

**PROPERTY APPRAISAL SIX FACET SURVEY  
AND RISK ASSESSMENT OF BACKLOG**

**LEEDS TEACHING HOSPITALS NHS TRUST**





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# 1.0 INTRODUCTION

A Six Facet Property Appraisal review was carried out at various sites from April to November 2022. An annual review consisting of 20% resurvey of blocks selected by the Trust plus an 80% desktop review was undertaken from January to April 2025. The survey covered the Physical Condition, (including all external and internal building fabrics, fixtures and fittings; electrical and mechanical systems), Statutory Compliance, Functional Suitability, Space Utilisation, Quality of the Environment, and Environmental Management.

The results were presented in Micad reporting Backlog Maintenance and Lifecycle Replacements as applicable over a 10-year period, together with a Risk analysis of the Physical Condition and Statutory Compliance costs.

The surveys were followed by an extensive validation process that was undertaken by Trust specialists including Compliance, Capital Planning and Estates to provide assurance that in-house knowledge of the Trust Estate and systems was incorporated into the six facet survey data.

## 1.1 AIM

The aim of this executive summary is to analyse overall costs and risks identified during the survey. This will assist in highlighting particular trends or patterns in the problems identified, thus assisting in the planning of future maintenance, refurbishments, Estate Strategies or rationalisation of facilities and the way they are utilised to maximise the benefit to the service users and employees. Conclusions and Recommendations relating to the management of the Estate are also included, based solely on the results of the survey and not functional or other requirements.

## 1.2 SURVEYED PROPERTIES

A full resurvey of the following blocks was undertaken as part of the 20% site surveys:-

- St. James University Hospital
  - Block 2 Lincoln Wing
  - Block 7 Gledhow Wing
  - Block 30 Chancellors Wing
  - Block 31 Pathology
  - Block 32 Pathology
  - Block 42 Mortuary
  - Block 43 Residential Accommodation
  - Block 46 Specialist Laboratory Medicine
- Seacroft Healthcare Campus
  - Block 2 Covered Walkways
  - Block 4 Gardeners Accommodation
  - Block 7 Estates & Facilities Workshops
  - Block 10 Ultrasound
  - Block 11 Andrology Unit & Facilities





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- Block 13 Hearing & Balance Centre, Former Orthodontics & Dialysis
- Block 14 Radiology
- Block 15 Pain Management Offices
- Block 24 Transport Lodge
- Block 27 General Outpatients
- Block 31 West Entrance
- Block 32 RADU
- Block 34 Medical Records Store
- Block 35 Changing & Office Area
- Block 36 Blood Bank
- Block 37 RVS Refreshment Area
- Block 40 East Entrance
- Block 61 Wards N to U – Speciality Outpatients
- Block 62 Ward V
- Block 63 Ward W – Seacroft Eye
- Block 64 Ward W – Annex Seacroft Eye Clinic
- Block 97 Breast Screening Unit





## 2.0 PROJECTED COSTS

All costs within this document are reported as net costs. These do not include any uplifts that may be applicable such as:

- Main Contractor's preliminaries, overheads, and profit
- Temporary or enabling works.
- Contingencies
- Professional fees
- VAT
- Decanting or temporary accommodation
- Inflation

The exact uplift applied to form a project cost is best considered on a project-by-project basis. For example, the uplift applied to a scheme of internal redecoration within an unoccupied building is likely to be less than that associated with the replacement of a heating system in an operational building when decanting costs, temporary accommodation and enabling works are factored in.





## 2.1 BACKLOG MAINTENANCE

Backlog Maintenance and Statutory Compliance costs are graded as Low, Moderate, Significant and High Risk.

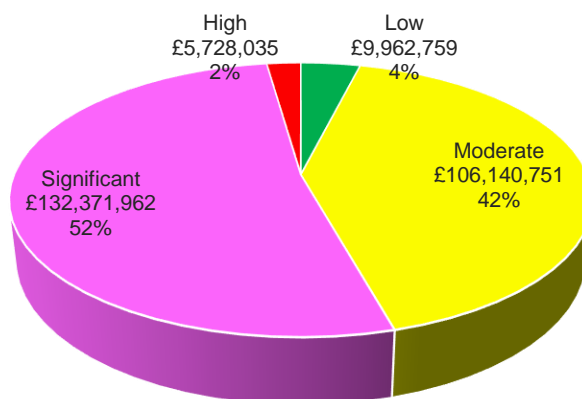
The NHS Estates Guide 'A Risk-Based Methodology for Establishing & Managing Backlog' was used to calculate the risks for each defect highlighted within the Physical Condition and Statutory Compliance reports. Table 1 below shows a breakdown of the backlog costs (i.e., costs required to bring elements currently below condition grade 'B' up to condition grade 'B' immediately) by risk.

