

Bwrdd Iechyd Prifysgol Bae Abertawe Swansea Bay University Health Board

S



Meeting Date	04 October 2022	Agenda Item	3.6		
Report Title	Estates Health & Safet	Estates Health & Safety Report			
Report Author	Des Keighan – Assista	nt Director of Estates			
Report Sponsor	Darren Griffiths – Direc Performance	Darren Griffiths – Director of Finance and Performance			
Presented by	Des Keighan – Assista	Des Keighan – Assistant Director of Estates			
Freedom of Information	Open				
Purpose of the Report	Health & Safety Assuran	The purpose of the report is to update the Committee on Health & Safety Assurance within the Estates function over a range of specialist areas, including Fire, Asbestos, Low Voltage Systems, Waste Management and Security.			
Key Issues	<ul> <li>The Estates Department continues to work to meet the Health Board's statutory obligations and has identified the need for additional resources to effectively manage our responsibilities over the full range of Estates disciplines.</li> <li>There are a number of workforce pressures at Morriston Hospital in particular which a currently being addressed: -</li> <li>Successful candidate for an Estates Manager for Morriston Hospital has recently declined the post following Occupational Health clearance, as they had been offered a job in their existing Health Board. The post was then offered to the other candidate above the line, however, they declined due to contractual issues. Interviews are now scheduled for the 29<sup>th</sup> September 2022</li> <li>There is an existing vacancy which has now been appointed to but the individual is yet to start</li> <li>Two officers have secured positions outside the Department. We have appointed a replacement however this has been an internal candidate which means we now have a supervisor vacancy. A second set of interviews are scheduled for the 4<sup>th</sup> October 2022.</li> </ul>				

	advertised shortly. We are also in the process of recruiting a Health & Safety Officer role, following the retirement of the previous post holder interview are scheduled for the 30 <sup>th</sup> September 2022.			
Specific Action	Information	Discussion	Assurance	Approval
Required	$\boxtimes$		$\boxtimes$	
(please choose one only)				
Recommendations	<ul> <li>Members are asked to:</li> <li>• NOTE and CONSIDER the report</li> </ul>			

## ESTATES HEALTH & SAFETY REPORT

#### 1. INTRODUCTION

The purpose of the report is to update the Committee on Health & Safety Assurance within the Estates function over a range of specialist areas, including Asbestos, Low Voltage and High Voltage Systems, Ventilation and Decontamination Waste and Security and also cover some general assurance issues.

## 2. BACKGROUND

#### Workforce

The department has lost a number of staff over recent months, whilst thought we had managed to recruit a new Estates Manager they then declined the post following Occupational Health clearance, as they had been offered a job in their existing Health Board. The post was then offered to the other candidate above the line, however, they declined the post as well as we were not able to offer them the top of the Band. Interviews are now scheduled for the 29<sup>th</sup> of September

We have identified the need for further resources to effectively manage our responsibilities over the full range of Estates disciplines and have been discussing with the Director of Finance and Performance on how services need to be enhanced over the coming months and years. Training compliance is at 70.65% and PADR compliance is at 53%, however, work is ongoing to improve performance in both these areas however vacancies in Morriston have made this difficult with performance in both staying static over the last period.

Org L8	Assignment Count	Reviews Completed	Reviews Completed %
130 7200 Morriston Estates Management	12	9	75.00
130 7211 Morriston Grounds & Gardens	7	7	100.00
130 7212 Morriston Building	11	10	90.91
130 7213 Morriston Engineering	32	0	0.00
130 7215 HVS 1B	3	2	66.67
130 7220 Singleton Grounds & Gardens	4	3	75.00
130 7221 Singleton Building	14	8	57.14
130 7222 Singleton Engineering	25	22	88.00
130 7223 Singleton Estates Management	10	9	90.00
130 7500 Waste Management & Incineration	4	2	50.00
130 7503 Support Services	4	0	0.00
130 7801 Estates Management Support	7	0	0.00
Grand Total	134	70	52.07

#### Appraisal Review Summary - Estates – 31 August 2022

#### Training Compliance Summary - Estates @ 31/08/2022

Assignment Count	Required	Achieved	Compliance %
135	1755	1240	70.65%

Org L8	Assignment Count	Required	Achieved	Compliance %
130 7200 Morriston Estates	12	156	98	62.82%
Management				
130 7211 Morriston Grounds & Gardens	7	91	61	67.03%
130 7212 Morriston Building	11	143	91	63.64%
130 7213 Morriston Engineering	33	429	235	54.78%
130 7215 HVS 1B	3	39	24	61.54%
130 7220 Singleton Grounds & Gardens	4	52	39	75.00%
130 7221 Singleton Building	14	182	152	83.52%
130 7222 Singleton Engineering	26	338	267	78.99%
130 7223 Singleton Estates Management	10	130	123	94.62%
130 7500 Waste Management &	4	52	38	73.08%
Incineration				
130 7503 Support Services	4	52	44	84.62%
130 7801 Estates Management Support	7	91	68	74.73%

#### Sickness

For the department in July was 11.48% overall 4.81% for long-term sickness and 6.78% for short term sickness. Action plans are in place for the long term sickness cases and concluding some of these will bring the long term sickness figures down. The Profile for the last six months that it's the recent high levels of short term sickness that have affected the performance.

Process	Feb	Mar	April	May	June	July	12mth Cumulative
Overall sickness	12.27	11.48	10.00	11.00	7.37	11.04	9.80%
Long Term Sickness %	6.76	4.81	5.60	10.00	4.97	6.65	
Short Term Sickness %	5.51%	6.67%	4.40	1.00	2.41	4.97	

#### Incidents

Incidents currently under investigation are attached as in appendix 2. With regard to the issues around the unavailability of shift these problems are linked to the fact that the department are struggling to recruit to vacancies mainly due to the fact that salaries offered are much lower than market rates. The department are now looking at supporting services using contractors due to the level of vacancies.

The department have been working to develop a new band 5 multi skilled engineering role to help with recruitment and are developing transition plans for existing staff who want to move into the revised roles. Working with Gower College we have developed a training program for staff and are hoping to canvass staff to gauge the level of interest in the coming weeks. Those staff that choose to retain existing roles will not be affected however any vacancies will be replaced with the new role.

#### Six Facet Appraisal – Backlog Maintenance Review

We have now completed the Six Facet Review of the Estate the report is being presented to a sub group of the Estates Utilization group on the 26<sup>th</sup> September 2022 prior to its submission to main group in October 2022. The group will consider the priorities for the estate in line with the Estates Strategy and Clinical Service Plan. The review has covered Building Condition, Utilisation, Functional Suitability, Energy, Health & Safety and Quality we also asked then to review equality \*(DDA review).

#### **Medical Gas Pipeline Systems**

The Medical Gas Committee has set up a Task & Finish Group to review and update the MGPS Operational Policy and procedures, the first draft has been shared and is out for comment prior to submission for agreement by the Health & safety operational Group and then by the main committee..

The Committee is also working with clinical colleagues to pilot test around nitrous oxide with a view to remove this service and move to bottle supplies to reduce losses to atmosphere.

