133 Molesworth Street
PO Box 5013
Wellington 6140
New Zealand
T+64 4 496 2000

19 February 2021

[redacted]

[redacted] [redacted]
Ref: H202009166

[redacted]

Response to your request for official information

Thank you for your request under the Official Information Act 1982 (the Act) on 10 December 2020 to the Ministry of Health (the Ministry) for:

> *"1) For the critical buildings assessed for the NAMP programme but not self-assessed by DHBs, please provide - for all mental health and intellectual disability units - any data/information/documents that informed the publication of the NAMP report for these units."*

Thirty-five documents have been identified within the scope of your request and copies are attached to this letter. Appendix One details the decision on the release of each document. Some documents have been previously released and are publicly available, these documents are also outlined Appendix One.

Please note data presented in the Clinical Facility Fitness for Purpose reports is raw data. The raw data is then standardised into a 1 – 5 scoring matrix to remain consistent with the other National Asset Management Programme's data outputs. On this spectrum, a score of 1 is considered good and a score of 5 is considered to be poor.

The published graphs as published in *The National Asset Management Programme for District Health Boards: Report 1: The current-state assessment* use the 1 – 5 averaged data results across the principles assessed. In addition, a clinical facility may be scored as Average to Very Good for its Clinical Facility Fitness for Purpose but have Poor or Very Poor building condition, component, or seismic scores.

The Clinical Facility Fitness for Purpose scores need to be read contextually with the other assessments.

If you have any further queries or would like clarification on the scoring, please contact:

- NAMP@health.govt.nz

I trust this information fulfils your request. Under section 28(3) of the Act you have the right to ask the Ombudsman to review any decisions made under this request. The Ombudsman may be contacted by email at: info@ombudsman.parliament.nz or by calling 0800 802 602.

Please note that this response, with your personal details removed, may be published on the Ministry website at: www.health.govt.nz/about-ministry/information-releases/responses-official-information-act-requests.

Yours sincerely

Karen Mitchell
Deputy Director-General
DHB Infrastructure

Appendix One: List of documents for release

#	Date	Title	Decision on release
1	02 September 2019	Clinical Facility Fitness for Purpose: Lakes District Health Board	Released with some information withheld out of scope
2	02 September 2019	Clinical Facility Fitness for Purpose: Nelson Marlborough District Health Board	Released with some information withheld out of scope
3	02 September 2019	Clinical Facility Fitness for Purpose: Hauora Tairāwhiti	Released with some information withheld out of scope
4	02 September 2019	Clinical Facility Fitness for Purpose: Taranaki District Health Board	Released with some information withheld out of scope
5	02 September 2019	Clinical Facility Fitness for Purpose: Waikato District Health Board	Released with some information withheld out of scope
6	02 September 2019	Clinical Facility Fitness for Purpose: Waitematā District Health Board	Released with some information withheld out of scope
7	03 September 2019	Clinical Facility Fitness for Purpose: Canterbury District Health Board	Released with some information withheld out of scope
8	03 September 2019	Clinical Facility Fitness for Purpose: Capital & Coast District Health Board	Publicly available at: https://www.health.govt.nz/about-ministry/information-releases/responses-official-information-act-requests/documents-related-national-asset-management-programme-report
9	03 September 2019	Clinical Facility Fitness for Purpose: Hutt Valley District Health Board	Publicly available at: https://www.health.govt.nz/about-ministry/information-releases/responses-official-information-act-requests/documents-related-national-asset-management-programme-report
10	03 September 2019	Clinical Facility Fitness for Purpose: South	Released with some information withheld out of scope

#	Date	Title	Decision on release
		Canterbury District Health Board	
11	03 September 2019	Clinical Facility Fitness for Purpose: West Coast District Health Board	Released in full
12	03 September 2019	Clinical Facility Fitness for Purpose: Whanganui District Health Board	Released with some information withheld out of scope
13	18 September 2019	Clinical Facility Fitness for Purpose: Auckland District Health Board	Released with some information withheld out of scope
14	18 September 2019	Clinical Facility Fitness for Purpose: Bay of Plenty District Health Board	Released with some information withheld out of scope
15	18 September 2019	Clinical Facility Fitness for Purpose: Counties Manukau District Health Board	Released with some information withheld out of scope
16	18 September 2019	Clinical Facility Fitness for Purpose: Southern District Health Board	Released in full
17	02 September 2019	Clinical Facility Fitness for Purpose: Mid-Central District Health Board	Publicly available at: https://www.health.govt.nz/about-ministry/information-releases/responses-official-information-act-requests/documents-related-national-asset-management-programme-report
18	N/A	Clinical Facility Fitness for Purpose Data	Release in full
19	N/A	Building and Infrastructure Data	Release in full
20	N/A	Building and Infrastructure: Southern District Health Board Condition Assessments	Released with some information withheld out of scope
21	N/A	Building and Infrastructure: Waitematā District Health Board Condition Assessments	Released with some information withheld out of scope

#	Date	Title	Decision on release
22	N/A	Building and Infrastructure: Auckland District Health Board Condition Assessments	Released with some information withheld out of scope
23	N/A	Building and Infrastructure: Bay of Plenty District Health Board Condition Assessments	Released with some information withheld out of scope
24	N/A	Building and Infrastructure: Canterbury District Health Board Condition Assessments	Released with some information withheld out of scope
25	N/A	Building and Infrastructure: Counties Manukau District Health Board Building Assessments	Released with some information withheld out of scope
26	N/A	Building and Infrastructure: Hauora Tairāwhiti Condition Assessments	Released with some information withheld out of scope
27	N/A	Building and Infrastructure: Lakes District Health Board Condition Assessments	Released with some information withheld out of scope
28	N/A	Building and Infrastructure: South Canterbury District Health Board Condition Assessments	Released with some information withheld out of scope
29	N/A	Building and Infrastructure: Taranaki District Health Board Condition Assessments	Released with some information withheld out of scope
30	N/A	Building and Infrastructure: Waikato District Health Board Condition Assessments	Released with some information withheld out of scope
31	N/A	Building and Infrastructure: West Coast District Health Board Building Assessments	Released in full

#	Date	Title	Decision on release
32	N/A	Building and Infrastructure: Whanganui District Health Board Building Assessments	Released in full
33	N/A	Building and Infrastructure: Hutt Valley District Health Board Building Assessments	Publicly available at: https://www.health.govt.nz/about-ministry/information-releases/responses-official-information-act-requests/documents-related-national-asset-management-programme-report
34	N/A	Building and Infrastructure: Capital and Coast District Health Board Building Assessments	Publicly available at: https://www.health.govt.nz/about-ministry/information-releases/responses-official-information-act-requests/documents-related-national-asset-management-programme-report
35	N/A	Building and Infrastructure: Mid-Central District Health Board Building Assessments	Publicly available at: https://www.health.govt.nz/about-ministry/information-releases/responses-official-information-act-requests/documents-related-national-asset-management-programme-report

Document 1

2019

Clinical Facility fitness for Purpose

LAKES DISTRICT HEALTH BOARD

Author: Rose Macfarlane
Project: National Asset Management Plan
Date: 02 September 2019

Document 1

Contents

Out of scope

1 Introduction

1.1 Aim of this Paper

The aim of this paper is to provide your DHB high-level feedback relating to each of the clinical units that underwent a Clinical Facility Fitness for Purpose (CFFFP) Assessment.

1.2 NAMP Background and Context

The Minister of Health has asked the Capital Investment Committee (CIC) to develop a National Health Asset Management Plan (NAMP) in response to capital expenditure intentions signalled by the DHB's for the next ten years, to a total of $14.2 billion (of which $9.2 billion would be Crown funded). The NAMP will provide a tool supported by the Ministry of Health and Treasury, so they can prioritise the investment of the Health Capital Envelope (HCE) funds at a national level.

Each DHB owns their assets and is accountable for the maintenance, remediation, replacement and growth of these assets to a fit for purpose standard. The current model has the management for health assets to each DHB with no mandate for the Ministry to hold a national view on standardised policy and procedures for health building and infrastructure, and therefore no ability for the ministry to be consistent in measuring performance of business case benefit across the health asset portfolio.

1.3 The NAMP Project

The NAMP project has been tasked with setting up a national framework that outlines the condition of health assets across the DHB's, which the ministry can then use as a tool to assist with their prioritisation of capital spending on health infrastructure.

The NAMP project has been set up with six streams of work as follows;

- Feasibility report
- Building & infrastructure
- Clinical facility fit for purpose
- Demand & capacity
- Ancillary assets
- Establish asset portfolio
- Clinical Facility Fit-for-Purpose Workstream

When the outputs of these workstreams are combined, the Ministry will be able to provide a pipeline for proposed capital expenditure based on several investment scenarios.

1.4 Clinical Facility Fit-for-Purpose Workstream

The aim of the CFFFP workstream was to assess physical aspects of key clinical areas/departments within 'critical infrastructure' at each DHB, to determine whether their environments were 'safe for patients and staff'.

Critical infrastructure at each DHB was determined using a criticality matrix. The MoH worked with each DHB and applied the matrix across all buildings on each DHB campus. The first wave of assessments by the MoH Building & Infrastructure team, involved only buildings that housed critical services and were over 20 years old. Critical services may be non-clinical e.g. plant or clinical.

Sometimes a key clinical service e.g. Intensive Care Unit or Emergency Department made a building critical.

The following five clinical areas on the emergency patient pathway were included in the assessment if they were accommodated in critical infrastructure over 20 years old;

Out of scope [redacted]

And

- Adult Mental Health (MH) inpatient units in buildings over 10 years old (excluding forensic).

As we were only looking at older facilities across the country, we completed a CFFFP Assessment on one control unit for each clinical facility – Out of scope This was done to provide context for our assessments.

1.5 The CFFFP Assessment Tool

The assessment tool questionnaire was based on key international evidence-based design principles specific to the health sector that promote safe design for patients and staff. These principles were ratified by the NAMP Clinical Reference Group which was set up to oversee the CFFFP workstream.

The following table outlines these principles.

Principle	Safety Design Principles
#1	Provide appropriate external functional relationships to promote safe clinical care (i.e. the proximity of key health planning units outside the department being assessed)
#2	Provide appropriate internal functional relationships (e.g. do key space co-locations within a department support safe care delivery?)
#3	Improve access
#4	Provide appropriate and adequately sized space/s / layout for safe care delivery (e.g. what is the function of the room and is it adequately sized – based on AHFG[1] room sizes)
#5	Enhance communication/interaction between staff and patient (e.g. observation of patients in beds from staff stations and vice versa)
#6	Enhance privacy (e.g. audible, visual)
#7	Reduce patient infection risk (e.g. numbers of hand wash basins, isolation rooms etc.)
#8	Reduce medication errors
#9	Enhance security (patient, staff, facility) (e.g. can a department be locked down, after-hours access, position of security guards etc.)

[1] Australasian Health Facility Guidelines

Most of the principles had more than one question. The number of questions under each principle depended on the department being assessed.

1.6 The CFFFP Assessments

- The CFFFP Assessments followed a standard format.
- In each clinical unit we met with key clinical personnel who knew how the unit functioned. Almost always the nurse in charge was one of them, as they have a comprehensive overview of how the unit functioned.
- Each meeting was booked for 2 hours.
- The first part of the meeting involved a sit-down discussion. We explained the process, then the DHB staff gave a high-level overview of the model of care (MoC) of the unit.
- We reviewed and marked-up the floor plans in order to understand how the space was utilised.
- Key architectural metrics were recorded, e.g. how many bedrooms, how many bathrooms etc.
- Responses to the nine design principle questions were then recorded.
- The data was captured in a standard template and entered into a tablet in a data base called Survey123. Hard copy was also used as a backup.
- Following the discussion, we had a walk around the unit and took photographs of things of interest or to demonstrate issues that may have been raised in the discussion.

1.7 Information provided to DHB's in this report

1.7.1 Clinical Facilities visited in your DHB

This section lists the clinical facilities and dates the CFFFP Assessment/s took place in your DHB.

1.7.2 Gross Floor Area

In each clinical facility visited we measured its gross floor area (GFA). This section provides information of the space (m2) allocated to the main unit of measurement in each unit, (beds in inpatient units, operating rooms in OT suites) as a ratio of the GFA.

We have benchmarked your space allocation to a benchmark derived from the Australasian Health Facility Guidelines (AHFG) for each clinical facility, e.g. AHFG benchmark of 36m2/bed in an inpatient unit.

1.7.3 Total score of the CFFFP Assessment

The CFFFP Assessment template is based on nine design principles. Some of these principles had more than one question. These questions were modified slightly to match the clinical facility being assessed, which means the total score for each type of clinical facility may vary. Each question has been allocated a score of 1 to 5 with 1 being the optimal score, and 5 the least optimal, so the lower the score the more optimal the clinical facility being assessed. No weighting has been applied the principles.

This section provides you with the score of your clinical facility.

1.7.4 Supporting notes from CFFFP Assessment visit

Notes taken during the CFFFP Assessment visit are provided. These notes capture the discussion from the visit. They support the key architectural metrics and the design principle questionnaire.

