLY/STORAGE/ DISTRIBUTION	Gas supply pipework and metering stations, gas storage (propane), oil storage and distribution
		BOILER PLANT	All types of boilers: steam, HTHW, MTHW, LPHW and associated plant and equipment. All flues directly connected up to, but not including, steel/brick/concrete stack *HTHW = High temperature hot water* *MTHW = Medium temperature hot water* *LTHW = Low temperature hot water*
		PRESSURISATION PLANT	Pressurisation plant for both heating and DHW systems *DHW = domestic hot water*
		BOILER TREATMENT PLANT	De-alk–De-gas plant, TDS control and softening plant *TDS = total dissolved solids* *De-alk–De-gas = a type of water treatment plant*
		CALORIFIERS/HEAT EXCHANGERS	Heating calorifiers, plate heat exchangers
		DHW STORAGE/NON-STORAGE	Storage calorifiers, storage cylinders, thermal stores, direct fired water heaters, plate heat exchangers *DHW = domestic hot water*
		FLUES – SEPARATE	Steel/brick/concrete stack/chimneys
		CONTROLS/METERS	Control systems for all energy-using equipment
		GENERATORS	All types

ELEMENT		SUB-ELEMENT	
7.	**HEATING SYSTEMS**	PIPEWORK	Steam and condensate pipework, all pipework associated with heating systems. Include both surface and under-floor/heated ceiling types
		HEAT EMITTERS	All types of heat emitters including fixed electrical heating
		INSULATION	Insulation to steam and heating pipework
		HEATING PUMPS	All types
8.	**HOT & COLD WATER SYSTEMS**	POTABLE COLD WATER TANKS	All water storage tanks, including water transfer tanks. Includes external water supplies – reservoirs
		DOMESTIC HOT WATER HEADER TANKS	
		GENERAL HEADER TANKS	
		WATER TREATMENT PLANT	Potable water treatment plant including tanks, softeners, local pipework, valves and controls
		DISTRIBUTION	All pipework, internal and external including fire hydrants and systems
		PUMPS	DHW pumps and associated booster pumps including water transfer *DHW = domestic hot water*
		SANITARY WARE/SANITARY FITTINGS	Including sanitary ware, cisterns, sanitary fittings, valves, taps and other fittings and waste piping but not electrically operated plant such as bedpan disposal equipment, wash-up, macerators etc (ie power-operated equipment)
		INSULATION	All pipework insulation
		ANCILLARY EQUIPMENT	Valves/controls
9.	**VENTILATION SYSTEMS**	VENTILATION PLANT	All types of supply and extract plant, modular, plenum etc including equipment installed to the plant such as filter units, sound attenuation, humidifiers, heater batteries, chiller coils etc including all insulation
		DISTRIBUTION	Ductwork and terminals including ductwork insulation
		ROOM SPLIT CHILLERS/ COMPRESSORS	All split chillers as installed in rooms and associated pipework/ insulation
		CHILLERS/COOLING SYSTEMS	Main chiller plant, cooling towers, local treatment plant for cooling towers
		CONTROLS	
		INSULATION	
10.	**MEDICAL GAS PIPELINE SERVICES**	VIE	Main storage (bulk liquid oxygen) *VIE = vacuum insulated evaporator*
		DISTRIBUTION	Excludes portable gas cylinders but includes distribution system, outlets, manifolds/storage and security alarm systems. Includes oxygen generators Includes medical air compressors and storage/manifold systems, vacuum plant and vessels
		MANIFOLDS	
		OUTLETS	
		ALARM SYSTEMS	
		MEDICAL AIR COMPRESSORS/VACUUM PUMPS	
11.	**LIFTS & HOISTS**	PASSENGER	All lift cars and drive mechanisms, rope, hydraulic, rope crawlers
		GOODS	
		HOISTS	
		CONTROL PANEL	Control panels and associated motor room safety gear

