

SCOTTISH HOSPITALS INQUIRY

Hearing commencing 26 February 2024 Bundle 5 – Documentation relating to Commissioning and Testing Prior to the Instruction of IOM

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The terms of that Restriction Order are published on the Inquiry website.

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From: Henderson C (Calum)
Sent: 23 September 2019 12:01
To: Cabinet Secretary for Health and Sport
Cc: [REDACTED]
Subject: Weekend information request from Cabinet Secretary regarding Ventilation
Attachments: Letters and responses on built environment.zip; NHSL Letters as Discussed
Follow Up Flag: Follow up
Flag Status: Completed

Andy

Please find responses to the questions the Cabinet Secretary raised over the weekend

Regards

Calum

1. What does the evidence actually say – the evidence covers a wide range of the topics, but is well captured in the letter from the convener to the Cabinet Secretary noted below.

On ventilation specifically, anonymous submission A2, says 'Inadequate ventilation systems have been installed in new build hospitals; these are not fit for purpose for the specialist patient groups they are intended for, e.g. bone marrow transplant and haematology wards. The systems did not supply sufficient air changes, pressures and HEPA filtration.'

As detailed under question 5, DG wrote to all boards in January 2019, asking them to confirm that all critical ventilation systems inspected and maintained in line with the SHTM 03-01. As the Cabinet Secretary is aware, SHTM 03-01 specifies the number of air changes required for different areas. All Boards responded to HFS (see attached) confirming that they were in compliance.

2. Did committee write to me highlighting this or any other matter and when – Yes, this was received on 2 May 2019 –

https://www.parliament.scot/S5_HealthandSportCommittee/Inquiries/20190502_Ltr_OUT_to_CabSecHS_HHHE_FINAL.pdf

Within this letter the H&SC draw attention to the above wording from A2 and then ask: 'Will the Scottish Government undertake a review of recently built facilities to assess their compliance with the appropriate installation, maintenance, decontamination and monitoring of vital systems?' and 'Will the Scottish Government also undertake a review to ensure all high risk clinical areas, in both new and existing facilities, have the appropriate equipment for minimising infection?'

3. What did we say in response -

https://www.parliament.scot/S5_HealthandSportCommittee/Inquiries/20190514_Ltr_IN_CabSecHS_Health_Hazard_s.pdf. This response reflected input from both HFS and HPS in addition to CNO and Health Finance.

On ventilation specifically, we responded to HSC with the following:

Q17. Do you believe employing a team of authorising engineers [to manage water and ventilation systems] at a national level will improve access to this expertise for individual NHS boards, reduce risk and be more cost effective?

Yes and this is the policy which HFS implement.

Q18. Will the Scottish Government undertake a review of recently built facilities to assess their compliance with the appropriate installation, maintenance, decontamination and monitoring of vital systems?

A. HFS work with boards that have recently completed major capital projects to ensure compliance with relevant guidance.

Q19. Will the Scottish Government also undertake a review to ensure all high risk clinical areas, in both new and existing facilities, have the appropriate equipment for minimising infection?

A. NHS boards are responsible for ensuring that they have the appropriate equipment for minimising infection, as they are best placed to determine what equipment is required.

In our response to Q8, we made reference to the work to consider broader compliance and governance structures.

Q8. Do you believe consideration should be given to greater monitoring by external bodies of NHS boards usage of HAISCRIBE, SCART and other risk assessment processes or do you believe the current process enables issues to be identified and where required improved?

NHS boards should have appropriate control processes in place for these issues to be addressed, however, as detailed above, active consideration is currently being given to broader compliance and governance structures.

4. Detail of every communication we have had with NHSL seeking assurances and their response – see attached which includes the following:

- RHCYP.PDF – Original letter sent by HFS to NHS Lothian seeking and requesting assurance documents on **8 March 2019**.
- 010419L1 HFS...PDF – Response from NHS Lothian (Additional info was also provided on Disk) on **1 April 2019**
- Susan Goldsmith...PDF – Letter issued last week (With Appendix 1...PDF) seeking information as well as question set on **16 July 2019**.

In essence, even before the current problems with the ventilation systems were known, in March HFS requested information from NHS Lothian on a broad range of engineering compliance issues (which covered nine main areas including ventilation, water, electrical, drainage, fire etc). While NHS Lothian confirmed that the engineering systems were in compliance, HFS thought there were a lot of assertions and were looking to gather more evidence to support the position that NHS Lothian were reporting. The issues at QEUH earlier this year became the focus of HFS during the first half of the year, so that evidence gathering had not progressed as quickly as we would want given the current position.

The return in April included a letter from IHSL (page 19 of the attachment) which confirmed compliance on a wide range of issues with the **project agreement** (my emphasis ie project agreement not national standards/guidance). As the project agreement is contractual what IHSL was required to provide, it is not surprising, but there may be a focus on the distinction.

5. Detail of every communication we have had with all boards since Jan seeking assurances on any building related matter and the response –

- In January 2019, DG wrote to all Boards seeking assurances on plant rooms and ventilation systems. All Boards responded to HFS (see attached) confirming that they were in compliance.

- On 8 March 2019, Board Chief Executives were asked to ensure that all relevant aspects of the Requirements and Recommendations contained in the QEUH report were implemented in their Boards as standard practice. The DG letter and NHSL response are attached above.
- On 12 March, Malcolm Wright and CNO held a Teleconference with Board CEOs - the meeting discussed DG's letter of 8 March, covering safety and cleanliness and the built environment.
- In June 2019, CNO wrote to Board CEOs and Chairs to reemphasise the importance of high standards of building cleanliness, including plant rooms and an instruction to advise of compliance with the guidance.

6. When will NSS complete work re Dumfries and Orkney and on fire etc for Edinburgh sick kids – Fire report is expected by Friday 11 October. No timeline for the D&G and Orkney work yet, but I expect HFS to provide a timeline and also what other projects will be included in their review once they are finished at the Sick Kids.



██████████
██████████

NHS Chief Executives

Copy to Directors of Estates

25 January 2019

Dear Colleague

Queen Elizabeth University Hospital – follow up actions

This letter sets out actions following the meeting of the Strategic Facilities Group on Wednesday 23 January. There are a number of controls that I would like you to confirm are in place and working effectively:

- All plant rooms must be secure and have adequate access controls in place at all times;
- All plant rooms maintained clean and free of vermin;
- Standard Operating Procedures for the management of plant rooms are in place and being followed;
- All critical ventilation systems inspected and maintained in line with 'Scottish Health Technical Memorandum 03-01: Ventilation for healthcare premises'.

I have asked Health Facilities Scotland to co-ordinate the responses and would ask that you reply to ██████████ copied to ██████████ by Friday 1 February.

In addition to these control measures, the Strategic Facilities Group has undertaken to share best practice on relevant Standard Operating Procedures and anti-pest management. The Ventilation Group, which reports direct to the Scottish Engineering and Technology Advisory Group (SETAG), is also considering urgently whether SHTM 03-01 needs to be revised and updated in view of recent developments. I will ensure that you are kept in touch with any changes to that.

Yours sincerely

██████████

Paul Gray

Director-General Health & Social Care and
Chief Executive NHSScotland
Malcolm Wright



Scottish Government
Riaghaltas na h-Alba
gov.scot

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E: dghsc@gov.scot

NHS Board Chief Executives

Copy : NHS Board Chairs

8 March 2019

Dear Colleagues

Healthcare Improvement Scotland Unannounced Inspection Report – Safety and Cleanliness of Hospitals: Queen Elizabeth University Hospital

Implementation of relevant aspects of the report's Requirements and Recommendations in all NHSScotland Boards

I am writing to make you aware that Healthcare Improvement Scotland is today publishing the [report](#) of the Healthcare Environment Inspectorate Unannounced Inspection of the Queen Elizabeth University Hospital, which took place on 29-31 January 2019.

I would like to seek confirmation from Board Chief Executives that all relevant aspects of the Requirements and Recommendations contained in that report are implemented in your Boards as standard practice. I should be grateful for confirmation to be submitted in writing to Fraser Judge, [REDACTED], by 15 March 2019, and also confirmation that this will be taken through your Board's Clinical Governance Committee in early course.

Yours sincerely

[REDACTED]

Malcolm Wright
Director General for Health & Social Care and Chief Executive of NHSScotland

NHS LOTHIAN

Assessment of Position against Recommendations and Requirements Contained in the Healthcare Environment Inspectorate Report on the Queen Elizabeth University Hospital.

Requirement	NHS Lothian Position
<p>Requirement 1 NHS Greater Glasgow and Clyde must improve the governance arrangements in both estates and infection prevention control teams to assure themselves of safe patient care in line with Scottish Government's guidance, <i>NHS Scotland Health Boards and Special Health Boards – Blueprint for Good Governance</i> (2019) (see page 10).</p>	<ul style="list-style-type: none"> • There are links through Pan Lothian Infection Control Committee and Domestic Managers & Infection Prevention Control Managers forum – both are quarterly meetings. In addition Facilities have representation on Lothian Infection Control Advisory Committee. • There are local site based infection control committees and the Health and Social Care Partnership & Royal Edinburgh Hospital Infection Control Committee that report into the Pan Lothian Infection Control Committee. • Areas we wish to increase governance in are the sharing of information at the more operational level. The Infection Control team are developing HAI Dashboards in Tableaux. • Work is in progress to develop a facilities services intranet resource to share Standard Operating Procedures and Guidance
<p>Requirement 2 Boards must ensure functioning negative pressure isolation rooms are available in the hospital in line with Healthcare Facilities Scotland, Scottish Health Planning Note 04. (a) Where these are not available, staff are provided with clear guidance on how to manage a situation where a patient would require this type of isolation. 8.1 and 6.5 priority 1 (b) Staff in ID will be reminded of facilities available for admission of patients with infectious diseases of high consequence</p>	<ul style="list-style-type: none"> • We have mechanical ventilation that provides isolation rooms in a number of hospitals, including sites under the control of Pfl partners and Estates. They are following relevant guidance to ensure functionality. • We are reviewing all our arrangements for negative pressure systems and Estates are developing a comprehensive register and template of rooms and a system by which information can be shared with relevant stakeholders and therefore checks can be interrogated more robustly.
<p>Requirement 3 NHS Greater Glasgow and Clyde must ensure all staff involved in the running of water are clearly informed of their roles and responsibilities in this and a clear and accurate record is kept to allow early identification of any water</p>	<ul style="list-style-type: none"> • Domestic staff undertake daily flushing, this should significantly reduce risk associate with concern around infrequently used outlets, the process however is under review to ensure practice is undertaken in a consistent manner.

outlets that are not being run	<ul style="list-style-type: none"> Facilities and ICN have undertaken an evaluation of the proposed draft on pseudomonas A. Testing and has developed an SBar including evaluation of costs. It has done sampling in a number of sites, and would recommend its introduction for vulnerable client groups.
<p>Requirement 4 NHS Greater Glasgow and Clyde must ensure all clinical areas across comply with the current national guidance in relation to the use of bladeless fans</p>	<ul style="list-style-type: none"> HPS information was circulated – advice was given to remove bladeless fans. These should only be used in exceptional circumstances subject to documented local risk assessment. There is work ongoing to make the local risk assessments more robust.
<p>Requirement 5 NHS Greater Glasgow and Clyde must ensure that information on the expressed breast milk recording charts is in line with national guidance. This will ensure that the storage of expressed breast milk is managed in a way that reduces the risk to patients.</p>	<ul style="list-style-type: none"> No significant issues identified in relation to this in Lothian. There is an SOP for Expressed Breast Milk which is due for review in June 2019. Communication will be reinforced on release of updated SOP.
<p>Requirement 6 Is there a strategy that ensures the environment in the emergency department is clean and patient equipment is clean and ready for use to ensure infection prevention and control can be maintained?</p>	<ul style="list-style-type: none"> There will be challenges in addressing some of the findings of the reports- based on footfall in ED, the diversity of a challenging patient (and public) population who access ED. We will review domestic resources and as appropriate increase frequencies of cleaning (floors, public toilets, and hand gel dispensers). NHS Lothian Cleaning matrix is under review with and options appraisal see requirement 7.
<p>Requirement 7 NHS Greater Glasgow and Clyde must ensure the patient environment, and patient equipment, is clean and ready for use to reduce the risk of cross infection</p>	<ul style="list-style-type: none"> A short life working group (led by Lead IPCN) developed an options appraisal paper for NHS Lothian to consider how nursing time might be released to care, and how equipment cleaning activity might be more effectively achieved. The final options appraisal is due to go to April Directors of Nursing Group for consideration. Additional domestic resource is one of the options for consideration in this paper. Additional resource implications for domestic services for the new RHSC and DCN building have been considered- additional staff hours

	have been made available.
<p>Requirement 8 The board must ensure that domestic cleaning schedules are signed as complete by domestic supervisors with evidence and satisfaction that the domestic cleaning has been completed as detailed within the cleaning schedule</p>	<ul style="list-style-type: none"> • There is a schedule and protocol presented and signed of by the supervisor. For assurance purposes Facilities will undertake an audit for compliance.
<p>Requirement 9 The board must ensure domestic staff have the necessary equipment to perform their cleaning duties, to keep the environment clean and safe</p>	<ul style="list-style-type: none"> • Processes are in place to ensure domestic services have a good compliment of resources to carry out there duties.
<p>Requirement 10 NHS Greater Glasgow and Clyde must provide staff with suitable and functioning domestic services rooms to minimise the risk of cross contamination from the disposal of soiled water after cleaning regime</p>	<ul style="list-style-type: none"> • Some buildings have DSR which are sub optimal due to the age and lay out of the building (e.g. WGH, RHSC) – there is limited scope to improve this. • However no issues identified to IPCT in Lothian but as a precaution facilities will carry out ‘toolbox talks’ for domestics re disposal of soiled water.
<p>Requirement 11 The board senior management must ensure all staff are aware of the correct cleaning method for cleaning hand wash basins and that the correct cleaning products are used to clean all sanitary fittings in line with current national guidance</p>	<ul style="list-style-type: none"> • Routine use of chlorine 1000ppm av chlorine has been explicitly communicated by IPCT and Domestic services managers. • However it has been an issue that has been identified by HEI Inspectorate during visits to Acute hospitals in NHS Lothian • As a result of HEI reports NHS Lothian undertook ‘Tool box’ talks with staff. These will continue to reinforce/refresh this message to domestics
<p>Requirement 12 The board must ensure that the built environment is effectively monitored to ensure it is maintained to allow effective cleaning to ensure effective infection prevention and control</p>	<ul style="list-style-type: none"> • A mixed methods approach is used – paper based records, ward diaries, domestics and estates electronic reporting system. • There is currently no electronic interface between estates electronic log for issues and the National Facilities Monitoring Tool Framework. Estates are working with clinical teams to streamline the process for

	a more robust electronic maintenance management system.
<p>Requirement 13 The Board must ensure the estates reporting system is reliable and effective and acted on. Staff should also be informed of timescales for completion.</p>	<ul style="list-style-type: none"> As part of governance review NHS Lothian will address compliance with reporting systems and reporting back to staff works completions.
<p>Requirement 14 The board must ensure that ventilation panels are cleaned</p>	<ul style="list-style-type: none"> NHS Lothian has a monitoring schedule in place but we acknowledge this does not in itself give assurance. Access can also be an issue as many are in close proximity to occupied beds. NHS Lothian will work to improve this.
<p>Recommendation a NHS Greater Glasgow and Clyde should ensure that access to audit information is not person dependent to ensure the continuity of the audit programme</p>	<ul style="list-style-type: none"> The IPCT have undertaken a review of the audit programme – the revised programme specifically does NOT include reporting of aggregated scores and more clearly highlights areas of non compliance of highest risk. The IPC audit also reports individual rather than aggregated data. Audits are reported through an electronic system which is accessible to the clinical teams.



[REDACTED]
[REDACTED]

NHS Board Chief Executives

Copy : NHS Board Chairs

6 June 2019

Dear Colleagues

Safety and Cleanliness of Hospitals: Managing the Risk of Contamination of Ventilation Systems by Fungi from Bird Droppings

On 21 December 2018, Health Protection Scotland informed the Scottish Government of two cases of *Cryptococcus neoformans* in the Queen Elizabeth University Hospital, NHS Greater Glasgow and Clyde.

This outbreak was one of the issues that led to the establishment of an Independent Review of the Queen Elizabeth University Hospital, commissioned by Jeane Freeman MSP, Cabinet Secretary for Health and Sport, in January 2019. In March 2019, NSS Health Facilities Scotland issued interim guidance to all health boards on 'Managing the Risk of Contamination of Ventilation Systems by Fungi from Bird Droppings', which is attached.

On 2 June 2019, The Sun on Sunday published an article and pictures of a plant room at Gartnavel Hospital, NHS Greater Glasgow and Clyde, which was found to be covered in pigeon droppings.

I would like to re-emphasise to you all that adhering to the highest standards of building cleanliness, including in plant rooms, is a required action. Please note and confirm you are complying with the guidance by replying to [REDACTED] by 21 June 2019. If this deadline presents problems, I would be grateful if you could contact that address.

Fiona McQueen

Lothian NHS Board

Waverley Gate
2-4 Waterloo Place
Edinburgh
EH1 3EG



Telephone

www.nhslothian.scot.nhs.uk

Sent by email to Alan Morrison
Ms Fiona McQueen
Chief Nursing Officer Directorate
Scottish Government
St Andrew's House
Regent Road
EDINBURGH EH1 3DG.

Date 4 July 2019
Your Ref
Our Ref GC/BD/KAB

Enquiries to: [Redacted]
Extension [Redacted]
Direct Line [Redacted]
Email [Redacted]

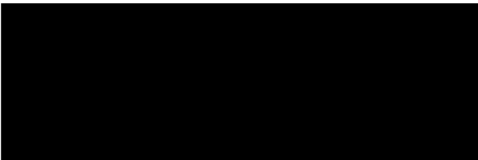
Dear Ms McQueen

SAFETY AND CLEANLINESS OF HOSPITALS : MANAGING THE RISK OF CONTAMINATION OF VENTILATION SYSTEMS BY FUNGI FROM BIRD DROPPINGS

Further to your letter of of 6 June, NHS Lothian's response is as follows:

We are complying with the "bird dropping" guidance and have setup a Ventilation Assurance Group with a more generic scope to monitor operational management and performance verification of our systems – first meeting scheduled for 4th July 2019. This group supplements existing annual audits carried out by our Authorising Engineer (Ventilation) as per Scottish Health Memorandum (SHTM) 03-01 Part B - Ventilation for healthcare premises.

Yours sincerely



GEORGE CURLEY
Director of Operations - Facilities



Headquarters
Waverley Gate
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Edinburgh EH1 3EG

Chair Brian G. Houston
Chief Executive Tim Davison

Lothian NHS Board is the common name of Lothian Health Board

From: JAMES, Gordon (NHS NATIONAL SERVICES SCOTLAND) [REDACTED]
Sent: 23 July 2019 08:40
To: Morrison A (Alan)
Subject: NHSL Letters as Discussed
Attachments: RHCYP.PDF; Susan Goldsmith - NHSL RHCYP 16th July 2019 v.1.pdf; Appendix 1 - RHCYP Phase 1 Review Question Set.pdf; 010419L1 HFS ~ RHSC & DCN Project.pdf

Alan,

Attached are the following letters as discussed:

RHCYP.PDF – Original letter sent by HFS to NHS Lothian seeking and requesting assurance documents.

010419L1 HFS...PDF – Response from NHS Lothian (Additional info was also provided on Disk)

Susan Goldsmith...PDF – Letter issued last week (With Appendix 1...PDF) seeking information as well as question set.

Thanks
Gordon.

[REDACTED]
Director of Health Facilities Scotland
Health Facilities Scotland
NHS National Services Scotland
[REDACTED]

[REDACTED]

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Mr T. Davidson
 WaverleyGate
 2-4 Waterloo Place
 Edinburgh
 EH1 3EG

Date: 08/03/2019
 Your Ref:
 Our Ref: RHCYP, Edinburgh

Enquiries to:
 Extension:
 Direct Line:
 Email:



Dear Tim,

The Royal Hospital for Children and Young People, Edinburgh (RHCYP)

We have been learning lessons from projects over the past few years, relating to the implications for safety and efficacy of engineering systems, of failure to ensure thorough discharge of client duties in construction projects. In response to recent issues where the financial and safety issues for the service have been very significant, Scottish Government has asked that we seek assurances about the management of projects in progress and those which have been recently completed, and provide a report for the Director for Health Finance.

To ensure that the engineering services in new and refurbishment projects are safe and effective, we are seeking assurances regarding the management of these projects, with specific reference to the engineering services listed below. In addition to documentary evidence, we may seek to visit projects at various stages of construction to assess the risks and mitigating actions in collaboration with operational colleagues.

Lessons learned from recent projects:

- Water systems contaminated by bacteria during construction and not managed suitably after being filled, allowing biofilm to grow, incurring costs and management resource for the life of the system.
- Pre commissioning checks not fully carried out, recorded and handed over, allowing shortcomings to pass unchallenged.
- Commissioning of services not carried out properly leading to maintenance, energy and rectification costs over the life of the systems, equipment (thermostatic valves and taps, controls etc) not set up and set to work prior to handover.
- Safe access not provided for maintenance and replacement of services in accordance with legal requirements, entailing health and safety risks for staff and contractors over the life of the building.
- Routine maintenance not implemented, entailing deterioration of safety critical systems and health and safety risks for staff, patients and visitors, as well as increased running costs.

It has become clear that, although much of the above is the responsibility of the contractor, the management of the contractor and any supervisory contractor by the client is essential to ensure the desired quality of the completed project. It proves complex and costly, or impractical to pursue the contractor for rectification if the client role has not been adequately discharged.



Chair
 Chief Executive

Professor Elizabeth Ireland
 Colin Sinclair

NHS National Services Scotland is the common name of the Common Services Agency for the Scottish Health Service.

Can you therefore please provide evidence of:

1. How the Board sought assurance that engineering systems have been designed and are being installed and commissioned to meet current guidance and statutory requirements.
2. How the Board is assured that the project was managed on site to ensure safety, quality and compliance of the engineering systems,
3. How the Board is assured that the engineering systems are commissioned, validated and set to work to ensure safety, quality and compliance,
4. How the Board is assured that its staff and appropriate contractors are adequately trained to ensure engineering systems are managed and operated competently,
5. How the Board is assured that the systems to be handed over meet the specified requirements and are safe and effective.
6. How the Board is assured that engineering systems will be maintained and operated safely and in compliance with guidance and legal requirements.
7. How the Board is assured that the systems delivered are maintainable, minimise operating cost and maximise reliability and efficacy.
8. How the Board is assured that the records of construction and as fitted documents are complete and stored and managed correctly.

Engineering systems include:

1. Electrical HV/LV
2. Hot and cold water services
3. Heating
4. Ventilation, including specialised ventilation in isolation rooms, theatres etc
5. Medical gas and vacuum systems
6. Pressure systems
7. Drainage
8. Fire precautions and equipment
9. Lifts and escalators

Example of evidence:

Evidence that Board Senior Engineer or other appropriate professional skilled in the area under consideration, has seen and accepted signed commissioning certificates, test results, microbiological results, as fitted drawings and operation and maintenance manuals etc.