**Table 1**

Backlog by Site	Low	Moderate	Significant	High	Total
Leeds General Infirmary	£3,724,939	£59,991,122	£74,750,756	£2,187,697	<b>£140,654,514</b>
St James University Hospital	£4,691,820	£40,027,112	£47,186,828	£1,097,934	<b>£93,003,694</b>
Chapel Allerton Hospital	£46,967	£1,913,074	£3,369,096	£633,660	<b>£5,962,797</b>
Seacroft Healthcare Campus	£1,499,033	£4,209,443	£7,065,282	£1,808,744	<b>£14,582,502</b>
<b>Total</b>	<b>£9,962,759</b>	<b>£106,140,751</b>	<b>£132,371,962</b>	<b>£5,728,035</b>	<b>£254,203,507</b>

A breakdown of Total costs by risk is show in Chart 1 below:

**Chart 1**



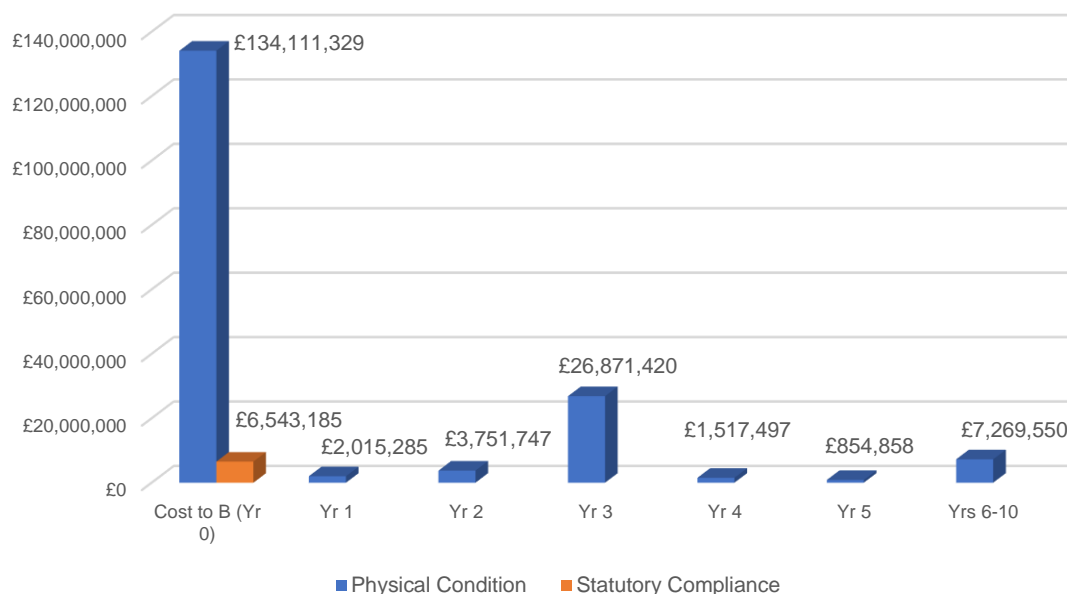


## 2.2 LEEDS GENERAL INFIRMARY

### 2.2.1 Physical Condition and Statutory Compliance

The total projected cost of all items identified under Physical Condition is £176,391,686 over a 10-year period. The total cost for Statutory Compliance is £6,543,185. An indication of the projected costs per year is shown in Chart 2.

Chart 2



Where defects were duplicated in Condition or Statutory Compliance, e.g., for inadequate heating, the costs were only recorded under one facet. In the Facet spreadsheet where the duplicated costs are not entered, the alternative location of the cost is displayed in the 'Remedial Action' column.





### 2.2.1 Impending Backlog Maintenance Costs

Impending backlog relates to B(C) sub-elements; sub elements currently in Condition B that will fall below B within 5 years, assuming no major investment in the interim.