2 District Health Board – Lakes

2.1 Clinical facilities assessed in your DHB

The following facilities were assessed in your DHB:

DHB	Campus/Hospital	Clinical Unit	Date
Lakes	Rotorua	MH IPU	8 April 2019

Out of scope

3 Findings per Clinical Facility

3.1 Rotorua Hospital – Mental Health Inpatient Unit – Whare Whakaue

3.1.1 Gross Floor Area

The AHFG recommend MH units are planned at approximately 80m2/bed. The Rotorua Hospital MH inpatient unit is approximately 56m2/bed which is 70% of the recommended size.

3.1.2 Total score of the CFFFP Assessment

The CFFFP assessment included nine principles most of which had multiple questions. The total score possible for a MH IPU was 275. The Rotorua Hospital MH IPU scored a total of 180/275.

Campus	Unit	Principle # 1 Appropriate *external* functional relationships	Principle # 2 Appropriate *internal* functional relationships	Principle # 3 Access	Principle # 4 Adequately sized / shape / layout key clinical spaces	Principle # 5 Enhance communication between staff and patients	Principle # 6 Enhance privacy	Principle # 7 Reduce patient infections	Principle # 8 Reduce medication errors	Principle # 9 Enhance staff & patient safety	Principle Total
Rotorua	MHIPU	20	20	5	23	28	5	35	5	39	180
	Total Possible Score	**20**	**30**	**15**	**55**	**30**	**5**	**35**	**20**	**65**	**275**

3.1.3 Supporting notes from CFFFP Assessment visit

Whare Whakaue, has 14 beds which include; 2 older persons, 1 detox, 4 intensive care beds and 7 acute beds.

The floor plan is seriously compromised and hampers delivery of a safe, effective model of care.

There is no ability to separate or flex between patient cohorts.

Access from patient bedrooms to shared areas and activity areas requires travel through other patient and staff areas.

Challenges include; no de-escalation area, bedrooms smaller than AHFG, need for more elderly care rooms, need for more separated lounge areas, the kitchen is separated from the ward, low quality outdoor area and poor quality internal natural light.

All bedrooms except the two rooms for elderly have shared bathrooms.

There are ligature points throughout the unit, except the seclusion rooms.

The medication room is not accessible from the acute area.

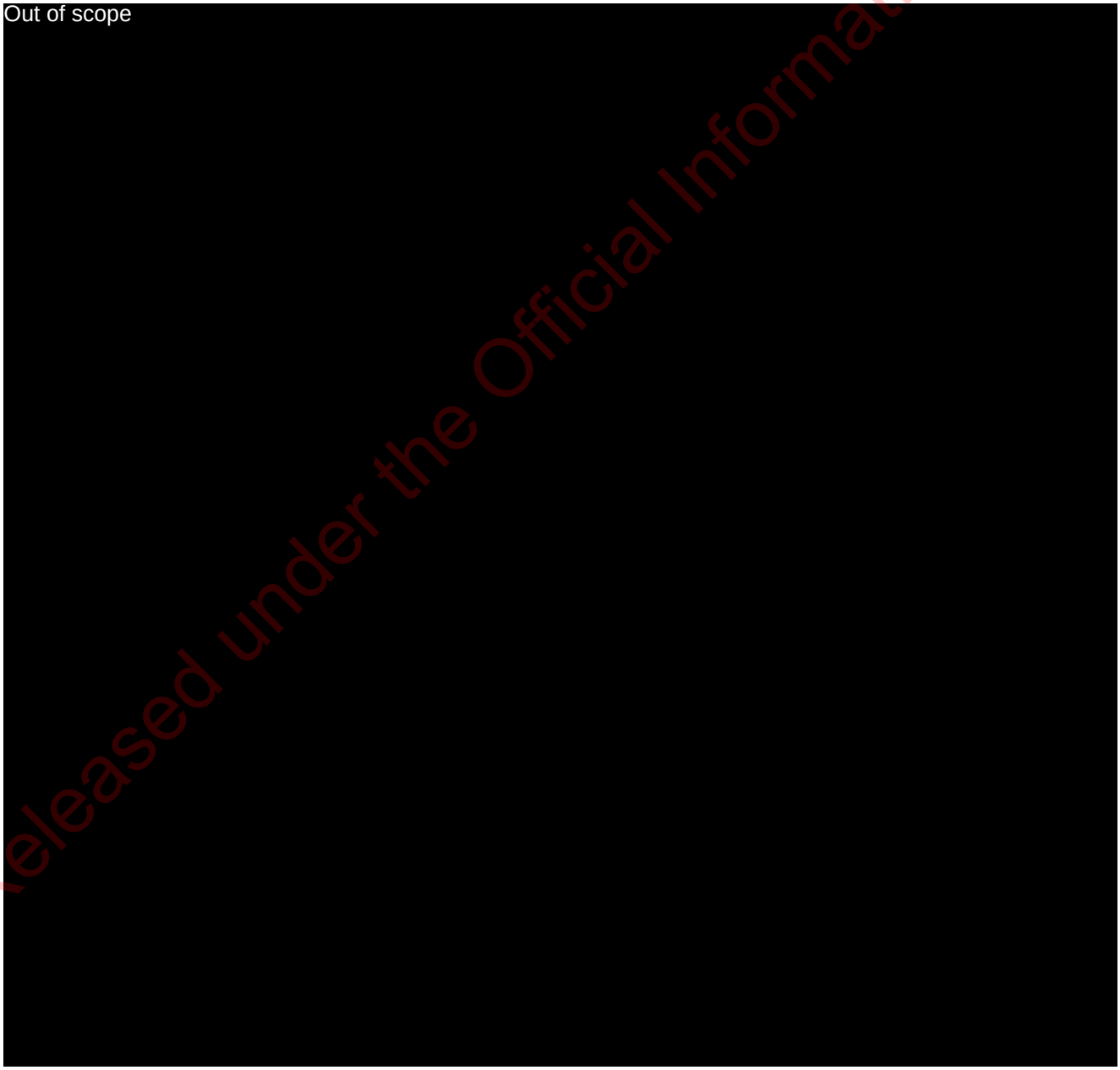
The unit has a mixture of key and swipe card which is a security risk.

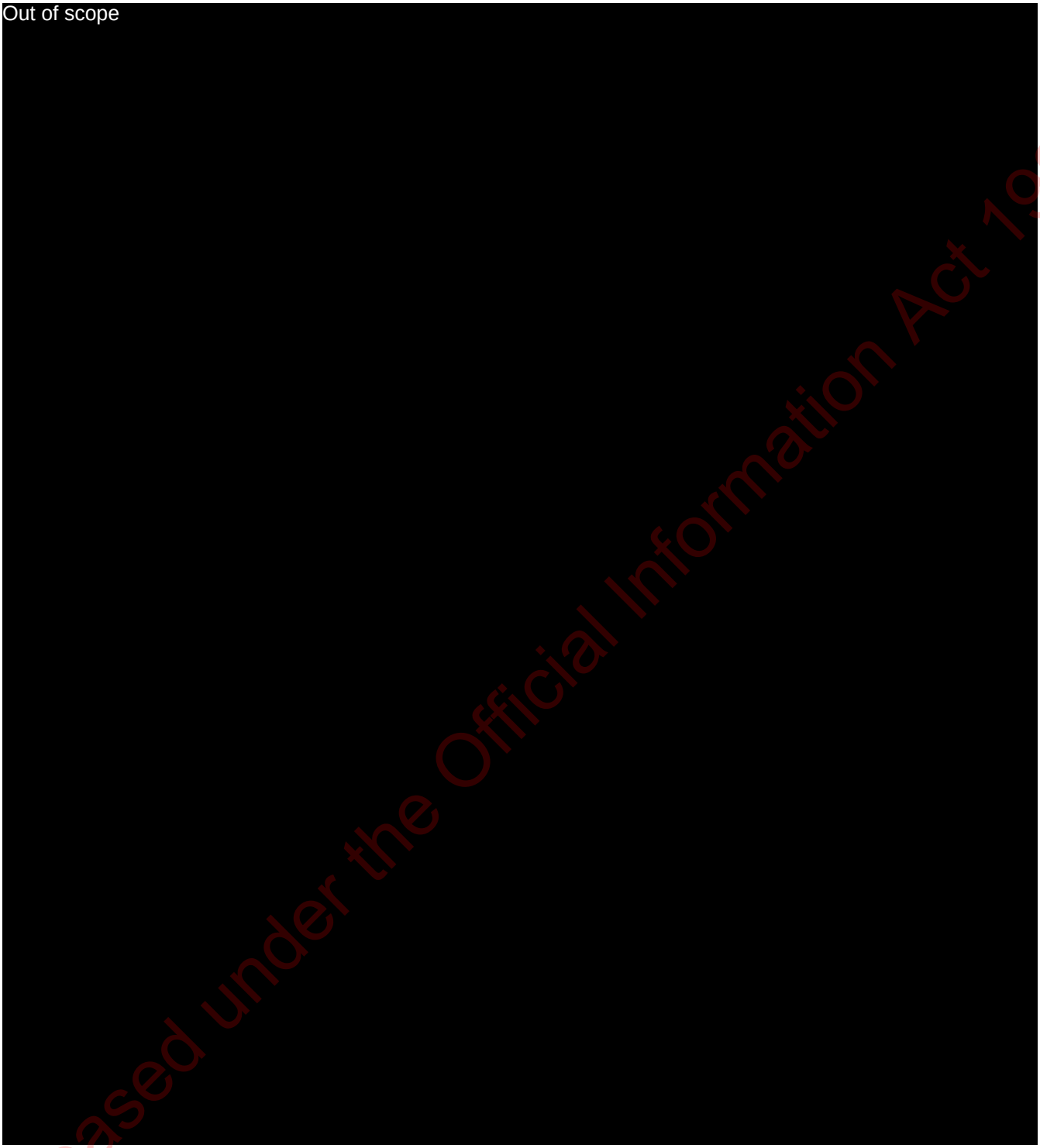
When demand dictates, un-resourced beds are set up in shared spaces.

Some building fabric issues were noted including; leaking in patient bedrooms and nursing office and extensive damp on the walls in the dining area; floors in bedrooms and the kitchen/dining area have had patch repairs to remediate rotting and sagging, fungal growth under the kitchen has led to insect infestation; the laundry is not ducted; the small occupational therapy area is located just off the laundry – through a door situated in the laundry and off the main ward area. Its collocation with the laundry, ward and the kitchen is undesirable and functional assessments are difficult to organise in the small space.

The overall building condition is run down.

Out of scope





Document 2

2019

Clinical Facility fitness for Purpose

NELSON MARLBOROUGH DISTRICT HEALTH BOARD

Author: Rose Macfarlane
Project: National Asset Management Plan
Date: 02 September 2019

Document 2

Contents

Out of scope

Out of scope

Out of scope

1 Introduction

1.1 Aim of this Paper

The aim of this paper is to provide your DHB high-level feedback relating to each of the clinical units that underwent a Clinical Facility Fitness for Purpose (CFFFP) Assessment.

1.2 NAMP Background and Context

The Minister of Health has asked the Capital Investment Committee (CIC) to develop a National Health Asset Management Plan (NAMP) in response to capital expenditure intentions signalled by the DHB's for the next ten years, to a total of $14.2 billion (of which $9.2 billion would be Crown funded). The NAMP will provide a tool supported by the Ministry of Health and Treasury, so they can prioritise the investment of the Health Capital Envelope (HCE) funds at a national level.

Each DHB owns their assets and is accountable for the maintenance, remediation, replacement and growth of these assets to a fit for purpose standard. The current model has the management for health assets to each DHB with no mandate for the Ministry to hold a national view on standardised policy and procedures for health building and infrastructure, and therefore no ability for the ministry to be consistent in measuring performance of business case benefit across the health asset portfolio.

1.3 The NAMP Project

The NAMP project has been tasked with setting up a national framework that outlines the condition of health assets across the DHB's, which the ministry can then use as a tool to assist with their prioritisation of capital spending on health infrastructure.

The NAMP project has been set up with six streams of work as follows;

- Feasibility report
- Building & infrastructure
- Clinical facility fit for purpose
- Demand & capacity
- Ancillary assets
- Establish asset portfolio
- Clinical Facility Fit-for-Purpose Workstream

When the outputs of these workstreams are combined, the Ministry will be able to provide a pipeline for proposed capital expenditure based on several investment scenarios.

1.4 Clinical Facility Fit-for-Purpose Workstream

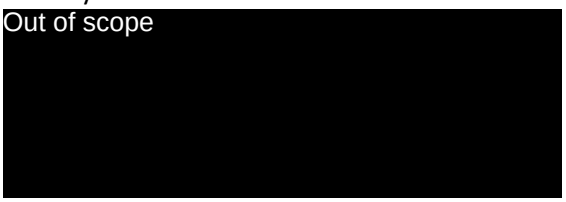
The aim of the CFFFP workstream was to assess physical aspects of key clinical areas/departments within 'critical infrastructure' at each DHB, to determine whether their environments were 'safe for patients and staff'.

Critical infrastructure at each DHB was determined using a criticality matrix. The MoH worked with each DHB and applied the matrix across all buildings on each DHB campus. The first wave of assessments by the MoH Building & Infrastructure team, involved only buildings that housed critical services and were over 20 years old. Critical services may be non-clinical e.g. plant or clinical.

Sometimes a key clinical service e.g. Intensive Care Unit or Emergency Department made a building critical.