I would be most grateful if you could provide evidence to show that the above duties have been appropriately discharged in relation to the current stage of The Royal Hospital for Children and Young People, Edinburgh (RHCYP) by 1st April 2019. If you are unable to provide the required information by this date, could you please provide what is available and advise when the remainder will be available?

Yours sincerely,



Gordon James
Director of Health Facilities Scotland

CC: Edward McLaughlan
George Curley
Iain Graham

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Susan Goldsmith
NHS Lothian
Director of Finance
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EH1 3EG

Date 16/07/2019
Your Ref
Our Ref

Enquiries to
Extension
Direct Line
Email



Dear Susan,

HFS & HPS review of the NHS Lothian Royal Hospital for Children and Young People

Further to our meeting on 11th July 2019, I can confirm that we have now agreed a commission to review the technical aspects relating to the RHCYP. The initial scope of the review will focus on the Water, Ventilation and Drainage systems as these relate to the main HAI Built Environment Risks. The review will also have a specific focus on the Clinical Neurosciences area, notwithstanding the work across the wider campus.

I have attached an initial question set in Appendix 1 and would request that this is reviewed with the necessary evidence and response submitted to [REDACTED] at [REDACTED] by close of business on Friday 19th July. I appreciate the timescale is short, but we are all working to support a successful and safe migration as quickly as possible.

The question set reflects the assurance request letter issued from Health Facilities Scotland to the Chief Executive of NHS Lothian and subsequent response by NHS Lothian on the 08 March 2019 and 01 April 2019 respectively. These questions have been further refined based on our discussion, initial site visit and learning elsewhere across the health systems.

Please do not hesitate to contact me if you have any questions.

Yours sincerely,

JIM MILLER
Director, Procurement, Commissioning & Facilities, NSS
Senior Responsible Officer RHCYP review group, NSS

Attachment: Appendix 1 – Question Set

cc: Gordon James HFS



Chair
Chief Executive

Professor Elizabeth Ireland
Colin Sinclair

NHS National Services Scotland is the common name of the Common Services Agency for the Scottish Health Service.

Health Facilities Scotland and Health Protection Scotland

Review

RHCYP Edinburgh

July 2019

Document required for review

NOTE: the focus of these initial questions are on water, ventilation, drainage and HAI.

Ref	Document	Date requested	Date received	Electronic or hard copy	Filed	Comments
1.	NHS Lothian ACR					
2.	Original contract					
3.	Any amendments to contract					
4.	Settlement agreement					
5.	HAI SCRIBE (all iterations)					
6.	Contractor MEP design proposal					
7.	Contractor M design specifications					
8.	Contractor E design specifications					
9.	Contractor P design specifications					
10.	Derogations schedule (and detail)					
11.	Contractor competency checks by NHS L					
12.	Sub-Contractor competency checks by Contractor					
13.	Design drawings (M)					
14.	Design drawings (E)					
15.	Design drawings (P)					
16.	RDD schedule					
17.	Contract instructions					
18.	Sub-contractor deviations from design (M)					

Ref	Document	Date requested	Date received	Electronic or hard copy	Filed	Comments
19.	Sub-contractor deviations from design (E)					
20.	Sub-contractor deviations from design (P)					
21.	Sub-contractor drawings (M)					
22.	Sub-contractor drawings (E)					
23.	Sub-contractor drawings (P)					
24.	Commissioning documentation (M)					
25.	Commissioning documentation (E)					
26.	Commissioning documentation (P)					
27.	Contract supervisor progress reports					
28.	Independent tester progress reports					
29.	Independent tester validation reports					
30.	Independent tester completion certificates					
31.	NHS L independent validation test certificates and supporting documentation					
32.	As installed drawings (M)					ZUTEC access?
33.	As installed drawings (E)					ZUTEC access?
34.	As installed drawings (P)					ZUTEC access?
35.	NHS L Project risk register					
36.	NHS L schedule of unresolved issues					
37.	NHS L technical advisors reports					
38.	NHS L IPC team records					
39.	Paymech (payment mechanism)					
40.	Confirmation that FM contractor has competent staff in place					
41.	Confirmation that FM contractor has AE/AP and CP in place					
42.	PPM schedules					
43.	Contractor critical care vent proposal					
44.	HAI SCRIBE associated with vent proposal					

Ref	Document	Date requested	Date received	Electronic or hard copy	Filed	Comments
45.	Unresolved snagging schedule					
46.	Schedule of known issues post completion					
47.	NHS L water management plan					
48.	Contractor water management plan					
49.	Provide comprehensive timeline of water system indicating when system was pressure tested, initially filled, dried and refilled, water treatment added, commissioning, handover and water management routines.					
50.	Test results and certificates for incoming water					
51.	Test results and certificates for water tanks					
52.	Test results and certificates for hot and cold pipe work					
53.	Test results and certificates for hot water system					
54.	Water treatment test results and certification					
55.	Contractors pre handover risk assessment					
56.	Water system handover documentation					
57.	Evidence of any issues with water system during construction or handover					
58.	Extent of flexible hose installations					
59.	Commissioning documentation for flexible hose installations					
60.	Pressure testing records					
61.	O&M instructions for water system including any recommendations for PPM					

Ref	Document	Date requested	Date received	Electronic or hard copy	Filed	Comments
62.	Specification for water services pipe work					
63.	Records of pipe work inspection during construction					
64.	NHS L initial water risk assessment					
65.	Authorising Engineer (water) initial audit with recommendations					
66.	Appointment letters for Competent Persons (water)					
67.	Appointment letters for Authorised Persons (water)					
68.	Appointment letters for Designated Person (water) Responsible Person (water) Deputy Responsible Persons (water)					
69.	Training records for all AP(W) and CP(W)					
70.	Minutes of all water safety group meetings					
71.	Results of any organisms found and water treatment to eradicate same					
72.	Cold water temperature records (system)					
73.	Hot water temperature records (system)					
74.	Tap temperature records (mixed, hot, cold)					
75.	Main filtration system PPM					
76.	Water storage tank turnover versus storage volume					
77.	Competency of company and individuals carrying out risk assessment					
78.	Details of PPM water systems					

Ref	Document	Date requested	Date received	Electronic or hard copy	Filed	Comments
79.	Details of chemical treatments on any part of the water system post hand over					
80.	Details of thermal treatments on any part of the water system post hand over					
81.	Details of testing regime (frequency, for which organisms, TVC results, organism results etc)					
82.	Details of company taking water samples, training records, methodology.					
83.	Provide details of all sanitary ware types (including taps, clinical wash hand basins and showers)					
84.	Children hospital commissioning results for taps					
85.	PPM records for taps					
86.	Drop tests for taps					
87.	Children hospital commissioning results for taps					
88.	PPM records for taps					
89.	Drop tests for taps					
90.	Children hospital commissioning results for showers					
91.	Confirm all shower hose lengths meet the requirements of SHTM 04-01 part A paragraph 9.54					
92.	PPM records for showers					
93.	Drop tests for showers					
94.	Details on all shower types					
95.	Records for shower hose and head replacements since handover					

Ref	Document	Date requested	Date received	Electronic or hard copy	Filed	Comments
96.	Design brief for requirements including dimensions					
97.	Details of what has been installed					
98.	Records of PPM					
99.	Records of any organisms found and treatment to eradicate.					
100.	Point of Use Filters Cleaning regime					
101.	Point of use Filters Replacement regime					
102.	Ventilation commissioning certification					
103.	Theatre ventilation validation certification					
104.	Details of control system and operational parameters for switching UCV theatre to conventional mode					
105.	Isolation room validation certification					
106.	AHU drawings and specifications					
107.	Air conditioning plant commissioning certification					
108.	BMS certification					
109.	Fire damper test certificates					
110.	Recent Calidus Health and Safety Report					
111.	Details of all water meters					
112.	Details of all water valves (all sizes)					
113.	Details of above ground drainage systems(s)					
114.	Details of below ground drainage system					
115.	Test certificates for above ground drainage system					
116.	Test certificates for below ground drainage					

Ref	Document	Date requested	Date received	Electronic or hard copy	Filed	Comments
117.	NHS L response to HFS "bird dropping " Guidance					
118.	Details of vermin control measures					
119.	Operational protocol to protect vulnerable patients when a helicopter is landing/taking off.					
120.	Formal training records for all NHS L and FM Contractor staff.					
121.	CDM File					
122.	Can access be provided (read only) to ZUTEC for members of HFS/HPS team					
123.	Confirm the level of involvement of NHS L Infection Control at the following stages of the project: ACR Project Agreement Side Agreement Commissioning Handover					
124.	Confirm the derogation from 100% single side rooms and confirm how the decision was arrived at.					
125.	Confirm compliance with HPS SBAR regarding flooding issue.					

From: RANKIN, Annette (NHS NATIONAL SERVICES SCOTLAND)
Sent: 05 August 2019 14:21
To: STORRAR, Ian (NHS NATIONAL SERVICES SCOTLAND)
Subject: Fwd: In confidence:FW: Infection control + Ventilation Issues from Sunday Herald Article on Glasgow QEH- RHCYP

Sensitivity: Confidential

Sent from my iPhone

Begin forwarded message:

From: "Guthrie, Lindsay" [REDACTED]
Date: 5 August 2019 at 13:14:18 BST
To: "'RANKIN, Annette (NHS NATIONAL SERVICES SCOTLAND)'"
[REDACTED]
Subject: In confidence:FW: Infection control + Ventilation Issues from Sunday Herald Article on Glasgow QEH- RHCYP

Annette

This email chain relates to a difference of opinion about the 'involvement' of IPCT in the project and hand over as part of settlement.

I had advised that IPCT had not completed the stage 4 SCRIBE at the time of settlement, or indeed at March 2019 – Fiona summarised that discussion and our position at the time. This is subsequent email trail.

Regards

Lindsay

From: Guthrie, Lindsay
Sent: 18 March 2019 09:47
To: Little, Kerryann; Inverarity, Donald
Cc: Cameron, Fiona; Sutherland, Sarah; [REDACTED]
Subject: RE: Infection control + Ventilation Issues from Sunday Herald Article on Glasgow QEH- RHCYP
Sensitivity: Confidential

Yes that will be ok for me

Lindsay

From: Little, Kerryann
Sent: 18 March 2019 09:34
To: Inverarity, Donald
Cc: Guthrie, Lindsay; Cameron, Fiona; Sutherland, Sarah; [REDACTED]
Subject: FW: Infection control + Ventilation Issues from Sunday Herald Article on Glasgow QEH- RHCYP
Importance: High
Sensitivity: Confidential

Thanks Donald

I have discussed with Alex. Alex has suggested Wednesday 20th March at 1130.

I have copied this email to Lindsay, Fiona and Sarah so they can also confirm if they can attend.

Thanks
Kal

Kerryann Little
PA to Professor Alex McMahon
Executive Director, Nursing, Midwifery and AHPs
Executive Lead for REAS and Prison Healthcare
NHS Lothian | 2 - 4 Waterloo Place | Edinburgh | EH1 3EG | Tel [REDACTED]

From: McMahon, Alex
Sent: 18 March 2019 09:28
To: Little, Kerryann
Subject: RE: Infection control + Ventilation Issues from Sunday Herald Article on Glasgow QEH-RHCYP
Sensitivity: Confidential

Could we do later on Wed? Say the afternoon?

Professor Alex McMahon
Executive Director, Nursing, Midwifery and Allied Healthcare Professionals
Executive Lead, REAS and Prison Healthcare
NHS Lothian
email: [REDACTED]
Mobile: [REDACTED]

From: Little, Kerryann
Sent: 18 March 2019 09:26
To: McMahon, Alex
Subject: FW: Infection control + Ventilation Issues from Sunday Herald Article on Glasgow QEH-RHCYP
Sensitivity: Confidential

Hi Alex

See below from Donald – Do you want me to organise this for another dates/time. Finding 2 hours in your diary soon is going to prove tricky!

Thanks
Kal

Kerryann Little
PA to Professor Alex McMahon
Executive Director, Nursing, Midwifery and AHPs
Executive Lead for REAS and Prison Healthcare
NHS Lothian | 2 - 4 Waterloo Place | Edinburgh | EH1 3EG | Tel [REDACTED]

From: Inverarity, Donald
Sent: 15 March 2019 16:03
To: Little, Kerryann
Subject: RE: Infection control + Ventilation Issues from Sunday Herald Article on Glasgow QEH-RHCYP
Sensitivity: Confidential

Hi Kal,

Probably at 9am but there is an Incident Management Team Meeting being chaired by Public Health at 11am about an issue at a community dental practice that I need to participate in and 2 hours may not be long enough for the walk round of the whole building. We would also need the input of Sarah Sutherland and Lindsay Guthrie (or deputy) from the Infection Control Nurses.

Thanks

Donald

From: Little, Kerryann
Sent: 15 March 2019 15:50
To: Inverarity, Donald
Subject: FW: Infection control + Ventilation Issues from Sunday Herald Article on Glasgow QEH-RHCYP
Sensitivity: Confidential

Hi Donald

Following on from below, would you be able to do a walk round with Alex on Wednesday 20th March @ 0900am?

Thanks

Kal

Kerryann Little

PA to Professor Alex McMahon

Executive Director, Nursing, Midwifery and AHPs

Executive Lead for REAS and Prison Healthcare

NHS Lothian | 2 - 4 Waterloo Place | Edinburgh | EH1 3EG | Tel [REDACTED]

From: McMahon, Alex
Sent: 15 March 2019 15:48
To: Little, Kerryann
Subject: Re: Infection control + Ventilation Issues from Sunday Herald Article on Glasgow QEH-RHCYP
Sensitivity: Confidential

Could we look at next Wed morning if I don't do the budget sign off?

Sent from my BlackBerry 10 smartphone on the EE network.

From: Little, Kerryann
Sent: Friday, 15 March 2019 3:41 PM
To: McMahon, Alex
Subject: RE: Infection control + Ventilation Issues from Sunday Herald Article on Glasgow QEH- RHCYP

Hi Alex

How quickly do you need this?

Thanks

Kal

Kerryann Little

PA to Professor Alex McMahon

Executive Director, Nursing, Midwifery and AHPs

Executive Lead for REAS and Prison Healthcare

NHS Lothian | 2 - 4 Waterloo Place | Edinburgh | EH1 3EG | Tel [REDACTED]

From: McMahon, Alex

Sent: 15 March 2019 15:40

To: Inverarity, Donald

Cc: Little, Kerryann

Subject: Re: Infection control + Ventilation Issues from Sunday Herald Article on Glasgow QEH- RHCYP KAL TO ORGANISE

Sensitivity: Confidential

Thank you. It's all a bit of an education for me but I agree a wak around with the 'interested ' parties would help being us all to hopefully an agreed place. Will get set up.

KAL can we pick up on Monday please.

Sent from my BlackBerry 10 smartphone on the EE network.

From: Inverarity, Donald

Sent: Friday, 15 March 2019 3:34 PM

To: McMahon, Alex

Subject: RE: Infection control + Ventilation Issues from Sunday Herald Article on Glasgow QEH- RHCYP

Dear Alex,

Thanks for letting me see this.

The pdf attachment relates primarily to the decisions around the design of the building and its ventilation. Janette Rae (Richards) was heavily involved in that planning and design process as outlined by Brian. She did often contact me for my advice when she had questions about the design or ventilation when she required another opinion and I think we all agree there was active involvement by the Infection Control team in the design and planning process.

With regards to point 2 about water quality for clarity my comment that there was no further communication had been there was no further communication after receiving the e-mail from Ronnie (which was the one I had sent you). Perhaps I could have been clearer in that email that the person best placed to answer the question, "whether the presence of Pseudomonas species is an indicator of future risk of Pseudomonas Aeuriginosa" is the Authorising Engineer for Water and not me as infection control doctor/medical microbiologist as it is a question about water and environmental microbiology and that strictly is not part of my training as a medical microbiologist. I had suggested contacting Alan Hambridge to answer that particular question as I believed he was still the NHS Lothian Authorising Engineer for Water. Alan replied to Ronnie promptly on 21st Feb to advise that he was no longer contracted by NHS Lothian to provide such advice. At that point I was no longer included in any e-mail communication regarding how this had been resolved. (Having met John Bryson at the DCN IMT on Wednesday I believe he and Westfield Caledonian were then involved.) So that is the context of the comment that there was "no further communication." It is reassuring from Brian's e-mail that corrective work seems to have currently dealt with the Legionella water contamination issues but I still don't know where in the building they occurred. I was told they were not in an augmented care area but I had been hoping for more specific information about the location(s) to be able to assess the clinical risk once the building is occupied.

Regarding point 3 about windows in the isolation rooms not being able to open. I'm very pleased if that's no longer the case but the room Ewan, Lindsay and myself were shown had a window that opened when we were there in December 2018 and it wasn't in a lobby but the actual patient room.

Regarding theatre ventilation validation Point 4. I'm glad there is an independent validation of these results although when the new theatres were commissioned at SJH in 2017 we were issued with a clear validation report that assured us all was well and functional (attached as an example of the sort of document we were hoping to receive). This is in line with SHTM 03-01 where it states the IPCT can legitimately request the validation report when a theatre is commissioned. I've pasted the relevant section from SHTM 03-01 below:

Ventilation system commissioning/validation report

8.64 Following commissioning and/or validation a full report detailing the findings should be produced. The system will only be acceptable to the client if at the time of validation it is considered fit for purpose and will only require routine maintenance in order to remain so for its projected life.

8.65 **The report shall conclude with a clear statement as to whether the ventilation system achieved or did not achieve the required standard.** A copy of the report should be lodged with the following groups:

- ~ the user department;
- ~ infection control (where required);
- ~ estates and facilities.

I've spoken with Sarah Sutherland this afternoon and both of us would welcome the opportunity to assist with a walk round as news that the commissioning was complete and the building was now accepted by NHS Lothian had been a surprise to us both.

Best wishes
Donald

From: McMahon, Alex
Sent: 15 March 2019 12:33
To: Inverarity, Donald
Subject: Fw: Infection control + Ventilation Issues from Sunday Herald Article on Glasgow QEH-RHCYP
Importance: High
Sensitivity: Confidential

Donald, just sending all for ease of communicating. Do you want to read and then we can agree how best to square the circle on getting is all agreed on our position.

Alex

Sent from my BlackBerry 10 smartphone on the EE network.

From: Goldsmith, Susan [REDACTED]
Sent: Thursday, 14 March 2019 2:40 PM
To: McMahon, Alex; Gillies, Tracey
Cc: Crombie, Jim
Subject: FW: Infection control + Ventilation Issues from Sunday Herald Article on Glasgow QEH- RHCYP

Alex/Tracey

Response from Brian, clearly some frustration (sorry!), but happy to follow up as required. As will Brian be

Susan

From: Currie, Brian [REDACTED]
Sent: 14 March 2019 13:30
To: Goldsmith, Susan [REDACTED]
Cc: Crombie, Jim [REDACTED]
Subject: RE: Infection control + Ventilation Issues from Sunday Herald Article on Glasgow QEH-RHCYP
Importance: High
Sensitivity: Confidential

Susan

Thanks for passing on further correspondence from Alex and Donald Inverarity.

I respond to various points contained in numerous recent emails as follows:

1 Infection Control involvement in the project

I reiterate my email of 12/03/19 at 8.06 and 12/03/19 at 10.09 with further clarification in yellow:

On further reading of the chain of emails from Lindsay Guthrie to Alex can we just advise that Sarah Jane Sutherland, Lead HAI Scribe Advisor, and IPCN Emma Collett last visited the project on Monday 28th January, 2019 at 9.15am.

The purpose of this visit was to reassure Sarah Jane that Janette (recently retired HAI Scribe advisor) was fully involved in the room review process and in anticipation of an imminent completion or handover of the facility. Janette was provided with the timetable for our first and second round of reviews and she chose which ones she wanted to attend. To ensure a consistent approach was taken to the reviews a checklist of what to look at was developed, which was discussed with Janette. The project team have been consistently checking that previous observations made by them have been addressed and to identify any further observations that have occurred since the 2nd room reviews through to completion.

A further meeting on 27th February with one of the project's Commissioning Managers also took place to review previous documentation signed off by Janette Richards.

However, it is accepted that given the uncertainty of the actual completion date, to almost the day before it occurred, ICPT were not involved in the actual day of completion. It is worth emphasising that patients will not occupy the facility until 9th July, 2019. It is our intention to carry out a pre handover check when all construction activity by IHSL/MPX completes in June.

We can confirm that the Board's Infection Control have been involved from the early stages in the project including competitive dialogue, evaluation of some parts of the submission; actively contributing with the clinical teams to the clinical area design development and approval process reviewing relevant specifications for items such as sanitary ware, flooring, vent coverings etc.

We have been fortunate in that there has always been a nominated IPCN for Reprovision and they have been an integral part of the process participating in key meetings and, if they could not be present at meetings, taking the opportunity to

comment on meeting outputs where required and following up on issues in consultation with project and other clinical staff.

Throughout each of the stages of the project they have provided expert advice on elements such as isolation room design and functionality, room ventilation design, and HAI Scribe.

They have also joined project team personnel in reviewing the rooms for adherence to design brief, quality of finish and functionality, (including ease of cleaning and compliance with SHTM and HEI guidance) and advised us on aspects of the building that they felt HEI inspectorate may consider during any future inspections.

2 Water Quality

Before updating you on the current water quality status on site we are at a loss to understand Donald's comment that "there was no further communication". The email attached to Donald's email is clearly a response (text in red) from our Hard FM Commissioning Manager. Indeed, we have still to receive a response to our request from Donald on whether the presence of Pseudomonas species is an indicator of future risk of Pseudomonas Aeruginosa

Current update is that all test results from latest full batch of sampling have come back clear for Legionella. Pseudomonas positives were found in 2 of 14 samples with elevated TVC counts, this from a total sample of 115. Further disinfection has taken place and the 14 elevated TVC locations will be re-sampled with results due by 20/03/19, until such times as these come back clear MPX are continuing with their responsibilities for water safety management. Further sampling will be carried out by Bouygues in the next 2 weeks once the current batch are all confirmed as clear and in addition there will be a further round of sampling at a time to be agreed prior to full operation. In the intervening period between the last two sampling exercises, Bouygues will implement a robust water management system involving flushing of little used outlets as per the positive obligation in the settlement agreement. It will be for the NHSL water safety management group to decide if this is enough reassurance as it complies with SHTM 04-01.

3 Ventilation to Isolation Rooms

All windows to isolation rooms and their lobbies are fixed pane windows (they do not open) except lobby 1-B1-033 which has been reported as a defect. I suspect Donald viewed room 1-B1-068 where works to correct an earlier identified defect were incomplete, this has now been resolved.

4 Theatre Ventilation Validation

Theatre ventilation commissioning, include cascade and UCV validation took place between October 2018 and February 2019 and all certificates and reports have been examined and verified by Arcadis as Independent Tester. These are available on the project data storage system 'Zutec'. These have however been rendered void by the agreed post completion works to enhance fire safety across the site and will be fully re tested and validated which will be witnessed by NHSL and the Independent Tester once these works are complete. In the meantime the information on the system can be reviewed by ICD and IPC at any time to ensure they meet their requirements. MPX will carry out air sampling on completion of their builders clean

and prior to NHSL equipping the area. It is assumed IPC will wish to repeat this prior to theatres becoming fully operational.