## **Electrical Services LV**

There are issues on both main acute sites with the electrical services with regard to compliance with the WHTM. A paper has been prepared for the Executive Team highlighting the main Estates risks and potential ways for these to be addressed. This will be considered as part of the backlog maintenance discussions.

#### Ventilation Systems

The last Audit Report highlighted the fact that a large proportion of our plant is non-compliant with the current HTM's, noting that the plant was not designed to meet the current standards. These shortcomings have been highlighted in the paper that was prepared for the Executive Team and have been identified within the Six facet survey with costs (without fees contingency and on costs) of over £6,771,000. The Health Board is developing plans to provide a decant facility on the Morriston Hospital site that will allow the Health Board to start a rolling programme of refurbishment of the site.

## **Fire Safety**

The Health Board recognises that the completion of the risk assessments has identified work that needs to be undertaken by the Health Board. This work requires further investment.

The Health Board has completed a review of the fire compartmentation on the Morriston and Singleton Hospital sites and it is intended that this work will be

developed to into a specification to commission repairs on fire compartmentation on both sites. The six facet survey has identified costs of over £ 5.1 million for the two main sites excluding fees contingency and on costs

#### **Fire Dampers**

The fire compartmentation reviews will identify the fire dampers, however, a number of them due to their location, are inaccessible and therefore unmaintainable as they are often in confined areas or within walls. The six facte survey has provided estimated costs of around £500,000 sites excluding fees contingency and on costs to address the fire damper issues. As part of the review of fire compartmentation within the Morriston and Singleton Hospital sites the risks associated with the fire dampers have been considered and be included as part of future capital schemes where appropriate.

#### **Asbestos Management**

Within Singleton Hospital there is a significant amount of Asbestos present within the void service areas. Control measures have been put into place to strictly control access to these areas. Work has now been completed in OPD removing the asbestos lagging and re-lagging the pipe work.

#### Water

The Health Board has been competed a Water Management Risk Assessment from this the Health Board has identified the priority high risk issues. The Health Board Water Management Group met in September 2022 has agreed to prioritise the high risks and meetings are scheduled in October 2022 to start planning how to address this remedial work. Appendix 3 includes a sample of the risks identified. However staff vacancies have affected completion rate for routine checks.

## Waste

The volume of waste has increased massively as a result of the requirement for staff to wear PPE. The waste whilst not heavy is extremely bulky and the contractor who provides the waste disposal service is now not in a position to cope with this increased demand. All spare capacity has been lost due to the volume of waste that has been generated.

The department has already put into place contingency arrangements, however, the sites continue to suffer from delayed collections on a regular basis. This issue has been escalated up through Welsh Government and meetings are being held on a regular basis with the waste disposal company.

The department attend the Welsh Government Operation TIGER WOOD – resilience meeting last week with Welsh Government / Natural resources wales / Industry last week / And contractors which identified that there has been a significant reduction in UK waste Storage capacity – due to changes in legislation. Also Treatment capacity remains finally balanced. The view from the group was that capacity will further reduce in the next two years due to impending Statutory Instruments coming into force.

One of which is on site sorting of waste. We are also being asked to provide refrigeration facilities for the storage of amotomical waste

## Lifts

We currently do not have an AE for Lifts as this service is not provided through Welsh Health Shared Services.

The Health Board is also looking to appoint an AE lifts. We have now had discussions about how these services can be procured. However we have not made progress on this issue due to staff limitations due to sickness.

#### Security

The Health Board has reformed the Security Management Group to act as a focal point for security management issues across the Health Board. The group is proposed to be a sub group of the Health & Safety Operational Group. The first meeting is due to be held on September 30<sup>th</sup> this was delayed due staff having Covid.

#### Summary

The Department has made progress in a number of areas, however, vacancies and a lack of resources continues to restrict the extent to which progress can be made. Hopefully further funding through EFAB2 in 2023/2024 will help the position. With the announcement that £40 million worth of investment is being allocated to address Fire, Infrastructure and Decarbonisation with £20 million available in 2023/2024 and a further £20 million in 2024/2025. However, this funding is across the whole of Wales however bids will be made by the Health Board against this funding through the Capital Team. The key issues within the Estate are as follows with more detail provided in **Appendix 1** to the report: -

## 3. GOVERNANCE AND RISK ISSUES

Governance for the range of areas set out above is under review with the function and frequency of the groups overseeing each of these important areas being considered to ensure that there are no gaps in reporting which will aid increased compliance.

There is a range of risks across the estate largely driven by the scale of the backlog maintenance required and the decreasing availability of capital to address these across NHS Wales. The Health Board continues to work with Welsh Government to develop a 10-year plan which will prioritise key areas of risk. The receipt and review of the 6 facet survey and the development of a Health Board estates strategy will provide greater clarity to this plan.

## 4. FINANCIAL IMPLICATIONS

There are no direct financial consequences of this report however, the capital and workforce requirements to adequately address backlog maintenance and operational issues will be significant when fully quantified. The six facet survey has identified backlog maintenance costs 0f circa £121 million over the next five years without on costs.

# 5. **RECOMMENDATION**

Members are asked to: • NOTE and CONSIDER the report

Governance and Assurance				
Link to Enabling	Supporting better health and wellbeing by actively empowering people to live well in resilient communities	promoting and		
Objectives	Partnerships for Improving Health and Wellbeing			
(please choose)	Co-Production and Health Literacy			
	Digitally Enabled Health and Wellbeing			
	Deliver better care through excellent health and care service outcomes that matter most to people	es achieving the		
	Best Value Outcomes and High Quality Care			
	Partnerships for Care			
	Excellent Staff			
	Digitally Enabled Care			
	Outstanding Research, Innovation, Education and Learning			
Health and Car	re Standards			
(please choose)	Staying Healthy			
	Safe Care			
	Effective Care			
	Dignified Care			
	Timely Care			
	Individual Care			
	Staff and Resources			
Quality, Safety	and Patient Experience			
This paper upda	ates the Committee on compliance over a range of Esta	ites issues.		
Financial Implications				
At present there are no financial implications. However, for a number of issues the Health Board are developing capital plans to address the issues identified, as part of the long term strategy for the Estate.				
Legal Implications (including equality and diversity assessment)				
The paper updates on current risks within the Estate.				
Staffing Implic	ations			

A paper is being drafted around the staffing requirements for the Department moving forward

# Long Term Implications (including the impact of the Well-being of Future Generations (Wales) Act 2015)

The paper updates the Committee on compliance issues within the Estates function, identifying risks and explaining the steps being taken to mitigate these risks. The Department recognises the need for additional funding and work is ongoing on a Business Case around resources required to address these issues in the longer term both from a staffing and capital investment perspective.

Report History	This provides an update on the agenda item on the risks within the Estate.
Appendices	Full report attached.

## Medical Gas Pipeline System:

We have Authorised Person's (AP)appointed for Singleton Hospital and Morriston Hospital. However, we still are short on AP's on the Morriston Hospital site. This has been exacerbated as a result of the vacancies within the Department. However the department have recruited to one of the officer vacancies but as this was an internal candidate have now got a supervisory vacancy.