The following five clinical areas on the emergency patient pathway were included in the assessment if they were accommodated in critical infrastructure over 20 years old;

Out of scope



And

- Adult Mental Health (MH) inpatient units in buildings over 10 years old (excluding forensic).

As we were only looking at older facilities across the country, we completed a CFFFP Assessment on one control unit for each clinical facility – Out of scope MHIPU. This was done to provide context for our assessments.

1.5 The CFFFP Assessment Tool

The assessment tool questionnaire was based on key international evidence-based design principles specific to the health sector that promote safe design for patients and staff. These principles were ratified by the NAMP Clinical Reference Group which was set up to oversee the CFFFP workstream.

The following table outlines these principles.

Principle	Safety Design Principles
#1	Provide appropriate external functional relationships to promote safe clinical care (i.e. the proximity of key health planning units outside the department being assessed)
#2	Provide appropriate internal functional relationships (e.g. do key space co-locations within a department support safe care delivery?)
#3	Improve access
#4	Provide appropriate and adequately sized space/s / layout for safe care delivery (e.g. what is the function of the room and is it adequately sized – based on AHFG[1] room sizes)
#5	Enhance communication/interaction between staff and patient (e.g. observation of patients in beds from staff stations and vice versa)
#6	Enhance privacy (e.g. audible, visual)
#7	Reduce patient infection risk (e.g. numbers of hand wash basins, isolation rooms etc.)
#8	Reduce medication errors
#9	Enhance security (patient, staff, facility) (e.g. can a department be locked down, after-hours access, position of security guards etc.)

[1] Australasian Health Facility Guidelines

Most of the principles had more than one question. The number of questions under each principle depended on the department being assessed.

1.6 The CFFFP Assessments

- The CFFFP Assessments followed a standard format.
- In each clinical unit we met with key clinical personnel who knew how the unit functioned. Almost always the nurse in charge was one of them, as they have a comprehensive overview of how the unit functioned.
- Each meeting was booked for 2 hours.
- The first part of the meeting involved a sit-down discussion. We explained the process, then the DHB staff gave a high-level overview of the model of care (MoC) of the unit.
- We reviewed and marked-up the floor plans in order to understand how the space was utilised.
- Key architectural metrics were recorded, e.g. how many bedrooms, how many bathrooms etc.
- Responses to the nine design principle questions were then recorded.
- The data was captured in a standard template and entered into a tablet in a data base called Survey123. Hard copy was also used as a backup.
- Following the discussion, we had a walk around the unit and took photographs of things of interest or to demonstrate issues that may have been raised in the discussion.

1.7 Information provided to DHB's in this report

1.7.1 Clinical Facilities visited in your DHB

This section lists the clinical facilities and dates the CFFFP Assessment/s took place in your DHB.

1.7.2 Gross Floor Area

In each clinical facility visited we measured its gross floor area (GFA). This section provides information of the space (m2) allocated to the main unit of measurement in each unit, (beds in inpatient units, operating rooms in OT suites) as a ratio of the GFA.

We have benchmarked your space allocation to a benchmark derived from the Australasian Health Facility Guidelines (AHFG) for each clinical facility, e.g. AHFG benchmark of 36m2/bed in an inpatient unit.

1.7.3 Total score of the CFFFP Assessment

The CFFFP Assessment template is based on nine design principles. Some of these principles had more than one question. These questions were modified slightly to match the clinical facility being assessed, which means the total score for each type of clinical facility may vary. Each question has been allocated a score of 1 to 5 with 1 being the optimal score, and 5 the least optimal, so the lower the score the more optimal the clinical facility being assessed. No weighting has been applied the principles.

This section provides you with the score of your clinical facility.

1.7.4 Supporting notes from CFFFP Assessment visit

Notes taken during the CFFFP Assessment visit are provided. These notes capture the discussion from the visit. They support the key architectural metrics and the design principle questionnaire.

2 District Health Board – Nelson Marlborough

2.1 Clinical facilities assessed in your DHB

The following facilities were assessed in your DHB:

Out of scope

Nelson Marlborough	Nelson	Mental Health inpatient unit	21 February 2019

Out of scope

3 Findings per Clinical Facility

Out of scope

3.2 Nelson Hospital – Mental Health Inpatient Unit – Waahi Oranga

3.2.1 Gross Floor Area

The AHFG recommend MH units are planned at approximately 80m2/bed. The Nelson Hospital MH inpatient, Waahi Oranga, unit is approximately 74m2/bed which is 92% of the recommended size.

3.2.2 Total score of the CFFFP Assessment

The CFFFP assessment included nine principles most of which had multiple questions. The total score possible for a MH IPU was 275. The Nelson Hospital MH IPU, Waahi Oranga, scored a total of 115/275.

Campus	Unit	Principle # 1 Appropriate *external* functional relationships	Principle # 2 Appropriate *internal* functional relationships	Principle # 3 Access	Principle # 4 Adequately sized / shape / layout key clinical spaces	Principle # 5 Enhance communication between staff and patients	Principle # 6 Enhance privacy	Principle # 7 Reduce patient infections	Principle # 8 Reduce medication errors	Principle # 9 Enhance staff & patient safety	Principle Total
Nelson	Waahi Oranga MHIPU	16	4	3	25	15	7	14	8	23	115
	Total Possible Score	**20**	**30**	**15**	**55**	**30**	**5**	**35**	**20**	**65**	**275**

3.2.3 Supporting notes from CFFFP Assessment visit

Waahi Oranga has 32 inpatient beds configured as 28 general, 4 Intensive Psychiatric Care (IPC) and 2 seclusion rooms. There are 5 x single bedroom flats for patients, adjacent to Waahi Oranga, but they were not included in this assessment.

The unit is a panopticon in shape with five fingers. One accommodates seclusion and some clinical support space, one IPC and the other three acute inpatients and has centralised support space. Two of the acute inpatient fingers are used for males and females respectively, however, the third finger is usually mixed, so gender separation can be challenging. There are large open spaces centrally, however, observation of patients by staff is not ideal.

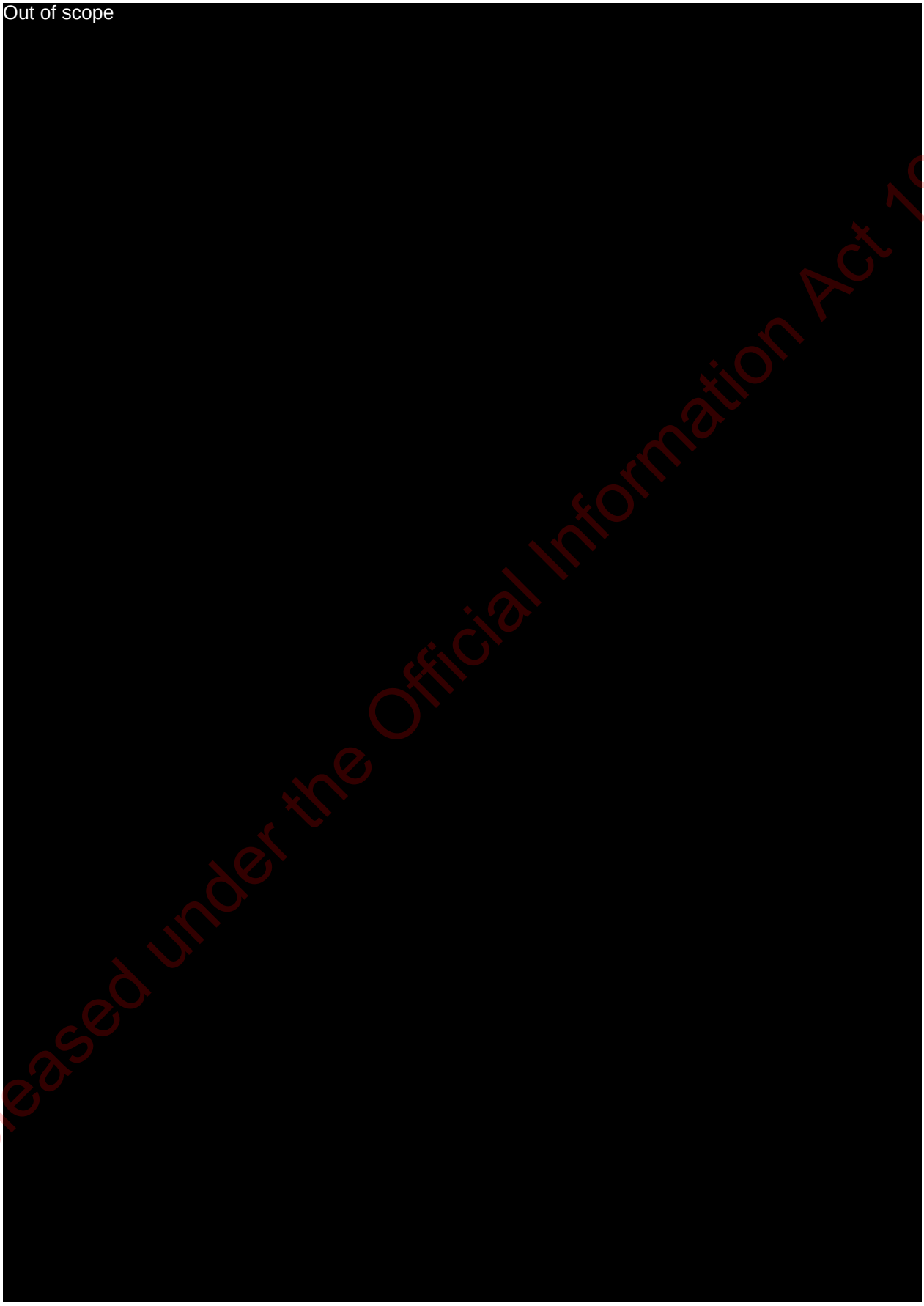
The unit has 100% single bedrooms which are ensuited in IPC (and seclusion), otherwise they are shared.

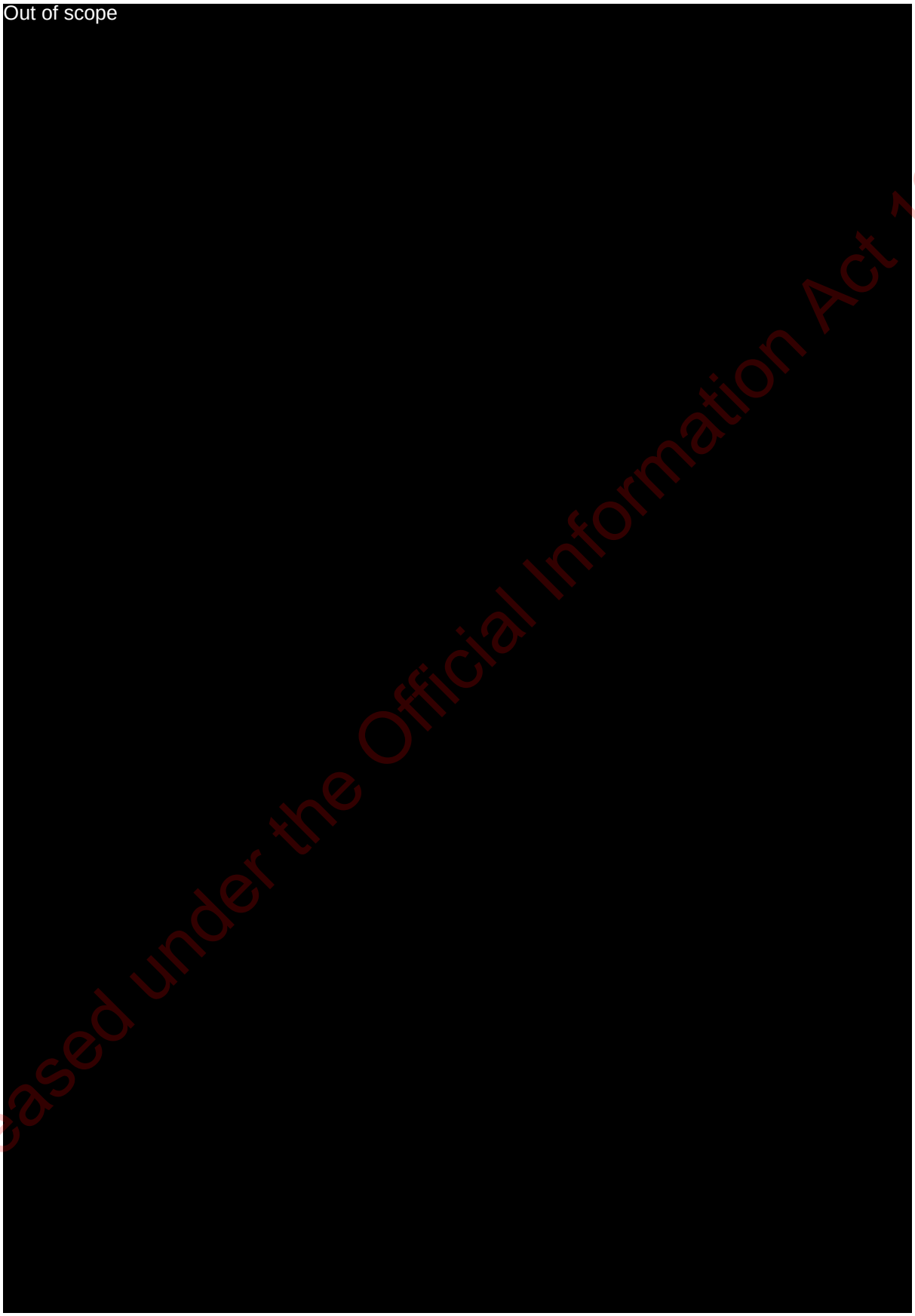
Floors are carpeted and in reasonably poor condition and lack of storage is an issue within the unit. Wall linings and doors are not sufficiently robust, and evidence of damage was seen.