5 Sub optimal Air Exchange Rates in clinical areas

During the review of the environmental matrix it was identified that air exchange rates within the single and 4 bedded rooms did not meet the recommendations of SHTM 03-01. Risk assessments were carried out and discussed with infection control staff (sample attached). A workable solution has been implemented which includes mixed mode ventilation where natural ventilation provides the difference between 4 and 6 ac/hr.

6 Consequences of water damage event

The project's Clinical Director and a Commissioning Manager toured the Facility on 5th July, 2019 with Janette Richards, Dr Pota Kalima and MPX and the remedial and reinstatement process proposed by IHSL/MPX was accepted in addressing the departments that were affected by the water damage. Donald's recommendation, in his email of 25/07/2018 to the project's Clinical Director that a building survey using a moisture meter to assess dryness of walls should be undertaken at the appropriate time will be undertaken. We assume the outcome of such a survey would suffice in providing the reassurance being sought by Fiona. To the best of our knowledge, and we believe also the Independent Tester's, all materials and systems damaged by water have been replaced.

We hope this clarifies the communications with Infection Control to date but needless to say we would welcome a walk round by Donald and members of the IPCT at any time as suggested by Alex.

Regards

Brian

Brian Currie
Project Director - NHS Lothian
RHCYP + DCN Site Office
Little France Crescent
Edinburgh
EH16 4TJ



From: Goldsmith, Susan
Sent: 13 March 2019 17:10
To: Currie, Brian
Subject: FW: Infection control + Ventilation Issues from Sunday Herald Article on Glasgow QEH-RHCYP

Importance: High
Sensitivity: Confidential

Brian as discussed!

Thanks Susan

From: McMahon, Alex [REDACTED]
Sent: 13 March 2019 16:19
To: Crombie, Jim [REDACTED]; Goldsmith, Susan
[REDACTED]; Gillies, Tracey [REDACTED]
Cc: Inverarity, Donald [REDACTED]
Subject: FW: Infection control + Ventilation Issues from Sunday Herald Article on Glasgow QEH-RHCYP
Importance: High
Sensitivity: Confidential

All

I caught up with Donald after the DCN IMT. He said he would send me this email and I have his permission to forward on. For transparency I have copied Donald in.

The content gives me some cause for concern. Jim and Tracey can we take the opportunity to discuss this with Donald tomorrow afternoon. I know Jim you and I are meeting others at 4 but I think if we can take 5 mins just for a quick discussion that would be helpful.

In the meantime happy to take thoughts but one action we I am going to instruct is that Donald and members of the IPCT do a walk around of the whole building with the appropriate personnel.

Donald asks for sight of reports as set out below, Jim/Susan can we make these available as well.

Alex

From: Inverarity, Donald
Sent: 13 March 2019 15:37
To: McMahon, Alex
Subject: RE: Infection control + Ventilation Issues from Sunday Herald Article on Glasgow QEH-RHCYP
Sensitivity: Confidential

Dear Alex,

Following our discussion after the DCN IMT today, I'd like to raise a further issue that relates to water quality and ventilation in the new hospital site.

Please see the (confidential) e-mail dialogue attached which was sent to me by the commissioning team in the week before the building was handed over to NHS Lothian. It was highlighted that there were concerns about *Pseudomonas aeruginosa* and more concerningly *Legionella* in the water. Despite replying expressing concern particularly over the finding of *Legionella*, there was no further communication with me about the issue. I don't know where in the building this was found and I don't know what corrective action is/has been taken. Consequently it is not possible to risk assess whether there is a clinical risk to immunocompromised patients when they occupy the building without knowing if there are water issues in the clinical areas where such patients will be managed. Even if they have been addressed and corrected by the time patients are admitted later in the year, they would still count as higher risk areas that would deserve more scrutiny to ensure the level of *Legionella* remains low and would present a persisting clinical risk if in a clinical area.

I also mentioned to you the paediatric isolation rooms which are designed as positive pressure ultraclean rooms with HEPA filtered air and yet the windows open to the outside unfiltered

Edinburgh air defeating the purpose of the room. I don't know if any corrective action has taken place regarding this design flaw which was identified by Lindsay, Ewan Olsen and myself when we were invited to review the design of the room and its ventilation pre handover.

Although given assurances that pre hand over there would be validation performed on all theatre ventilation, as ICD I've never seen any of these validation reports and neither have any of my consultant microbiologist colleagues albeit we were given a tour of the ventilation system and theatres as they were being built.

All the best
Donald

From: Cameron, Fiona
Sent: 12 March 2019 12:25
To: Currie, Brian
Cc: McMahon, Alex; Guthrie, Lindsay; Inverarity, Donald
Subject: RE: Infection control + Ventilation Issues from Sunday Herald Article on Glasgow QEH-RHCYP

Brian

Alex sent on your email I am unsure what HEI guidance you are referring to. Healthcare Environment Inspectorate do not have standards for buildings. I can confirm any reviews, recommendations IPC made would be in alignment with the SHTM guidance by HFS for building works. I agree we did have involvement and a dedicate person i.e. our HAI SCRIBE lead involved. However as per communications with Alex IPC were not involved in handover as per SCRIBE guidance recommendations

I cannot reliably say if all our recommendations were accepted. I am aware as a result of the cancelled FOI there was discussion re air exchanges rates perhaps being suboptimal in clinical areas and we don't know what the outcome of that report was. The HAI SCRIBE documents or minutes of your project meetings should be able to confirm.

Another example IPCT can only assume the building engineer who accepted the building on behalf of NHS Lothian saw evidence of theatre validation See p114-124 of SHTM 03-01. IPC to the best of my knowledge have not seen a validation report (section 8.64-8.65 of SHTM 03-01). The validation/commissioning report should be a clearly understood document that outlines that the theatre is working optimally, not just engineering data, which allows us to have confidence in the efficiency of theatre ventilation and would go some way to provide the board with a level of assurance.

In addition not have we seen what evidence was provided to give NHS Lothian assurance that the consequences of the flood were fully addressed. Did the contractors provide assurance that all water damaged construction materials were replaced and there is no unnecessary residual damp material, particularly not in clinical areas. As previously advised by our ICD Dr Inverarity, damp building materials that are left in place to dry out over time are predisposed to growing moulds and fungus and that could take some time to show. The clinical risk that can result in depends on where the damp material is situated e.g. theatre or isolation room designed to protect patients from infection. Did the contractor provide a comprehensive assessment for residual damp in clinical areas or was this checked by an external authority to the contractor as I think was recommended by Dr Inverarity at the time.

Alex I have copied Lindsay and Donald as they may also wish to comment as Lead Nurse and Lead ICD

Fiona

Ms Fiona Cameron
Head of Service

NHS Lothian Infection Prevention & Control Services

Ext: [REDACTED]
Mobile: [REDACTED]

For more information visit the IPCT [IPCT Intranet Homepage](#)



From: McMahon, Alex
Sent: 12 March 2019 08:08
To: Cameron, Fiona
Subject: FW: Infection control + Ventilation Issues from Sunday Herald Article on Glasgow QEH-RHCYP
Importance: High

Professor Alex McMahon
Executive Director, Nursing, Midwifery and Allied Healthcare Professionals
Executive Lead, REAS and Prison Healthcare
NHS Lothian
email: [REDACTED]
Mobile: [REDACTED]

From: Currie, Brian
Sent: 12 March 2019 08:06
To: Goldsmith, Susan; McMahon, Alex
Subject: FW: Infection control + Ventilation Issues from Sunday Herald Article on Glasgow QEH-RHCYP
Importance: High

Susan / Alex

FYI - see below.

Regards

Brian

Brian Currie
Project Director - NHS Lothian
RHCYP + DCN Site Office
Little France Crescent
Edinburgh
EH16 4TJ

T: [REDACTED]
M: [REDACTED]
E: [REDACTED]



From: MACKAY, Judith (NHS Lothian) [REDACTED]
Sent: 11 March 2019 16:45
To: Currie, Brian
Cc: Crombie, Jim; Graham, Iain
Subject: RE: Infection control + Ventilation Issues from Sunday Herald Article on Glasgow QEH-RHCYP

Thanks Brian – this is very helpful and much appreciated.
Regards
Judith

From: Currie, Brian [REDACTED]
Sent: 11 March 2019 16:43
To: MACKAY, Judith (NHS Lothian)
Cc: CROMBIE, James (NHS Lothian); [REDACTED]
Subject: RE: Infection control + Ventilation Issues from Sunday Herald Article on Glasgow QEH-RHCYP
Importance: High

Judith

Hopefully the following will be useful:

Infection Control

We can confirm that the Board's Infection Control have been involved from the early stages in the project including competitive dialogue, evaluation of some parts of the submission; actively contributing with the clinical teams to the clinical area design development and approval process reviewing relevant specifications for items such as sanitary ware, flooring, vent coverings etc.

We have been fortunate in that there has always been a nominated IPCN for Reprovision and they have been an integral part of the process participating in key meetings and, if they could not be present at meetings, taking the opportunity to comment on meeting outputs where required and following up on issues in consultation with project and other clinical staff.

Throughout each of the stages of the project they have provided expert advice on elements such as isolation room design and functionality, room ventilation design, and HAI Scribe.

They have also joined project team personnel in reviewing the rooms for adherence to design brief, quality of finish and functionality, (including ease of cleaning and compliance with SHTM and HEI guidance).

Let me know if you need more on HAI Scribe and contractual obligations.

Ventilation

Through witnessing of commissioning activities we can verify that the correct grade of filters are installed in the various air handling units and the ductwork is designed in accordance with relevant guidance. Regular inspections are carried out and alarm monitoring also occurs via the building management system and warns of deteriorating filter conditions.

Regards

Brian

Brian Currie
Project Director - NHS Lothian
RHCYP + DCN Site Office
Little France Crescent
Edinburgh
EH16 4TJ

T: [REDACTED]
M: [REDACTED]
E: [REDACTED]



From: MACKAY, Judith (NHS Lothian) [REDACTED]
Sent: 11 March 2019 14:53
To: Currie, Brian
Subject: RE: Infection control- RHCYP

Thanks Brian.

From: Currie, Brian [REDACTED]
Sent: 11 March 2019 10:14
To: MACKAY, Judith (NHS Lothian)
Cc: [REDACTED]; [REDACTED]
Subject: RE: Infection control- RHCYP
Importance: High

Judith

We will summarise what involvement Infection Control have had in the project to date, how HAI Scribe works and contractual obligations in terms of infection control standards.

The specific ventilation issues raised at Glasgow will also be responded to in relation to this project as I said earlier.

Regards

Brian

Brian Currie
 Project Director - NHS Lothian
 RHCYP + DCN Site Office
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 Edinburgh
 EH16 4TJ

T: [REDACTED]
 M: [REDACTED]
 E: [REDACTED]



From: MACKAY, Judith (NHS Lothian) [REDACTED]
Sent: 11 March 2019 09:27
To: Currie, Brian
Cc: Graham, Iain; Cameron, Fiona
Subject: RE: Infection control- RHCYP

Hi again Brian,

Most of this details the standard daily infection control measures we would expect to operate once the building is open. Presumably we can say the building has been built to industry standards (and that's a start) but I would expect the QEUH could have done the same?

If (and I do mean; if) our own infection control team was not involved specifically, then :

- is there something explicit in the contract that gives us assurance that the building was designed to satisfy all latest infection control standards?
- Retrospectively, do we know it doesn't have the same design weaknesses (in ventilation duct design and safety alarms) that is the issue with QEUH?

On that first point , there's been reference to the HAI Scribe but I don't know what (or who??!) the scribe is. Not looking for the contract – just a means by which we can describe in layperson's terms how we derive assurance that the design takes account of infection control requirements.

Thanks!

Judith

Judith Mackay
 Director of Communications, Engagement and Public Affairs | NHS Lothian
 [REDACTED]

From: Currie, Brian [REDACTED]
Sent: 11 March 2019 08:09
To: MACKAY, Judith (NHS Lothian); [REDACTED]
Cc: CROMBIE, James (NHS Lothian)
Subject: RE: Infection control- RHCYP
Importance: High

Judith

Please see a draft MS Word version and final letter recently sent to Miles Briggs which should deal with the majority of questions on Infection Control.

In terms of the specific ventilation issues we will get back to you asap.

Regards

Brian

Brian Currie
Project Director - NHS Lothian
RHCYP + DCN Site Office
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EH16 4TJ

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From: MACKAY, Judith (NHS LOTHIAN) [REDACTED]
Sent: 11 March 2019 07:39
To: Currie, Brian; Graham, Iain
Cc: Crombie, Jim
Subject: Infection control- RHCYP

Morning all,

I anticipate questions from media today about the formal involvement of Infection Control expertise in the design of RHCYP / DCN in the wake of criticisms about the apparent lack of documented evidence of their involvement in the design / commissioning / handover of QEUH.

Please see this piece from yesterday's Sunday Herald.

<https://www.heraldscotland.com/news/17489840.50m-repair-bill-for-glasgows-troubled-queen-elizabeth-university-hospital/>

Can we state categorically that Infection Prevention and Control Team were fully and formally (in a governance sense) involved in the commissioning or handover process of RHCYP/DCN?

We are also likely to be asked explicitly if we know / have assurance that the design does not suffer from the same ventilation duct / safety alarm weaknesses as QEUH.

Since these were 2 of the issues that led to some delay late last year am I correct in thinking we were are satisfied RHCYP does not share same design issues on those counts?

Thanks for your help with this,

Regards

Judith

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From: Henderson, Ronnie
Sent: 21 March 2019 13:30
To: Inverarity, Donald
Cc: Mackenzie, Janice; McMahon, Alex; Sutherland, SarahJane; GORDON, David; Currie, Brian
Subject: IPC SITE VISIT 20/03/19

Hi Donald,

It was good to meet yesterday and have the opportunity to reassure and clarify how the project team are addressing concerns raised by IPC. As discussed I will produce a table of water sampling test results showing positive for Legionella and/or P.Aeruginosa. I am presently reviewing the certificates on the data management system to identify the relevant ones and I will get these to you as soon as possible but no later than Monday 25th March.

I have summarised the main points of discussion and evidence seen:

1. Attendees:

Janice McKenzie(JM), Ronnie Henderson(RH), Alex McMahon(AM), Donald Inverarity(DI), Sarah Jane Sutherland(SJS), David Gordon(DG) (Bouygues)

2. Introduction:

- JM/RH felt that the walkround had been arranged specifically to address concerns over water safety and ventilation issues post press articles about QEUH. DI had thought that the HAI SCRIBE handover audit was to take place.
- DI expressed concern that this HAI SCRIBE audit had not taken place before handover
- RH/JM explained that although handover had occurred there were still significant ongoing construction works affecting areas that would automatically result in a HAI SCRIBE failure in terms of NHSL being able to occupy the affected spaces clinically.
- Theatre validation was discussed and DI agreed to forward report from St John's for reference
- It was agreed that SJS/RH/JM carry out the desktop elements of the HAI SCRIBE audit and discuss phasing of the site visit elements to coincide with completion of site works. SJS to send JM her availability over next 2 weeks for a planning meeting to agree how this will be done

3. Water Safety Management:

- RH explained the sampling process and current status of results and water management
- The group visited the location of a known outstanding P. Aeruginosa positive and the implications were discussed
- RH agreed to forward test results showing positives for Legionella and Pseudomonas as well as subsequent clear results and the area and clinical specialty affected
- DG explained BYES approach and the next steps after they receive a clear set of results from MPX

4. Ventilation:

- RH explained the commissioning and validation that had taken place for both isolation rooms and theatres and that records were available on the project data storage system
- The group visited an isolation room, the theatre suite and a ventilation plantroom where RH and DG explained the ventilation philosophy for each area
- The group visited external areas to view pest prevention measures and active measures to prevent ingress of pigeon droppings were demonstrated
- RH explained that both isolation and theatre validation would be re done once construction works were completed

5. Outstanding issue from previous visit:

- The group visited room 1-L1-068 where DI had identified an openable window in an isolation room. JM explained that this had been identified previously by the room review team and as demonstrated had now been resolved. DI was satisfied that this had been addressed.

If I have incorrectly interpreted anything or have missed something relevant, please get back to me and I will amend

Regards

Ronnie

Ronnie Henderson
Commissioning Manager Hard FM
RHSC & DCN - Little France
NHS Lothian

RHSC & DCN Site Office
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EH16 4TJ

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E: [REDACTED]

From: STORRAR, Ian (NHS NATIONAL SERVICES SCOTLAND)
Sent: 29 July 2019 07:12
To: 'Tim Wafer'; 'T Wafer'
Subject: 2019-07-26 RHCYP
Attachments: NHS Lothian - The Royal Hospital for Children and Young People, Edinburgh - Compliance Report (Final)..pdf

Tim
I thought I sent this on Friday, sorry

Regards

Ian

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Compliance Audit

Royal Hospital for Children and Young People, Edinburgh

With Findings and Recommendations

Date: May 2019

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1. Executive Summary

On a project of this size there will always be teething problems and issues that arise, so it is important that stakeholders work in partnership to address any issues that may come to the fore, and it was great to see the close relationship between NHSL site team and the FM provider team. I wish to express my thanks for the cooperation and hospitality shown during my visit by Ronnie Henderson (NHSL), Richard Hair and David Gordon (Bouygues); this was extremely helpful in allowing me to conduct the audit in an effective manner. It is important to note that each of the Bouygues staff the author encountered and interacted with during this site visits were professional and helpful.

This report was compiled following site visits to the **Royal Hospital for Children and Young People (RHCYP), Edinburgh** on 21st, 22nd March and 25th, 26th April and many of the items identified in the Simple Compliance audit will be repeated here but many wont, and this report is designed to give the client a high-level view of findings on site.

Observations were made during the assessment and walk about in areas of the Hospital and Energy Centre with several comments being made under each relevant section within the report, to ensure that the health and safety responsibilities of Bouygues, as Hard FM Provider and IHSL, as SPV are being discharged adequately and the significant key areas identified which should be addressed. We also carried out an audit whilst on site using our online portal "Simple Compliance" (SC) which records findings against pre-set questions and automatically provides actions to the providers for noncompliance items. The SC audit was published on 27th March. In addition, a summary of recommendations and corrective actions is included at Section 6 of this report.

IHS Lothian Ltd (IHSL) the SPV were invited to attend the initial introductory meeting, site walk round and requested to demonstrate compliance and monitoring information however, whilst they attended the introductory meeting and walk round, they have suggested the interface agreement between Bouygues and Multiplex should be utilised for the provision of information requested from the SPV. The SPV provided access to an online portal to view Multiplex documentation however, this information was a library of PDF files that were numbered and not named so it was difficult to navigate when looking for specific documents and not useful. On publishing the Simple Compliance audit IHSL contacted Callidus and requested face to face meetings to discuss the online audit and the information requested for this report. On several occasions IHSL raised concerns regards the timing of this audit as there were still a large amount of construction works being completed under the "Settlement Agreement". The author felt it was prevalent to discuss the partnership and innovative approach commissioned by NHSL however, the SPV did not agree with the authors view and stated that partnership is always practiced on this Contract.

The FM provider, Bouygues, embraced the audit and whilst supporting requests for information they demonstrated excellent compliance knowledge and as previous, have a very good relationships with the Client, NHSL.

In summary, we found the management arrangements on the contract required development to such a degree to categorise the assessment as **RED** (as defined below). The contract has

only been live now for a short period of just over two months. It is reported that the site was handed over to NHS Lothian under a "Settlement Agreement" where there are still construction works going on and ownership of areas under health & safety, compliance and maintenance are split between the Hard FM Provider and Construction Co, so not all areas have been passed over to Bouygues. Bouygues demonstrated they are managing the areas handed over to them with a mix of in-house engineers and contractors carrying out maintenance on the site.



Unsatisfactory,
Significant
Improvements
Needed

Health and safety control measures are not functioning as designed and/or will have a material impact on both statutory compliance and/or contractual obligations.

Health and safety control measures are lacking or have degraded since the last audit and is a contributing factor to non-compliance.

Immediate management actions need to be taken to address the deficiencies noted,

(Project Co & NHSL is currently considered to be at risk).

2. Introduction

The purpose of the assessment visit was to focus on the positive elements of the health and safety management arrangements of the organisation. There was an element of compliance evidence checking however, the main objective was to identify evidence of arrangements underpinning the safety management system and how individuals at all levels within the organisations integrate safety into the day to day operations of the project.

The purpose of the report is to concisely present an overview of the findings of the assessment visit for areas where access was permitted, and evidence demonstrated.

During our visits we reviewed a few examples of management system arrangements and contract documentation. No commercially sensitive (project related) information was taken, although the report may refer to specifics as evidence of industry best practice.

The contents of this report should not be construed as acceptance that the organisation is fully compliant with all existing legislation, as only a representative sample of areas available and evidence was examined.

The following indicates some of the applicable, legislation, standards, guidance and contract documentation which have relevance to the subject areas assessed:

	Applicable areas to NHSL							
	H&S							
Project Agreement	•	•	•	•	•		•	•
Management of Health and Safety at Work Regulations 1999	•	•	•	•			•	•
COSHH Regulations 2002			•					•
Electricity at Work Regulations 1989			•					
Regulatory Reform (Fire Safety) Order 2005				•				•
LOLER Regulations 1998			•					
PUWER Regulations 1998			•					
Work at Height Regulations 2005	•	•	•					
ACOP (L8) – Control of Legionella in Water Systems			•		•			
Control of Asbestos Regulations						•		

Note: This is not an exhaustive list of all applicable legislation, guidance etc on the project.

3. Project Details

3.1 Client

NHS Lothian



3.2 SPV

IHS Lothian LTD



3.3 Hard FM Service Provider

Bouygues FM

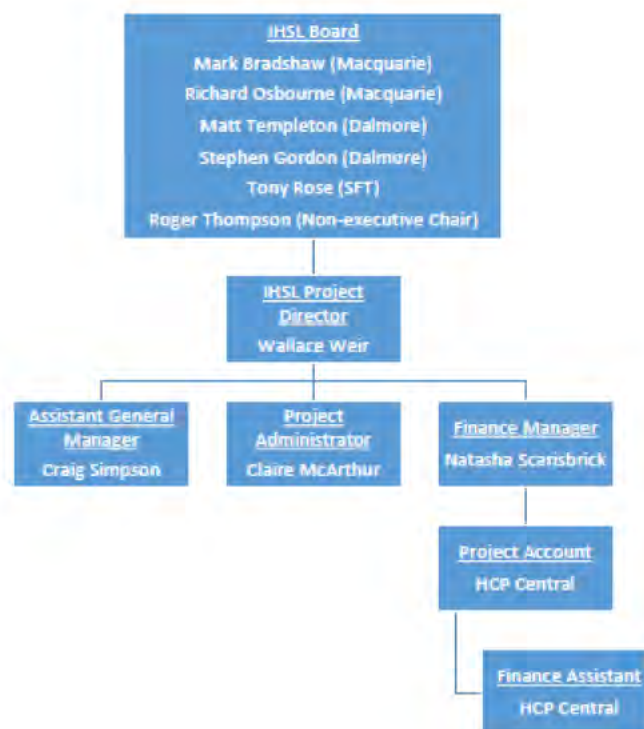


3.4 SPV Organisation – IHS Lothian Limited

NOTE - This organisation chart was supplied by the IHSL Project Director however, the Assistant General Manager introduced to the audit was Bob Brown who will be replaced by Craig Simpson.