Through the Medical Gas Committee, we have identified the need to ensure that senior nursing staff have had appropriate training around the management of medical gases on a ward and their responsibilities relating to these facilities.

The Draft Audit Report has been received from the Authorised Engineer (AE), who has highlighted the following key actions.

- Train, nominate for assessment and appoint more MGPS AP's to provide cover at Morriston Hospital. The appointment of additional officers will support this and places have been book on the appropriate training courses for newly appointed staff.
- The Medical Gas Committee have set up a Task & Finish Group to review and update the MGPS Operational Policy and the final draft is out to comment prior to submission to the Operational Health and Safety group.
- The Committee is developing a training package to support Designated Nursing/Medical (DNO/DMO) officers, and Designated Porters. This is to ensure all general staff using medical gases receive appropriate training.
- The Committee is supporting clinical colleagues undertake a trial to explore moving to bottled nitrous oxide

The department will be developing an action plan in response to the recommendations as part of the Medical Gas Committee agenda.

## Electrical Services – LV:

There is now an AE LV appointed, and following a lot of work we now have AP's in place at both Morriston and Singleton Hospitals. However, with the loss of staff within the Morriston Department specifically we are once again going to be short of AP's, Interviews are scheduled for the 4 of October when we hope to be able to appoint a further electrical estates officer. In the mean time we had planned to utilise the BMS officer to support the Department in the short term. However, we have had to use them to cover sickness in the department and they are now covering the operational maintenance managers role on a short term basis The appointment of a new Estates Manager will strengthen the Department with interviews scheduled for the 29<sup>th</sup> of September.

There are issues on both main acute sites with the electrical services with regard to compliance with the WHTM. A paper was prepared for the Executive Team highlighting the main Estates risks and potential ways for these to be addressed.

The Department have now completed the Six Facet Survey of the Estate, which will be discussed by the sub group of the estates utilisation to prioritise the investment needed across the Estate. The report showed a significant increase in backlog maintenance costs. The Health Board is developing its long term strategy for its Estate, part of which is the provision of decant facilities to allow the Health Board to address the backlog issues across the Morriston and in the longer term Singleton Hospital sites.

## **Electrical Services – HV:**

The Health Board has appointed an Authorised Engineer, and a revised HV policy has been submitted to the Health & Safety Operational Committee and has been submitted to the Main Health & Safety Committee.

## Ventilation System:

Once again this has been adversely affected due to the loss of staff from the Morriston Estates Department. Once we have reappointed to these positions we will look to book staff on the appropriate training courses with the appointment of a mechanical estates officer we have now booked this individual on to an AP course.

The last Audit Report highlighted the fact that a large proportion of our plant is noncompliant with the current HTM's, noting that the plant was not designed to meet the current standards. These shortcomings have been highlighted in the six facet survey. The Health Board is developing plans to provide a decant facility on the Morriston Hospital site that will allow the Health Board to start a rolling programme of refurbishment of the site. This will include addressing single room accommodation as well as providing appropriate ventilation systems.

The Department has been working with colleagues in dental services and infection prevention on trialling air scrubbers following a change in the guidance which now suggests considering these types of units where there are insufficient air changes.

However, long term sickness in the department along with the vacancies already reported have meant further progress has not been made.

# **Estates Fire Safety:**

There has been a significant improvement in the completion of the risk assessments and The Health Board recognises that the completion of the risk assessments has identified work that needs to be undertaken by the Health Board. This work requires further investment.

The Health Board has completed a review of the fire compartmentation on the Morriston and Singleton Hospital sites and are reviewing the recommendations. It is intended that this work will be developed to into a specification to commission repairs on fire compartmentation on both sites. The six facet survey has identified costs of over £ 5.1 million for the two main sites excluding fees, contingency and on costs. From this we will develop bids against the EFAB2 monies.

# Cause and Effect Drawings:

As part of the compartmentation review we will, as part of the work, update the cause and effect drawings for the two sites.

# **Emergency lighting:**

Whilst we have addressed the majority of areas within the Singleton Hospital site there are still areas within Morriston Hospital that need to be addressed. The department continue to try and upgrade the emergency lighting as areas are being refurbished.

## Fire Dampers:

The fire compartmentation reviews will identify the fire dampers, however, a number of them due to their location, are inaccessible and therefore unmaintainable as they are often in confined areas or within walls. The six facet survey has provided estimated costs of around £500,000 sites excluding fees contingency and on costs to address the fire damper issues. As part of the review of fire compartmentation within the Morriston and Singleton Hospital sites the risks associated with the fire dampers have been considered and be included as part of future capital schemes where appropriate.

## **Decontamination:**

We now have AP's in both Singleton and Morriston. Infection Prevention have also implemented a Decontamination Working Group focussing on the operational issues around the department. The Health Board is looking at the feasibility of moving HSDU services out of the acute sites and options are being considered by the Health Board's Estates Utilisation Group.

## Asbestos Management:

The department have commenced further work in Singleton Hospital this year from discretionary capital to address asbestos issues identified in the management plan. As the Health Board continues to complete the infrastructure programme, the removal of asbestos will be included within these projects where appropriate.

Within Singleton Hospital there is a significant amount of Asbestos present within the void service areas. Control measures have been put into place to strictly control access to these areas.

The Health Board is developing the control plan for the Singleton Hospital site and within this the Health Board will consider how it addresses the asbestos issues across the site. The Department will also be reviewing the management plans.

## Water:

The Health Board has been competed a Water Management Risk Assessment from this the Health Board has identified the priority high risk issues. The Health Board Water Management Group has agreed to prioritise the high risks and meetings are scheduled in October to start planning how to address this remedial work. Appendix 3 includes a sample of the risks identified. However staff vacancies have affected completion rate for routine checks.

## Waste:

The National challenges around the management of waste continue which have resulted in a number of papers being provided to the Executive Team. The pandemic has put significant additional pressures on what was already a struggling service. The volume of waste has increased massively as a result of the requirement for staff to wear PPE. The waste whilst not heavy is extremely bulky and the contractor who provides the waste disposal service is simply not in a position to cope with this increased demand. All spare capacity has been lost due to the volume of waste that has been generated.

The department have already put into place contingency arrangements, however, the sites continue to suffer from delayed collections on a regular basis. This issue has been escalated up through Welsh Government and meetings are being held on a regular basis with the waste disposal company. We have also now seen significant cost increases in this area which is having a profound effect on the Health Board.

# Lifts:

There is no specific policy for lifts and the role of CP's sit with our maintenance contractor who by their appointment take on this role, on behalf of the Health Board. In light of the nature of the lifts in Singleton Hospital. A member of staff is due to attend training, however, we currently do not have an AE for Lifts as this service is not provided through Welsh Health Shared Services.

The Health Board is also looking to appoint an AE lifts. We have now had discussions about how these services can be procured but have not yet finalised the specification for the provision of these services.

We have not progressed the appointment of an AE Lift and this will be revisited. Last financial year we spent significant capital monies upgrading the lifts on Morriston Hospital site, however, it is recognised that there needs to be a formal replacement programme in place. Unfortunately, shortage of capital means this will not be progressed due to other priorities.