The total Impending Backlog costs, for Condition (including costs for site infrastructure) are shown in Table 2 below:

**Table 2**

<b>Impending Backlog by Risk (Condition)</b>	<b>Total Cost</b>
Low Risk Totals	£9,829,679
Moderate Risk Totals	£21,101,900
Significant Risk Totals	£4,079,228
High Risk Totals	£0
<b>Total Impending Backlog</b>	<b>£35,010,807</b>





### 2.2.2 Function, Space, Quality and Environmental

The total projected costs for Functional Suitability, Space Utilisation, Quality of the Environment and Environmental Management are shown in Table 3.

In-line with Estatecode guidance, any defects identified within these facets are neither risk assessed nor assigned a year for completion.

**Table 3**

	Total Cost
Functional Suitability	£68,491,560
Space Utilisation	£6,309,750
Quality of the Environment	£868,176
Environmental Management	£21,500
<b>TOTAL</b>	<b>£75,690,986</b>



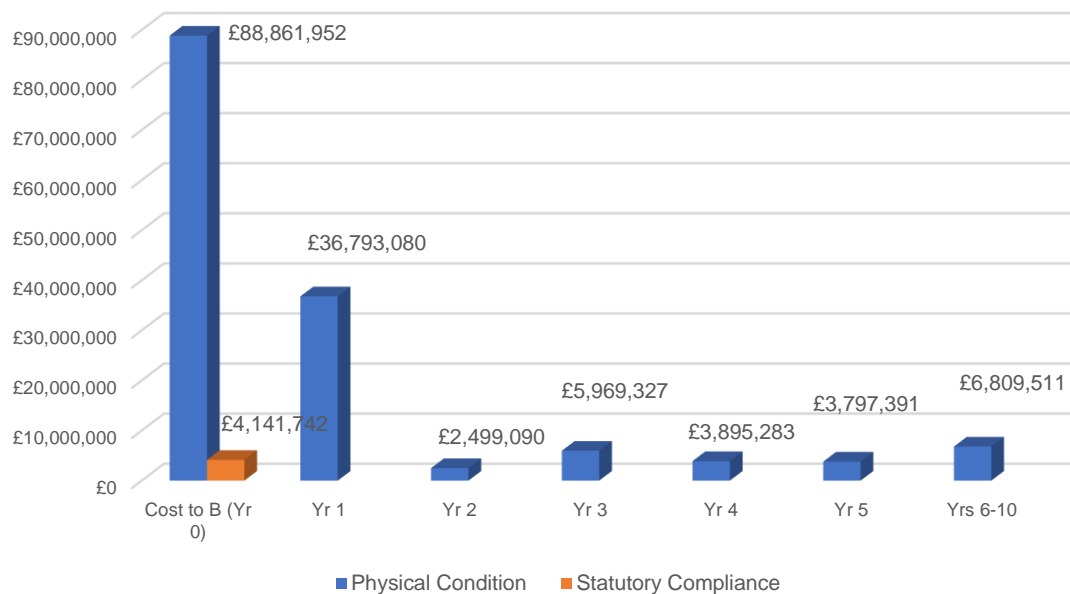


## 2.3 ST. JAMES UNIVERSITY HOSPITAL

### 2.3.1 Physical Condition and Statutory Compliance

The total projected cost of all items identified under Physical Condition is £148,625,634 over a 10-year period. The total cost for Statutory Compliance is £4,141,742. An indication of the projected costs per year is shown in Chart 3.

Chart 3



Where defects were duplicated in Condition or Statutory Compliance, e.g., for inadequate heating, the costs were only recorded under one facet. In the Facet spreadsheet where the duplicated costs are not entered, the alternative location of the cost is displayed in the 'Remedial Action' column.





### 2.3.2 Impending Backlog Maintenance Costs

Impending backlog relates to B(C) sub-elements; sub elements currently in Condition B that will fall below B within 5 years, assuming no major investment in the interim.

The total Impending Backlog costs, for Condition (including costs for site infrastructure) are shown in Table 4 below:

**Table 4**

<b>Impending Backlog by Risk (Condition)</b>	<b>Total Cost</b>
Low Risk Totals	£5,979,264
Moderate Risk Totals	£36,570,011
Significant Risk Totals	£6,448,646
High Risk Totals	£3,956,250
<b>Total Impending Backlog</b>	<b>£52,954,171</b>





### 2.3.3 Function, Space, Quality and Environmental

The total projected costs for Functional Suitability, Space Utilisation, Quality of the Environment and Environmental Management are shown in Table 5.