RHCYP + DCN Project Team Operations

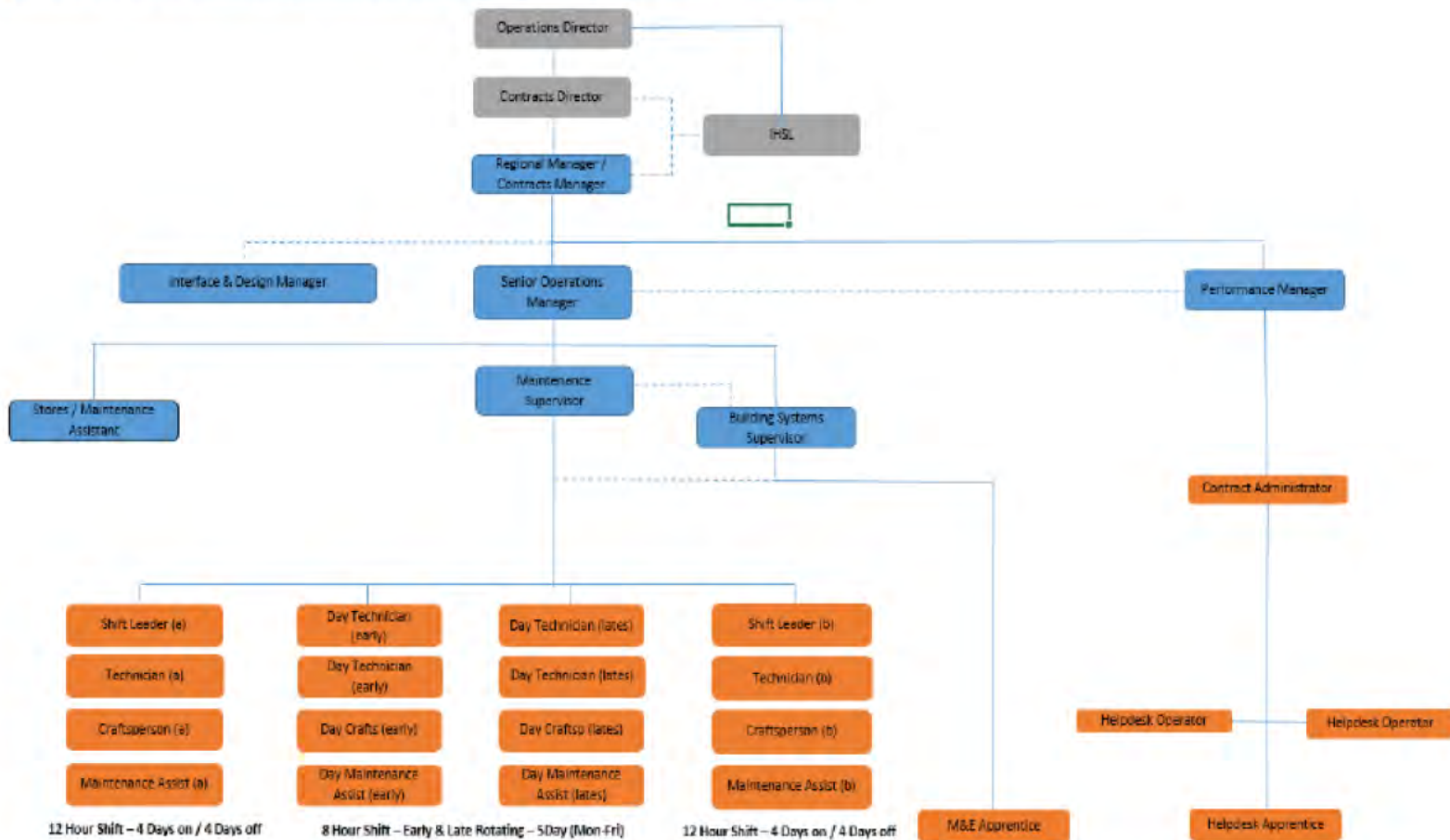


15.03.2019

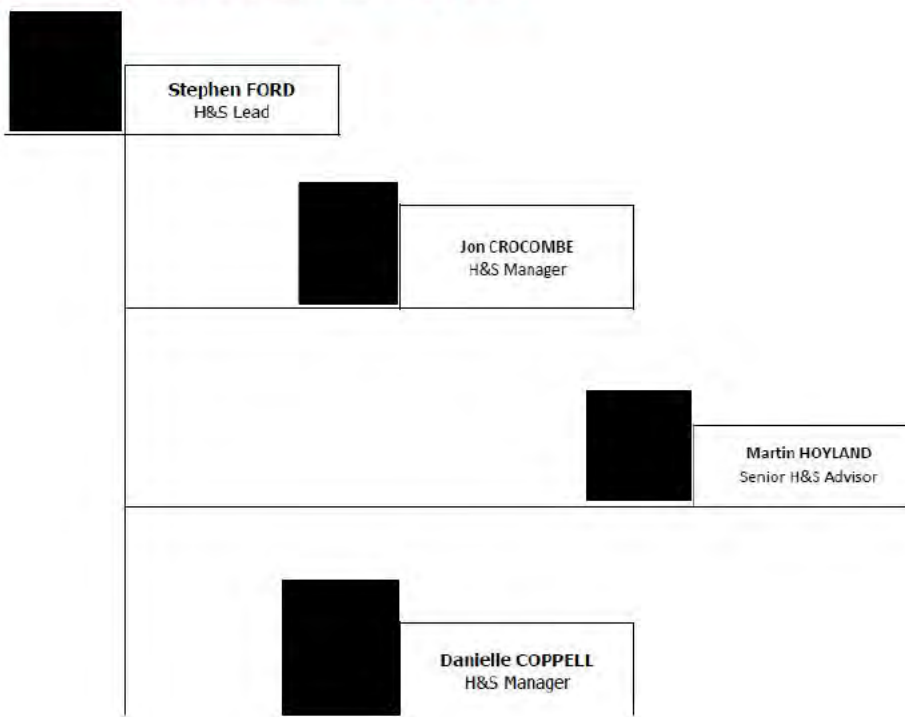
FM Structure – Bouygues FM



RHCYP & DCN Edinburgh - Bouygues E&S FM – Organisational Chart



Bouygues FM: Health and Safety (Site Support)



Bouygues: Health and Safety Organogram – Appendix B

4. Review of previous SHE Assessment

This site only handed over to NHSL, under a Settlement Agreement to allow IHSL to complete construction works, in Feb 2019 so there were no previous SHE Assessment's to review.

5. Assessment findings

5.1 Health and Safety Management

Observations:

Health and Safety Management System

The *Royal Hospital for Children and Young People, Edinburgh (RHCYP)*, NHSL was handed over on 22nd February 2019 under a Settlement Agreement between *NHS Lothian* and *IHS Lothian Ltd* (SPV), an agreement that allows NHSL take handover of the building whilst construction works and remedials have still to be completed. As a result of ongoing construction works there are areas of building maintenance responsibilities that have not yet been signed off and handed over to the FM provider Bouygues; so much of the Health & Safety information for maintenance visits and first year's defects has still to be done, and for this report information was requested from IHSL and remains outstanding.

We would advise that IHSL have failed to support this audit as we normally expect from an SPV company. Initial requests for information from IHSL were put in writing and IHSL responded asking for face to face meetings. This was discussed at the first available face to face meeting on 25th April where the SPV Deputy General Manager articulated that information should be provided by Multiplex or Bouygues (through their interface agreement) and not through IHSL. Some of the evidence requested was monitoring information however, the SPV representative told the meeting that IHSL do not monitor records. This was discussed during a request that the SPV was monitoring the construction contractor to ensure water flushing was being discharged appropriately but the SPV responded that this would be "duplicating work if they were to monitor". A request was made to IHSL for the following information but to date the SPV has not provided any evidence;

- Assessment of management system documentation
- Review of management structure roles and responsibilities
- Demonstrate how IHSL will ensure SPV Management under the project agreement
- Arrangements identify and address key requirements of the contract
- Assessment of communication and performance monitoring

The Hard FM provider, Bouygues, are still collating their asset list, as packages of work are handed over, and they were able to demonstrate their PPM program covers areas that have been handed over and maintenance works are now in progress. Bouygues report that they will continue to use a number of the construction sub-contractors as specialist maintenance contractors for the first year which will support manufacturers maintenance guidance, awareness and identification of any defects.

Bouygues FM demonstrated excellent evidence of project-specific health and safety management arrangements relating to the activities on site (as required by the Project Agreement). During the audit, we consulted with Bouygues Senior Design Interface & Asset Manager, Richard Hair, who discussed and demonstrated FM health and safety project specific documentation, processes and policy. This was required to be in place upon commencement of the concession period. It is imperative that the health and safety management system is established to provide both the client and FM that on-site arrangements are adequately planned, managed and resourced.

A site walk round with IHSL and Bouygues FM, for familiarisation and visual inspection, highlighted areas for comment and recommendation within this report. These areas were discussed with stakeholders during the walk round.

Areas that were demonstrated included Roles & Responsibilities, Risk Register, General arrangements for managing H&S on the Contract, Competency Matrix for Key Personnel, Control of Contractors, Access to competent H&S advice and arrangements for monitoring and reporting performance and Duty Holder Structure for key activities (Electrical, Water, Fire, Medical Gas, etc), and FM demonstrated compliance for Duty Holder Competence and a very good structure for controlling High Risk Activities (Permit to Work system, AE, AP, CP appointments). Due to the ongoing areas of construction some information e.g. Legionella, was not available, but FM will complete the documentation to meet the compliance structure organogram once the remaining construction areas are completed and signed off.

Once the Compliance Structure is in place, Bouygues FM will have an excellent Management system that will;

- Demonstrate how FM comply with the key requirements of their FM Agreement
- Allow the SPV to monitor performance and provide meaningful reporting to NHSL based on agreed standards
- Allow NHSL to obtain demonstrable evidence of compliance against the Project Agreement
- Provide all parties with reassurance that there is a structure in place which is adequately resourced to manage the risks on site.

Guidance and Documentation

The Bouygues Contract management team demonstrated both H&S qualifications and a very good knowledge of H&S roles and responsibilities on site. They are supported by a central H&S team and Stephen Ford – Health, Safety and Environmental Lead for Bouygues E&S UK Limited, who visits the site monthly and is contactable outside of these planned visits at any time. The FM site team have access to the Bouygues Health and Safety documents on line and have a very good H&S notice board in the main corridor of the FM suite.

The HS&E Team carry out site visits to support staff performance and understanding of H&S documentation and requirements. The Bouygues HS&E team are in regular

contact with site teams to add or improve the H&S information relating to Hard FM activities. Whilst on site we recommend that Bouygues FM refer to specific health sector guidance contained within Scottish Health Technical Memoranda (SHTM) and utilise this guidance when providing FM activities.

Bouygues FM also demonstrated reporting of near misses and use this information to improve processes and information.

It is good to see a process of constant improvement, and whilst the health and safety guidance documentation on site is suitably developed to manage the specific activities undertaken. Guidance had failed to observe there was no provision of rubber matting to the floors at electrical switchgear. (See Appendix E)

Risk Management and Risk Assessment

Bouygues FM demonstrated an excellent library of H&S documentation including Risk Assessments and COSHH Assessments, all relevant to their responsibilities on site.

Bouygues FM demonstrated a proactive approach and documentation to show a good understanding of Risk Assessments and Risk Management. However, due to the Settlement Agreement and the different stakeholders on site there was some confusion regards the quality and risks in the Plant Rooms, who was responsible and the escalation process to drive remedials.

Bouygues FM advised that Plant issues have been raised to IHSL but did not appear to have any progress or completion dates, e.g. requests for Legionella information, Heat Station Plant rooms high temperatures and Heat Station Plant room flooding and humidity.

When discussed IHSL articulated the items identified did not offer any serious risk and reported that Multiplex was working on remedials and reminded that areas of the building were still under construction however, we would recommend that the areas identified do offer a number of risks and the information requested should be made available and shared with NHSL.

We have requested that IHSL support the audit and provide information to demonstrate how IHSL will ensure SPV Management under the project agreement, arrangements to identify and address key requirements of the contract, and assessment of communication and performance monitoring however, IHSL have not provided this information.

Provision of competent advice

Bouygues FM have access to the Bouygues Health, Safety & Environmental Team, a group of competent Advisors, Manager and Director. They are available to the site team by email or phone call and the HS&E Manager visits the site monthly. Through regular communication and programmed site visits they provide a good support structure across the NHS Lothian, (RHCYP) Contract and are delighted to work closely with NHSL and their advisors.

The H&S and compliance information support and feedback from the Bouygues FM site team throughout this audit was very good.

Bouygues FM demonstrated they are supported by external provider's through and were appointed through the procurement process for work tendered by FM.

Corrective Actions Required:

Ref	Findings / Recommendations
5.1.a	HV/LVAE to comment on the lack of rubber matting in electrical Plant areas and offer remedials.
5.1.b	Bouygues FM should report all building issues and self-identified maintenance through the Helpdesk including heat station issues. This provides an excellent tool to demonstrate reporting and provides the client with sight of repairs and issues.
5.1.c	We recommend that IHSL to provide evidence as requested in our Health & Safety Management System paragraphs.
5.1.d	Not used

5.2 Contractor Management

Observations:

Contractor Procurement

Hard FM sub-contractors are Bouygues approved through a strict approval process. A list of sub-contractors is available to the site team and is maintained by the Hard FM procurement team. The site team can request new contractors are added to the list through following the questionnaire process. Any contractors who do not meet the requirements of this process are not taken forward to work for Hard FM.

The contractor's questionnaire is robust with a strict question set that must be met. Contractors are approved through this approval process but also checked by the SHEQ team. The sub-contractor list is with the Hard FM procurement team.

Contractor Control on Site

Hard FM sub-contractors are required to submit RAMS online prior to any works commencing. The RAMS are reviewed by Hard FM staff and sent back to the contractor if not suitable and sufficient, once approved works commence. For PPM works, Bouygues FM informs the client of the works in advance to request access. Bouygues FM reported the client is made aware of who will be completing the works and Bouygues FM control site access, RAMS and any Permits.

Bouygues FM induct all sub-contractor staff before work commences and records are kept in the Hard FM office on site. Contractors are only allowed access to site as controlled by Bouygues FM however, this is complicated by the ongoing construction works.

Under the *Settlement Agreement* IHSL have an agreement where Multiplex are still on-site completing construction works. Although Bouygues FM control Permits for site

areas Multiplex and their contractors were seen to be moving freely around the site. NHSL also have management, Admin and Soft FM staff on site. Requests were made to IHSL for evidence of construction RAMS, Legionella information and how IHSL are performance monitoring but to date no suitable information has been provided.

Permits to Work

Bouygues FM have a Permit office in the FM suite and an excellent library of records to show that Permits are controlled and issued in line with RAMS following a site induction.

Permits are issued to control high risk activities as follows:

- Emergency Light Checks in 2nd floor Plant Room
- Hot Works – Ground floor – floor repairs
- Various others

During the assessment we examined the following Permits to Work.

Ref	Date	Area Covered	Organisation	Comments
006	21/03/19	2 nd floor Plant Room	Mercury	Emergency Light Checks
HW005	13/03/19	Hot works - Ground Floor	Xtreme Flooring	Floor repairs

During the assessment, we witnessed the following Contractor Induction Records:

Date	Name	Organisation	Comments
15/03/19	Various	GSS	
11/03/19	Fran Rizzo	Musbury Fabrics	
11/03/19	Gary Ridgewell	RMCH	

Corrective Actions Required:

Ref	Findings / Recommendations
5.2.a	Although areas are controlled through the access control system, we would recommend the site access and control of contractors is tightened up on a daily basis to understand who is on site, where they should be working, what they are doing and timescales for completion, clean work area and checks/signoff.

Ref	Findings / Recommendations
5.2.b	Not used

5.3 Statutory Compliance

Observations:

PPM Systems and Management Arrangements

At present the asset information and PPM process is still being collated as there are areas under the Hard FM Contract that have still to be handed over to the Bouygues FM. This does not yet allow the Hard FM provider to have a complete plan that captures all Statutory, Mandatory, Function Critical and Discretionary assets at the appropriate frequencies however, Bouygues FM were able to demonstrate a good PPM planner that covers the areas they are currently maintaining. This planner is shared with the SPV and client prior to the programme of works commencing. As work packages are agreed, signed off and handed over Bouygues FM will add these to the planner.

Bouygues FM confirmed the PPM planner is still being compiled using the asset register following SHTMs and guidance. Bouygues FM acknowledge this is still in progress and is being updated.

The site has only been handed over for a short period so many of the maintenance tasks are planned. During the assessment, the following commissioning records were inspected.

Item	Date	Inspected By	Comments
Gas Booster	15/04/19	Utile	
Passenger Lifts	19/04/19	Zurich	
Damper Control system	31/10/18	Safeguard Systems	
Anchor point test	13/06/17	Arjo	
Lightning Protection	19/04/19	PTSG	
Boilers	16/08/18	Bosch	
Generators	26/03/19	Dieselec Thistle	

Corrective Actions Required:

Ref	Findings / Recommendations
5.3.a	We recommend that Bouygues keep NHSL updated as they receive handover of packages and areas of the building regards information, quality and any issues.
5.3.b	Not used

Ref	Findings / Recommendations
5.3.c	Not used

5.4 Fire and Emergency Planning

Observations:

Fire maintenance is part of the Hard FM Contract however, there are areas of ongoing construction works where, its reported, that void detection above bedroom areas was an addition so the Fire maintenance has not yet been fully handed over. Further information was requested from IHSL then again on 25/03/19 from Multiplex but this has still to be provided.

It was observed that the construction contractor is using Energy Centre space to store construction materials. The housekeeping of the construction materials in the boiler house highlighted poor management and several risks including blocking a fire exit, risks from slips trips and falls. (See appendix F)

Fire Risk Strategy and Fire Risk Assessments

*This is a NHS Lothian action and at the time of the audits the Fire Officer (Jim Gardiner) had completed a FRA on 16/07/18 that covered the fit out stage and joint occupancy (commissioning) period. This will be superseded when to Settlement Agreement works are complete and the full building and systems has been handed over ready for patient access.

During the assessment we examined the maintenance records for fire equipment as follows:

Item	Date	Inspected By	Comments
Fire Alarm Quarterly	24/01/19	Boston Networks	
Emergency Lighting	PPM	Bouygues	
Fire Damper (Commissioning)	31/10/18	Safegard Systems	Maintenance by Swegon – to start
Emergency Lighting (Routine)	Monthly PPM	Bouygues	
Fire Extinguisher	Sep 18	Walker Fire	
Fire Door Inspection	PPM	Scotdor	
Fire Strategy	03/09/18	WSP	
Emergency Lighting (Periodic)		NR	

Corrective Actions Required:

Ref	Findings / Recommendations
5.4.a	We recommend that Bouygues keep NHS Lothian updated as they receive handover of the fire detection infrastructure regards information, quality and any issues.

Ref	Findings / Recommendations
5.4.b	NHSL Fire Officer to complete FRA and make available to the SPV and FM provider prior to patient occupation.
5.4.c	Not used
5.4.d	Not used

5.5 Legionella

Observations:

Due to the Settlement Agreement the Legionella completions were still underway and remained with the construction company, Multiplex. A request for information was submitted to IHSL however, no information was provided by IHSL although they did confirm its existence and that Multiplex would supply this information.

Various areas of legionella risk were identified during the site walk round and details recorded later in this report.

In the Simple Compliance audit, all Legionella actions were assigned to the IHSL Project Director, as discussed with the Project Director prior to the audit taking place.

Although water systems have still to be handed over to the Hard FM provider, Bouygues commissioned their specialist contractor, Clira Water Hygiene Specialists, to deliver a Legionella Risk Assessment and Water Hygiene Survey Report which was completed on 21st Feb 19. The survey at that time identifies the overall risk rating for the site as **high**.

Observations: Main Building

4th Floor Labs

The audit was guided around areas including fourth floor rooms and looked at a section of the Laboratory area. These rooms have flushing sheets present that identify outlets in the room with dates and signatures for flushing however, it was noted that outlets for clinical equipment were not identified on the flushing sheets and were not being flushed. This was discussed with IHSL who advised that as one outlet was on a return loop, the area of “dead leg” was under 100mm and small enough that it did not require being flushed. The author did not agree with this as it was still an outlet and suggested this should be added. In the following room another area of pipework for clinical equipment was identified, this time it was considerably over the 100mm but still was not identified on the flushing sheet. The author suggested this highlighted a risk across this area, and also where outlets for clinical equipment were not being flushed. (See Appendix D)

There are various areas designed as roof courtyards/garden areas where a water supply has been added, during the audit the author requested flushing information for these areas as there was no flushing sheets available in these areas as per the rooms. The author was informed these areas are being flushed and following the meeting on Friday

26th April Multiplex provided evidence of the flushing however, we can report the evidence provided does not follow the same process as the rooms by identifying individual flushing points and we have still not witnessed suitable flushing evidence is available. As Multiplex are unable to provide suitable evidence of flushing to these areas, we recommend this is a non-compliance. We recommend these documents should have been monitored by the IHSL in their role as SPV to ensure compliance.

The author discussed Plant room areas where stand pipes are present and flushing information was not available at the time of the audit. Bouygues FM reported that the construction company have confirmed these areas are being flushed however, evidence has still to be witnessed.

The audit identified that L8 maintenance to shower heads is not currently in practice. IHSL recommend that maintenance of these areas is not required as the "site has been live since 22nd Feb 19 and the maintenance is every six months". We would recommend NHSL request sight of the Multiplex risk assessment we feel the SPV must be referring to as recommended maintenance for showerheads is quarterly. Multiplex articulated that they had disinfected the water system in Sep and Dec 18, then again in Feb 19 so this would negate the need for shower descale, and the SPV agreed with this presumption however, that author does not concur with this as flushing disinfectant through a water system does not meet the required maintenance for descaling showerheads nor does it meet the timescales, but as previous we feel the SPV must be referring to a risk assessment when stating it is a six monthly maintenance and this should be tabled by Multiplex or corrected prior to handover of the water system to the FM provider.

At the time of the audit no access was provided to inspect the internals of water tanks.

IHSL demonstrated multiple copies of testing documentation which they recommend identifies there is currently no water risk. However, we would suggest the flushing regime is not as robust as was first reported and flushing records are not duplicated across all outlets. (See Appendix D)

Scheme of Control

No scheme of control was demonstrated by IHSL.