There are problems with environmental systems; heating/cooling/ventilation.

The unit is generally run down.

Out of scope





Document 3

2019

Clinical Facility fitness for Purpose

TAIRAWHITI DISTRICT HEALTH BOARD

Author: Rose Macfarlane
Project: National Asset Management Plan
Date: 02 September 2019

Document 3

Contents

Out of scope

Out of scope

Out of scope

1 Introduction

1.1 Aim of this Paper

The aim of this paper is to provide your DHB high-level feedback relating to each of the clinical units that underwent a Clinical Facility Fitness for Purpose (CFFFP) Assessment.

1.2 NAMP Background and Context

The Minister of Health has asked the Capital Investment Committee (CIC) to develop a National Health Asset Management Plan (NAMP) in response to capital expenditure intentions signalled by the DHB's for the next ten years, to a total of $14.2 billion (of which $9.2 billion would be Crown funded). The NAMP will provide a tool supported by the Ministry of Health and Treasury, so they can prioritise the investment of the Health Capital Envelope (HCE) funds at a national level.

Each DHB owns their assets and is accountable for the maintenance, remediation, replacement and growth of these assets to a fit for purpose standard. The current model has the management for health assets to each DHB with no mandate for the Ministry to hold a national view on standardised policy and procedures for health building and infrastructure, and therefore no ability for the ministry to be consistent in measuring performance of business case benefit across the health asset portfolio.

1.3 The NAMP Project

The NAMP project has been tasked with setting up a national framework that outlines the condition of health assets across the DHB's, which the ministry can then use as a tool to assist with their prioritisation of capital spending on health infrastructure.

The NAMP project has been set up with six streams of work as follows;

- Feasibility report
- Building & infrastructure
- Clinical facility fit for purpose
- Demand & capacity
- Ancillary assets
- Establish asset portfolio
- Clinical Facility Fit-for-Purpose Workstream

When the outputs of these workstreams are combined, the Ministry will be able to provide a pipeline for proposed capital expenditure based on several investment scenarios.

1.4 Clinical Facility Fit-for-Purpose Workstream

The aim of the CFFFP workstream was to assess physical aspects of key clinical areas/departments within 'critical infrastructure' at each DHB, to determine whether their environments were 'safe for patients and staff'.

Critical infrastructure at each DHB was determined using a criticality matrix. The MoH worked with each DHB and applied the matrix across all buildings on each DHB campus. The first wave of assessments by the MoH Building & Infrastructure team, involved only buildings that housed critical services and were over 20 years old. Critical services may be non-clinical e.g. plant or clinical.

Sometimes a key clinical service e.g. Intensive Care Unit or Emergency Department made a building critical.

The following five clinical areas on the emergency patient pathway were included in the assessment if they were accommodated in critical infrastructure over 20 years old;

Out of scope

And

- Adult Mental Health (MH) inpatient units in buildings over 10 years old (excluding forensic).

Out of scope

1.5 The CFFFP Assessment Tool

The assessment tool questionnaire was based on key international evidence-based design principles specific to the health sector that promote safe design for patients and staff. These principles were ratified by the NAMP Clinical Reference Group which was set up to oversee the CFFFP workstream.

The following table outlines these principles.

Principle	Safety Design Principles
#1	Provide appropriate external functional relationships to promote safe clinical care (i.e. the proximity of key health planning units outside the department being assessed)
#2	Provide appropriate internal functional relationships (e.g. do key space co-locations within a department support safe care delivery?)
#3	Improve access
#4	Provide appropriate and adequately sized space/s / layout for safe care delivery (e.g. what is the function of the room and is it adequately sized – based on AHFG[1] room sizes)
#5	Enhance communication/interaction between staff and patient (e.g. observation of patients in beds from staff stations and vice versa)
#6	Enhance privacy (e.g. audible, visual)
#7	Reduce patient infection risk (e.g. numbers of hand wash basins, isolation rooms etc.)
#8	Reduce medication errors
#9	Enhance security (patient, staff, facility) (e.g. can a department be locked down, after-hours access, position of security guards etc.)

[1] Australasian Health Facility Guidelines

Most of the principles had more than one question. The number of questions under each principle depended on the department being assessed.

1.6 The CFFFP Assessments

- The CFFFP Assessments followed a standard format.
- In each clinical unit we met with key clinical personnel who knew how the unit functioned. Almost always the nurse in charge was one of them, as they have a comprehensive overview of how the unit functioned.
- Each meeting was booked for 2 hours.
- The first part of the meeting involved a sit-down discussion. We explained the process, then the DHB staff gave a high-level overview of the model of care (MoC) of the unit.
- We reviewed and marked-up the floor plans in order to understand how the space was utilised.
- Key architectural metrics were recorded, e.g. how many bedrooms, how many bathrooms etc.
- Responses to the nine design principle questions were then recorded.
- The data was captured in a standard template and entered into a tablet in a data base called Survey123. Hard copy was also used as a backup.
- Following the discussion, we had a walk around the unit and took photographs of things of interest or to demonstrate issues that may have been raised in the discussion.

1.7 Information provided to DHB's in this report

1.7.1 Clinical Facilities visited in your DHB

This section lists the clinical facilities and dates the CFFFP Assessment/s took place in your DHB.

1.7.2 Gross Floor Area

In each clinical facility visited we measured its gross floor area (GFA). This section provides information of the space (m2) allocated to the main unit of measurement in each unit, (beds in inpatient units, operating rooms in OT suites) as a ratio of the GFA.

We have benchmarked your space allocation to a benchmark derived from the Australasian Health Facility Guidelines (AHFG) for each clinical facility, e.g. AHFG benchmark of 36m2/bed in an inpatient unit.

1.7.3 Total score of the CFFFP Assessment

The CFFFP Assessment template is based on nine design principles. Some of these principles had more than one question. These questions were modified slightly to match the clinical facility being assessed, which means the total score for each type of clinical facility may vary. Each question has been allocated a score of 1 to 5 with 1 being the optimal score, and 5 the least optimal, so the lower the score the more optimal the clinical facility being assessed. No weighting has been applied the principles.

This section provides you with the score of your clinical facility.

1.7.4 Supporting notes from CFFFP Assessment visit

Notes taken during the CFFFP Assessment visit are provided. These notes capture the discussion from the visit. They support the key architectural metrics and the design principle questionnaire.

2 District Health Board – Tairawhiti

2.1 Clinical facilities assessed in your DHB

The following facilities were assessed in your DHB:

DHB	Campus/Hospital	Clinical Unit	Date
Out of scope			
Tairawhiti	Gisborne	Ward 11, Mental Health inpatient unit	27 May 2019
Out of scope			

3 Findings per Clinical Facility

Out of scope

3.2 Gisborne Hospital – Mental Health Inpatient Unit – Ward 11

3.2.1 Gross Floor Area

The AHFG recommend MH units are planned at approximately 80m2/bed. The Gisborne Hospital MH inpatient unit is approximately 120m2/bed which is 150% of the recommended size.

3.2.2 Total score of the CFFFP Assessment

The CFFFP assessment included nine principles most of which had multiple questions. The total score possible for a MH IPU was 275. The Gisborne Hospital MH IPU scored a total of 170/275.

Campus	Unit	Principle # 1 Appropriate *external* functional relationships	Principle # 2 Appropriate *internal* functional relationships	Principle # 3 Access	Principle # 4 Adequately sized / shape / layout key clinical spaces	Principle # 5 Enhance communication between staff and patients	Principle # 6 Enhance privacy	Principle # 7 Reduce patient infections	Principle # 8 Reduce medication errors	Principle # 9 Enhance staff & patient safety	Principle Total
Gisborne	MHIPU	13	17	11	21	26	5	29	5	43	170
	Total Possible Score	**20**	**30**	**15**	**55**	**30**	**5**	**35**	**20**	**65**	**275**

3.2.3 Supporting notes from CFFFP Assessment visit

There are 8 inpatient beds in the main unit plus 3 seclusion rooms in the low stimulation area (LSE).

The whole unit consists of single bedrooms each with its own ensuite. Keyed access to locked doors, no swipe cards.

Staff reported demand hugely exceeds capacity which means that seclusion rooms are often used as beds. There is a lack of beds in the community, so discharge from the unit is difficult.

The layout of the whole unit is poor and does not support the model of care. There is difficulty with separation of the complex patient cohorts and their requirements; gender, age, acuity, D&A and cultural. Babies cannot be accommodated with post-natal depression mothers as there are no facilities for them. The staff base is positioned at the entry of the unit and staff would prefer it was located more centrally in communal areas. The location of the clinic room (medications) is sub-optimal for staff safety it is in a poorly lit dead-end corridor and patients congregate outside it when staff are inside it. The unit has a single point of entry, which causes safety issues as groups congregate at reception. There are no bariatric facilities. The unit has lots of blind spots, which cause safety concerns.

ECT patients are transferred to Tauranga as ECT equipment is no longer available on-site as their equipment is obsolete. This has a big impact on costs, as well as on patients and families as patients can be in Tauranga for up to six weeks.

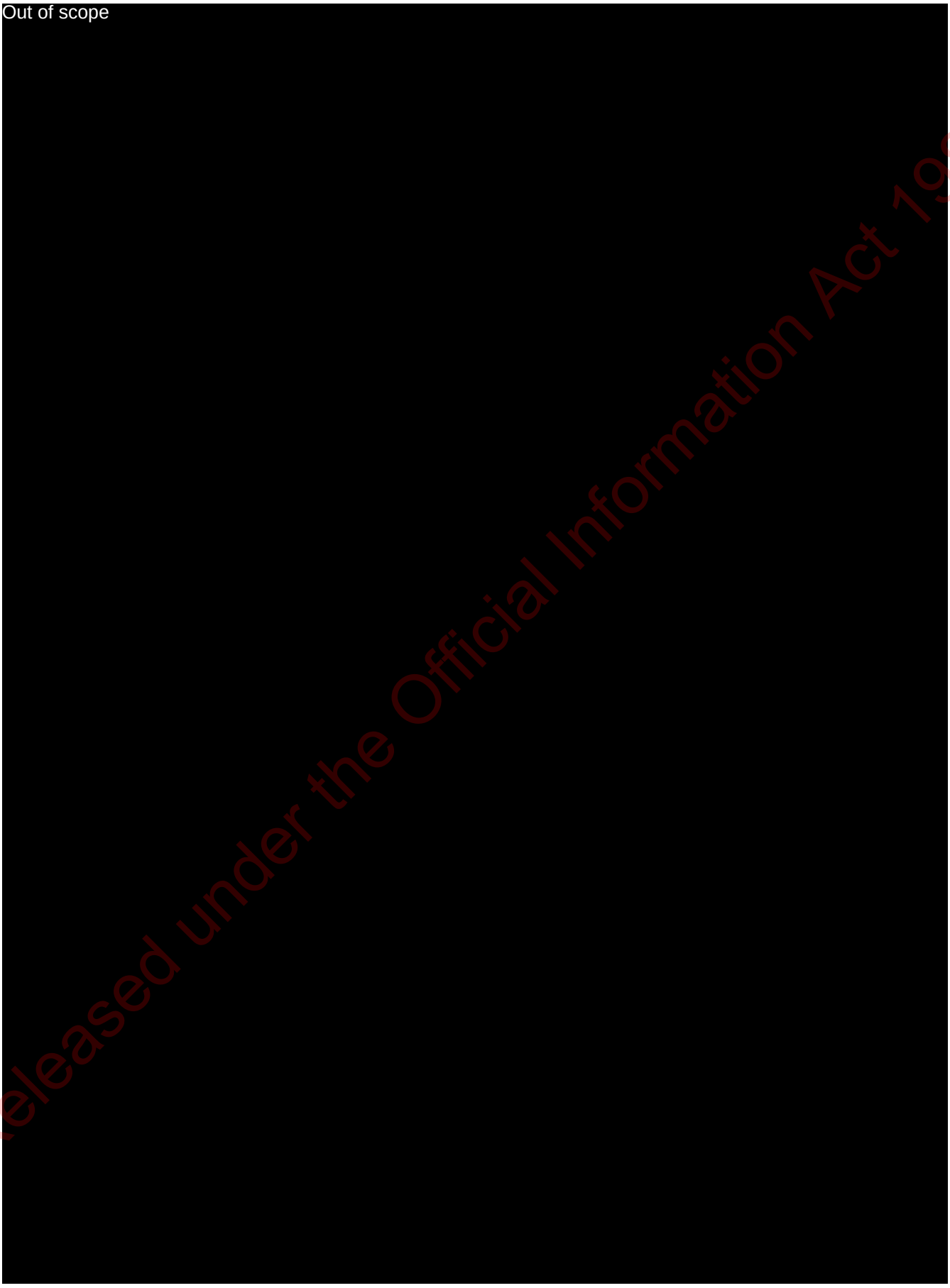
Seclusion (LSE) wing is sub-optimal. It has no staff support space and the secure courtyard is unsafe. Not all fittings are anti-ligature. The water in the rooms cannot be controlled (turned on/off) from outside the seclusion rooms. Locked doors open automatically if there is a power cut.