In-line with Estatecode guidance, any defects identified within these facets are neither risk assessed nor assigned a year for completion.

**Table 5**

	Total Cost
Functional Suitability	£75,317,021
Space Utilisation	£1,586,500
Quality of the Environment	£754,584
Environmental Management	£0
<b>TOTAL</b>	<b>£77,658,105</b>



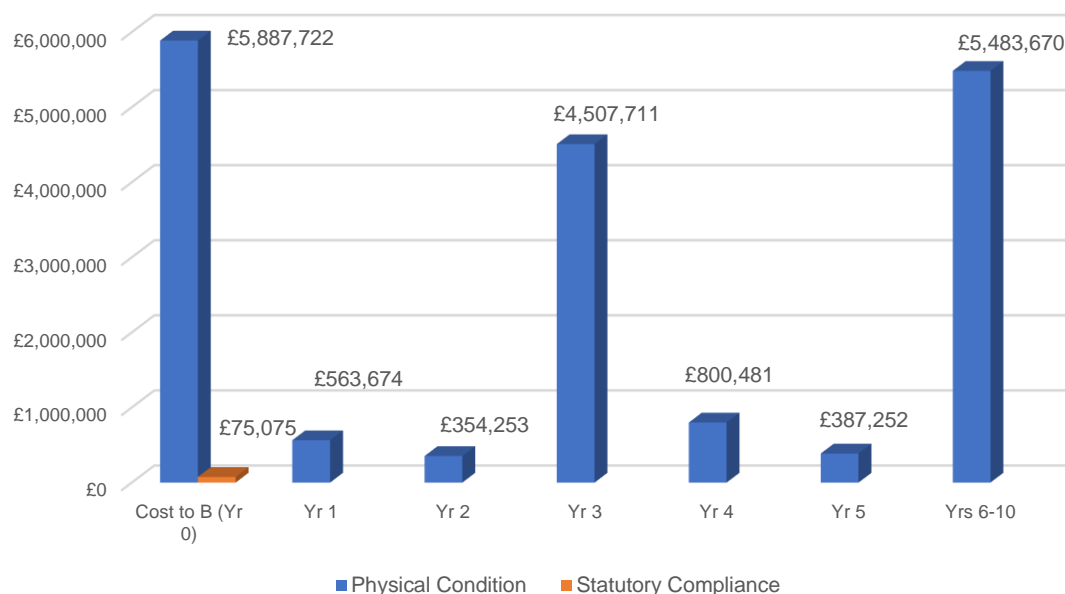


## 2.4 CHAPEL ALLERTON HOSPITAL

### 2.4.1 Physical Condition and Statutory Compliance

The total projected cost of all items identified under Physical Condition is £17,984,763 over a 10-year period. The total cost for Statutory Compliance is £75,075. An indication of the projected costs per year is shown in Chart 4.

**Chart 4**



Where defects were duplicated in Condition or Statutory Compliance, e.g., for inadequate heating, the costs were only recorded under one facet. In the Facet spreadsheet where the duplicated costs are not entered, the alternative location of the cost is displayed in the 'Remedial Action' column.





### 2.4.2 Impending Backlog Maintenance Costs

Impending backlog relates to B(C) sub-elements; sub elements currently in Condition B that will fall below B within 5 years, assuming no major investment in the interim.

The total Impending Backlog costs, for Condition (including costs for site infrastructure) are shown in Table 6 below:

**Table 6**

<b>Impending Backlog by Risk (Condition)</b>	<b>Total Cost</b>
Low Risk Totals	£2,923,199
Moderate Risk Totals	£3,210,394
Significant Risk Totals	£479,778
High Risk Totals	£0
<b>Total Impending Backlog</b>	<b>£6,613,371</b>





### 2.4.3 Function, Space, Quality and Environmental

The total projected costs for Functional Suitability, Space Utilisation, Quality of the Environment and Environmental Management are shown in Table 7.

In-line with Estatecode guidance, any defects identified within these facets are neither risk assessed nor assigned a year for completion.