Bouygues FM demonstrated the named individuals with Legionella Duty Holder responsibilities were: Ian Clark (AE), Alan Herkes (RP), Alan Herkes (CP), David Murphy (CP).

Name	Date Appointed	Duty Holder Role	Letter Issued Y/N
Ian Clark	18/05/18	TA	Certificate
Alan Herkes	04/02/19	AP	Yes
David Murphy	TBC	CP	TBC

During the assessment we requested the following records through IHSL but no documentation has been shared:

Record	Inspected By	Date	Comments
Calorifier Temp Checks			Requested
Water Sampling			Various provided through online portal.
Outlet Flushing		Twice weekly	Rooms have flushing sheets present. Note: some areas were missed e.g. clinical equipment outlets, courtyards, stand pipes.
Shower Descale			Requested, SPV report this is not required.
Outlet Temps			Requested
Quarterly TVC Sampling			Various provided through online portal.
Coliforms Sampling Escherichia coli Sampling			Various provided through online portal.

Corrective Actions Required:

Ref	Findings / Recommendations
5.5.a	IHSL (monitoring Multiplex) to ensure a robust flushing regime that has identified all outlets is in place and reported accurately and reported back to NHSL.
5.5.b	IHSL (managing Construction Co) to demonstrate a safe water system is in place prior to handover of water system maintenance.
5.5.c	IHSL to confirm their duty holder responsibilities for water.
5.5.d	Not used
5.5.e	Not used
5.5.f	Not used

5.6 Building Observations

Observations: Basement Plant Rooms

Heat Station 4

The temperature when entering Heat Station 4 was excessive and we would recommend this is investigated and reported back to NHSL. It was confirmed that air handling to the Plant areas was in operation, so it is unusual to feel the Plant area so hot. The Plant all looked to be insulated and at that time of the audit it was difficult to

identify why the space remained so hot. IHSL were present but did not identify the heat loss as an issue. The heat loss will impact on utility costs.

Heat Station 3

On entering Heat Station 3 we witnessed very hot water discharging from calorifier plant with about 10mm-20mm standing water in the Plant room. There is no mechanical drainage in this Plant room and there has been 100mm holes cored through the block wall to allow water to flow out of the Heat Station Plant room and into the Pneumatic Plant room next door.

We would recommend the design of this Plant room is addressed to identify if a drainage source is required as allowing water to run through a block wall into another Plant area is unacceptable in a new building.

The block wall with the holes cored through it should be investigated to confirm any fire rating has not been compromised. (See Appendix C2)

The Plant room design has the Plant raised off the concrete floor on, what looks like, steel RSJs covered with steel chequered plate. This metal work is showing signs of rusting that would indicate the water has been discharging for considerable time. (See Appendix C1)

During the audit the author was informed by IHSL that Multiplex was “trying to identify” the cause of the water discharging onto the floor and IHSL believe it was because the full building was not in full use however, the author does not agree with this diagnosis and reports it is unacceptable to have this level of flooding in a new building, in an area that has been commissioned.

Due to the heat in this Plant room and the very hot water discharging, the air is humid, and we would recommend that this is a risk as the humid air is drawn through the ducting and Air Handling Plant. We would recommend that IHSL confirm the controls in the Plant room are designed to operate in these conditions for any length of time. We would recommend that these areas are investigated to ascertain what the impact of the humidity is having and what the risks are. (See Appendix C1)

Pneumatic Plant Room

Water was draining through 100mm holes from Heat Station 3 and was ponding on the floor of the Pneumatic Plant room. There is a drainage outlet in this Plant room, but the floor is not raked towards the outlet so the water running from the Heat station must accumulate and pond to a level before water meets the outlet. We would advise that cutting holes through a block wall in a new Plant room to allow water to flow through is unacceptable and we would recommend this is investigated to ascertain why this has happened and what damage the water in the Plant room is causing/has caused. (See Appendix C2)

A computer was sitting to one end of the Plant room on a small desk, the desk was saturated and there was a risk of the moisture meeting the computer. There were also electrical cables behind the desk sitting in water. This was witnessed by all

stakeholders during the walk round. The following day this area was revisited, and as it had not been addressed the author articulated the risks, as there are tradesmen and staff standing in water which is very close to electrical equipment, and the FM Provider moved the PC. (See Appendix C3)

HV/LV Plant Rooms

On inspecting the LV Plant area, it was evident that one of the Transformers in the HV side was generating “load noise” and that it was considerably louder than the other transformers. The author understands that Bouygues AP for HV is monitoring this transformer. We would recommend the manufacturer and installer are asked to advise on the cause and any risk as it is unusual that one of four Transformers is generating such “loud noise”.

Rain Water Tank Plant Room

On viewing the rain water tank room it was identified that a waste pipe through the slab from the area above did not appear to have a Fire Collar. Fire Collars were clearly visible to other areas where pipe work was entering through the slab. (See Appendix C4)

Basement Plant Rooms

Many of the basement plant rooms have a small bund wall inside the doorways, prior to accessing plant areas, which also impacts on escape. These walls are not marked up as a hazard to support safe evacuation. As these are the escape routes, we would recommend some form of visual marking is practiced. (See Appendix C5)

Observations: Roof Plant Rooms

Only a small section of roof area plant rooms was inspected with no issues highlighted.

Lifts

It was identified that the condition of the Lifts did not reflect a brand-new building and at the time of the audit the commissioning information was not available for witnessing however, this information was shared at the meeting on Thu 25th April. The SPV articulated that the Lifts were identified for latent defects and were programmed for repair although no completion date for these repairs could be provided.

Observations: Energy Centre

Energy Centre - Boiler Plant Room

The author, with Bouygues FM staff present, identified a strong smell of Gas near the Gas inlet in the Boiler Plant room. Bouygues FM articulated they would follow this up as any smell of Gas is a risk. Bouygues FM later reported that this area was checked with

a Gas sniffer and no leaks were identified. There is Gas Detection is above the boilers (See Appendix G). At the meeting on Fri 26th April we were informed a maintenance visit had identified Gas leaks at each of the boilers which was now being addressed. At that time it was unclear how commissioning and later checks had not identified the Gas leak.

Asbestos

There is a statement by Multiplex to say that there were no materials containing asbestos used in the construction of the site.

Corrective Actions Required:

Ref	Findings / Recommendations
5.6.a	Heat Station 4, recommend heat loss is investigated and reported back to NHSL, by Multiplex
5.6.b	Heat Station 3, recommend discharging water is investigated and rectified with investigation to determine the impact on Plant, gauges and electrical equipment with findings shared with NHSL, by Multiplex
5.6.c	Heat Station 3, recommend the humid air entering the ventilation is investigated and risk assessed and reported back to NHSL by IHSL
5.6.d	Heat Station 3, recommend the Plant Room design and lack of drainage is assessed by Multiplex
5.6.e	IHSL to confirm - Heat Station 3 recommend the cutting of "drainage holes" through the block wall has not impacted on the Fire Rating or integrity of wall.
5.6.f	Heat Station 3, recommend the condition of the Plant base plates is addressed to suit a new Plant Room by Multiplex
5.6.g	Multiplex - recommend HV Plant Room, transformer "load noise" is investigated and report provided to NHSL
5.6.h	Rainwater Tank Plant Room, Fire Collar to be fitted around the white plastic waste pipe by Multiplex
5.6.i	Basement Plant Rooms, Bund Wall to be marked for identification on the escape route by Multiplex
5.6.j	Multiplex - Energy Centre, smell of gas to be investigated and remedials reported back to NHSL.
5.6.k	IHSL to confirm latent defect list and remedial dates for the Lifts
5.6.l	Not used

5.7 Training

Observations:

Training Analysis and Planning

Bouygues FM demonstrated an excellent training matrix and hard copies of certificates. Each member of staff has a training matrix and the level of training and planning is good.

Training Provision, Recording and Relevance of Training Provision

Training can be identified by company policy, line management, SHEQ, at the request of the engineers or as dictated by guidance and it is added to training matrix records.

Roles and responsibilities are clearly defined with support between shift patterns. Ongoing training provision is good, and records are available on site in hard copy and electronically.

Bouygues FM were able to demonstrate that they have a contingency in place to support the site team from engineers in other areas and contractors should support staff ever be required for this contract.

Corrective Actions Required:

Ref	Findings / Recommendations
5.7.a	We would recommend Bouygues share the positive training and contingency information with the Client as it is very positive

5.8 Performance Monitoring

Observations:

Project Level Performance Monitoring

The CAFM System and Helpdesk record performance and this is demonstrated in the client monthly report. Performance monitoring is carried out by the SPV through monthly reporting and monthly meetings but at the time of audit there had been no site audits carried out carried out by the SPV.

Health and Safety Audits

SHEQ have regular visits programmed and are in regular contact with site teams.

At the time of audit there was no SPV audits carried out or programmed.

Director H&S Tours

As these are new sites there has not been a Directors H&S Tour, but this should be programmed and shared with the site.

Ongoing Support from Competent Person

The site teams have ongoing support from the Technical Manager and Line Management above that position.

Other forms of Performance Monitoring

Liaison meetings, Contract Meetings and adhoc meetings take place. The site team are in regular contact with an NHS Lothian point of contact to allow discussions to take place out of programmed dates.

Corrective Actions Required:

Ref	Findings / Recommendations
5.8.a	IHSL should demonstrate that they are discharging their duties as per the Project Agreement
5.8.b	Not used

6. Summary Report

Summary Points

The table below summarises the assessments remedial actions, it is essential that [Service Provider] take these findings and address their legal and contractual obligations in establishing, implementing and maintaining its safety management systems, when identifying hazards, assessing risks and determining controls measures.












Ref	Award	Findings/Recommendations	Target Date	Owner	Closed Date
Health and Safety Management					
6.1.a		HV/LV AE to comment on the lack of rubber matting in electrical Plant areas and offer remedials.	19/07/19	Bouygues	
6.1.b		Bouygues should report all building issues and self-identified maintenance through the Helpdesk including heat station issues. This provides an excellent tool to demonstrate reporting and provides the client with sight of repairs and issues.	31/07/19	Bouygues	
6.1.c		We recommend that IHSL to provide evidence as requested in our Health & Safety Management System paragraphs.	31/07/19	IHSL	
6.1.d		Not used			
Contractor Management					
6.2.a		Although areas are controlled through the access control system, we would recommend the site access and control of contractors is	19/07/19	Bouygues	


		tightened up on a daily basis to understand who is on site, where they should be working, what they are doing and timescales for completion, clean work area and checks/signoff.		
6.2.b		Not used		


Statutory Compliance				
6.3.a		We recommend that Bouygues keep NHSL updated as they receive handover of packages and areas of the building regards information, quality and any issues.	Ongoing	Bouygues
6.3.b		Not used		
6.3.c		Not used		

Fire and Emergency Planning				
6.4.a		We recommend that Bouygues keep NHSL updated as they receive handover of the fire detection infrastructure regards information, quality and any issues.	Ongoing	Bouygues
6.4.b		NHSL Fire Officer to complete FRA and make available to the SPV and FM provider prior to patient occupation.	31/07/19	NHSL
6.4.c		Not used		
6.4.d		Not used		




Legionella				
6.5.a		IHSL (monitoring Multiplex) to ensure a robust flushing regime that has identified all outlets is in place and reported accurately and reported back to NHSL.	July 19	IHSL
6.5.b		IHSL (monitoring Multiplex) to demonstrate a safe water system is in place prior to handover of water system maintenance and reported back to NHSL.	TBA	IHSL
6.5.c		IHSL to confirm their duty holder responsibilities for water.	31/07/19	IHSL
6.5.d		Not used		

Building Observations				
6.6.a		Multiplex - Heat Station 4, recommend heat loss is investigated and reported back to NHSL.	19/07/19	Multiplex
6.6.b		Multiplex - Heat Station 3, recommend discharging water is investigated and rectified with investigation on any damage or impact and findings shared with NHSL.	19/07/19	Multiplex
6.6.c		Multiplex - Heat Station 3, recommend the humid air entering the ventilation is investigated and reported back to NHSL.	19/07/19	Multiplex
6.6.d		Multiplex - Heat Station 3, recommend the Plant Room design and lack of drainage is assessed and reported back to NHSL.	31/07/19	Multiplex
6.6.e		Multiplex to confirm - Heat Station 3 recommend the cutting of "drainage holes" through the block wall has not impacted on the Fire Rating or integrity of wall.	31/07/19	Multiplex
6.6.f		Multiplex - Heat Station 3, recommend the condition of the Plant base plates is addressed to suit a new Plant Room.	31/07/19	Multiplex
6.6.g		Multiplex - recommend HV Plant Room, transformer "load noise" is investigated and report provided to NHSL.	31/07/19	Multiplex
6.6.h		Multiplex - Rainwater Tank Plant Room, investigation why a Fire Collar has not been fitted to waste pipe entering through ceiling slab and any remedials required are completed.	31/07/19	Multiplex
6.6.i		Multiplex - Basement Plant Rooms, Bund Wall is marked up and identified as affecting fire escape route.	31/07/19	Multiplex
6.6.j		Multiplex - Energy Centre, smell of gas to be investigated and remedials reported back to NHSL.	19/07/19	Multiplex
6.6.k		IHSL to confirm latent defect list and remedial dates for the Lifts	31/07/19	IHSL
6.6.l		Not used		


Training				
6.7.a		We would recommend Bouygues share the positive training and contingency information with the Client as it is very positive	TBA	Bouygues

Performance Monitoring				
6.8.a		IHSL should demonstrate that they are discharging their duties as per the Project Agreement	31/07/19	IHSL
6.8.b		Not used		
6.8.c		Not used		

Key to Colour Coding and Timescales for Action

	A major gap in management arrangements, which directly breaches the requirements of legislation. Project Co is at risk. IMMEDIATE ACTION REQUIRED
	A gap in management arrangements resulting from not fully complying with legislation. Project Co is not considered to be at imminent risk, but corrective action should be implemented within an agreed timescale to remedy the issue. WITHIN 3 MONTHS.
	Opportunity for Improvement. There is no direct breach of compliance, but the existing management arrangements could be improved to provide a more suitable or robust solution. ACTION PLAN TO BE AGREED.

Appendix A – Summary of Assessment Grading Scale

Award	Audit Rating	Definition
	Controlled, Minor Improvements Needed	<p>All or many of the health and safety control measures are functioning as intended; however, some minor changes may be necessary to make the controlled environment more effective and efficient.</p> <p>Some minor actions may be necessary at this time (Project Co is not considered to be at risk).</p>



Moderate
Improvements
Needed

Some of the health and safety control measures are in place and functioning; however, several major issues were noted that could jeopardize statutory compliance or contractual obligations.

Actions will be necessary to address the deficiencies noted, (Project Co may be considered at risk in the short to medium term were corrective action not implemented).



Unsatisfactory,
Significant
Improvements
Needed

Health and safety control measures are not functioning as designed and/or will have a material impact on both statutory compliance and/or contractual obligations.

Health and safety control measures are lacking or have degraded since the last audit and is a contributing factor to non-compliance.

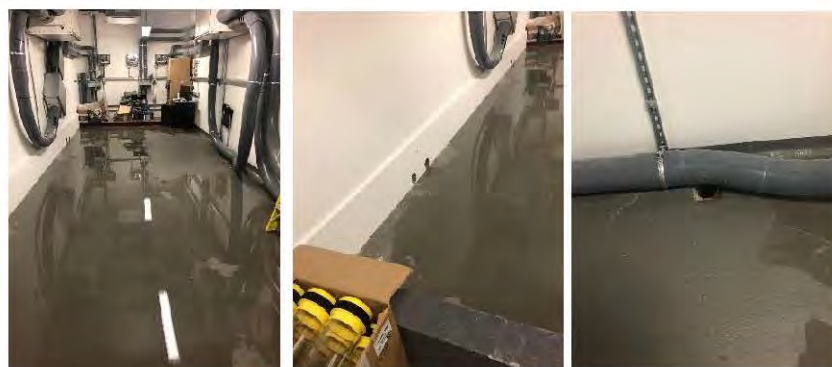
Immediate management actions need to be taken to address the deficiencies noted,

(Project Co is currently considered to be at risk).

Appendix C – 1 (Heat station 3 – Flooding)



Appendix C – 2 (Pneumatic Plant Room – Flooding, holes through wall and outlet)



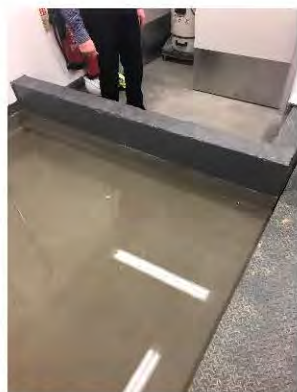
Appendix C – 3 (Pneumatic Plant Room – PC risk)



Appendix C – 4 (Fire collar and fire collar missing)



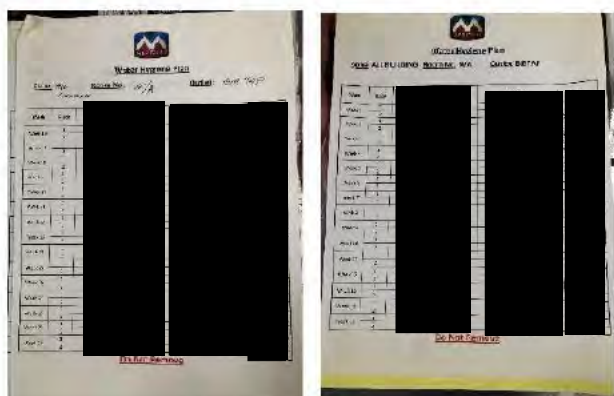
Appendix C – 5 (Bund Walls not marked for fire exit)



Appendix D – Legionella – (Lab Flushing Points and information)



(Courtyard Flushing information)



Appendix E – Missing Electrical Matting



Appendix F – Blocked Fire Exit (Poor storage of construction materials in Energy Centre).



From: Tony Rose [REDACTED]
Sent: 27 May 2019 12:15
To: Matthew Templeton; Roger Thompson RMT
Cc: [REDACTED]
Subject: Re: RHCYP + DCN - Little France - Update + Issues of Concern

Thanks

Agreed in terms of what you've highlighted as the key issues. I'm happy to do a call today if there is an update to discuss; so timing really should be based on when/if we think an update is realistic today, or likely to have to leave until tomorrow...

T

Tony Rose
Scottish Futures Trust
[REDACTED]

From: Matthew Templeton [REDACTED]
Sent: Monday, May 27, 2019 12:07 pm
To: Roger Thompson RMT
Cc: Tony Rose; [REDACTED]
Subject: Re: RHCYP + DCN - Little France - Update + Issues of Concern

Tony/Roger,

Callum is attending tomorrow.

Darren/Callum are only available from 1:30pm tomorrow (i.e 30 mins before meeting), hence why I suggest a call with Darren and Callum today. Disappointingly no response.

Bob and Craig are working today and expecting an update later this afternoon.

We need to separate the real issues from the items which are a smoke screen or positioning from NHSL. Fire doors, corridor doors, lifts, are real and MPX need to address.

Heat stations is an issue, but one for BYES/MPX, unsure why NHSL are so concerned. The key commercial issue is “responsibility for areas to be handed back to Consort”. Key area was handed back last year, however Scottish Water need to come in and do some significant infrastructure work and Brian pushing in our direction but not our responsibility. I will forward analysis from Pinsent Masons.

I can do a call at 3:30pm and I will ask Bob and Craig to also be available. Let me know if that suits.

Regards

Matt

Sent from my iPhone

On 27 May 2019, at 11:48, Roger Thompson RMT [REDACTED] wrote:

Hi Tony

I think Callum is attending but not certain.

The idea of getting a call on Bank Hol is a bit ambitious.

I will be on- site from 11.00 tomorrow, which gives us some time to line things up.

Regards,

Roger

Director

RMT Consultancy Ltd

PPP Advisory Services

[REDACTED]

[REDACTED]

Co Reg 10688740

From: Tony Rose [REDACTED]

Sent: 27 May 2019 11:31

To: Roger Thompson RMT [REDACTED]

Cc: [REDACTED]

[REDACTED]

Subject: Re: RHCYP + DCN - Little France - Update + Issues of Concern

Roger

Thanks for following up on this over the weekend.

Some, but by no means all of this was reported in the update of 16/5 from Craig, (following some of the issues raised by Brian at the Board Meeting). Ironically the room transition issue Brian specifically raised is not on Susan's list and on the face of it, the 16/5 note would suggest wasn't such an issue as Brain had made out...

From that 16/5 note assurance had been provided that some of the issues would have been resolved/progressed significantly that week, however given recent email that doesn't seem to be the case, specifically for:

- boiler to oil use
- water system
- heat stations

The reminder though looked to be of concern then, and seem to remain so.

Hopefully we can get clarity as you have set out in time for the meeting in the afternoon.

If we are having a call today at all I'm available other than 2-3.

Do we know if Callum or Ben are attending tomorrow?

T

Tony Rose

Scottish Futures Trust

[REDACTED]

From: Roger Thompson RMT [REDACTED]

Sent: Sunday, May 26, 2019 9:03 am

To: Wallace Weir; Matthew Templeton

Cc: Bob Brown; Craig Simpson; Tony Rose

Subject: RE: RHCYP + DCN - Little France - Update + Issues of Concern

Hi Wallace,

I am interested in as to where all of this has sprung from and whether the processes, communication and resources are working effectively.

In looking at the long list from Susan can you consider

- Were these all issues that were known to both our team and MPX?
- Are some of them “bolts from the blue”?
- Are the meetings and communications effective at picking up managing and elevating issues?
- Do we have enough resource to manage these and close out effectively before the opening in under 40 days?

Having observed Brian first hand in the recent Board meeting, my observation, which I am sure you all share, is that he likes to sit remote and chuck a few rocks in – doesn’t matter whether they have come up through the channels.

If there is a fair chunk of that here, then we need to sort it out.

If they are all known issues and are material, then it is a different issue

Happy to join a call tomorrow – It is a Bank Hol down here so maybe we won’t get everyone?

Best Regards and see you on Tues (I will be on-site about 11.00)

Roger

Director

RMT Consultancy Ltd

PPP Advisory Services

[REDACTED]

[REDACTED]

From: Wallace Weir [REDACTED]
Sent: 25 May 2019 10:49
To: Matthew Templeton [REDACTED]
Cc: Bob Brown [REDACTED]; Craig Simpson [REDACTED]; Tony Rose [REDACTED]; Roger Thompson RMT [REDACTED]
Subject: RE: RHCYP + DCN - Little France - Update + Issues of Concern
Importance: High

Thanks Matt,

I am away on Monday and will stay in contact. Bob and Craig will progress the IHSL commentary as requested. It would be helpful to involve both on the call on Monday. I will be back on site for the pre-meet on Tuesday.

Kind regards

[REDACTED]

Wallace Weir

Project Director
IHSL

IHS Lothian Limited

RHSC & DCN Site Office | Little France Crescent | Edinburgh | EH16 4TJ

[REDACTED] | [REDACTED] | www.hcp.co.uk

<image001.jpg>

From: Matthew Templeton [REDACTED]
Sent: 24 May 2019 17:07
To: Wallace Weir [REDACTED]
Cc: Bob Brown [REDACTED]; Craig Simpson [REDACTED]; Tony Rose [REDACTED]; Roger Thompson [REDACTED]
Subject: Fwd: RHCYP + DCN - Little France - Update + Issues of Concern

Wallace,

Note below from Susan in advance of Steering Group.