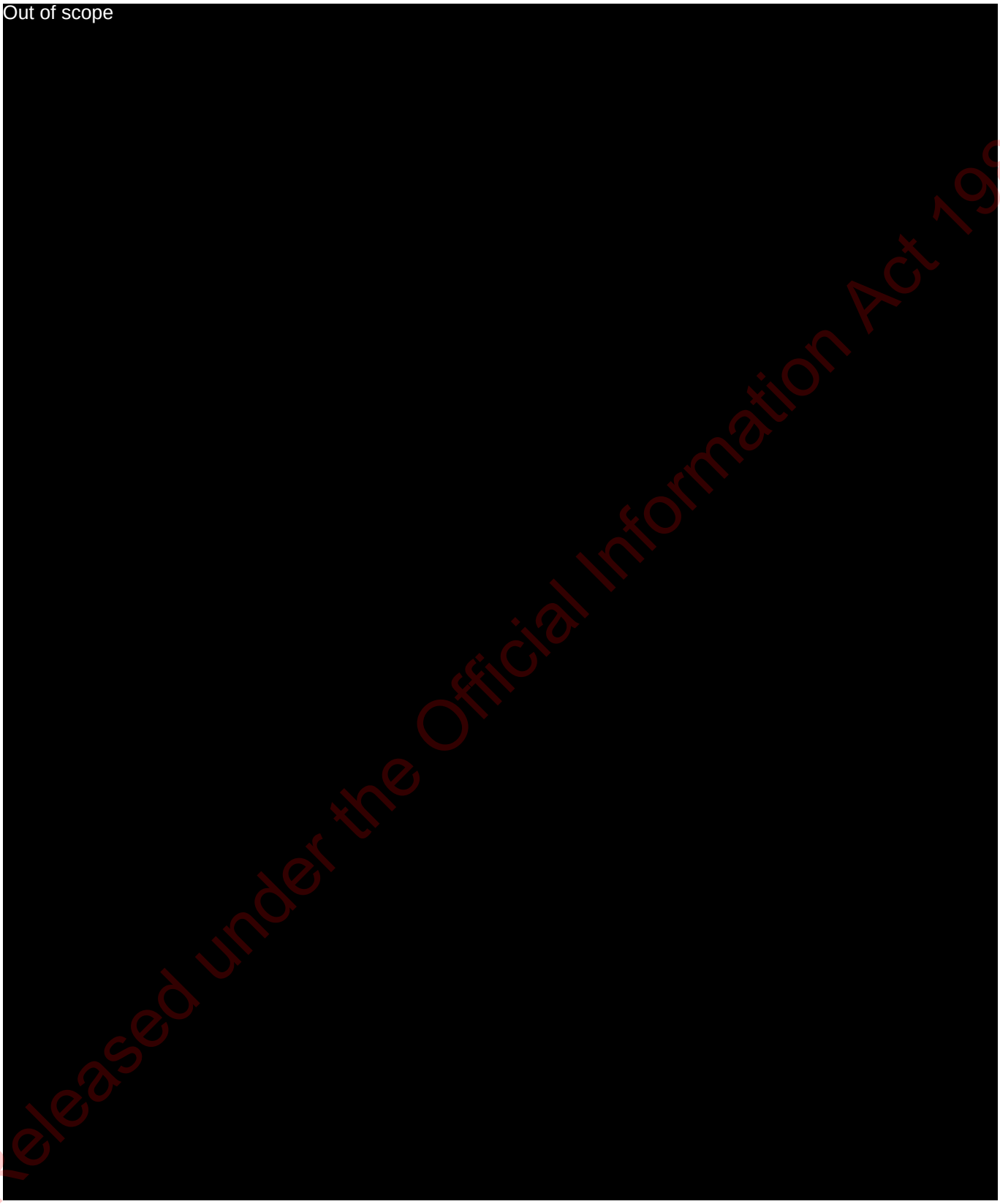
There is a lack of privacy for patients in the unit as a hospital road wraps around half of unit. This is problematic in a relatively small community where patients may wish to remain private but may be seen by someone they know driving past. Outdoor areas are not well utilised due to lack of fencing, security and privacy. Intruders also have good access. There are, however, good communal areas within the unit.

Security; staff carry portable alarms, there is no CCTV at entrances and open spaces outside the unit are of concern.

Maintenance of the unit is poor, and the overall unit is shabby. The Clere story is not cleaned. There is vermin and mouse traps are used. The building leaks.

Out of scope





Document 4

2019

Clinical Facility fitness for Purpose

TARANAKI DISTRICT HEALTH BOARD

Author: Rose Macfarlane
Project: National Asset Management Plan
Date: 02 September 2019

Document 4

Contents

1 Introduction

1.1 Aim of this Paper

The aim of this paper is to provide your DHB high-level feedback relating to each of the clinical units that underwent a Clinical Facility Fitness for Purpose (CFFFP) Assessment.

1.2 NAMP Background and Context

The Minister of Health has asked the Capital Investment Committee (CIC) to develop a National Health Asset Management Plan (NAMP) in response to capital expenditure intentions signalled by the DHB's for the next ten years, to a total of $14.2 billion (of which $9.2 billion would be Crown funded). The NAMP will provide a tool supported by the Ministry of Health and Treasury, so they can prioritise the investment of the Health Capital Envelope (HCE) funds at a national level.

Each DHB owns their assets and is accountable for the maintenance, remediation, replacement and growth of these assets to a fit for purpose standard. The current model has the management for health assets to each DHB with no mandate for the Ministry to hold a national view on standardised policy and procedures for health building and infrastructure, and therefore no ability for the ministry to be consistent in measuring performance of business case benefit across the health asset portfolio.

1.3 The NAMP Project

The NAMP project has been tasked with setting up a national framework that outlines the condition of health assets across the DHB's, which the ministry can then use as a tool to assist with their prioritisation of capital spending on health infrastructure.

The NAMP project has been set up with six streams of work as follows;

- Feasibility report
- Building & infrastructure
- Clinical facility fit for purpose
- Demand & capacity
- Ancillary assets
- Establish asset portfolio
- Clinical Facility Fit-for-Purpose Workstream

When the outputs of these workstreams are combined, the Ministry will be able to provide a pipeline for proposed capital expenditure based on several investment scenarios.

1.4 Clinical Facility Fit-for-Purpose Workstream

The aim of the CFFFP workstream was to assess physical aspects of key clinical areas/departments within 'critical infrastructure' at each DHB, to determine whether their environments were 'safe for patients and staff'.

Critical infrastructure at each DHB was determined using a criticality matrix. The MoH worked with each DHB and applied the matrix across all buildings on each DHB campus. The first wave of assessments by the MoH Building & Infrastructure team, involved only buildings that housed critical services and were over 20 years old. Critical services may be non-clinical e.g. plant or clinical.

Sometimes a key clinical service e.g. Intensive Care Unit or Emergency Department made a building critical.

The following five clinical areas on the emergency patient pathway were included in the assessment if they were accommodated in critical infrastructure over 20 years old;

Out of scope

And

- Adult Mental Health (MH) inpatient units in buildings over 10 years old (excluding forensic).

As we were only looking at older facilities across the country, we completed a CFFFP Assessment on one control unit for each clinical facility – Out of scope MHIPU. This was done to provide context for our assessments.

1.5 The CFFFP Assessment Tool

The assessment tool questionnaire was based on key international evidence-based design principles specific to the health sector that promote safe design for patients and staff. These principles were ratified by the NAMP Clinical Reference Group which was set up to oversee the CFFFP workstream.

The following table outlines these principles.

Principle	Safety Design Principles
#1	Provide appropriate external functional relationships to promote safe clinical care (i.e. the proximity of key health planning units outside the department being assessed)
#2	Provide appropriate internal functional relationships (e.g. do key space co-locations within a department support safe care delivery?)
#3	Improve access
#4	Provide appropriate and adequately sized space/s / layout for safe care delivery (e.g. what is the function of the room and is it adequately sized – based on AHFG[1] room sizes)
#5	Enhance communication/interaction between staff and patient (e.g. observation of patients in beds from staff stations and vice versa)
#6	Enhance privacy (e.g. audible, visual)
#7	Reduce patient infection risk (e.g. numbers of hand wash basins, isolation rooms etc.)
#8	Reduce medication errors
#9	Enhance security (patient, staff, facility) (e.g. can a department be locked down, after-hours access, position of security guards etc.)

[1] Australasian Health Facility Guidelines

Most of the principles had more than one question. The number of questions under each principle depended on the department being assessed.

1.6 The CFFFP Assessments

- The CFFFP Assessments followed a standard format.
- In each clinical unit we met with key clinical personnel who knew how the unit functioned. Almost always the nurse in charge was one of them, as they have a comprehensive overview of how the unit functioned.
- Each meeting was booked for 2 hours.
- The first part of the meeting involved a sit-down discussion. We explained the process, then the DHB staff gave a high-level overview of the model of care (MoC) of the unit.
- We reviewed and marked-up the floor plans in order to understand how the space was utilised.
- Key architectural metrics were recorded, e.g. how many bedrooms, how many bathrooms etc.
- Responses to the nine design principle questions were then recorded.
- The data was captured in a standard template and entered into a tablet in a data base called Survey123. Hard copy was also used as a backup.
- Following the discussion, we had a walk around the unit and took photographs of things of interest or to demonstrate issues that may have been raised in the discussion.

1.7 Information provided to DHB's in this report

1.7.1 Clinical Facilities visited in your DHB

This section lists the clinical facilities and dates the CFFFP Assessment/s took place in your DHB.

1.7.2 Gross Floor Area

In each clinical facility visited we measured its gross floor area (GFA). This section provides information of the space (m2) allocated to the main unit of measurement in each unit, (beds in inpatient units, operating rooms in OT suites) as a ratio of the GFA.

We have benchmarked your space allocation to a benchmark derived from the Australasian Health Facility Guidelines (AHFG) for each clinical facility, e.g. AHFG benchmark of 36m2/bed in an inpatient unit.

1.7.3 Total score of the CFFFP Assessment

The CFFFP Assessment template is based on nine design principles. Some of these principles had more than one question. These questions were modified slightly to match the clinical facility being assessed, which means the total score for each type of clinical facility may vary. Each question has been allocated a score of 1 to 5 with 1 being the optimal score, and 5 the least optimal, so the lower the score the more optimal the clinical facility being assessed. No weighting has been applied the principles.

This section provides you with the score of your clinical facility.

1.7.4 Supporting notes from CFFFP Assessment visit

Notes taken during the CFFFP Assessment visit are provided. These notes capture the discussion from the visit. They support the key architectural metrics and the design principle questionnaire.

2 District Health Board – Taranaki

2.1 Clinical facilities assessed in your DHB

The following facilities were assessed in your DHB:

Out of scope				
	Taranaki	Taranaki	Adult MH inpatient unit	15 April 2019
Out of scope				

3 Findings per Clinical Facility

Out of scope

3.2 Taranaki Hospital – Mental Health Inpatient Unit – Te Puna Waiora

3.2.1 Gross Floor Area

The AHFG recommend MH units are planned at approximately 80m2/bed. The Taranaki Hospital MH inpatient unit is approximately 77m2/bed which is 96% of the recommended size.

3.2.2 Total score of the CFFFP Assessment

The CFFFP assessment included nine principles most of which had multiple questions. The total score possible for a MH IPU was 275. The Taranaki Hospital MH IPU scored a total of 132/275.

Campus	Unit	Principle # 1 Appropriate *external* functional relationships	Principle # 2 Appropriate *internal* functional relationships	Principle # 3 Access	Principle # 4 Adequately sized / shape / layout key clinical spaces	Principle # 5 Enhance communication between staff and patients	Principle # 6 Enhance privacy	Principle # 7 Reduce patient infections	Principle # 8 Reduce medication errors	Principle # 9 Enhance staff & patient safety	Principle Total
Taranaki Base	MHIPU	14	17	5	18	15	5	27	3	28	132
	Total Possible Score	**20**	**30**	**15**	**55**	**30**	**5**	**35**	**20**	**65**	**275**

3.2.3 Supporting notes from CFFFP Assessment visit

Te Puna Waiora has 23 beds. Patients area situated in three patient areas Nikau, Kowhai and Rimu.

The unit is situated in an old AT&R ward which was converted to accommodate mental health patients in 2000-01.