**Table 7**

	Total Cost
Functional Suitability	£304,771
Space Utilisation	£0
Quality of the Environment	£158,820
Environmental Management	£0
<b>TOTAL</b>	<b>£463,591</b>



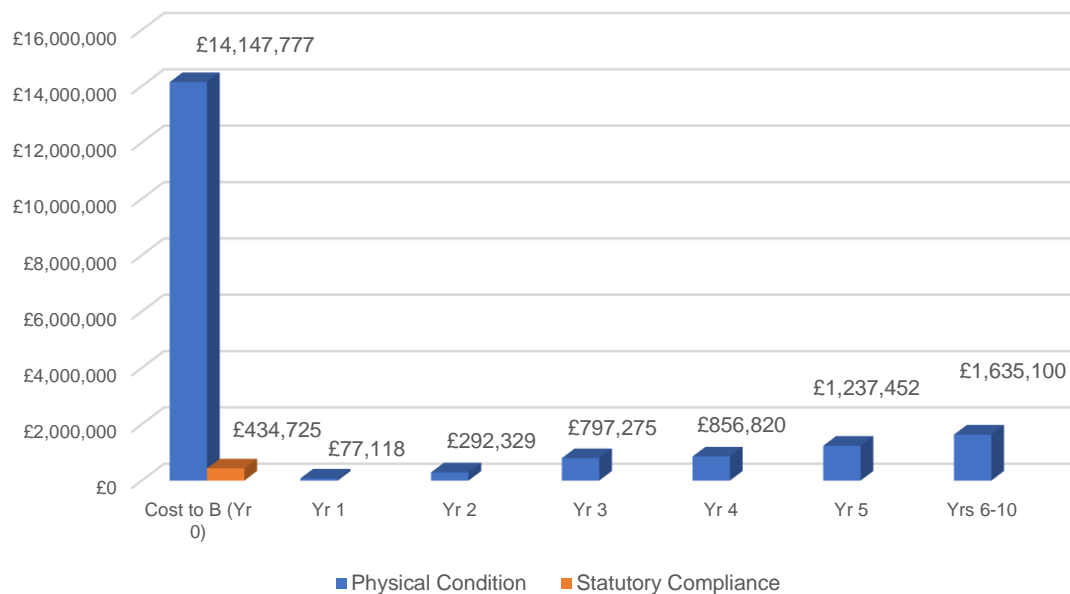


## 2.5 SEACROFT HEALTHCARE CAMPUS

### 2.5.1 Physical Condition and Statutory Compliance

The total projected cost of all items identified under Physical Condition is £19,043,871 over a 10-year period. The total cost for Statutory Compliance is £434,725. An indication of the projected costs per year is shown in Chart 5.

Chart 5



Where defects were duplicated in Condition or Statutory Compliance, e.g., for inadequate heating, the costs were only recorded under one facet. In the Facet spreadsheet where the duplicated costs are not entered, the alternative location of the cost is displayed in the 'Remedial Action' column.





### 2.5.2 Impending Backlog Maintenance Costs

Impending backlog relates to B(C) sub-elements; sub elements currently in Condition B that will fall below B within 5 years, assuming no major investment in the interim.

The total Impending Backlog costs, for Condition (including costs for site infrastructure) are shown in Table 8 below:

**Table 8**

<b>Impending Backlog by Risk (Condition)</b>	<b>Total Cost</b>
Low Risk Totals	£1,861,075
Moderate Risk Totals	£1,288,559
Significant Risk Totals	£111,360
High Risk Totals	£0
<b>Total Impending Backlog</b>	<b>£3,260,994</b>





### 2.5.3 Function, Space, Quality and Environmental

The total projected costs for Functional Suitability, Space Utilisation, Quality of the Environment and Environmental Management are shown in Table 9.

In-line with Estatecode guidance, any defects identified within these facets are neither risk assessed nor assigned a year for completion.

**Table 9**

	Total Cost
Functional Suitability	£7,281,133
Space Utilisation	£3,781,000
Quality of the Environment	£161,078
Environmental Management	£0
<b>TOTAL</b>	<b>£11,223,211</b>





## 3.0 CONCLUSIONS

The total Backlog cost calculated for Leeds Teaching Hospitals NHS Trust within the Physical Condition report is £243,008,780

Works identified include replacements to infrastructure including replacement windows, aged site drainage, BMS, water distribution, and electrical systems.

For remedial works to be implemented between years 1 to 5, the impending cost calculated is a total of £97,839,343. Works identified include works to internal fabric including floor coverings and décor, replacements to heating systems and electrical systems.

There are various elements which have been recommended for lifecycle replacement within 6-10 years with a total associated cost of £21,197,831. Works identified include decorations and lifecycle replacements to fire alarm systems, electrical wiring and lighting and ventilation.