# Security

The Health Board has reformed the Security Management Group to act as a focal point for security management issues across the Health Board. The group is proposed to be a sub group of the Health & Safety Operational Group.

The Director of Finance has written to Service Directors, Capital, Support Services, Health & Safety and Counter Fraud and IT to seek nominations for the group The Health Board is reforming the Security Management Group. The first meeting is due to be held on September 30<sup>th</sup> this was delayed due staff having Covid.

# Summary:

The Department has made progress in a number of areas, however, vacancies and a lack of resources continues to restrict the extent to which progress can be made. Hopefully further funding through EFAB2 in 2023/2024 will help the position. With the announcement that £40 million worth of investment is being allocated to address Fire, Infrastructure and Decarbonisation with £20 million available in 2023/2024 and a further £20 million in 2024/2025. However, this funding is across the whole of

Wales however bids will be made by the Health Board against this funding through the Capital Team.

The work around the Six Facet Survey has come to an end and is due to be discuss at a sub group of the estates utilisation group to prioritise capital investment and fully understand the backlog maintenance issues which will feed into the Development Control Plans being developed for the main sites.

The completion of the Water Risk Assessments is also a positive step forward as is the work being undertaken to review the Fire Compartmentation on the Singleton and Morriston sites. However, it has to be recognised that the organisation is facing considerable pressure due to the lack of capital this financial year. Appendix 2 sample high risk issues from water risk assessments

Building	HAZARD DESCRIPTION	RECOMMENDED ACTION
Blaengwynfi Health Centre	No suitable access to inspect tank externals	Fit suitable boarding
Cefn Coed Main Hospital Building	Deadend to the pipework (greater than 6 times the pipe diameter) – <i>approx. 1.5m (x2)</i>	Remove deadend and fully cut pipework back to the live pipe
Cefn Coed Main Hospital Building	Deadend to the pipework (greater than 6 times the pipe diameter) – <i>approx. 300mm</i>	Remove deadend and fully cut pipework back to the live pipe
Cefn Coed Main Hospital Building	Deadend to the pipework (greater than 6 times the pipe diameter) – <i>approx. 1.5m</i>	Remove deadend and fully cut pipework back to the live pipe
Cefn Coed Main Hospital Building	Deadend to the pipework (greater than 6 times the pipe diameter) – <i>approx. 3m</i>	Remove deadend and fully cut pipework back to the live pipe
Cwmbwrla Clinic	Deadend to the pipework (greater than 6 times the pipe diameter) Approx. 15cm on domestic hot water pipework	Remove deadend and fully cut pipework back to the live pipe
Dan y Deri	Flow temperature was below 60°C	Increase storage temperature to achieve 60°C on flow
Dulais Valley PCC	Flow temperature was below 60°C and the return and outlet temperature was below 55°C	Increase storage temperature to achieve 60°C on flow and at least 55°C on the return and from the outlets
Dyfed Road Health Centre	Flow temperature was below 60°C and return temperature was below 50 °C	Increase storage temperature to achieve 60°C on flow and 50°C on return
Forge Centre MHRC	Deadend to the pipework (Pipework that previously supplied washing machines)	Remove deadend and fully cut pipework back to the live pipe
Llwyneryr	Flow temperature was below 60°C	Increase storage temperature to achieve 60°C on flow

Llwyneryr	Flow temperature was below 60°C	Increase storage temperature to achieve 60°C on flow
Morriston Clinic	Deadend to the pipework (greater than 6 times the pipe diameter) Approx. 1.25m on domestic cold water pipework	Remove deadend and fully cut pipework back to the live pipe
Morriston Clinic	Deadend to the pipework (greater than 6 times the pipe diameter) One approx. 10cm on domestic cold water, one approx. 7cm on domestic hot water	Remove deadend and fully cut pipework back to the live pipe
Neath Port Talbot Hospital	There is a central TMV (eg Horne Valve) that supplies mixed water to a significant area of the building and this creates an elevated risk of legionella proliferation	Consider removal of the TMV. If there is a requirement for TMVs in the building (eg Healthcare), then install point of use TMVs as close to outlets as possible
Neath Port Talbot Hospital	There is a central TMV (eg Horne Valve) that supplies mixed water to a significant area of the building and this creates an elevated risk of legionella proliferation	Consider removal of the TMV. If there is a requirement for TMVs in the building (eg Healthcare), then install point of use TMVs as close to outlets as possible
Orchard Centre	Deadend to the pipework Approx. 0.3m of visible dead-end pipework	Remove deadend and fully cut pipework back to the live pipe
Tonna Hospital	Deadend to the pipework (on Mains cold water vertically behind Wash hand basin approximately 50cm)	Remove deadend and fully cut pipework back to the live pipe
Unit 22	Deadend to the pipework (Approximately 40cm deadend to valve on mains cold water pipework)	Remove deadend and fully cut pipework back to the live pipe
Unit 32	Deadend to the pipework (Approximately 30cm deadend)	Remove deadend and fully cut pipework back to the live pipe
Morriston Hospital Main Block 1 (Plant Room 1) - Blocks AZ / AG / AF / AE / AD / AT / AY / AL / AM	Scale noted to shower head x 2	Clean outlet of scale
Morriston Hospital Main Block 1 (Plant Room 1) - Blocks AZ / AG / AF / AE / AD / AT / AY / AL / AM	Old drinking water fountain present.	Ensure this is cut back to live source and no deadends remain.
Morriston Hospital Main Block 1 (Plant Room 1) - Blocks AZ / AG / AF / AE / AD / AT / AY / AL / AM	Deadend to the pipework (greater than 6 times the pipe diameter) Approx 15cm visible	Remove deadend and fully cut pipework back to the live pipe
Morriston Hospital Main Block 1 (Plant Room 1) - Blocks AZ / AG / AF / AE / AD / AT / AY / AL / AM	Deadend to the pipework (greater than 6 times the pipe diameter) 1 on cold supply and two on the hot.	Remove deadend and fully cut pipework back to the live pipe