ELEMENT		SUB-ELEMENT	
12.	**FIXED PLANT/ EQUIPMENT**	STERILIZERS	All fixed installation types, porous load, downward displacement, path lab, but not including portable bench-top types
		BEDPAN DISPOSAL	All types, macerators, disinfectors
		DISINFECTION EQUIPMENT	Ultrasonic baths, anaesthetic equipment disinfectors and all other disinfectors as installed in sterile services units or related departments
		CATERING EQUIPMENT	All fixed catering equipment. Does not include bench top items as portable appliances. Small items such as cookers and fridges etc should also be omitted
		LAUNDRY EQUIPMENT	All fixed laundry equipment. Small domestic type laundry equipment should be omitted
		MISCELLANEOUS EQUIPMENT	Related equipment not included in the above
13.	**ELECTRICAL SYSTEMS**	WIRING SYSTEMS/BONDING	All types of wiring systems including wiring, outlets, support systems (conduit trunking tray systems etc), cables and main distribution cables from sub-stations. Includes both LV and HV systems as applicable *LV = low voltage* *HV = high voltage*
		DISTRIBUTION BOARDS	Main intake/section boards/distribution boards, switches, including domestic type installation
		SWITCHGEAR	Main switchgear and metering stations. Includes both LV and HV systems as applicable
		LUMINAIRES	Internal and external luminaires
		LUMINAIRES – EMERGENCY	Emergency lighting, including central supply systems
		LIGHTNING PROTECTION	All protection systems
14.	**ALARMS & DETECTION SYSTEMS**	FIRE ALARM WIRING SYSTEM	Wiring and support systems
		SECURITY SYSTEMS	All components, wiring, panel, detectors
		OTHER ALARM SYSTEMS	All components, wiring, panel, detectors
15.	**COMMUNICATION SYSTEMS**	TELEPHONE SYSTEMS	Wiring and cable support systems, central hubs and switchgear. Not including remote (plug-in type) hubs, point-of-use equipment
		DATA TRANSMISSION	Wiring and cable support systems, central hubs and switchgear. Not including remote (plug-in type) hubs, point-of-use equipment
		PAGING SYSTEMS	Transmitter and control equipment only
		NURSE CALL SYSTEMS	Wiring and cable support systems, control panels but not including point-of-use equipment
		RADIO & TELEVISION SYSTEMS	Wiring and cable support systems, control panels but not including point-of-use equipment
		BUILDING MANAGEMENT SYSTEM	Wiring and cable support systems, main terminals, local outstations, but not including point-of-use equipment
16.	**MISCELLANEOUS**	INDUSTRIAL GAS SYSTEMS	Gas systems as installed to path labs and other like uses
		WET AND DRY RISERS	Fire protection systems including sprinkler systems
		HYDROTHERAPY POOL	Hydrotherapy pool and all associated equipment, water treatment, pumps and calorifiers
		MISCELLANEOUS	Ad-hoc items not covered anywhere else

ESTATES DEPARTMENT – HELPDESK RESPONSE CODES – FEB 2006

E	1	2	3	4
EMERGENCY	**HIGH**	**MEDIUM**	**LOW**	**NON-URGENT**
Immediate Attendance	1 Working Day	2 – 3 Working Days	4 – 7 Working Days	8 Days +
This priority relates to faults which represent an urgent danger to life or property. ALL calls in this category **MUST** be forwarded immediately to a member of the Estates Senior Management Team, or the Facilities Safety & Support Manager.	***Examples are;*** • Lights in critical areas eg stairs, toilets • Heating failures (winter) • Nurse call failure general • Waste disposals sluice/food • Leaks • Lift repair • Pneumatic tube	***Examples are;*** • Streetlighting if low lighting • General lighting • Patient equipment • Heating failures (non winter) • Catering equipment	***Examples are;*** • Streetlighting if adjacent lighting • Domestic equip • Bed/trolley if removed from service • New non urgent equip • Non urgent lighting • Routine replacements eg bleep batterys, filters, projector bulbs etc • Air beds	***Examples are;*** • Trolley repair • Grill cleaning • Light cleaning • Equipment disposal • Installation work / purchases, accompanied by code
Action: BLEEP Duty Engineer BLEEP Duty EO BLEEP Other staff as required Senior attendance as required Estates contingency planning				

Target attendance on time

100% 90% 80% 80% 80%