There are Statutory Compliance items that require immediate remedial action with a total backlog cost of £11,194,727. Works identified include fire safety works and risk assessment.

A total cost of £151,394,485 has been identified for Functional Suitability, this is primarily due to changes in service provision, changes in work practices and expansions in teams within buildings that are simply too small for function or were constructed and designed for another function which does not provide a suitable layout and space for services. Older Estate is often difficult to reconfigure to provide correct layouts and facilities suitable for today's work methods and services and costs have been allowed to reflect this.

Space Utilisation and Quality total costs of £11,677,250 and £1,942,658 respectively. Works identified are to allow underutilised/empty areas to be brought into use and improvements to the quality of environment including ventilation and wayfinding.

As part of the Estate Strategy, it is recommended that Statutory Compliance items are addressed first, followed by high-risk backlog items under Physical Condition, followed by significant then moderate and low risk items.

Future costs should be tabled as per the recommended year of remedial action and as appropriate by risk as described for backlog items above, i.e., high risk items should be addressed as a priority in that year's impending works.

For further details on issues raised within this report and for other issues identified, reference should be made to the Trust Micad system.

The total cost for all facets is £538,276,574 for a 10-year programme.





## 4.0 INFLATION ASSESSMENT (ERIC)

As part of the ERIC data a new assessment requirement aims to assess the inflation element of costs for backlog maintenance in accordance with ERIC guidance below:

*The amount inflation has increased the total backlog cost at the site compared to the prior year's figure.*

*Total backlog cost = High risk + Significant risk + Moderate risk + Low risk backlog maintenance.*

The assessment of the inflationary impact has included the consideration of any works completed as well as any newly identified backlog which has been identified through a 20% resurvey of the Estate.

The 80% desktop review has updated costs in accordance with current rates or an inflationary uplift in accordance with published figures.

The inflationary element estimated for backlog is shown in Table 10 below:

**Table 10**

<b>Site</b>	<b>Inflation Element 2025</b>
Leeds General Infirmary	<b>£3,786,859</b>
St James University Hospital	<b>£2,053,641</b>
Chapel Allerton Hospital	<b>£154,371</b>
Seacroft Healthcare Campus	<b>£340,802</b>
<b>Total</b>	<b>£6,335,673</b>





## 5.0 APPENDIX A: PROPERTY APPRAISAL USER NOTES

1	The physical condition of each sub-element is categorised as follows:	
	A	As new and can be expected to perform adequately to its full normal life.
	B	Sound, operationally safe and exhibits only minor deterioration
	B(C)	Currently as B, but will fall below B within five years
	C	Operational, but major repair or replacements is currently needed to bring up to condition B
	D	Operationally unsound and in imminent danger of breakdown
	X	Supplementary rating added to C or D to indicate that it is impossible to improve without replacements
2	Costs for Condition Defects to be scheduled over years 1-10	
3	Risk Assessment using (5 x 5 matrix) on sub-elements if Backlog (i.e., current defects) with a grade of C or below. The results of the risk assessment exercise will feed into the immediate and longer-term investment planning process.	
	Low Risk:	Should be addressed through agreed maintenance programmes or included in the later years of the estate improvement strategy
	Moderate Risk:	Should be addressed by close control and monitoring; can be effectively managed in the medium term so as not to cause undue concern to statutory enforcement bodies or risk to healthcare delivery or safety. These items require expenditure planning for the medium term.
	Significant Risk:	Require expenditure in the short term but should be effectively managed as a priority so as not to cause undue concern to statutory enforcement bodies or risk to healthcare delivery or safety.
	High Risk:	Must be addressed as an urgent priority in order to prevent catastrophic failure, major disruption to clinical services or deficiencies in safety liable to cause serious injury and/or prosecution.
	Risk Ranking	Score Range
	Low	1 - 6
	Moderate	7 - 10
	Significant	11 - 16