AD / AT / AY / AL / AM         approx. 1.5m visible.         live pipe           Morriston Hospital Main Block 1 (Plant Room 1) - Blocks AZ / AG / AF / AE / AD / AT / AY / AL / AM         Deadend to the pipework (greater than 6 times the pipe diameter) AD / AT / AY / AL / AM         Remove deadend and fully cut pipework back to the live pipe           Morriston Hospital Main Block 1 (Plant Room 1) - Blocks AZ / AG / AF / AE / AD / AT / AY / AL / AM         Sediment to base of tank         Clean and disinfect tank           Morriston Hospital Main Block 1 (Plant Room 1) - Blocks AZ / AG / AF / AE / AD / AT / AY / AL / AM         Deadend to the pipework (greater than 6 times the pipe diameter). 3 x 15cm deadends         Remove deadend and fully cut pipework back to the live pipe           Morriston Hospital Main Block 2 (Plant Room 1) - Blocks AZ / AG / AF / AE / AD / AT / AY / AL / AM         Pool plant for disused pool is still present. It was unclear if or where pipework is isolated. Ensure that no deadend remain.         Cutback any pipework to live source ensuring no deadends remain.           Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD         Deadend to the pipework (unknown pipework approx 3m seen before live pipe         Remove deadend and fully cut pipework back to the live pipe           Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD         Deadend to the pipework (unknown if this is on hot, cold or closed rol y AD         Remove deadend and fully cut pipework back to the live pipe           Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD         Deadend to the p	Morriston Hospital Main Block 1 (Plant Room 1) - Blocks AZ / AG / AF / AE /	Deadend to the pipework (greater than 6 times the pipe diameter)	Remove deadend and fully cut pipework back to the
Room 1) - Blocks AZ / AG / AF / ÁE /       Deadend to the pipework (greater than 6 times the pipe diameter)       Remove deadend and fully cut pipework back to the         Morriston Hospital Main Block 1 (Plant       Sediment to base of tank       Clean and disinfect tank         Morriston Hospital Main Block 1 (Plant       Deadend to the pipework (greater than 6 times the pipe diameter).       Remove deadend and fully cut pipework back to the         Morriston Hospital Main Block 1 (Plant       Deadend to the pipework (greater than 6 times the pipe diameter).       Remove deadend and fully cut pipework back to the         Norriston Hospital Main Block 2 (Plant       Deadend to the pipework (approx 20cm below the right hand side       Remove deadend and fully cut pipework back to the         Norriston Hospital Main Block 2 (Plant       Pool plant for disused pool is still present. It was unclear if or where pipework is isolated. Ensure that no deadend remain.       Cutback any pipework to live source ensuring no deadends remain.         Morriston Hospital Main Block 2 (Plant       Deadend to the pipework (approx 20cm below the right hand side basin)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant       Deadend to the pipework (unknown pipework approx 3m seen before it disappears into wall)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant       Deadend to the pipework (greater than 6 times the pipe diameter)       Remove deadend and fully cut pipework back to the live pipe	AD / AT <sup>´</sup> / AY / AL / AM		
AD / AT / AY / AL / AM         approx. 20cm on DCW.         live pipe           Morriston Hospital Main Block 1 (Plant Room 1) - Blocks AZ / AG / AF / AE / AD / AT / AY / AL / AM         Sediment to base of tank         Clean and disinfect tank           Morriston Hospital Main Block 1 (Plant Room 1) - Blocks AZ / AG / AF / AE / D / AT / AY / AL / AM         Deadend to the pipework (greater than 6 times the pipe diameter). 3 x 15cm deadends         Remove deadend and fully cut pipework back to the live pipe           Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD         Pool plant for disused pool is still present. It was unclear if or where only AD         Cutback any pipework to live source ensuring no deadends remain.           Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD         Deadend to the pipework (approx 20cm below the right hand side basin)         Remove deadend and fully cut pipework back to the live pipe           Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD         Deadend to the pipework (unknown pipework approx 3m seen befor it disappears into wall)         Remove deadend and fully cut pipework back to the live pipe           Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD         Deadend to the pipework (greater than 6 times the pipe diameter)         Remove deadend and fully cut pipework back to the live pipe           Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD         Deadend to the pipework (unknown if this is on hot, cold or closed system)         Remove deadend and f	Morriston Hospital Main Block 1 (Plant		
Morriston Hospital Main Block 1 (Plant Room 1) - Blocks AZ / AG / AF / AE / AD / AT / AY / AL / AM       Sediment to base of tank       Clean and disinfect tank         Morriston Hospital Main Block 1 (Plant Room 1) - Blocks AZ / AG / AF / AE / AD / AT / AY / AL / AM       Deadend to the pipework (greater than 6 times the pipe diameter). 3 x 15cm deadends       Remove deadend and fully cut pipework back to the iive pipe         Morriston Hospital Main Block 1 (Plant Room 1) - Blocks AZ / AG / AF / AE / AD / AT / AY / AL / AM       Pool plant for disused pool is still present. It was unclear if or where pipework is isolated. Ensure that no deadend remain.       Cutback any pipework to live source ensuring no deadends remain.         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (unknown pipework approx 3m seen before it disappears into wall)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (greater than 6 times the pipe diameter).       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (greater than 6 times the pipe diameter).       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (unknown if this is on hot, cold or closed only AD       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Ma	,		
Room 1) - Blocks AZ / AG / AF / AE /       Sediment to base of tank       Clean and disinfect tank         Morriston Hospital Main Block 1 (Plant Room 1) - Blocks AZ / AG / AF / AE /       Deadend to the pipework (greater than 6 times the pipe diameter). 3 x 15cm deadends       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Pool plant for disused pool is still present. It was unclear if or where pipework is isolated. Ensure that no deadend remain.       Cutback any pipework to live source ensuring no deadends remain.         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (approx 20cm below the right hand side basin)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (unknown pipework approx 3m seen before it disappears into wall)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (greater than 6 times the pipe diameter)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (unknown if this is on hot, cold or closed system)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 3 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (on DHW and DCW pipe work aprox 30cm)		approx. 20cm on DCW.	live pipe
AD / AT / AY / AL / AM         Sediment to base of tank         Clean and disinfect tank           Morriston Hospital Main Block 1 (Plant Room 1) - Blocks AZ / AG / AF / AE / AD / AT / AY / AL / AM         Deadend to the pipework (greater than 6 times the pipe diameter). 3 x 15cm deadends         Remove deadend and fully cut pipework back to the live pipe           Morriston Hospital Main Block 1 (Plant Room 1) - Blocks AZ / AG / AF / AE / AD / AT / AY / AL / AM         Pool plant for disused pool is still present. It was unclear if or where pipework is isolated. Ensure that no deadend remain.         Cutback any pipework to live source ensuring no deadends remain.           Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF         Deadend to the pipework (approx 20cm below the right hand side basin)         Remove deadend and fully cut pipework back to the live pipe           Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF         Deadend to the pipework (Unknown pipework approx 3m seen before it disappears into wall)         Remove deadend and fully cut pipework back to the live pipe           Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF         Deadend to the pipework (Unknown if this is on hot, cold or closed system)         Remove deadend and fully cut pipework back to the live pipe           Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF         Deadend to the pipework (Unknown if this is on hot, cold or closed system)         Remove deadend and fully cut pipework back to the live pipe           Morriston Hospital Main Block 3 (Plant Room 5) - Blocks ED / AR / AC / GF			
Morriston Hospital Main Block 1 (Plant Room 1) - Blocks AZ / AG / AF / AE / AD / AT / AY / AL / AM       Deadend to the pipework (greater than 6 times the pipe diameter). 3 x 15cm deadends       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 1 (Plant Room 1) - Blocks AZ / AG / AF / AE / AD / AT / AY / AL / AM       Pool plant for disused pool is still present. It was unclear if or where pipework is isolated. Ensure that no deadend remain.       Cutback any pipework to live source ensuring no deadends remain.         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (unknown pipework approx 3m seen before not yAD       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (Unknown pipework approx 3m seen before not yAD       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (greater than 6 times the pipe diameter)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (Unknown if this is on hot, cold or closed system)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / SC / BB / BD / BH       Deadend to the pipework (on DHW and DCW pipe work aprox 30cm)       Remove deadend and fully cut pipework back to the live pipe<			Olean and disinfect tends
Room 1) - Blocks AZ / AG / AF / AE / AD / AT / AY / AL / AM       Deadend to the pipework (greater than 6 times the pipe diameter). 3 AD / AT / AY / AL / AM       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 1 (Plant Room 1) - Blocks AZ / AG / AF / AE / AD / AT / AY / AL / AM       Pool plant for disused pool is still present. It was unclear if or where pipework is isolated. Ensure that no deadend remain.       Cutback any pipework to live source ensuring no deadends remain.         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (approx 20cm below the right hand side basin)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (Unknown pipework approx 3m seen before it disappears into wall)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (greater than 6 times the pipe diameter)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (unknown if this is on hot, cold or closed system)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 3 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (on DHW and DCW pipe work aprox 30cm)       Remove deadend and fully cut pipework back to the live pipe		Sediment to base of tank	Clean and disinfect tank
AD / AT / AY / AL / AM       x 15cm deadends       live pipe         Morriston Hospital Main Block 1 (Plant Room 1) - Blocks AZ / AG / AF / AE /       Pool plant for disused pool is still present. It was unclear if or where pipework is isolated. Ensure that no deadend remain.       Cutback any pipework to live source ensuring no deadends remain.         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (approx 20cm below the right hand side basin)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (Unknown pipework approx 3m seen before it disappears into wall)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (greater than 6 times the pipe diameter)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (Unknown if this is on hot, cold or closed system)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (unknown if this is on hot, cold or closed system)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA /       Deadend to the pipework (on DHW and DCW pipe work aprox 30cm)       Remove deadend and fully cut pipework b			Demonstration devidend fully such a second to the second second
Morriston Hospital Main Block 1 (Plant Room 1) - Blocks AZ / AG / AF / AE / AD / AT / AY / AL / AM       Pool plant for disused pool is still present. It was unclear if or where pipework is isolated. Ensure that no deadend remain.       Cutback any pipework to live source ensuring no deadends remain.         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (approx 20cm below the right hand side basin)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (Unknown pipework approx 3m seen before only AD       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (greater than 6 times the pipe diameter)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (greater than 6 times the pipe diameter)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (Unknown if this is on hot, cold or closed system)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / BC / BB / DJ / BH       Deadend to the pipework (on DHW and DCW pipe work aprox 30cm)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 3 (Plant Room			
Room 1) - Blocks AZ / AG / AF / AE /       Pool plant for disused pool is still present. It was unclear if or where pipework to live source ensuring no deadends remain.       Cutback any pipework to live source ensuring no deadends remain.         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (approx 20cm below the right hand side basin)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (unknown pipework approx 3m seen before it disappears into wall)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (greater than 6 times the pipe diameter)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (Unknown if this is on hot, cold or closed system)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks AN / AP / BF / BA /       Deadend to the pipework (on DHW and DCW pipe work aprox 3m seen before live pipe       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 3 (Plant Room 5) - Blocks AN / AP / BF / BA /       Deadend to the pipework (on DHW and DCW pipe work aprox 3m seen before live pipe       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / A			
AD / AT / AY / AL / AM       pipework is isolated. Ensure that no deadend remain.       deadends remain.         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (approx 20cm below the right hand side basin)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (Unknown pipework approx 3m seen before it disappears into wall)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (greater than 6 times the pipe diameter)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (Unknown if this is on hot, cold or closed system)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (Unknown if this is on hot, cold or closed system)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / BC / BR / BD / BH       Deadend to the pipework (on DHW and DCW pipe work aprox 30cm)       Remove deadend and fully cut pipework back to the live pipe		Pool plant for disused pool is still present. It was unclear if or where	Cutback any pipework to live source ensuring no
Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (approx 20cm below the right hand side basin)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (Unknown pipework approx 3m seen before it disappears into wall)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (greater than 6 times the pipe diameter)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (greater than 6 times the pipe diameter)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (Unknown if this is on hot, cold or closed only AD       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 3 (Plant Room 5) - Blocks AN / AP / BF / BA / BC / BB / BD / BH       Deadend to the pipework (on DHW and DCW pipe work aprox 30cm)       Remove deadend and fully cut pipework back to the live pipe	,		
Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (approx 20cm below the right hand side basin)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (Unknown pipework approx 3m seen befor it disappears into wall)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (greater than 6 times the pipe diameter)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (greater than 6 times the pipe diameter)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (Unknown if this is on hot, cold or closed system)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / DC / BB / BD / BH       Deadend to the pipework (on DHW and DCW pipe work aprox 30cm)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA /       Deadend to the pipework (unknown source, approximately 0.5m seen       Remove deadend and fully cut pipework back to the live pipe	Morriston Hospital Main Block 2 (Plant		
Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (Unknown pipework approx 3m seen before it disappears into wall)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (greater than 6 times the pipe diameter)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (greater than 6 times the pipe diameter)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (Unknown if this is on hot, cold or closed only AD       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (On DHW and DCW pipe work aprox 30 cm)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA /       Deadend to the pipework (on DHW and DCW pipe work aprox 30 cm)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA /       Deadend to the pipework (unknown source, approximately 0.5m seen       Remove deadend and fully cut pipework back to the live pipe		Deadend to the pipework (approx 20cm below the right hand side	Remove deadend and fully cut pipework back to the
Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (Unknown pipework approx 3m seen before it disappears into wall)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (greater than 6 times the pipe diameter)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (Unknown if this is on hot, cold or closed system)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (Unknown if this is on hot, cold or closed system)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / BC / BB / BD / BH       Deadend to the pipework (on DHW and DCW pipe work aprox 30cm)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA /       Deadend to the pipework (unknown source, approximately 0.5m seen       Remove deadend and fully cut pipework back to the live pipe	only AD	basin)	live pipe
only ADit disappears into wall)It we have the transmission of the transmission of the transmission of the transmission of the pipework (greater than 6 times the pipe diameter)live pipeMorriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GFDeadend to the pipework (greater than 6 times the pipe diameter)Remove deadend and fully cut pipework back to the live pipeMorriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GFDeadend to the pipework (Unknown if this is on hot, cold or closed system)Remove deadend and fully cut pipework back to the live pipeMorriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GFDeadend to the pipework (Unknown if this is on hot, cold or closed system)Remove deadend and fully cut pipework back to the live pipeMorriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / BC / BB / BD / BHDeadend to the pipework (unknown source, approximately 0.5m seenRemove deadend and fully cut pipework back to the live pipe	Morriston Hospital Main Block 2 (Plant		
Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (greater than 6 times the pipe diameter)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (Unknown if this is on hot, cold or closed system)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only AD       Deadend to the pipework (Unknown if this is on hot, cold or closed system)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / BC / BB / BD / BH       Deadend to the pipework (on DHW and DCW pipe work aprox 30cm)       Clean outlet of scale         Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA /       Deadend to the pipework (unknown source, approximately 0.5m seen       Remove deadend and fully cut pipework back to the live pipe	,		Remove deadend and fully cut pipework back to the
Room 5) - Blocks ED / AR / AC / GF only ADDeadend to the pipework (greater than 6 times the pipe diameter)Remove deadend and fully cut pipework back to the live pipeMorriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only ADDeadend to the pipework (Unknown if this is on hot, cold or closed system)Remove deadend and fully cut pipework back to the live pipeMorriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only ADDeadend to the pipework (Unknown if this is on hot, cold or closed system)Remove deadend and fully cut pipework back to the live pipeMorriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / BC / BB / BD / BHDeadend to the pipework (unknown source, approximately 0.5m seenRemove deadend and fully cut pipework back to the live pipe		it disappears into wall)	live pipe
only ADDeadend to the pipework (greater than 6 times the pipe diameter)live pipeMorriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GFDeadend to the pipework (Unknown if this is on hot, cold or closed system)Remove deadend and fully cut pipework back to the live pipeMorriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only ADDeadend to the pipework (Unknown if this is on hot, cold or closed system)Remove deadend and fully cut pipework back to the live pipeMorriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / BC / BB / BD / BHDeadend to the pipework (on DHW and DCW pipe work aprox 30cm)Remove deadend and fully cut pipework back to the live pipeMorriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / BC / BB / BD / BHDeadend to the pipework (unknown source, approximately 0.5m seenRemove deadend and fully cut pipework back to the live pipe			
Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (Unknown if this is on hot, cold or closed system)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Deadend to the pipework (unknown if this is on hot, cold or closed system)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / BC / BB / BD / BH       Deadend to the pipework (on DHW and DCW pipe work aprox 30cm)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / BC / BB / BD / BH       Deadend to the pipework (unknown source, approximately 0.5m seen       Remove deadend and fully cut pipework back to the	,		
Room 5) - Blocks ED / AR / AC / GFDeadend to the pipework (Unknown if this is on hot, cold or closed system)Remove deadend and fully cut pipework back to the live pipeMorriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GFExcessive scale noted to shower headClean outlet of scaleMorriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / BC / BB / BD / BHDeadend to the pipework (on DHW and DCW pipe work aprox 30cm)Remove deadend and fully cut pipework back to the live pipeMorriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / Deadend to the pipework (unknown source, approximately 0.5m seenRemove deadend and fully cut pipework back to the live pipe		Deadend to the pipework (greater than 6 times the pipe diameter)	live pipe
only ADsystem)live pipeMorriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF only ADExcessive scale noted to shower headClean outlet of scaleMorriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / BC / BB / BD / BHDeadend to the pipework (on DHW and DCW pipe work aprox 30cm)Remove deadend and fully cut pipework back to the live pipeMorriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / BC / BB / BD / BHDeadend to the pipework (unknown source, approximately 0.5m seenRemove deadend and fully cut pipework back to the			
Morriston Hospital Main Block 2 (Plant Room 5) - Blocks ED / AR / AC / GF       Excessive scale noted to shower head       Clean outlet of scale         Only AD       Excessive scale noted to shower head       Clean outlet of scale         Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / BC / BB / BD / BH       Deadend to the pipework (on DHW and DCW pipe work aprox 30cm)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA /       Deadend to the pipework (unknown source, approximately 0.5m seen       Remove deadend and fully cut pipework back to the			
Room 5) - Blocks ED / AR / AC / GF only ADExcessive scale noted to shower headClean outlet of scaleMorriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / BC / BB / BD / BHDeadend to the pipework (on DHW and DCW pipe work aprox 30cm)Remove deadend and fully cut pipework back to the live pipeMorriston Hospital Main Block 3 (Plant BC / BB / BD / BHDeadend to the pipework (unknown source, approximately 0.5m seenRemove deadend and fully cut pipework back to the		system)	live pipe
only ADExcessive scale noted to shower headClean outlet of scaleMorriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / BC / BB / BD / BHDeadend to the pipework (on DHW and DCW pipe work aprox 30cm)Remove deadend and fully cut pipework back to the live pipeMorriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA /Deadend to the pipework (unknown source, approximately 0.5m seenRemove deadend and fully cut pipework back to the			
Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / BC / BB / BD / BH       Deadend to the pipework (on DHW and DCW pipe work aprox 30cm)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA /       Deadend to the pipework (unknown source, approximately 0.5m seen       Remove deadend and fully cut pipework back to the		Evenesive apple noted to shower head	Clean outlet of apple
Room 7) - Blocks AN / AP / BF / BA /       Deadend to the pipework (on DHW and DCW pipe work aprox 30cm)       Remove deadend and fully cut pipework back to the live pipe         Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA /       Deadend to the pipework (unknown source, approximately 0.5m seen       Remove deadend and fully cut pipework back to the			
BC / BB / BD / BH       30cm       live pipe         Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA /       Deadend to the pipework (unknown source, approximately 0.5m seen       Remove deadend and fully cut pipework back to the		Deadend to the ninework (on DHW and DCW nine work aprox	Remove deadend and fully cut ninework back to the
Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / Deadend to the pipework (unknown source, approximately 0.5m seen Remove deadend and fully cut pipework back to the			
Room 7) - Blocks AN / AP / BF / BA / Deadend to the pipework (unknown source, approximately 0.5m seen Remove deadend and fully cut pipework back to the			
		Deadend to the ninework (unknown source, approximately 0.5m seen	Remove deadend and fully cut ninework back to the
	BC / BB / BD / BH	length)	live pipe

Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / BC / BB / BD / BH	Deadend to the pipework (Unknown source, assumed on DCW and DHW, approximately 0.8m in length)	Remove deadend and fully cut pipework back to the live pipe
Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / BC / BB / BD / BH	Deadend to the pipework (1m on DHW)	Remove deadend and fully cut pipework back to the live pipe
Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / BC / BB / BD / BH	Deadend to the pipework (Unknown source, approx. 0.1m seen length)	Remove deadend and fully cut pipework back to the live pipe
Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / BC / BB / BD / BH	Deadend to the pipework (On mains water feed before entering two Cold Water Storage Tanks. Approximately 5m in length)	Remove deadend and fully cut pipework back to the live pipe
Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / BC / BB / BD / BH	Deadend to the pipework (Under WHB on far side of room)	Remove deadend and fully cut pipework back to the live pipe
Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / BC / BB / BD / BH	Deadend to the pipework (DCW pipework approx. 1m)	Remove deadend and fully cut pipework back to the live pipe
Morriston Hospital Main Block 3 (Plant Room 7) - Blocks AN / AP / BF / BA / BC / BB / BD / BH	Deadend to the pipework (three deadend pipes, two on DHW and one on DCW. Approximately 0.5m in length.)	Remove deadend and fully cut pipework back to the live pipe
Morriston Hospital Medical Records - Block GR	Deadend to the pipework (greater than 6 times the pipe diameter)	Remove deadend and fully cut pipework back to the live pipe
Morriston Hospital Medical Records - Block GR	Scale noted to shower head	Clean outlet of scale
Morriston Hospital Office Accommodation - Blocks HS / HT / HU	Deadends to the pipework in each old Boiler Cupboard in each block(greater than 6 times the pipe diameter)	Confirm if live and remove deadends then fully cut pipework back to the live pipes
Morriston Hospital Outpatients - Block HVS	Deadend to the pipework (greater than 6 times the pipe diameter) Approx. 3m on unknown pipework	Remove deadend and fully cut pipework back to the live pipe
Morriston Hospital Pathology - Block AQ	Deadends to the pipework (greater than 6 times the pipe diameter)	Remove deadends and fully cut pipework back to the live pipe
Morriston Hospital Pathology - Block AQ	Deadend to the pipework (greater than 6 times the pipe diameter)	Remove deadend and fully cut pipework back to the live pipe