We will require a full IHSL commentary and debrief prior to meeting. Ideally a note on Monday and a pre-meet around 12:45 on Tuesday.

I have forward to Callum and Darren and requested a call on Monday.

Regards

Matt

Sent from my iPhone

Begin forwarded message:

From: "Goldsmith, Susan" [REDACTED]

Date: 24 May 2019 at 15:03:35 BST

To: 'Matthew Templeton' [REDACTED],
[REDACTED]

Cc: "Crombie, Jim" [REDACTED]

Subject: FW: RHCYP + DCN - Little France - Update + Issues of Concern

Matt/Tony

We have our next Steering Board on Tuesday and there are a few issues which are causing concern. Brian and the team are clear that everyone is working hard to resolve these issues but with just over 40 days until migration the key concern is whether the following issues will be resolved., and progress does seem slow. In particular the issues with the doors and the lifts are critical, although all are material to service

I just want to give you the heads up that we will be looking for updates and assurance from you that these will be complete in time.

The areas are:

- 70 Access Controlled Pass Doors not fully operational or reliable
- Lifts not reliable and visibly damaged
- PTS yet to be fully commissioned
- Guardian System not operational
- Water Management still to be passed to Bouygues
- Access Control System - not all doors visible on system
- Boilers unable to run on oil
- Snagging - MPX closing out various snags but no evidence on site that this is the case
- Gaps in Fire Doors
- Will all Board Operational Changes be implemented by Bouygues and particularly security of various doors
- BMS not fully operational
- CT Scanner Room Overheating
- Excessive temperature in all heat stations
- Car Park Barriers remain to be installed
- Patient Entertainment System not operational

In addition to these there are other operational issues worthy of discussion

- Callidus Audit
- Responsibility for areas not yet handed back to Consort
- PMS – accuracy and reliability

- Helpdesk - Not yet contractually compliant (rectification times, user update, user interface etc)
- Management of Defects - not being actioned timeously
- Agenda for IHSL / Bouygues / NHSL Executive Meeting now arranged for 28th June, 2019

Appreciate this is a lot but given the timeline it is important that we are all confident of delivery and that we are all sighted

Kind regards

Susan

Please note from Monday 17th June, we are moving the Edinburgh office to 2nd Floor, Caledonian Exchange, 19A Canning Street, Edinburgh, EH3 8EG. All telephone numbers will remain the same. We look forward to welcoming you to our new office.

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From: Goldsmith, Susan
Sent: 24 May 2019 15:04
To: Currie, Brian; Graham, Iain
Subject: FW: RHCYP + DCN - Little France - Update + Issues of Concern

Importance: High

fyi

From: Goldsmith, Susan
Sent: 24 May 2019 15:04
To: 'Matthew Templeton'; [REDACTED]
Cc: Crombie, Jim [REDACTED]
Subject: FW: RHCYP + DCN - Little France - Update + Issues of Concern
Importance: High

Matt/Tony

We have our next Steering Board on Tuesday and there are a few issues which are causing concern. Brian and the team are clear that everyone is working hard to resolve these issues but with just over 40 days until migration the key concern is whether the following issues will be resolved., and progress does seem slow. In particular the issues with the doors and the lifts are critical, although all are material to service

I just want to give you the heads up that we will be looking for updates and assurance from you that these will be complete in time.

The areas are:

- 70 Access Controlled Pass Doors not fully operational or reliable
- Lifts not reliable and visibly damaged
- PTS yet to be fully commissioned
- Guardian System not operational
- Water Management still to be passed to Bouygues
- Access Control System - not all doors visible on system
- Boilers unable to run on oil
- Snagging - MPX closing out various snags but no evidence on site that this is the case
- Gaps in Fire Doors
- Will all Board Operational Changes be implemented by Bouygues and particularly security of various doors
- BMS not fully operational
- CT Scanner Room Overheating
- Excessive temperature in all heat stations
- Car Park Barriers remain to be installed

- Patient Entertainment System not operational

In addition to these there are other operational issues worthy of discussion

- Callidus Audit
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Appreciate this is a lot but given the timeline it is important that we are all confident of delivery and that we are all sighted

Kind regards

Susan

Development stage 4: Review of completed project	
HAI-SCRIBE Name of project	
Name of Establishment	National allocated number
HAI-SCRIBE Review Team	
HAI-SCRIBE Sign Off	
Completed by (Print name)	Date
Signature(s)	Date
Stage 4	
Additional notes	
<ul style="list-style-type: none"> * LOCHRANZA - HAEM/ONC WARD. * PICU - PAEDIATRIC CRITICAL CARE. * DCN ACUTE CARE 	

Pre-handover check, ongoing maintenance & feedback

Development Stage 4: Pre-handover check, ongoing maintenance and feed-back: General overview					
		Yes	No	N/A	Comments with issues and actions to be taken
4.1	Is the space around beds in accordance with current NHSScotland guidance?	✓			
4.2	Are there sufficient single rooms to accommodate patients known to be an infection of potential infection risk?	✓			
4.3	Are all surfaces, fittings, fixtures and furnishings designed for easy cleaning?	✓			High dusting to be explicit in schedule
4.4	Are soft furnishings covered in an impervious material in all clinical and associated areas, and are curtains able to withstand washing at disinfection temperatures?	✓			
4.5	Is the bathroom / shower / toilet accommodation sufficient and conveniently accessible, with toilet facilities no more than 12m from the bed area?	✓			
4.6	Are the bathroom/shower/toilet facilities easy to clean?	✓			
4.7	Where required are there sufficient en-suite single rooms with negative/positive pressure ventilation to minimise risk of infection spread from patients who are a known or potential infection risk?	✓			
Provision of hand-wash basins, liquid soap dispensers, paper towels and alcohol rub dispensers					
4.8	Does each single room have a clinical hand-wash basin, liquid soap dispenser, paper towels, and alcohol rub dispenser over and above the hand-wash basin in the en-suite facility?	✓			
4.9	Do intensive care and high dependency units have sufficient clinical hand wash basins, liquid soap dispensers, paper towels, and alcohol rub dispensers conveniently accessible to ensure the practice of good hand hygiene? An assessment should be made, however, to ensure that there is not an over-provision of hand-wash basins resulting in under-use.	✓			
4.10	Is there provision of clinical hand-wash basins, liquid soap dispensers, paper towels, and alcohol rub dispensers in				

	lower dependency settings like mental health units, acute, elderly and long term care settings appropriate to the situation with a ratio of 1 basin/dispenser to 4-6 beds?	✓			
4.11	Do out-patient areas and primary care settings have a clinical hand-wash basin close to where clinical procedures are carried out?			✓	
4.12	Do all toilets have a hand-wash basin, liquid soap dispenser and paper towels?	✓			
4.13	Are all clinical hand-wash basins exclusively for hand hygiene purposes?	✓			check H towel dispenser at north H suite.
4.14	Does each clinical hand-wash basin have wall mounted liquid soap dispenser, paper towel dispenser?	✓			
4.15	Does each clinical hand-wash basin satisfy the requirement not to be fitted with a plug?	✓			
4.16	Are elbow-operated or other non-touch mixer taps provided in clinical areas?	✓			
4.17	Does each hand-wash basin have a waterproof splash back surface?	✓			
4.18	Is each hand-wash basin provided with an appropriate waste bin for used hand towels?	✓			To be placed.
Provision of facilities for Decontamination					
4.19	Are separate, appropriately sized sinks provided locally, where required, for decontamination? <i>(The sinks should be large enough to immerse the largest piece of equipment and there should be twin sinks, one for washing and one for rinsing. A clinical hand-wash basin should be provided close to the twin sinks).</i>	✓			Playroom. Equip Rm. + No local decontamination anticipated outside specialist areas. K.
4.20	Are appropriate decontamination facilities provided centrally for sterilisation of specialist equipment?			✓	
4.21	Is there adequate provision in terms of transport, storage, etc. Ensuring separation of clean and used equipment and to prevent any risk of contamination of cleaned equipment?	✓			
4.22	Does the system in operation comply with the current guidance on decontamination facilities and procedures?			✓	
Storage					
4.23	Is there suitable and sufficient storage provided in each area of the healthcare facility for the following if required patients' clothes and possessions,	✓			

	domestic cleaning equipment and laundry, large pieces of equipment e.g. beds, mattresses, hoists, wheelchairs, trolleys, and other equipment including medical devices, wound care, and intravenous infusion equipment, consumables etc?	✓			
4.24	Is there separate, suitable storage for contaminated material and clean material to prevent risk of contamination?	✓			
Engineering services (Ventilation)					
4.25	Are heat emitters, including low surface temperature radiators, designed, installed and maintained in a manner that prevents build up of dust and contaminants and are they easy to clean?	✓			
4.26	Is the ventilation system designed in accordance with the requirements of SHTM 03-01 'Ventilation in Healthcare Premises'?	✓*			With derogation 4 ac/hr - single rm. risk assessed + approved.
4.27	Is the ventilation system designed so that it does not contribute to the spread of infection within the healthcare facility? <i>(Ventilation should dilute airborne contamination by removing contaminated air from the room or immediate patient vicinity and replacing it with clean air from the outside or from low-risk areas within the healthcare facility.)</i>	✓			
4.28	Are the ventilation system components e.g. air handling, ventilation ductwork, grilles and diffusers designed to allow them to be easily cleaned?	✓*			Not viewed AHU at sign off. Renewed by lead ICS
4.29	Are ventilation discharges located a suitable distance from intakes to prevent risk of contamination?	✓			
4.30	Does the design and operation of re-circulation of air systems take account of dilution of contaminants and the space to be served? <i>(NB: Recirculation would only arise in UCV theatres)</i>			✓	
4.31	Is the ventilation of theatres and isolation rooms in accordance with current guidance SHTM 03-01, SHPN 04-01 Supplement 1 and the Scottish Hospital Infection Manual)?	✓		✓	
4.32	Do means of control of pathogens consider whether dilution or entrainment is the more appropriate for particular situations?	✓			
4.33	Where ventilation systems are used for removal of pathogens, does their design and operation take account of infection risk associated with maintenance of the	✓			

	system?				
4.34	Are specialised ventilation systems such as fume cupboards installed and maintained in accordance with manufacturers' instructions?			✓	Not viewed
Engineering services (Lighting)					
4.35	Is the lighting designed so that lamps can be easily cleaned with minimal opportunity for dust to collect?	✓			
Engineering services (Vacuum Units)					
4.36	Are vacuum-controlled units with overflow protection devices for mechanical suction used to avoid contaminating the system with aspirated body fluid?	✓			
Engineering services (Water services)					
4.37	Are water systems designed, installed and maintained in accordance with current guidance? (SHTM 04-01 series – Water safety)	*			To be renewed and confirmed.
4.38	Are facilities available to enable special interventions for <i>Legionella</i> such as chlorination/chlorine dioxide, copper/silver ionisation treatment of water?	✓			
4.39	Is the drainage system design, especially within the healthcare facility building, fit for purpose with access points for maintenance carefully sited to minimise HAI risk?	✓			
4.40	Are surface mounted services avoided and services concealed with sufficient access points appropriately sited to ease maintenance and cleaning? (These services would include water, drainage, heating, medical gas, wiring, alarm system, telecoms, equipment such as light fittings, bedhead services, heat emitters.)	✓			
Estates services (Pest control)					
4.41	Is the concealed service ducting designed, installed and maintained to minimise risk of pest infestation?	✓			
Estates services (Maintenance access)					
4.42	Does the design and build of the facility allow programmed maintenance of the fabric to ensure the integrity of the structure and particularly the prevention of water ingress and leaks and prevention of pigeon and other bird access?	✓			

Check cleaning of expansion joints + sealant.

Additional notes - Stage 4
 Check floor to wall / wall to ceiling seals.
 TV Arm cleaning to be considered.
 Remove Danicette - isolation rms.
 ? Fly screens add to opening windows in kitchen.
 Ensure ABHR dispensers in treatment rms.
 Seal corners at suits. Seal outlet in party suits

Development stage 4: HAI-SCRIBE Review of completed project

4.43	Brief description of the work carried that was carried out.
4.44	Identify any issues associated with this work.
4.45	Identify any risk associated with the issues identified above.
4.46	Outline the measures that required to be implemented to eliminate or mitigate the identified issues. Ensure these are entered on the project risk register.

Lothian NHS Board

Office of the Deputy Chief Executive
Waverley Gate
2-4 Waterloo Place
EDINBURGH
EH1 3EG.



www.nhslothian.scot.nhs.uk

Wallace Weir
IHS Lothian Limited
C/O Pinsent Masons
13 Queens Road
ABERDEEN
AB15 4YL

Date 7 June 2019
Your Ref
Our Ref JC/KAB

Enquiries to:
Extension:
Direct Line:
Email:

Dear Sir

Re-Provision of RHSC and DCN at Little France

I refer to the above matter and to our joint steering group meeting on 28 May 2019.

As you will recall, at that meeting we expressed concerns about the progress of the Post Completion Works, Outstanding Works and Snagging Matters against the agreed programme and other requirements of the Project Agreement and SA1. In particular, we conveyed our dismay that none of the Post Completion Works and Outstanding Works milestones agreed in SA1 have been achieved and anxiety regarding the extent of the Snagging Matters.

We were pleased to receive your reassurance at the joint steering group meeting that all of these issues were being addressed as a matter of urgency. However, following our meeting I have received a further briefing from our site team and they have communicated to me that they remain concerned about the number and significance of the issues, which require to be attended to, and which are critical to the safe and timeous opening of the hospital to staff, patients and visitors. Specifically, our site team have identified the following matters which, although not exhaustive, is a list of main issues known at the current time, which require to be addressed as a matter of urgency:-

1. Double Swing Doors – approximately 70 double swing doors not fully operational or reliable;
2. Access Control System – access control system not fully operational or reliable;
3. Lifts - push buttons not operational and significant aesthetic damage to lifts, e.g. lift's door at the children's entrance;
4. Guardian System – evidence awaited that the system is fully operational for proper protection of all NHSL staff;
5. Water Management (including replacement of Kemper valves and expansion vessel works) – we assume all tests and satisfactory results will be available to the Board prior to Hospital opening, please confirm;

Headquarters
Waverley Gate
2-4 Waterloo Place
Edinburgh EH1 3EG

Chair Brian G. Houston
Chief Executive Tim Davison
*Lothian NHS Board is the common
name of Lothian Health Board*



A46291723



6. Oil feed to boiler - unable to run on oil. This is a significant issue which has a material impact on the safe opening of the Hospital. We require assurance this is being urgently addressed and will be complete before opening;
7. Window restrictor – failure of window restrictors. Please confirm all window restrictors will operate safely for Hospital opening, and there are no health and safety issues;
8. HAI-SCRIBE / Infection Control – implementation of actions from HAI-SCRIBE visit;
9. Snagging – demonstrate evidence that all Snagging Items are being attended to and those that were marked as “closed” in error, have been revisited and re-verified;
10. Fire issues (e.g. Gaps in Fire Doors and the high level vents in the atrium) – we understand work is continuing on all fire issues. Please confirm all necessary works will be completed prior to Hospital opening;
11. Board Operational Changes – all those essential to Hospital opening to be implemented by IHSL/Bouygues prior to Hospital opening;
12. CT Scanner Room - overheating problem, temporary cooling currently being provided to enable commissioning of CT equipment. Please confirm that you will install permanent cooling solution to meet cooling requirements prior to Hospital opening;
13. Excessive temperature in all heat stations – Project Co currently installing mineral fibre insulation as a mitigation measure – Project Co to confirm they will resolve the overheating issue prior to opening;
14. Independent validation of critical ventilation systems in a number of clinical areas (Theatres, Imaging, Critical Care and all Isolation Rooms) – ensure all Project Co works are completed to allow independent validation to take place, including ZUTEC 20779 that had been closed by IHSL/MPX in error;
15. Dishwasher power supplies – single phase has been installed rather than the required three phase. Please confirm the three phase power supply works will be completed prior to Hospital opening;
16. IPS cupboard within Critical Care Department overheating – fire door has been left open with a sticker stating “do not close”, please confirm it is safe to close the door and there are no overheating issues;
17. Audiology worktops – worktops are not yet installed in the two audiology control rooms;
18. Medical Gases repeater panel – no panel in a manned 24 hour area;
19. Power supply for Ophthalmology Equipment – no power supplies allowing the specialist equipment to operate;
20. Security for the fourth floor terrace – currently there is a risk of public on fourth floor terrace entering the helipad and being able to access the clinical management suite and classrooms.

We appreciate that some of these issues were discussed at the joint steering group meeting and that you have subsequently issued a status update. However, we remain concerned about progress of these items.

As you know, we are in the process of finalising our preparations for the migration of services to Little France commencing on 5 July, all of which has been publicly reported, in line with the



timescales that all parties agreed and committed to work towards. In the circumstances, we trust that you will prioritise the resolution of the foregoing issues. We also trust that you will work collaboratively with us to ensure that all Post Completion Works, Outstanding Works and Snagging Matters are rectified and completed in accordance with the requirements of the Project Agreement and SA1 immediately.

Your further reassurance in this regard would be appreciated by return.

Meantime, we reserve our whole rights, remedies and pleas.

Yours faithfully



JIM CROMBIE
Deputy Chief Executive
Chief Officer, Acute Services

Demob and Site Clearance	Steering Group Meeting	Weekly Look Ahead	J Crombie Letter	OMG	Heading	Issue / Action	Update / Current Position	Responsible Party	Target Completion Date	Date Closed
				1.11	Post Completion Work Drainage	Last shroud to be installed	12/06: MPX noted this was completed	MPX		12/06/2019
				1.11	Post Completion Work Drainage	Commissioning, testing and witnessing information to be provided	12/06: MPX noted that information has been provided to JE/CD, awaiting response 19/06: Certificate issued yesterday (18/06) by IT - item closed	IT		18/06/2019
		1		1.12	Post Completion Work Void detection	IT witnessing to be completed	12/06: Loop testing scheduled for 1pm today; Cause & Effect from 17/06 (for CD's requirements). KK noted the Pod/Atrium appear to be missing from spreadsheet - CW to review 19/06: Cause&Effect underway - to continue on 20/06 & 21/06 (noted 10d behind milestone date)	MPX	21/06/2019	
		1		1.12	Post Completion Work Void detection	Risk Assessment: MPX to respond to KK's Aconex	12/06: Response received by Board, Jim Gardner to review and respond to MPX 19/06: Response received 18/06, Ken H reviewing (updating and amending PDF conversion errors). Ken H and Jim to discuss today, MPX anticipate a few days to tidy up and resubmit	MPX	28/06/2019	
				1.13	Post Completion Work Heater batteries	Isolation room witnessing	12/06: Witnessing completed, paperwork to be updated 19/06: DW has calibration certificate and pressure test paperwork - to upload today after C&E	MPX	19/06/2019	
				1.13	Post Completion Work Heater batteries	Alarms going off in isolation rooms	12/06: MPX confirmed alarm settings of 9 and 13 last week 12/06: SD noted alarms going off during tours. Board to check if domestic services had inadvertently set them off, SD noted Board will introduce signage. 19/06: JM noted alarms were still going off. CG noted he had seen cleaners with 2 rooms doors wedged open yesterday. JM noted Board will reiterate they are not to do this. CG went round on L3 on 18/06 and reset 2, L1 checked on 18/06 now sitting ok. CG asked if any found, to let MPX know. Item to remain open to monitor	MPX All	06/06/2019 To monitor	12/06/19 To monitor
				1.13	Post Completion Work Heater batteries	Board to agree CW's documentation to allow CD sign off (positioning and finish)	12/06: Board had comment on lux levels, now been taken, no further actions			12/06/2019
				1.13	Post Completion Work Heater batteries	Lux levels to be taken for KK	12/06: As above, item closed			12/06/2019
				1.13	Post Completion Work Heater batteries	MPX to upload information to Zutec for CD sign off	12/06: As-built drawings to be issued to CD for sign-off. 19/06: MPX to respond to HLM queries, drawings expected next week, but MPX to try to expediate (CD/JE availability is limited)	MPX	w/c 24/06/19	
			15	1.14	Room handback	To complete dishwasher connections to 3 phase	JC Letter: Please confirm the three phase power supply works will be completed prior to Hospital opening. 12/06: MPX progressing works, to complete by 17/06 or 18/06 19/06: MPX note cables pulled, dishwashers being installed in situ, final works in risers this weekend, JM noted Board plan to commission next week. Dishwasher found in there recovery - JMacG looking into this.	MPX	23/06/2019	
			15	1.14	Room handback	Missing detergent and dosing units for dishwashers	12/06: Trays cannot be located in the basement but uncertainty on what they look like. Information to be provided on what they look like (pump and tube etc). JMck to ask Patrick about the delivery date and location, as would have been delivered together. 19/06: Board have ordered more dosing units. Key for plinth has been requested, if not received by Friday (21/06), MPX will drill out	Board/MPX	TBC	

Demob and Site Clearance	Steering Group Meeting	Weekly Look Ahead	J Crombie Letter	OMG	Heading	Issue / Action	Update / Current Position	Responsible Party	Target Completion Date	Date Closed
	No 3	1		1.15	Patient Entertainment	Demonstration to be set up and Works on 'works to complete' list to be completed	28/06 Steering Group note: Patient Entertainment System not operational - A demonstration of the system was being undertaken today. - Post Meeting – We understand that this did not go well, with much functionality to be resolved 06/06: MPX's Senior M&E Manager has now re engaged with Sorrel and appears to be moving matters forward. We have had sight today of positive emails between them. 12/06: Progress being made (some additionality to be added)- target date for completion to be ascertained following demo today. CW and JM to speak to SC for target date. 19/06: SC sent email prior to meeting noting concerns on timescales and progress - requested meeting with Bostons and update from action logs. CW noted Bostons progressing work on TV booster signal, patching in Pod. 19/06 - post meeting note: Bostons unable to attend meeting on 20/06, update provided to SC on TV tuning issues, with futher updates to come	MPX/Board	TBC	
				1.15	Patient Entertainment	Gingko/NHSL content workshop with Bostons attendance	12/06: Demonstration being held later today 19/06: Demonstration went well, this item to close	MPX/Board	12/06/2019	12/06/2019
				1.15	Tail lift transformer	MPX to confirm installation complete	12/06: Completed, and MPX have test certificate	MPX	06/06/2019	12/06/2019
				1.2	Family Hotel	MPX to fix patress and pendant, then take lighting levels.	12/06: Action updated - MPX to fix patress and pendant (by end of next week) and then take a reading of the final lighting levels. 19/06: MPX aiming to complete this week, lux levels may be done on Friday	MPX	21/06/2019	
				1.2	Family Hotel	Documentation to be issued once the installation complete	12/06: Once patress and pendant are installed, documentation stating the final lighting level to be issued	MPX		
				2.1	179 (MRI access control in fire alarm)	MPX to speak to Building Control	12/06: Building control were on site yesterday, CT room will have a master key to get out, awaiting formal approval 19/06: LES spoke to Building Control, they will approve warrant. MPX will continue works once Cause&Effect finished, to be completed next week.	MPX	28/06/2019	
				2.1	179 (MRI access control in fire alarm)	MPX to progress prep work in anticipation of approval	12/06: MPX noted that SFRS have lockbox code to get a key to enter these rooms in the event of a fire - lockbox has been installed, key is required. Costs are yet to be agreed, but works to proceed. 19/06: Key is NHSL action - it was agreed this item can be closed			19/06/2019
				2.1	178 and 179 -additional discussion	Doors for single swing to be confirmed	12/06: MPX noted this was completed	MPX/Board	06/06/2019	06/06/2019
				2.1	181 (XLR sockets)	MPX to complete work	12/06: MPX noted this was completed	MPX	07/06/2019	12/06/2019
				2.1	182 (Bedside environment)	MPX to confirm bracket delivery dates	12/06: MPX noted brackets arrived last week	MPX	05/06/2019	05/06/2019
				2.1	182 (Bedside environment)	MPX to complete work	12/06: MPX noted 70% are fitted, targeting 14/06 for completion 19/06: Fitted all brackets - Craig (Bostons) to give list - if any are missing, MPX have spares on site. To complete this week.	MPX	21/06/2019	