	High	17 - 25
<b>4</b>	Costs for any Statutory Non-Compliance deemed to be backlog in year 1. Each sub-element is ranked according to compliance with mandatory requirements (including 'Firecode') and statutory safety legislation as follows-	
	<b>A</b>	Complies fully with current mandatory fire safety requirements and statutory safety legislation
	<b>B</b>	Complies with all necessary mandatory fire safety requirements and statutory safety legislation with minor deviations of a non-serious nature
	<b>B(C)</b>	Currently as B, but will fall below B within five years as a consequence of unabated deterioration or knowledge of impending mandatory fire safety requirements or statutory safety legislation
	<b>C</b>	Contravention of one or more mandatory fire safety requirements and statutory safety legislation, which falls short of B
	<b>D</b>	Dangerously below conditions A and B
<b>5</b>	If Sub-element is not present condition is N/A	
<b>6</b>	Functional Suitability - Assessed on the basis of three elements; internal space relationships, support facilities and location	
	<b>A</b>	Very satisfactory, no change needed
	<b>B</b>	Satisfactory, minor change needed
	<b>C</b>	Not satisfactory, major change needed
	<b>D</b>	Unacceptable in its present condition
	<b>X</b>	Supplementary rating added to C or D to indicate that nothing but a total rebuild or relocation will suffice (that is, improvements are either impractical or too expensive to be tenable)
<b>7</b>	Quality - For each element is assessed to produce an overall ranking of the quality of the estate as follows -	
	<b>A</b>	Facility of excellent quality
	<b>B</b>	A facility requiring general maintenance investment only
	<b>C</b>	A less than acceptable facility requiring capital investment
	<b>D</b>	A very poor facility requiring significant capital investment or replacement
	<b>X</b>	Supplementary rating added to C or D to indicate that nothing but a total rebuild or relocation will suffice (that is, improvements are either impractical or too expensive to be tenable)
<b>8</b>	Environmental Management - For Strategic Planning Purposes, the ranking for the site and/or building block based on the following energy usage per unit volume figures	





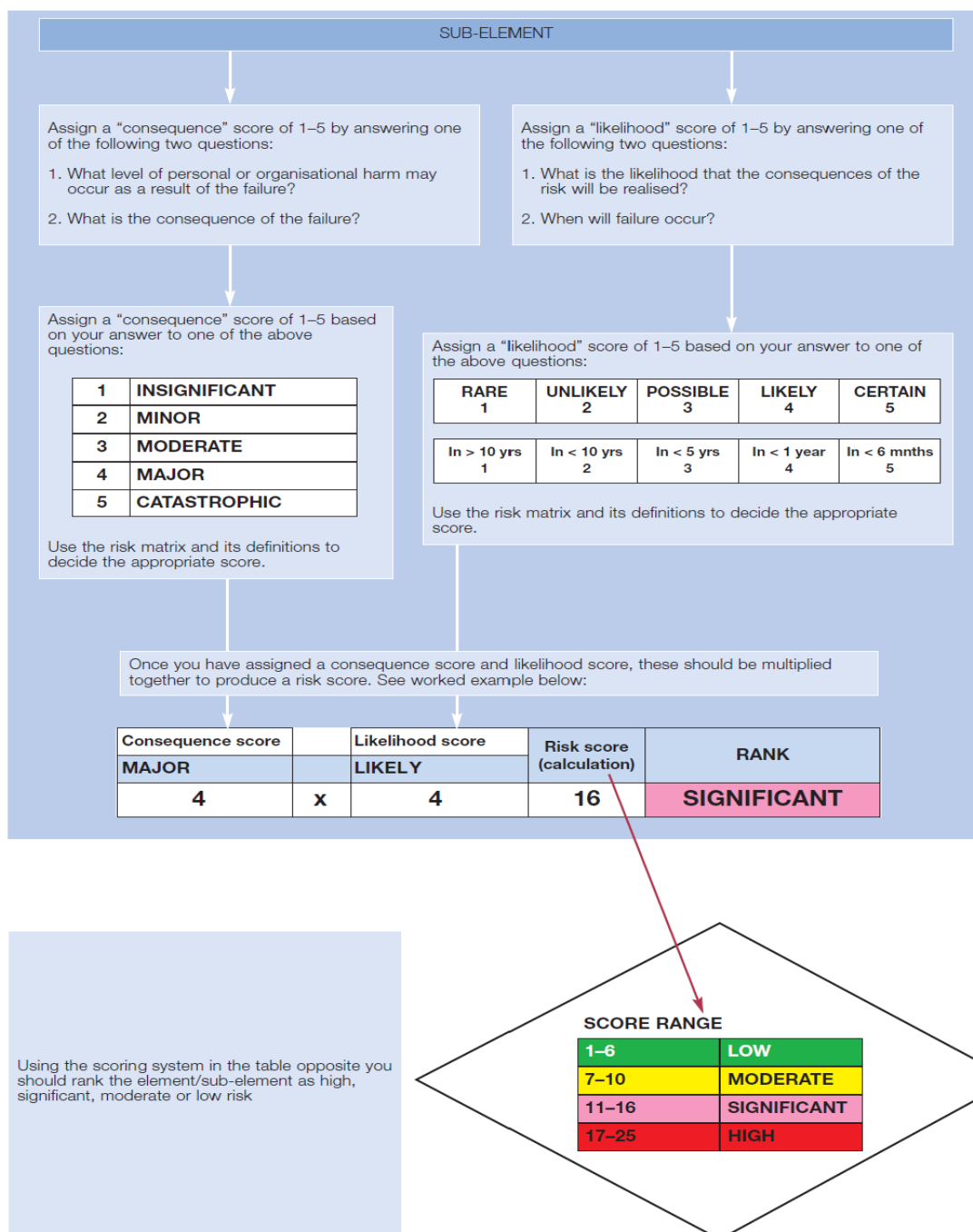
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	<b>A</b>	35-55 GJ per 100 cubic metres
	<b>B</b>	56-65 GJ per 100 cubic metres
	<b>C</b>	66-75 GJ per 100 cubic metres
	<b>D</b>	76-100 GJ per 100 cubic metres
	<b>X</b>	Supplementary rating added to C or D to indicate that nothing but a total rebuild or relocation will suffice (that is, improvements are either impractical or too expensive to be tenable)