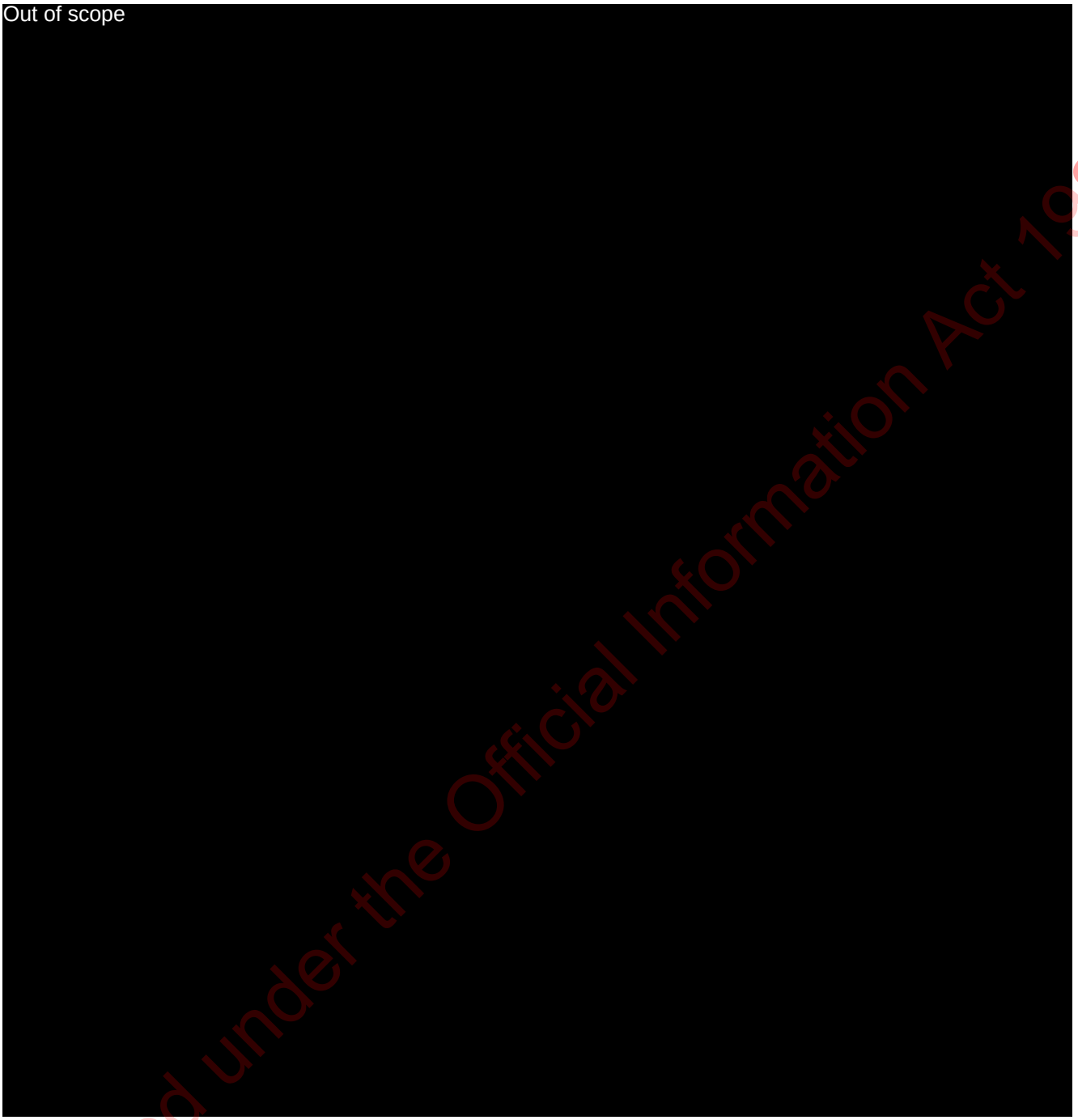
Overall issues:

- There are shared ablution facilities throughout the unit
- The unit has a combination of key & swipe access throughout unit.
- Demand and capacity issues and there are issues with access to community resources.
- Lack of clinical spaces (activity, lounge, therapy etc.).
- The layout of the unit results in a bottleneck of patient and service flows between Nikau/Kowhai and Rimu.

Nikau: 12 acute beds - open. It is run down and has poor environmental systems (heating/cooling), There are issues with gender separation. The general layout outdated for contemporary MH care. Observation of patients compromised so is not considered safe for their model of care. All bathrooms are shared. There is a lack of clinical spaces – lounges/dining/activity, and there is one outside space. All bedrooms undersized (to AHFG).

Kowhai: 4 x older persons' beds; refurbished in 2010. This small wing is run down but does have a good but small external garden space.

Rimu: 7 beds IPC - secure, refurbished in 2016/17. This wing has a better set up than Nikau. It has 2 x suites, each with a bedroom, ensuite & lounge each with outside access which work well. It has good lounge and dining areas. The remaining 5 bedrooms have shared bathrooms.



Document 5

2019

Clinical Facility fitness for Purpose

WAIKATO DISTRICT HEALTH BOARD

Author: Rose Macfarlane
Project: National Asset Management Plan
Date: 02 September 2019

Document 5

Contents

Out of scope

[redacted]

Out of scope

1 Introduction

1.1 Aim of this Paper

The aim of this paper is to provide your DHB high-level feedback relating to each of the clinical units that underwent a Clinical Facility Fitness for Purpose (CFFFP) Assessment.

1.2 NAMP Background and Context

The Minister of Health has asked the Capital Investment Committee (CIC) to develop a National Health Asset Management Plan (NAMP) in response to capital expenditure intentions signalled by the DHB's for the next ten years, to a total of $14.2 billion (of which $9.2 billion would be Crown funded). The NAMP will provide a tool supported by the Ministry of Health and Treasury, so they can prioritise the investment of the Health Capital Envelope (HCE) funds at a national level.

Each DHB owns their assets and is accountable for the maintenance, remediation, replacement and growth of these assets to a fit for purpose standard. The current model has the management for health assets to each DHB with no mandate for the Ministry to hold a national view on standardised policy and procedures for health building and infrastructure, and therefore no ability for the ministry to be consistent in measuring performance of business case benefit across the health asset portfolio.

1.3 The NAMP Project

The NAMP project has been tasked with setting up a national framework that outlines the condition of health assets across the DHB's, which the ministry can then use as a tool to assist with their prioritisation of capital spending on health infrastructure.

The NAMP project has been set up with six streams of work as follows;

- Feasibility report
- Building & infrastructure
- Clinical facility fit for purpose
- Demand & capacity
- Ancillary assets
- Establish asset portfolio
- Clinical Facility Fit-for-Purpose Workstream

When the outputs of these workstreams are combined, the Ministry will be able to provide a pipeline for proposed capital expenditure based on several investment scenarios.

1.4 Clinical Facility Fit-for-Purpose Workstream

The aim of the CFFFP workstream was to assess physical aspects of key clinical areas/departments within 'critical infrastructure' at each DHB, to determine whether their environments were 'safe for patients and staff'.

Critical infrastructure at each DHB was determined using a criticality matrix. The MoH worked with each DHB and applied the matrix across all buildings on each DHB campus. The first wave of assessments by the MoH Building & Infrastructure team, involved only buildings that housed critical services and were over 20 years old. Critical services may be non-clinical e.g. plant or clinical.

Sometimes a key clinical service e.g. Intensive Care Unit or Emergency Department made a building critical.

The following five clinical areas on the emergency patient pathway were included in the assessment if they were accommodated in critical infrastructure over 20 years old;

Out of scope

And

- Adult Mental Health (MH) inpatient units in buildings over 10 years old (excluding forensic).

As we were only looking at older facilities across the country, we completed a CFFFP Assessment on one control unit for each clinical facility – Out of scope MHIPU. This was done to provide context for our assessments.

1.5 The CFFFP Assessment Tool

The assessment tool questionnaire was based on key international evidence-based design principles specific to the health sector that promote safe design for patients and staff. These principles were ratified by the NAMP Clinical Reference Group which was set up to oversee the CFFFP workstream.

The following table outlines these principles.

Principle	Safety Design Principles
#1	Provide appropriate external functional relationships to promote safe clinical care (i.e. the proximity of key health planning units outside the department being assessed)
#2	Provide appropriate internal functional relationships (e.g. do key space co-locations within a department support safe care delivery?)
#3	Improve access
#4	Provide appropriate and adequately sized space/s / layout for safe care delivery (e.g. what is the function of the room and is it adequately sized – based on AHFG[1] room sizes)
#5	Enhance communication/interaction between staff and patient (e.g. observation of patients in beds from staff stations and vice versa)
#6	Enhance privacy (e.g. audible, visual)
#7	Reduce patient infection risk (e.g. numbers of hand wash basins, isolation rooms etc.)
#8	Reduce medication errors
#9	Enhance security (patient, staff, facility) (e.g. can a department be locked down, after-hours access, position of security guards etc.)

[1] Australasian Health Facility Guidelines

Most of the principles had more than one question. The number of questions under each principle depended on the department being assessed.

1.6 The CFFFP Assessments

- The CFFFP Assessments followed a standard format.
- In each clinical unit we met with key clinical personnel who knew how the unit functioned. Almost always the nurse in charge was one of them, as they have a comprehensive overview of how the unit functioned.
- Each meeting was booked for 2 hours.
- The first part of the meeting involved a sit-down discussion. We explained the process, then the DHB staff gave a high-level overview of the model of care (MoC) of the unit.
- We reviewed and marked-up the floor plans in order to understand how the space was utilised.
- Key architectural metrics were recorded, e.g. how many bedrooms, how many bathrooms etc.
- Responses to the nine design principle questions were then recorded.
- The data was captured in a standard template and entered into a tablet in a data base called Survey123. Hard copy was also used as a backup.
- Following the discussion, we had a walk around the unit and took photographs of things of interest or to demonstrate issues that may have been raised in the discussion.

1.7 Information provided to DHB's in this report

1.7.1 Clinical Facilities visited in your DHB

This section lists the clinical facilities and dates the CFFFP Assessment/s took place in your DHB.

1.7.2 Gross Floor Area

In each clinical facility visited we measured its gross floor area (GFA). This section provides information of the space (m2) allocated to the main unit of measurement in each unit, (beds in inpatient units, operating rooms in OT suites) as a ratio of the GFA.

We have benchmarked your space allocation to a benchmark derived from the Australasian Health Facility Guidelines (AHFG) for each clinical facility, e.g. AHFG benchmark of 36m2/bed in an inpatient unit.

1.7.3 Total score of the CFFFP Assessment

The CFFFP Assessment template is based on nine design principles. Some of these principles had more than one question. These questions were modified slightly to match the clinical facility being assessed, which means the total score for each type of clinical facility may vary. Each question has been allocated a score of 1 to 5 with 1 being the optimal score, and 5 the least optimal, so the lower the score the more optimal the clinical facility being assessed. No weighting has been applied the principles.

This section provides you with the score of your clinical facility.

1.7.4 Supporting notes from CFFFP Assessment visit

Notes taken during the CFFFP Assessment visit are provided. These notes capture the discussion from the visit. They support the key architectural metrics and the design principle questionnaire.

2 District Health Board – Waikato

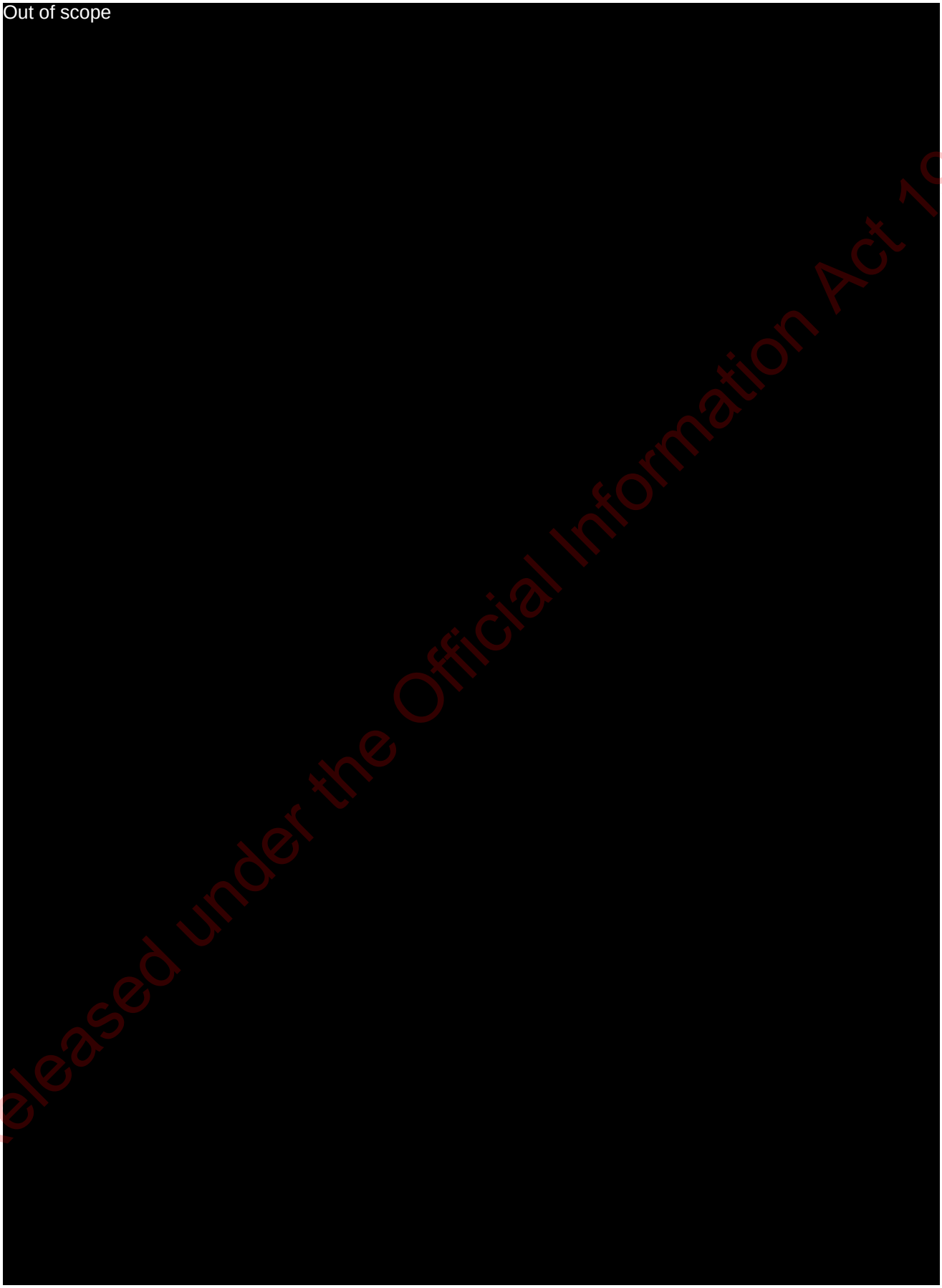
2.1 Clinical facilities assessed in your DHB