Morriston Hospital Pathology - Block AQ	Tank is drained leaving deadlegs on mains supply (4m) and outlet (2m).	Fully cut pipework back to source, flush outlets weekly or re-introduce tank
Morriston Hospital Renal Annexe - Block BJ	The DHW Return in the kitchen is valved off resulting in the return temp being 23°C and the pipework acting as a deadleg	All return legs should be open to allow circulation
Singleton Hospital Boiler House	Deadend to the pipework (approximately 2 metres).	Remove deadend and fully cut pipework back to the live pipe
Singleton Hospital Boiler House	Deadend to the pipework (approximately 100 mm)	Remove deadend and fully cut pipework back to the live pipe
Singleton Hospital Central Ward - East - Block 17	Deadend to the pipework (2 x circa 400mm)	Remove deadend and fully cut pipework back to the live pipe
Singleton Hospital Central Ward - East - Block 17	Deadend to the pipework (2 x circa 500mm in total; 1 to hot and 1 to cold pipework)	Remove deadend and fully cut pipework back to the live pipe
Singleton Hospital Central Ward - East - Block 17	Deadend to the pipework (Circa 400mm)	Remove deadend and fully cut pipework back to the live pipe
Singleton Hospital Central Ward - East - Block 17	Deadend to the pipework (Circa 200mm)	Remove deadend and fully cut pipework back to the live pipe
Singleton Hospital Central Ward - West - Block 35	Deadend to the pipework (approx. 0.2 meters in length each)	Remove deadend and fully cut pipework back to the live pipe
Singleton Hospital Central Ward - West - Block 36	Deadend to the pipework (Approx 0.1 metre of visible deadend pipework)	Remove deadend and fully cut pipework back to the live pipe
Singleton Hospital Chemotherapy / Breast Care / Cancer Institute - Blocks 4 / 5 / 6	High level of deposits, light slime and heavy corrosion e present within the tank	Clean and disinfect tank and check turnover (capacity should approximate to one day's use). Treat rust an line tank. Alternatively, replace tank which may be more economical.
Singleton Hospital Chemotherapy / Breast Care / Cancer Institute - Blocks 4 / 5 / 6	Flow temperature was below 60°C	Increase storage temperature to achieve 60°C on flow
Singleton Hospital Chemotherapy / Breast Care / Cancer Institute - Blocks 4 / 5 / 6	Flow temperature was below 60°C	Increase storage temperature to achieve 60°C on flow