## 6.0 APPENDIX B: RISK BASED METHODOLOGY EXTRACT





SCORE RANGE	RISK RANKING
1-6	LOW
7-10	MODERATE
11-16	SIGNIFICANT
17-25	HIGH

Rating	PROBABILITY OF FAILURE				
	1	2	3	4	5
Failure descriptors	RARE	UNLIKELY	POSSIBLE	LIKELY	CERTAIN
	None or minimal remedial action required and/or new/recent upgrade. Estimated time to failure may be circa > 10 yrs	Normal wear and tear. Sound, operationally safe and exhibits only minor deterioration. Estimated time to failure may be circa < 10 yrs	Reasonable physical damage/deterioration. Reassignment of life may be acceptable based on technical tests or residual robustness. Estimated time to failure may be circa < five yrs	Major physical damage/deterioration. Failure apparent/assessed as imminent or unacceptable built environment. Not appropriate to reassign life. Estimated time to failure may be circa < one yr	Failure occurred. Unacceptable built environment. Not appropriate to reassign life. Estimated time to failure may be circa < six months

	SEVERITY		Health & safety	Environment	Business	Operational/ building/ engineering element	Fire/statutory Complies with mandatory fire safety requirements and statutory safety legislation.	Fire/statutory Complies with mandatory fire safety requirements and statutory safety legislation with minor deviations of a non-serious nature	Fire/statutory Known contravention of one or more requirements – which falls short of "B".	Fire/statutory Dangerously below "B"	Fire/statutory Dangerously below "B"
	Rating	Descriptor									
POTENTIAL CONSEQUENCES	1	INSIGNIFICANT	No injury/breach of guidance/procedures	No or minimal impact breach of guidance/procedures.	Unlikely cause of complaint. Litigation remote. Minimal reputation loss/limited awareness within organisation.	Minimal or no impact. Minimal or no disruption.	1	2	3	4	5
	2	MINOR	Minor injury/ill health (first aid or self-treatment). Breach of legal requirement.	Breach of legal requirement.	Possible complaint. Litigation unlikely. Loss of reputation (widespread internal awareness).	Localised impact. Disruption to normal services.	2	4	6	8	10
	3	MODERATE	Moderate injury/ill health statutory obligations. Improvement notice issued.	Single breach of legal requirement. Improvement notice issued.	Possible complaint. Possible litigation. Loss of reputation. National paper reporting.	Moderate impact. Moderate disruption to normal services.	3	6	9	12	15
	4	MAJOR	Major/significant injury or long-term incapacity/disability. Prohibition notice issued.	Multiple breach of legal requirement. Prohibition notice issued.	Litigation expected. Loss of reputation. National reporting.	Major/significant impact. Severe disruption to normal services.	4	8	12	16	20
	5	CATASTROPHIC	Fatality and/or permanent incapacity/disability. Prosecution.	Multiple breach of legal requirement. Prosecution.	Litigation certain. National adverse publicity.	Critical impact. Service closure.	5	10	15	20	25