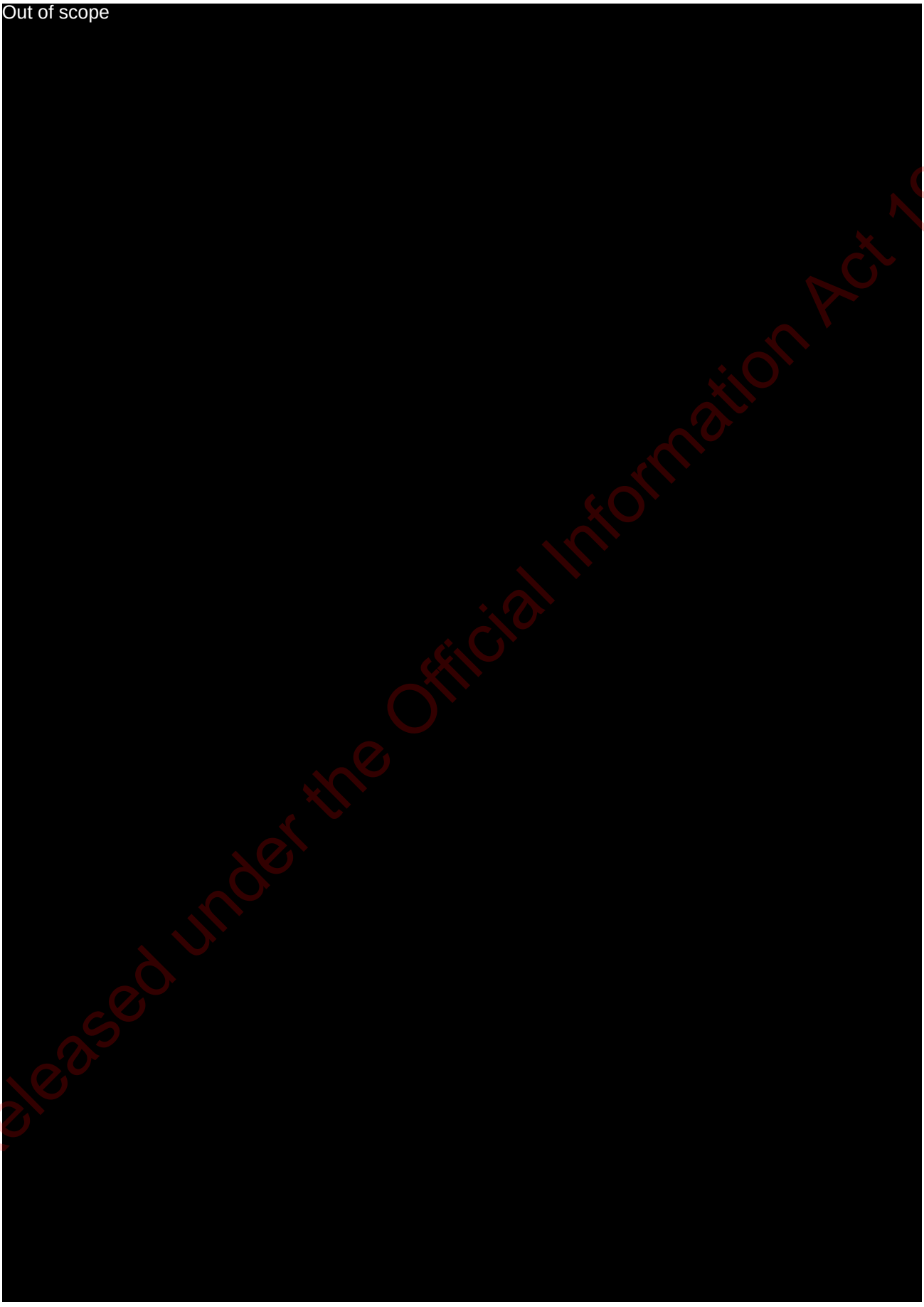
The following facilities were assessed in your DHB:

DHB	Campus/Hospital	Clinical Unit	Date
Out of scope			
Waikato	Waikato Hospital	MH IPU, Henry Bennett Facility	13 June 2019

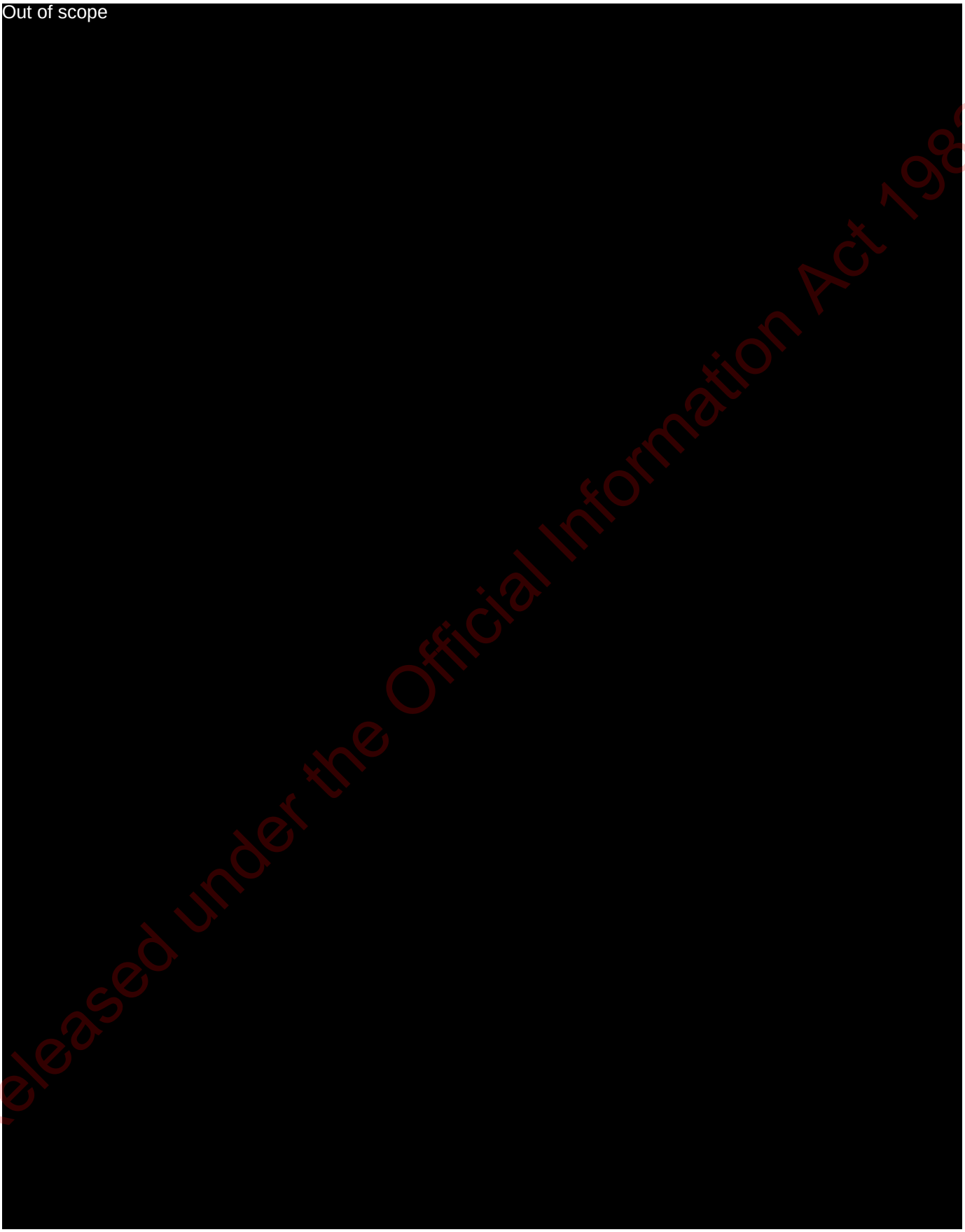
3 Findings per Clinical Facility

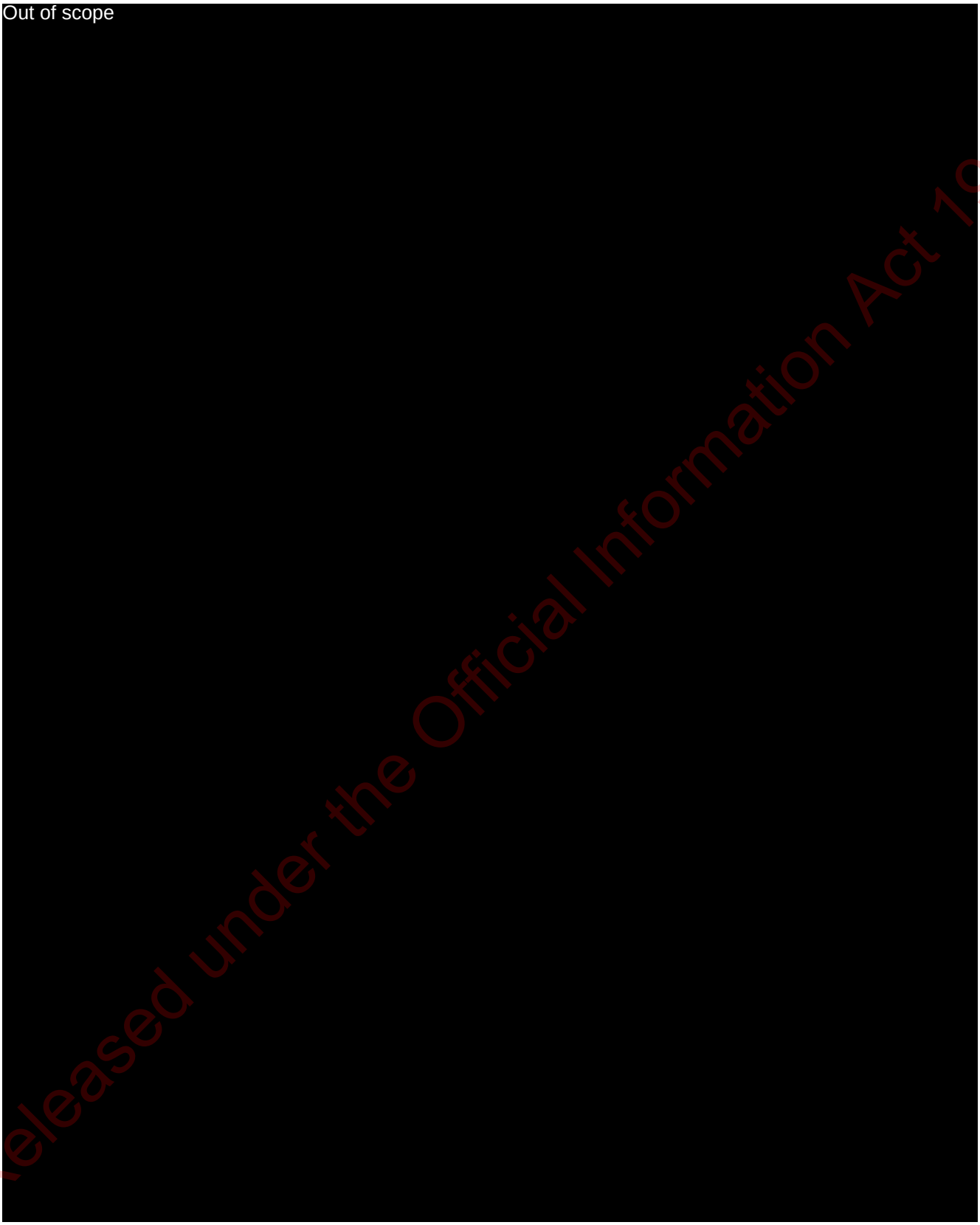
Out of scope





Out of scope





3.6 Waikato Hospital – Mental Health Inpatient Unit – Henry Bennett Facility

3.6.1 Gross Floor Area

The AHFG recommend MH units are planned at approximately 80m2/bed. The Waikato Hospital MH inpatient unit, Henry Bennet Facility is approximately 53m2/bed which is 66% of the recommended size.

3.6.2 Total score of the CFFFP Assessment

The CFFFP assessment included nine principles most of which had multiple questions. The total score possible for a MH IPU was 275. The Waikato Hospital MH IPU scored a total of 210/275.