Demob and Site Clearance	Steering Group Meeting	Weekly Look Ahead	J Crombie Letter	OMG	Heading	Issue / Action	Update / Current Position	Responsible Party	Target Completion Date	Date Closed
		1	11	2.31	Operational changes	BYES to issue status report of when changes will be completed	J Crombie letter: all those essential to Hospital opening to be implemented by IHSL/Bouygues prior to Hospital opening 12/06: DG agreed to issue this prior to Friday 10am meeting with IHSL/Board, with timescales for action and encompassing Board's priorities 19/06: DG issued update prior to this meeting, with changes that have progressed and estimated dates for later changes. DG confirmed not aware of any issues with Board's priority changes. JM noted two additional H&S related changes should be added to the Board's priority list - Core Stair 4 access control (012) and bump rails on balcony (064).	BYES	Ongoing	
		1	11	2.31	Operational changes	Board to feedback to priorities to be completed	J Crombie letter: all those essential to Hospital opening to be implemented by IHSL/Bouygues prior to Hospital opening 12/06: post-meeting, SD noted he will send an email with this information today	Board	12/06/2019	13/06/2019
	No 3	1	9	3.1	Snagging	MPX to complete outstanding 104 snags	Steering Group/Jim Crombie Letter: demonstrate evidence that all Snagging Items are being attended to and those that were marked as "closed" in error, have been revisited and re-verified; 12/06: MPX noted 96 snags remain - CW to review outstanding ones and give dates for completion. Additional floor layer resource coming to site tomorrow and MPX are pushing contractors to complete 19/06: CW noted snagging has not progressed as quickly as desired. MPX have brought in 4 additional managers for 4-6 weeks for snagging and helpdesk defects. JMacG noted around 70 snags remaining, but to be reviewed. BB noted he had forwarded Margaret DiMascio's email to CW with CAMHS snags.	MPX		
	No 3	1	9	3.1	Snagging	MPX snags to be reviewed for impact on Board activities.	Steering Group/Jim Crombie Letter:demonstrate evidence that all Snagging Items are being attended to and those that were marked as "closed" in error, have been revisited and re-verified; 19/06: BB requested definitive list of remaining snags so all parties are aware. JM noted 4 critical snags in Child Health and Life: * Tissue Culture - no water plumbed in for washers * Molecular lab - isolation cabinets not connected (hoses too short) * Ice machine - not plumbed in * Freezer store - not working (fuses taken out of spurs) DG noted that if MPX think there are any smaller items that BYES could do, to let him know.	MPX		
	No 3	1	9	3.1	Snagging	MPX to complete review of SD's list of snags	Steering Group/JCrombie Letter: demonstrate evidence that all Snagging Items are being attended to and those that were marked as "closed" in error, have been revisited and re-verified; 12/06: MPX noted that review was started yesterday, will be completed by end of this week. CW noted that of the snags he checked 10% had not been done (aesthetics mostly, may have been unable to find the snag, and so closed). 19/06: MPX review completed on upper levels, 50+% complete on L1 and on GF.	MPX	21/06/2019	
		1		3.1	Snagging	SD issues: PTV testing to be completed	12/06: CW noted an independent advisor conducted 11 pendulum tests in the basement. Report expected this week or start of next week. 19/06: CW noted report was issued this morning and will circulate	MPX	19/06/2019	

Demob and Site Clearance	Steering Group Meeting	Weekly Look Ahead	J Crombie Letter	OMG	Heading	Issue / Action	Update / Current Position	Responsible Party	Target Completion Date	Date Closed
		1		3.1	Snagging	SD issues: Lighting controls – Board to advise locations	12/06: MPX noted Schneider were on site checking controls. JM asked if all controls were being checked as being mentioned by lots of people. CW noted they were checking the reports logged on helpdesk. JM noted from previous meeting CG was to check dimming at night in the touchdown bases. 19/06: Schneider working through helpdesk items. Location details should be on these items, CG noted that functional controls were specifically planned for areas, so not all will switch off where expected etc.	MPX		
		1		3.1	Snagging	SD issues: external paviers – MPX to confirm install spec	12/06: SD noted BYES had brought in Tobermore representative, confirming no issues with product. 19/06: MPX conducting review of spec detail, to report back by next meeting	MPX	26/06/2019	
		1	7	3.1	Snagging	SD issues: Window restrictors - MPX to forward response from supplier once received	J Crombie Letter: Failure of window restrictors. Please confirm all window restrictors will operate safely for Hospital opening, and there are no health and safety issues 12/06: MPX believe failed items are a result of misuse during construction phase. Replacements have been ordered, and spare components for BYES. JM asked if the failure should be reported to IRIC - BB noted not necessary if all parties are content that this was misuse. It was reiterated PPMs are in place with BYES contractor and spot checks by BYES managers. 19/06: Velfac were on site on 13/06 - fixed restrictor on L4 which had been bent. Velfac returning to review every window and reoil - date to be confirmed later today. BB requested a progress report on those checked/still to be checked be issued.	MPX	TBC	
		1		3.1	Snagging	SD issues: Internal and external cleanliness – MPX sweep	12/06: Courtyards are being actioned this week, additional resources have been brought in to sweep the areas, and then will walk the outside next week. 19/06: MPX note courtyards are ready to be walked with Board; external areas to be complete this week. Other elements, e.g. moving of external furniture requested, will be complete by 28/06.	MPX	28/06/2019	
		1		3.1	Snagging	Light diffusers	12/06: BB noted that care is needed when reattaching the diffusers, which may have caused the issue. Diffuser in Core 3 has been replaced, to be checked later this week. 19/06: MPX reported 5 diffusers had not been seated correctly, these have been replaced and popping has not reoccured. Item to be closed.	MPX	14/06/2019	19/06/2019
		1		3.1	Lifts	Actions resulting from the Schindler survey to be discussed between BYES and MPX.	12/06: Schindler coming to site on Friday for meeting with BYES and MPX to discuss all lift aspects and surveys. Board are to be given feedback on Friday following meeting. 19/06: BYES now instructing external party to conduct survey. Focus is on lifecycle, and potentially some defects. DG noted as far as BYES are aware, reliability is good and all lifts have been inspected.	BYES	TBC	
		1		3.1	Lifts	MPX committed works (e.g. replacement of floors) to be completed	12/06: MPX noted may be an issue with replacing exact floor type (product and colour) - availability to be confirmed on Friday by Schindler. MPX and BYES to discuss if alternative is required, and to run the agreed solution past the Board prior to implementation. 19/06: CW and DG to speak today - CW to procure flooring from MPX floor layers. Board to be given proposal before ordering. Date for completion is 26/06.	MPX	26/06/2019	
		1	3	3.1	Lifts	Significant aesthetic damage to lifts, e.g. lift door at the children's entrance; Delivery date for reception lift door replacement to be confirmed	12/06: MPX confirmed on programme. Reception door will be taken away, refurbished, and put back - date to be confirmed following Friday meeting. 19/06: Door 15 has been taken away, expected next week, however MPX trying to get it back for Fri (Board have Google photography on site over weekend, and visits next week). MPX note will take few hours to reinstall. External door disc tags - CW to look at getting discs for each lift, for each floor (no need to demarcate floors, just 4 x Lift 1, 4 x Lift 2 etc)	MPX	TBC	
		1	3	3.1	Lifts	Push buttons – MPX to escalate	12/06: Buttons being replaced 19/06: CG to find out status if swapped or replaced, and if complete	MPX	28/06/2019	

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		1		3.1	Lifts	Ceilings – BYES to action change	12/06: Progress to be confirmed in BYES status report 19/06: DG has quote from 3M for film, approx 1 day to do.	BYES	TBC	
		1			Lifts - reliability data	Reliability information - downtime etc	12/06: BB noted fundamental element for the Board is that the lifts are reliable. Lifts are believed to all be currently operational. Statutory inspections have been conducted. BYES to provide Board with data from helpdesk, including downtime, and update on a regular basis, to provide assurance in the reliability. 19/06: Ongoing - BB noted would expect to have this in monthly report, so can note trends in particular lifts or reoccurrences.	BYES	Ongoing	
				3.3	Knowledge Transfer	Provision of hard-drive with Aconex contents to be confirmed	12/06: MPX to check PCPs for what was agreed to be provided and issue what is intended to be provided. CW noted that hard drives can be provided. 19/06: LES finding information from BCRs/PCPs. Generally can do whatever is required. BYES request download of Aconex and 'line in sand' Zutec download, once all construction info is present.	MPX		
				4.1	Call logger	BYES to confirm solution with Avaya and implement.	12/06: BYES to action. 19/06: Ongoing with Avaya. BYES collating telephony information for Board, as moving to new telephone systems.	BYES		
				4.5	Audit actions (HAI Scribe etc.)	HFS/SFT - SD to distribute notes from visit on 30/04, and follow-up meeting to be arranged	12/06: SD will action by end of next week 19/06: As above	Board	28/06/2019	
				4.5	Audit actions (HAI Scribe etc.)	Stage 4 HAI Scribe - RHe to speak to Sarah-Jane regarding HAI Scribe training for BYES employees.	12/06: JM noted this has been completed, information is with BYES.	Board		12/06/2019
			8	4.5	Audit actions (HAI Scribe etc.)	Stage 4 HAI Scribe - MPX to close actions	12/06: the 3 reports have been issued by the Board. Actions are closing gaps and ceilings, and 2 global issues - water system and ventilation. MPX noted builders are doing all clinical rooms - roses for pipes, checking ceilings, and movement joints. Works started on Tuesday (11/06) - MPX to confirm timescales 19/06: Ceiling trims and gaps are being resolved - to close by end of next week. Mastic man is coming to mastic IPS pipes. MPX to advise Board when completed, sp Board can check and inform Infection Control. CW to give JM a list of ceilings completed so far	MPX	28/06/19	
					HAI Scribe	HAI Scribe requirements after becoming operational	19/06: JM reiterated all work after the hospital becomes operational will require HAI Scribe (incl PPM). BYES to contact SarahJane to start process	BYES	21/06/2019	
				4.5	Audit actions (HAI Scribe etc.)	Callidus audit - IHSL to close outstanding actions.	12/06: to be closed once water system has been transferred to BYES 19/06: As above	IHSL	TBC	

Demob and Site Clearance	Steering Group Meeting	Weekly Look Ahead	J Crombie Letter	OMG	Heading	Issue / Action	Update / Current Position	Responsible Party	Target Completion Date	Date Closed
	No 3		13	4.6.1	Heat stations	Lagwell to complete stripping phenolic insulation and replacing with glass mineral fibre in all 4 heat stations and then monitor using dataloggers to prove if work has been effective.	Steering group, JCrombie Letter: Project Co currently installing mineral fibre insulation as a mitigation measure - Project Co to confirm they will resolve the overheating issue prior to opening; 12/06: Lagwell and Mercury are currently snagging areas, data loggers going in this week, to be monitored for 1 week, possibly longer. Data logger positions to be agreed with BYES. Temporary cooling to be removed prior to data loggers going in. Back-up plans in case insulation has not had the desired effect are being investigated. Mercury to complete works on plinths and floors once other works have been completed. 19/06: Insulation work is complete, metalwork is >99% complete (brackets needed). CG noted temporary cooling to come out and data loggers to go in 20/06, but will be at optimal conditions for recording from Monday 24/06. BYES are putting in their own logger too. Keith to liaise with BYES	MPX	20/06/2019	
			5	4.6.1	Water Management	Expansion vessels delivery to be confirmed then replaced	12/06: 20th June for installation 19/06: As above	MPX	20/06/2019	
			5	4.6.1	Water Management	Relief valves delivery to be confirmed then replaced	12/06: 21st June for installation 19/06: As above	MPX	21/06/2019	
				4.6.3	Oil feed to boiler	Pressure switch to be installed.	12/06: Repositioning of the valve started yesterday. Pressure switch to be on site today. WW requested MPX check what was being installed was correct for what Bosch need (e.g. 1 sensor or 3). 19/06: Installed - item closed	MPX	14/06/2019	
			6	4.6.3	Oil feed to boiler	The boiler to be recommissioned to run on oil.	JCrombie letter: This is a significant issue which has a material impact on the safe opening of the Hospital. We require assurance this is being urgently addressed and will be complete before opening. 06/06: Still not resolved. Bosch now advise an additional pressure sensor requires to be fitted. Bosch due back on site w/c 17 June. 12/06: Bosch to come back next week for the recommissioning, MPX to issue invite to recommissioning to BYES, Board and IHSL. 19/06: Bosch on site today - 1 boiler being recommissioned today, second and third to be recommissioned on 20/06 and 21/06 respectively. Post meeting note 19/06: first boiler confirmed to be recommissioned	MPX	21/06/2019	

Demob and Site Clearance	Steering Group Meeting	Weekly Look Ahead	J Crombie Letter	OMG	Heading	Issue / Action	Update / Current Position	Responsible Party	Target Completion Date	Date Closed
		1	1	4.6.5	Access Control Doors – shear locks, smoke seals,	MPX to replace shearlocks and strikeplates, and rewire all doors (~70), and check the fitting and alignment of shearlocks is correct, and fix any fire door gaps or smoke seals.	06/06: MPX have commenced a) the replacement of shear locks, b) making the necessary adjustments to the doors and c) carrying out the wiring modification. Level 4 (4 sets of doors) is complete. Level 3 (11 sets of doors) a and b are complete with c in progress. Level 2 (7 sets of doors) a and b in progress, c not yet started. Level 1 (19 sets of doors) and Ground Floor (29 sets of doors) not yet started. IHSL have requested that MPX put a robust test procedure in place that can demonstrate the success or otherwise of the remedial works. MPX are currently identifying those doors that could be converted to single swing if required. This will not be possible on all doors as a number are on bi-directional fire escape routes. 12/06: MPX are now replacing the installed shearlocks with those from Assa Abloy (same set-up as installed in Queen Elizabeth hospital in Glasgow). 50 locks due on site tomorrow, with further 84 to come as soon as possible. One set has been installed on GF, and 4th Floor management suite doors and medical records. Evidence of reliability to be provided. SD noted the importance of correct construction solution in conjunction with PPM quarterly checks for all elements of doors (e.g. geze mechanism, shearlock, access control, door frame etc). Data sheets for Assa Abloy shearlocks to be issued to BYES. 19/06: All 140 locks arrived on 14/06. MPX have completed take out and replace of locks on L4 - L1, currently on GF. Following with joinery and electrician, on target to be complete on 25/06. Baxters have been instructed for decoration, CW chasing for people asap (SD noted signs for wet paint etc required). Joint inspection to be conducted with NHSL. MPX 100% confident for operation. Data sheets to be provided to BYES, and new assets to be added to Zutec.	MPX	25/06/2019	
		1	2		Access Control System	access control system not fully operational or reliable	06/06: Confirmed completed. It would appear the confusion arose because a number of doors were offline due to shear lock issues. 12/06: MPX will check 100% of doors once shearlock work has been completed. JM and KK noted three areas requiring action: correlation from reader and lift (Bostons input); dedicated PC for access control requires password (CW to follow up) and pedestrian gate at energy centre (not on spreadsheet) - CW to check. 19/06: Full walk of access control to be conducted as part of shearlock floor walking with Board. IOMRI door to be added to system; status of pedestrian gate at service yard to be determined; queries from Jane's spreadsheet to be closed out. MPX to give definitive position of what doors are on the system by next meeting	MPX	26/06/2019	
		1	10	4.6.5	Fire Doors	Carry out checks and remedial actions on all corridor fire doors.	MPX to issue programme of completed doors and checks and timeline. 06/06: MPX now have a team of 20 Joiners on site. They are on target to have completed a full overhaul of each fire door by the end of June 2019. 12/06: MPX to provide breakdown of the timescale and completed/still to complete doors 19/06: MPX progressing well, L2 and L1 to be completed by end of week. GF to complete next week, more joiners have been requested. Targeted end date, end of June.	MPX	30/06/2019	
		1		4.6.5	Doors – shear locks, smoke seals,	Scoring on vinyl to be remedied once doors complete	12/06: Floors to be walked following shearlock/fire door works. 19/06: MPX can start progressing next week on upper levels	MPX	w/c 01/07/19	
				4.6.5	Doors – shear locks, smoke seals,	5 MRI doors to be made single swing	12/06: MPX note that this has been completed, and the completed work observed by Building Control on their visit on 11/06	MPX		12/06/2019
	No 3		12	4.7	CT room cooling	MPX to expediate provision of Fancoil unit	Steering Group, J Crombie letter: overheating problem, temporary cooling currently being provided to enable commissioning of CT equipment. Please confirm that you will install permanent cooling solution to meet cooling requirements prior to Hospital opening. 12/06: Pipework install is ongoing, awaiting Fancoil unit delivery date (chasing daily), all other work will be completed in advance of unit arriving. 19/06: Fancoil due on 25/06 - FES will fit (2 days) - to be complete by end of next week	MPX	28/06/2019	

Demob and Site Clearance	Steering Group Meeting	Weekly Look Ahead	J Crombie Letter	OMG	Heading	Issue / Action	Update / Current Position	Responsible Party	Target Completion Date	Date Closed
				4.7	Data point for alarm for critical fridges / freezers	MPX to confirm if complete.	12/06: MPX to confirm complete 19/06: To be completed by end of this week	MPX	21/06/2019	
			5	4.8	Water management system handover	MPX/BYES to complete transfer	12/06: Discussion to be held today following OMG 19/06: Meeting held last week - Ian Clarke working on schematic, testing to commence next week, documentation catch-up needed between DW and IC, BYES to take flushing and maintenance responsibility next week, full transfer before operations. GG noted Board pulling together results - missing DW tracker for April (red/green matrix) - DW may not have made one for April, CG to ask DW. Little used outlets/flushing info for BYES- Board to pick up next week. Operational procedures for flushing in clean areas (gowning up etc) to be discussed/agreed.	MPX/BYES	03/07/2019	
			20	5	Escape and security of egress from balcony	MPX to confirm if contact points are on access control system	J Crombie letter: currently there is a risk of public on fourth floor terrace entering the helipad and being able to access the clinical management suite and classrooms 12/06: MPX noted Building Control had no adverse comments to a bolt and removal of handle on public side of terrace. SD noted no escape signage currently in place. WW noted there is a sign missing in the cafe - signage to be reviewed (JMacG to action) 19/06: LES spoke to Building Control on 18/06 - ok with handle off and bolt, will be captured in amendment. Fire Scotland to confirm. CW to progress detail with blacksmith, signage will reflect. Contact points detail (if on system) to be confirmed next week	MPX	TBC	
				6.1	CCTV	MPX to install permanent signage.	12/06: MPX to chase for date (Ascots delivery came today, may contain this signage) 19/06: Signage due this week	MPX	21/06/2019	
				6.2	Planting	P1 to complete works	12/06: Courtyards to be completed by 17/06, external to be completed the following week. 19/06: Courtyards ready to walk with Board. SD noted turf has died again under canopy overhang (may need changed to artificial). Failed plants will be under warranty. SD noted sedum roofs need weeded.	MPX	24/06/2019	
				6.2	Planting	Consultant drawings and planting schedules to be added to Zutec	12/06: MPX to add this information to Zutec by Friday 19/06: Will be done by the end of this week.	MPX	21/06/2019	
		1		6.4	Escape signage	Ascot to install signage.	12/06: Delivery arrived today, to be installed 19/06: Installed. BYES have orded statutory plant room signage.	MPX		19/06/2019
		1	14	6.6	Theatre air sampling (also includes critical care, imaging, isolation rooms)	RHe to arrange Board testing/assurance IOM validation	J Crombie Letter: Independent validation of critical ventilation systems in a number of clinical areas (Theatres, Imaging, Critical Care and all Isolation Rooms) - ensure all Project Co works are completed to allow independent validation to take place, including ZUTEK 20779 that had been closed by IHSL/MPX in error 12/06: Ventilation has been sealed 19/06: GG noted IOM have experienced some issues since starting validation on Monday (ceilings tiles in adjacent corridors, no locks on corridor (CW noted should be done now), neonatal and critical care ceilings removed post clinical clean). JM notes signs have not made difference (for all parties) - is causing real concern. MPX requested sequence of areas to ensure out ahead of Board/clinical clean. Advance check of areas with MPX/Colin/Ashley to be done. Meeting later today to discuss - issues were circulated later that day.	MPX		
				6.6	Theatre 33	MPX to investigate non-pass through light.	12/06: MPX confirmed closed earlier today	MPX		12/06/2019