Singleton Hospital Chemotherapy / Breast Care / Cancer Institute - Blocks 4 / 5 / 6	Deadend to the pipework (on common flow pipework approximately 0.75m)	Remove deadend and fully cut pipework back to the live pipe
Singleton Hospital Chemotherapy / Breast Care / Cancer Institute - Blocks 4 / 5 / 6	Deadend to the pipework (On unknown pipework, approximately 45cm)	Remove deadend and fully cut pipework back to the live pipe
Singleton Hospital Day Surgery - Block	Flow temperature was below 60°C	Increase storage temperature to achieve 60°C on flow
Singleton Hospital Estates - Block 7	No suitable access to inspect tank internals	Ensure that the Cold Water Storage Tank can be accessed internally.
Singleton Hospital Oncology / Radiotherapy - Blocks 15 / 16	Flow temperature was below 60°C	Increase storage temperature to achieve 60°C on flow
Singleton Hospital Oncology / Radiotherapy - Blocks 15 / 16	Flow temperature was below 60°C	Increase storage temperature to achieve 60°C on flow
Singleton Hospital Oncology / Radiotherapy - Blocks 15 / 16	Deadend to the pipework (2 x old feeds to old sinks)	Remove deadend and fully cut pipework back to the live pipe
Singleton Hospital Pathology - Block 12	Deadend to the pipework (greater than 6 times the pipe diameter) <i>Approx. 3.5m each on unknown pipework</i>	Remove deadend and fully cut pipework back to the live pipe
Singleton Hospital Pathology - Block 12	Deadend to the pipework (greater than 6 times the pipe diameter) 3x Approx. 1.5m, 1x Approx. 0.3m and 1xApprox 0.5m on both domestic cold water and domestic hot water pipework	Remove deadend and fully cut pipework back to the live pipe
Singleton Hospital Pathology - Block 12	Low calorifier return temperature (<55°C)	Increase stored water temperature to achieve 55°C from the return
Singleton Hospital Pathology - Block 12	Low calorifier return temperature (<55°C)	Increase stored water temperature to achieve 55°C from the return
Singleton Hospital Rehabilitation - Block 20	Deadend to the pipework (Approx 0.5m on DHW, behind washing machine)	Remove deadend and fully cut pipework back to the live pipe
Singleton Hospital Theatres	Deadend to the pipework (greater than 6 times the pipe diameter)	Remove deadend and fully cut pipework back to the live pipe

Singleton Hospital Theatres	Scale noted to shower head	Clean outlet of scale
Singleton Hospital West Ward - Annexe - Block 8	Two vertical deadends of approx 20cm in visible length were present where toilets have been removed. Cut pipework back to the live source to prevent stagnation.	Remove deadend and fully cut pipework back to the live pipe
Singleton Hospital West Ward - Blocks 9 / 10 / 11	Deadend to the pipework (Approx 1.5m visible deadend on presumed mains and tank pipework descending from ceiling)	Remove deadend and fully cut pipework back to the live pipe
Singleton Hospital West Ward - Blocks 9 / 10 / 11	Deadend to the pipework (Approx 1m visible on DHW Return)	Remove deadend and fully cut pipework back to the live pipe
Singleton Hospital Western Residences	Deadend to the pipework (Approx.30cm from cut back shower)	Remove deadend and fully cut pipework back to the live pipe
Singleton Hospital Western Residences	Deadend to the pipework (Approx. 1x30cm , Approx. 1x50cm both on domestic cold water pipework)	Remove deadend and fully cut pipework back to the live pipe
Cefn Coed Energy Centre	Deadend to the pipework (greater than 6 times the pipe diameter) Approx. 600-1800mm on circa secondary return pipework to the secondary pipework to the redundant calorifier	Remove deadend and fully cut pipework back to the live pipe
Morriston Accommodation Houses 1 to 47	Flow temperature was below 60°C	Increase storage temperature to achieve 60°C on flow