Demob and Site Clearance	Steering Group Meeting	Weekly Look Ahead	J Crombie Letter	OMG	Heading	Issue / Action	Update / Current Position	Responsible Party	Target Completion Date	Date Closed
	No 3			6.7	Covers on PTS stations	Mercury to replace the bottom covers on the stations	06/06: NHSL have acknowledged that PTS has been commissioned (it was in maintenance mode to prevent inappropriate use). Bottom cover plates on order. 12/06: Whiterock has arrived to cover (hole will be cored in section of whiterock) 19/06: Whiterock covers will progress once locks completed. Mercury instructed to replace cushion. Maintenance mode to end 5th/6th July. Quirepace have been liaising with Fiona, also will be on site during migration period if any issues.	MPX		
				6.8	Digilocks – standardise staff area codes	MPX to carry out work at same time as fire door works.	12/06: Agreed that BYES will take this action, CW to forward information to BYES. Board to be notified when work commences. 19/06: Work complete	BYES		19/06/2019
			10	6.1	Fire Cause and Effect – smoke vents	MPX to confirm faulty vents have been fixed	J Crombie letter: the high level vents in the atrium - we understand work is continuing on all fire issues 12/06: Engineer to revisit (previously fixed, has reoccured - loose wire believed to be cause). Targeted to be completed end of this week/start of next week 19/06: JMacG to tie in with Gary, thinks complete. Confirmed can be tested by changing set point, CG to find Schneider record for Board	MPX	21/06/2019	
				6.11	Counter in pod stair 8	Counter top to be replaced	12/06: MPX targeting for completion by end of next week. 19/06: To complete next week	MPX	28/06/2019	
			19	6.12	Ophthalmology and equipment	MPX to investigate power provision	J Crombie letter: no power supplies allowing the specialist equipment to operate 12/06: JMacG, Fiona and Mike to visit area and agree solution. 19/06: To complete this weekend (spurs going in)	MPX	23/06/2019	
				6.13	Clinical management suite L2– phone points	Points to be installed	12/06: Targeted for completion by 20/06 19/06: To complete next week	MPX	28/06/2019	
				6.14	PTS pot holder	To be reinstated or replaced	12/06: MPX have ordered replacement - delivery date to be confirmed 19/06: As above	MPX		
		1		6.15	Glazing remedials	To be rectified – High level (MPX)	12/06: Due to be completed 23/06 19/06: To be installed 27/06 (logistics to be agreed - Heras etc)	MPX	23/06/2019	
		1		6.15	Glazing remedials	Low level (BYES)	12/06: Due to be completed 21/06 19/06: As above, to be confirmed	BYES	21/06/2019	
			AOB		Glazing remedials	MacKinlay	19/06: SD noted pane in MacKinlay needs replaced (upper right corner of bottom panel) - was on Zutec.	MPX		
				6.16	Front area – bus shelter	Bus shelter to be cleaned	12/06: To be completed next week (before Heras fencing is taken down) 19/06: Bus shelter completed today. BC noted bottom of curtain wall also needs cleaned - MPX will power wash.	MPX	21/06/2019	
				6.17	Optima - works	MPX to confirm works completed by 10/06	12/06: MPX works are complete, Optima are on site.	MPX	10/06/2019	10/06/2019
				6.19	IPS in MRI panels	MPX to respond to Board with evidence that issue is not MPX	12/06: MPX issued evidence to Board last week, which has gone back to Modus. Board to follow up with Modus for a response 19/06: CG noted demo'd on site, Modus liaised with Bender to get sorted - item to close	Board		19/06/2019
		1		6.2	CAMHS access control	To be actioned prior to occupation	12/06: Board need assurances that works related to CAMHS access will be completed. 19/06: BYES change	BYES		
					CAMHS kitchen		12/06: SD noted the CAMHS therapy kitchen has construction works in it (holes in walls, and access panels) - CW/JMacG to follow up. 19/06: Confirmation of who is to order (or who has ordered) induction hob top - MPX believe Board were ordering. MPX dealing with Margaret's final review of CAMHS - some items on her list may have been closed by time the list was sent to helpdesk - Board to review. Noted this ties up BYES resource.	MPX / Board	TBC	

Demob and Site Clearance	Steering Group Meeting	Weekly Look Ahead	J Crombie Letter	OMG	Heading	Issue / Action	Update / Current Position	Responsible Party	Target Completion Date	Date Closed
		1	17	6.22	Audiology benches	Benches to be installed	J Crombie letter: worktops are not yet installed in the two audiology control rooms 12/06: MPX targeting to be completed next week. CW confirmed soundproofing/integrity of rooms will be maintained 19/06: Benches not yet arrived, will be installed as soon as they arrive	MPX	21/06/2019	
			4		Guardian System	Evidence awaited that the system is fully operational. Evidence awaited that the system is fully operational for proper protection of all NHS staff	06/06: NHS have acknowledged that Guardian system has been commissioned. There had been an agreement between a member of the NHS team and Mercury that the personal pushbuttons (100 off) would be issued by Mercury "closer to opening time". This is now organised for 14 June. Also it would appear that elements of the system have been unplugged at patch panel level in an ICT Node Room. 12/06: the pushbuttons to be issued 14/06. MPX have issued information regarding node rooms from Static to Bostons to investigate (MPX do not have access to the node rooms). To find out today if the elements have been unplugged. BB noted that if this is the case, the cause needs to be identified, as cannot reoccur. 19/06: Faulty component (didn't beep when swiped) been closed out. Fobs been handed over, Fiona meeting with Static on Friday (functionality - different beep noises).	MPX	14/06/2019	19/06/2019
			16		IPS cupboard within Critical Care Department overheating	Assurances required for Board	J Crombie letter: fire door has been left open with a sticker stating "do not close", please confirm it is safe to close the door and there are no overheating issues; 12/06: The data logger has been in place, and door kept closed. CW noted DW to download data from the logger and distribute. 19/06: CG noted was unlocked - who has key? (SM7) BYES should hold all. CG to get key and relock it. Data logger - DW converting data. Wallace Whittle upper design limit is 31°C, with 70°C for breaker to fail. CG noted there is sufficient capacity to increase cooling if needed. Evidence from data logger req'd so can understand risks.	MPX		
		1	18		Medical Gases repeater panel	Panel location	J Crombie letter: no panel in a manned 24 hour area 12/06: Response will be issued to the Board 19/06: Agreement to install - JM can show location. Mercury/FES may not be able to install, Board to find out if HPI can be contracted directly, MPX would still do firestopping etc.	Board/MPX	TBC	
	No 3				BMS not fully operational	Reported at Steering Group that BYES are having difficulties with the system e.g. distinguishing critical from non- critical alarms and some links not being made	06/06: There appears to be an issue with the sheer number of alarms and BYES ability to differentiate, identify and action critical alarms. BYES are in direct discussion with MPX re this. 12/06: BB noted the alarms were not easy to find during the drainage demonstration. Critical alarm category to be set up (detail of alarms is in BCRs) - Schneider to configure. AH noted additional screen for critical alarms has been installed in helpdesk office. 19/06: CG noted pop-up can be enabled for critical alarms, CG and DG to speak after meeting.	MPX/BYES	TBC	
	No 3				Cooling and cabinets in Endoscopy suite	Reported at Steering Group that there is an additional cooling problem with cabinets in the Endoscopy suite	06/06: The NHS supplied cabinets housed in this room have a higher heat output (6 times more heat) than originally specified. NHS have now issued a change notice on 4 June to provide cooling to this room. 12/06: Change has been issued - BYES status report to note progress 19/06: BYES sourcing kit (one of Board's priority changes)	BYES	TBC	

Demob and Site Clearance	Steering Group Meeting	Weekly Look Ahead	J Crombie Letter	OMG	Heading	Issue / Action	Update / Current Position	Responsible Party	Target Completion Date	Date Closed
	No 3				Car Park Barriers	Due for installation between 3rd - 17th June	06/06: Work has commenced on schedule 12/06: Work is progressing well, cameras still to be installed. Board have raised query regarding data connection for remote log-in, MPX to investigate 19/06: Two parts of the data connection issues: remote diagnostics (BYES) and hand held devices (MPX - Board change 087). CW to get update from Lucy. Commissioning operative to come back next week. Hand held devices needed once operational. Board noted time if line needed is imperative, CW believes lines are available.	MPX	w/c 24/06/2019	
23/05					Demob and Site Clearance	MPX actions for demobilisation	HERAs and Turnstiles removed (all except below) HERAs removed - DCN Proximity Parking (removal in two phases on 11 and 14 July) HERAs removed - Bus Stop layby and shelter MPX to supply plastic barriers for NHSL use at ED Drop Off (8 off) 19/06: Walkround to take place on 21/06 at 9am (Board/MPX) for what will be done	MPX	21/06/2019 14/07/2019 08/07/2019 21/06/2019 21/06/19	
23/05					Demob and Site Clearance	MPX to leave fencing and erect planting screen at Energy Centre		MPX	23/05/2019	23/05/2019
23/05					Demob and Site Clearance	Car Park 1B - Manned security during business hours until 6.00am 9 July	12/06: Clarified this is MPX until 21/6/2019, thereafter NHSL	To note	09/07/2019	
23/05					Demob and Site Clearance	MPX to remove temp crossing poles at QMRI (Consort will reinstate kerbs during LFC resurfacing – circa August 2019).	12/06: SD will speak to Consort regarding tactile pavings 19/06: MPX noted Jamie struggling for tar (for tactile paving removal) - may get cold tar as interim measure.	MPX	TBC	
23/05					Demob and Site Clearance	MPX to have reinstated permanent crossing at QMRI	MPX agreed to remove temporary covers, and have power switched on. Crossing has been commissioned previously. 12/06: to be completed for when Heras is removed	MPX	21/06/2019	
23/05					Demob and Site Clearance	MPX to have reinstated 3 missing lamp standards at LFC bend – positions now	12/06: MPX to complete this week - 8ft poles being installed 19/06: Poles on site, currently being completed	MPX	21/06/2019	
23/05					Demob and Site Clearance	IHSL to commission Exit Condition Surveys for: Car Park 1B, and Little France Mills	12/06: Meeting being held today to discuss 19/06: Condition surveys have been completed		12/06/2019	
				AOB	Brackets in ED	Brackets needed in ED for PCs (1 of 4 installed)	12/06: JM and CW to visit ED following OMG meeting 19/06: Mike and Dorothy looking at these to make sure they are the right ones, aiming to be completed today.	MPX	19/06/2019	
				AOB	Turning circle in RHSC carpark	KK noted this was tight when exiting the carpark	12/06: MPX noted this had already been identified and rectified - Jamie has rounded off the 'pointy' edge and brought the kerb back ~0.5 m (any further would affect the parking space next to it)			12/06/2019
				AOB	Consort - link to RIE	Items to be discussed at interface meeting	19/06: BC and JMacG to speak to Consort at today's Interface meeting - re links. MPX need help with fire alarm and Engie	Board/MPX	19/06/2019	

190612 IHSL.NHSL JC Response

To: Jim Crombie
Deputy Chief Executive
Lothian Health Board
Waverley Gate
2-4 Waterloo Place
Edinburgh
EH1 3EG

12th June 2019

Dear Sirs,

Re-Provision of RHSC and DCN at Little France

We refer to your letter of 7 June 2019.

As you acknowledge we have provided an update (6 June) on the matters raised at the last Joint Steering Group meeting on 28 May 2019 and we note the further concerns listed in your letter of 7 June.

We have copied the 20 concerns below and provide our response to each.

1. Double Swing Doors - approximately 70 double swing doors not fully operational or reliable;

Following a successful trial of the alternative locking mechanism for double swing doors Multiplex shall replace locks with Assa Abloy magnetic type. 50 sets are currently being delivered to site and we await delivery of the balance. We are targeting the end of June for all to be replaced.

2. Access Control System - access control system not fully operational or reliable;

Our understanding is that the residual issues in relation to this item are related to item no 1 (above). We expect that when replacement locking mechanisms are installed all access control will be operational.

Multiplex will carry out a full floor by floor review when works in relation to item 1 are complete.

3. Lifts - push buttons not operational and significant aesthetic damage to lifts, e.g. lift's door at the children's entrance;

Replacement lift buttons have been installed and Schindler have been instructed to replace the lift door. We await final confirmation of this date from Schindler and will revert on receipt. NHS Lothian have agreed with BYES to allow one lift to be taken out of action. This will allow lift 15 door refurbishment to take place.

4. Guardian System - evidence waited that the system is fully operational for proper protection of all NHSL staff;

The staff attack system was fully commissioned and demonstrated with training carried out at each of the super user training sessions. We understand that on a recent visit from Static Systems that network connectivity issues were identified, and these were communicated to NHSL. It appears that patch leads had been incorrectly removed. Multiplex requested a combined review with Boston Networks and NHS Lothian to understand why patch leads had been incorrectly removed.

5. Water Management (including replacement of Kemper valves and expansion vessel works) - we assume all tests and satisfactory results will be available to the Board prior to Hospital opening, please confirm;

Water system microbiological testing has now received satisfactory results, and these have been shared with NHSL.

Multiplex noted during the general water system maintenance that some of the hot water end of line temperatures were not as high as we would have anticipated given the low demand (despite achieving the required 55 degrees). After discussion with the manufacturer regarding the thermal balancing valves they provided a solution by replacing the end of line valves with an alternative valve. This work has now been completed and the temperature checks are now being carried and a report will be provided in due course.

Remedial works to the expansion vessels (3off) is scheduled for 20 and 21 June.

6. Oil feed to boiler unable to run on oil. This is a significant issue which has a material impact on the safe opening of the Hospital. We require assurance this is being urgently addressed and will be complete before opening;

Multiplex has ordered the required pressure switch. Oil pipe works commenced on 11 June 2019. Final commissioning is expected week commencing 17 June 2019, Bosch confirmation is awaited and we will revert to NHSL on receipt. NHSL will be invited to witness commissioning as requested.

7. Window restrictor - failure of window restrictors. Please confirm all window restrictors will operate safely for Hospital opening, and there are no health and safety issues;

Multiplex believe these have been forced rather than failed. However, Multiplex is undertaking a site review and shall replace any that have been damaged.

8. HAI-SCRIBE/ Infection Control - implementation of actions from HAI-SCRIBE visit;

Works are ongoing and a full builders work review will be completed by 28 June 2019. HAI Scribe requirements for Water and Ventilation systems are addressed in items 5 and 14.

9. Snagging - demonstrate evidence that all Snagging Items are being attended to and those that were marked as "closed" in error, have been revisited and re-verified;

Snagging review is progressing with all incorrectly closed items being rectified. Multiplex will provide a report on this matter.

10. Fire issues (e.g. Gaps in Fire Doors and the high level vents in the atrium) - we understand work is continuing on all fire issues. Please confirm all necessary works will be completed prior to Hospital opening;

Door review is ongoing and will be completed prior to Hospital opening. The issue identified with high level vents in the atrium has been clarified and will be remedied w/c 17 June.

11. Board Operational Changes - all those essential to Hospital opening to be implemented by IHSL/Bouygues prior to Hospital opening;

IHSL/Bouygues have provided a Variation Project Tracker in the monthly report submitted on 10 June. NHSL Contract Manager has undertaken to review this and identify those Operational Changes that are essential to Hospital opening. These will be progressed jointly.

12. CT Scanner Room – overheating problem, temporary cooling currently being provided to enable commissioning of CT equipment. Please confirm that you will install permanent cooling solution to meet cooling requirements prior to Hospital opening:

Infrastructure works are progressing and additional FCU's are being manufactured, on target to complete 3 July 2019. Commissioning of imaging equipment with temporary cooling in place commenced 12 June 2019.

13. Excessive temperature in all heat stations – Project Co currently installing mineral fibre insulation as a mitigation measure – Project Co to confirm they will resolve the overheating issue prior to opening;

Insulation work is almost complete, data loggers will be installed to monitor the room temperatures following remedial works. Interim data should be available by 21 June however full results will take a further week.

14. Independent validation of critical ventilation systems in a number of clinical areas (Theatres, Imaging, Critical Care and all Isolation Rooms) - ensure all Project Co works are completed to allow independent validation to take place, including ZUTEC 20779 that had been closed by IHSL/MPX in error;

Theatre works are complete with the exception of the fire door review which will be completed as a priority item by 12 June 2019.

Zutec Item 20779, the gap between the duct and concrete has now been plated. This item is now confirmed closed.

The IOMRI room and adjacent theatre pressure cascade still requires to be set up in conjunction with NHSL fit out contractor. We await their final air balancing figures to allow the joint works to be completed.

15. Dishwasher power supplies - single phase has been installed rather than the required three phase. Please confirm the three phase power supply works will be completed prior to Hospital opening;

These works are ongoing and will be completed week commencing 17 June 2019.

Multiplex are unable to install the associated dosing units as these cannot be located. All parties are checking for evidence of delivery / receipt.

16. IPS cupboard within Critical Care Department overheating - fire door has been left open with a sticker stating, "do not close", please confirm it is safe to close the door and there are no overheating issues;

The door to this room can be closed.

A data logger had been installed within the room to monitor the room's temperature, results now being reviewed and will be shared shortly.

17. Audiology worktops - worktops are not yet installed in the two audiology control rooms;

These are ordered and will be fitted prior to Hospital opening.

18. Medical Gases repeater panel - no panel in a manned 24 hour area;

Multiplex advise that a repeater panel can be installed in the Emergency Department (exact location to be agreed). This will take approximately 3 weeks to complete from the date of agreement from NHS Lothian.

Multiplex noted in August 2018 regarding the hospital facility not making allowance for a 24 hour manned security location. NHS Lothian advised that these alarms would be sent to Lauriston Building in order for the facility to comply with SHTM. Multiplex understood this item would be actioned by NHSL.

The Emergency Department had never been confirmed as a suitable location during dialogue with NHSL.

Multiplex also note that during the handheld device workshops, NHSL clearly stated and recorded these alarms were to go back to the 'Security Room', as detailed on the medical gas construction drawings and where the panel has been installed.

On the basis of the foregoing, it is considered that a Board change is required to instruct the installation of a repeater panel to an exact location in the Emergency Department.

19. Power supply for Ophthalmology Equipment - no power supplies allowing the specialist equipment to operate;

Work shall be complete by 20 June 2019.

20. Security for the fourth-floor terrace - currently there is a risk of public on fourth floor terrace entering the helipad and being able to access the clinical management suite and classrooms.

This is a change to the previously agreed approach/solution.

We are investigating a short-term solution which could be implemented prior to hospital opening and will revert shortly.

The change to the strategy will require a building warrant amendment and Multiplex are discussing with Building Control Officers for agreement to remove the handle on the public side of the restaurant terrace leading to the helipad. It is anticipated that they will request Scottish Fire and Rescue Service agreement to implement.

We appreciate you are finalizing preparations for the migration of services to Little France commencing on 5 July 2019 and confirm we are committed to this date. Please be assured we are prioritizing the resolution of the foregoing issues.

We confirm to working collaboratively with you to ensure that the Post Completion Works, Outstanding Works and Snagging Matters are rectified and completed in accordance with the requirements of the Project Agreement and SA1.

Yours faithfully,



Wallace Weir
Project Co Representative

Shared **innovation****F.A.O: Mr. Wallace Weir**

IHSL Lothian Ltd
 13 Queens Road
 Aberdeen
 Scotland
 AB15 4YL

13th May 2019**By- e-mail**

Dear Wallace,

RE: RHCYP, DCN & CAMHS Water Systems**Without Prejudice**

We refer to your letter of the 12th June 2019 in relation to the above and our related emails and conversation with Mr Templeton of Dalmore Capital of the same date.

We have attempted to structure this letter to acknowledge your letter of the 12th June and the comments received from Mr Templeton on the same date via email.

1. With regard to your letter received yesterday and for the avoidance of doubt I would like to make it abundantly clear that Bouygues Energies and Services (BYES) have never attempted to, nor wanted to, distance themselves from their obligations in delivering services to the site since the handover of the facility on the 22nd February 2019.
 - a) There are however a unique set of circumstances around the domestic water systems, notwithstanding the issues around SA1, that have been known to both IHSL and their Construction Contractor during numerous meetings with BYES since the latter end of 2018 that led to the Construction Contractor retaining responsibility for these systems to date.

2. Further to the email received from Mr Templeton on the morning of the 12th June we have analysed all the data available to us and feel that some of the observations, probably due to a lack of accurate and relevant information, are somewhat flawed examples of which are;
 - a) There appears to be no acknowledgment that in the lead up to the handover of the facility on the 22nd February the BYES Authorising Engineer (AE), Mr D Wilson of Multiplex & Mr R Brown of IHSL agreed at meetings that the responsibility of the system should remain with Multiplex until the system was in compliant state to be handed over to BYES.



www.bouygues-es.co.uk

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- b) No reference to our Alan Halls email (of the 6/6/19 sent @17:31) sent to yourself which clearly states that BYES have not received the assurances that the systems in question have been maintained by the Construction Contractor in accordance with both the SHTM & ACoP L8 in the period from handover to the then date.
- i. NB from our perspective the primary concern from BYES here is the compliance of the system, that we are very keen to receive, and the integrity of the record keeping for items such as temperature profiling, flushing and the like. Without the assurance of these records which have not been forthcoming, despite numerous meetings and dialogue, we can only assume that the system does not comply with either the SHTM & the ACoP L8.
- c) There also appears to be a view that this position has been adopted by BYES because of other “contractual issues” which is entirely inaccurate and irrelevant. For the avoidance of doubt all BYES require to take full responsibility of these systems are;
- i. Unequivocal records of the temperature profiling of these systems;
 - ii. Details of all flushing activities
 - iii. Confirmation of the conclusion of all remedial works to date.
 - iv. Planned dates for the conclusion of any remaining defect or snag items by Multiplex in this regard

Given these circumstances and to avoid any doubt we do not consider ourselves to be in breach of contract on this matter

Please be assured that the sole motivation here has been to be in receipt of a safe, compliant and functional system (which I am sure you and both your Board and Lenders would support) and not to frustrate any processes for the contract. However from a personal perspective I am fearful that the lack of available evidence for these systems will not be produced, or be accurate, and with the Hospital soon to be fully populated and operational this requires the utmost attention from all parties to swiftly conclude these matters.

We look forward to receiving your response, and rest assured that Alan, David Gordon and I are keen to find a mutually acceptable way forward for all these matters as soon as is possible and we remain open to any meetings that can conclude all these items.

Yours Sincerely



Mark Griffiths
OPERATIONS DIRECTOR
 For and on Behalf of
 Bouygues Energies & Services FM Ltd



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From: David Cunningham [REDACTED]
Sent: 12 June 2019 11:34
To: Wallace Weir; Bob Brown; Craig Simpson; Darren Pike [REDACTED]
Cc: [REDACTED]
Subject: RHSC - Progress

Importance: High

Follow Up Flag: Follow up
Flag Status: Completed

Gents

I'm hearing some worrying comments from the Lenders following their recent discussions with the Board. I understand the Board are troubled, to the point they are indicating to Lenders that they may not be able to operate the hospital. In turn this is causing the Lenders grave cause for concern. The unease seems to focus on three main issues: -

1. Access Doors - I understand that there are serious problems with the reliability of the double swing access doors . I gather that even when these doors have been "fixed" they have subsequently failed (I understand a member of the Board & visitors were trapped). I am told there are approx. 70 such door sets providing security around the building. The Board's view is that until these doors work reliably the hospital cannot function safely. The Lenders concern is that the Board push this to lead to whole building unavailability with severe operational and financial consequences. Can you confirm the proposals for rectification of the doors, progress on these works to date and the programme for completion.
2. Water installation - The Board is also concerned that a certified safe water system is not yet in place. They are told this will all be sorted nearer completion, but naturally the Board cannot occupy the hospital without this and does not want to start the process of moving whilst there remains any level of uncertainty. Can you confirm what tasks remain outstanding to certify that the water system is safe for hospital operation and the programme for their completion.
3. Snagging – The Board also raised a concern that in a sample check of "closed off" snagging matters 50% were found by NHSL to have been closed in error. Can you provide me with an explanation of the circumstances here, proposals to correct going forward and update of snagging sign off to date.

Given the concern circulating on these issues I'd appreciate an urgent response to this email. I will also require to discuss them during my visit to site tomorrow.

Kind regards
David

David Cunningham
Associate Director

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SCOTTISH HOSPITALS INQUIRY
Hearing commencing 26 February 2024
Bundle 5 – Documentation relating to Commissioning and Testing Prior to the
Instruction of IOM