Campus	Unit	Principle # 1 Appropriate *external* functional relationships	Principle # 2 Appropriate *internal* functional relationships	Principle # 3 Access	Principle # 4 Adequately sized / shape / layout key clinical spaces	Principle # 5 Enhance communication between staff and patients	Principle # 6 Enhance privacy	Principle # 7 Reduce patient infections	Principle # 8 Reduce medication errors	Principle # 9 Enhance staff & patient safety	Principle Total
Waikato	Henry Bennett	20	23	15	31	30	5	33	9	44	210
	Total Possible Score	**20**	**30**	**15**	**55**	**30**	**5**	**35**	**20**	**65**	**275**

3.6.3 Supporting notes from CFFFP Assessment visit

This unit has 52 beds over three wards and two levels. Ward 34 (21 b), Ward 35 (19b) and Ward 36 (12 b). The current MoC sees [most] patients initially being admitted to Ward 36, then stepping-down to Ward 35, then to Ward 34 respectively. For the purposes of the CFFFP assessment Wards 35 & 36 were surveyed together while Ward 34 was not visited or included in the survey, however most issues reported in 35/36 are noted by clinicians to be the same in 34.

Demand far exceeds capacity over the three wards (52b) with rapid turnover resulting in up to 70 patients being accommodated over the three wards at any one time. Extra patients are accommodated in spaces not designed as bedrooms (meeting, interview, day spaces etc.) or in beds while some are on leave.

The single corridor donut with fingers layout of the wards causes many issues: lack of patient observation down the fingers, bedroom doors open out and meet so obstruct access and visibility down corridors, safety issues for staff and patients in distal ends of fingers, dark corridors with blind spot alcoves. Patients who need to transfer within the facility – are required to travel through other patient areas, which is of concern especially for those who may be distressed and require urgent transfer to the low stimulus or IPC.

Bedrooms are now all singles as former two bed bedrooms have been retrospectively partitioned (not to ceiling – so offer no audible privacy) to create single bedroom spaces, however, they offer no privacy, and the internal one has no natural light.

Throughout the unit there is a serious lack of distributed communal & therapy patient spaces and staff support space. The same applies for external spaces. There is little flexibility in the use of space which causes issues for the separation of either patient cohorts including acuity or gender. ECT is performed in a dedicated suite embedded in the same building.

Ward 34 (not assessed) but the 6-bed finger wing was reported as a particular area of concern due to its isolation from staff areas and lack of ability to observe.

The general condition of the Wards 35/36 is poor (excepting a superficial paint job in the low stimulus area).

Document 6

2019

Clinical Facility fitness for Purpose

WAITEMATA DISTRICT HEALTH BOARD

Author: Rose Macfarlane
Project: National Asset Management Plan
Date: 02 September 2019

Document 6

Contents

Out of scope

[redacted]

1 Introduction

1.1 Aim of this Paper

The aim of this paper is to provide your DHB high-level feedback relating to each of the clinical units that underwent a Clinical Facility Fitness for Purpose (CFFFP) Assessment.

1.2 NAMP Background and Context

The Minister of Health has asked the Capital Investment Committee (CIC) to develop a National Health Asset Management Plan (NAMP) in response to capital expenditure intentions signalled by the DHB's for the next ten years, to a total of $14.2 billion (of which $9.2 billion would be Crown funded). The NAMP will provide a tool supported by the Ministry of Health and Treasury, so they can prioritise the investment of the Health Capital Envelope (HCE) funds at a national level.

Each DHB owns their assets and is accountable for the maintenance, remediation, replacement and growth of these assets to a fit for purpose standard. The current model has the management for health assets to each DHB with no mandate for the Ministry to hold a national view on standardised policy and procedures for health building and infrastructure, and therefore no ability for the ministry to be consistent in measuring performance of business case benefit across the health asset portfolio.

1.3 The NAMP Project

The NAMP project has been tasked with setting up a national framework that outlines the condition of health assets across the DHB's, which the ministry can then use as a tool to assist with their prioritisation of capital spending on health infrastructure.

The NAMP project has been set up with six streams of work as follows;

- Feasibility report
- Building & infrastructure
- Clinical facility fit for purpose
- Demand & capacity
- Ancillary assets
- Establish asset portfolio
- Clinical Facility Fit-for-Purpose Workstream

When the outputs of these workstreams are combined, the Ministry will be able to provide a pipeline for proposed capital expenditure based on several investment scenarios.

1.4 Clinical Facility Fit-for-Purpose Workstream

The aim of the CFFFP workstream was to assess physical aspects of key clinical areas/departments within 'critical infrastructure' at each DHB, to determine whether their environments were 'safe for patients and staff'.

Critical infrastructure at each DHB was determined using a criticality matrix. The MoH worked with each DHB and applied the matrix across all buildings on each DHB campus. The first wave of assessments by the MoH Building & Infrastructure team, involved only buildings that housed critical services and were over 20 years old. Critical services may be non-clinical e.g. plant or clinical.

Sometimes a key clinical service e.g. Intensive Care Unit or Emergency Department made a building critical.

The following five clinical areas on the emergency patient pathway were included in the assessment if they were accommodated in critical infrastructure over 20 years old;

Out of scope

And

- Adult Mental Health (MH) inpatient units in buildings over 10 years old (excluding forensic).

As we were only looking at older facilities across the country, we completed a CFFFP Assessment on one control unit for each clinical facility – Out of scope MHIPU. This was done to provide context for our assessments.

1.5 The CFFFP Assessment Tool

The assessment tool questionnaire was based on key international evidence-based design principles specific to the health sector that promote safe design for patients and staff. These principles were ratified by the NAMP Clinical Reference Group which was set up to oversee the CFFFP workstream.

The following table outlines these principles.

Principle	Safety Design Principles
#1	Provide appropriate external functional relationships to promote safe clinical care (i.e. the proximity of key health planning units outside the department being assessed)
#2	Provide appropriate internal functional relationships (e.g. do key space co-locations within a department support safe care delivery?)
#3	Improve access
#4	Provide appropriate and adequately sized space/s / layout for safe care delivery (e.g. what is the function of the room and is it adequately sized – based on AHFG room sizes)
#5	Enhance communication/interaction between staff and patient (e.g. observation of patients in beds from staff stations and vice versa)
#6	Enhance privacy (e.g. audible, visual)
#7	Reduce patient infection risk (e.g. numbers of hand wash basins, isolation rooms etc.)
#8	Reduce medication errors
#9	Enhance security (patient, staff, facility) (e.g. can a department be locked down, after-hours access, position of security guards etc.)

Most of the principles had more than one question. The number of questions under each principle depended on the department being assessed.

1.6 The CFFFP Assessments

- The CFFFP Assessments followed a standard format.
- In each clinical unit we met with key clinical personnel who knew how the unit functioned. Almost always the nurse in charge was one of them, as they have a comprehensive overview of how the unit functioned.
- Each meeting was booked for 2 hours.
- The first part of the meeting involved a sit-down discussion. We explained the process, then the DHB staff gave a high-level overview of the model of care (MoC) of the unit.
- We reviewed and marked-up the floor plans in order to understand how the space was utilised.
- Key architectural metrics were recorded, e.g. how many bedrooms, how many bathrooms etc.
- Responses to the nine design principle questions were then recorded.
- The data was captured in a standard template and entered into a tablet in a data base called Survey123. Hard copy was also used as a backup.
- Following the discussion, we had a walk around the unit and took photographs of things of interest or to demonstrate issues that may have been raised in the discussion.

1.7 Information provided to DHB's in this report

1.7.1 Clinical Facilities visited in your DHB

This section lists the clinical facilities and dates the CFFFP Assessment/s took place in your DHB.

1.7.2 Gross Floor Area

In each clinical facility visited we measured its gross floor area (GFA). This section provides information of the space (m2) allocated to the main unit of measurement in each unit, (beds in inpatient units, operating rooms in OT suites) as a ratio of the GFA.

We have benchmarked your space allocation to a benchmark derived from the Australasian Health Facility Guidelines (AHFG) for each clinical facility, e.g. AHFG benchmark of 36m2/bed in an inpatient unit.

1.7.3 Total score of the CFFFP Assessment

The CFFFP Assessment template is based on nine design principles. Some of these principles had more than one question. These questions were modified slightly to match the clinical facility being assessed, which means the total score for each type of clinical facility may vary. Each question has been allocated a score of 1 to 5 with 1 being the optimal score, and 5 the least optimal, so the lower the score the more optimal the clinical facility being assessed. No weighting has been applied the principles.

This section provides you with the score of your clinical facility.

1.7.4 Supporting notes from CFFFP Assessment visit

Notes taken during the CFFFP Assessment visit are provided. These notes capture the discussion from the visit. They support the key architectural metrics and the design principle questionnaire.

2 District Health Board – Waitemata

2.1 Clinical facilities assessed in your DHB

The following facilities were assessed in your DHB:

DHB	Campus/Hospital	Clinical Unit	Date
Waitemata	Waitakere Hospital	Waitarau adult MH inpatient unit	02 May 2019
Waitemata	North Shore Hospital	Older persons Mental Health inpatient unit	22 May 2019

Out of scope

3 Findings per Clinical Facility

3.1 Waitakere Hospital – Mental Health Inpatient Unit – Waitarau

3.1.1 Gross Floor Area

The AHFG recommend MH units are planned at approximately 80m2/bed. The Waitarau MH unit at Waitakere Hospital MH inpatient unit is approximately 60m2/bed which is 75% of the recommended size.

3.1.2 Total score of the CFFFP Assessment

The CFFFP assessment included nine principles most of which had multiple questions. The total score possible for a MH IPU was 275. The Waitarau unit at Waitakere Hospital MH IPU scored a total of 111/275.

Campus	Unit	Principle # 1 Appropriate *external* functional relationships	Principle # 2 Appropriate *internal* functional relationships	Principle # 3 Access	Principle # 4 Adequately sized / shape / layout key clinical spaces	Principle # 5 Enhance communication between staff and patients	Principle # 6 Enhance privacy	Principle # 7 Reduce patient infections	Principle # 8 Reduce medication errors	Principle # 9 Enhance staff & patient safety	Principle Total
Waitakere	Waiatarau MHIPU	20	18	5	15	12	1	9	5	26	111
	Total Possible Score	**20**	**30**	**15**	**55**	**30**	**5**	**35**	**20**	**65**	**275**

3.1.3 Supporting notes from CFFFP Assessment visit

There are 40 beds total in the unit but only 32 overall are used (resourced).

The unit has an 8 bed ICU wing with good clinical support space. The 32 remaining beds in are in wings (fingers) of 5, 9, 10 & 8 beds with good clinical support spaces.

The unit was originally planned as an open unit in a self-contained building; however, the model of care was changed, and it now operates a closed model. Consequently, doors were placed in the main corridor to secure the unit, which meant patient access to some clinical support spaces (gym, activity, whanau, consulting) has been compromised, as they are no longer integrated in the main unit. Staff accompany patients who use those spaces.

The unit is well designed and works for the model of care (excepting the above). It needs some minor refurbishment; carpet, repair of some integral blinds in bedroom doors.

The unit has good outdoor spaces with attractive grounds/fencing, though the female courtyard requires a safer fence (currently staff need to supervise patients because of this).

There is a good seclusion / de-escalation space. The ICU 8 beds have a single corridor which staff feels compromises care, gender separation and is an overall risk factor. This has become more apparent with change in type of patient presentations which now includes increased drug use etc.

Not all bedrooms have ensuites, which is less than desirable.

There are no special facilities for bariatric patients.

3.2 North Shore Hospital – Mental Health Inpatient Unit

3.2.1 Gross Floor Area

The AHFG recommend MH units are planned at approximately 80m2/bed. The North Shore MH unit at North Shore Hospital MH inpatient unit is approximately 50m2/bed which is 63% of the recommended size.

3.2.2 Total score of the CFFFP Assessment

The CFFFP assessment included nine principles most of which had multiple questions. The total score possible for a MH IPU was 275. The older persons MH unit at North Shore Hospital scored a total of 148/275.

Campus	Unit	Principle # 1 Appropriate *external* functional relationships	Principle # 2 Appropriate *internal* functional relationships	Principle # 3 Access	Principle # 4 Adequately sized / shape / layout key clinical spaces	Principle # 5 Enhance communication between staff and patients	Principle # 6 Enhance privacy	Principle # 7 Reduce patient infections	Principle # 8 Reduce medication errors	Principle # 9 Enhance staff & patient safety	Principle Total
North Shore	Older Persons MHIPU	15	14	3	26	22	5	27	5	31	148
	Total Possible Score	**20**	**30**	**15**	**55**	**30**	**5**	**35**	**20**	**65**	**275**

3.2.3 Supporting notes from CFFFP Assessment visit

This is a 19-bed unit which caters for two main patient cohorts in the older population; acute mental health diagnoses & dementia. Demand exceeds capacity and staff felt they required 30 beds.

The unit has one entry for everyone; patients, visitors, staff and supply services.

There are multiple bed bedrooms (1x2 & 2x4), which is not recommended in the Australasian Health Facility Guidelines which recommend single bedrooms, each with their own ensuite. There are 2 'suites' each with a bedroom, ensuite lounge and private courtyard. Staff felt five of these configurations would better suit their model.

ECG telemetry is not possible anywhere in the unit due to poor wireless connection.

Some HWB in WC's have cold water only.

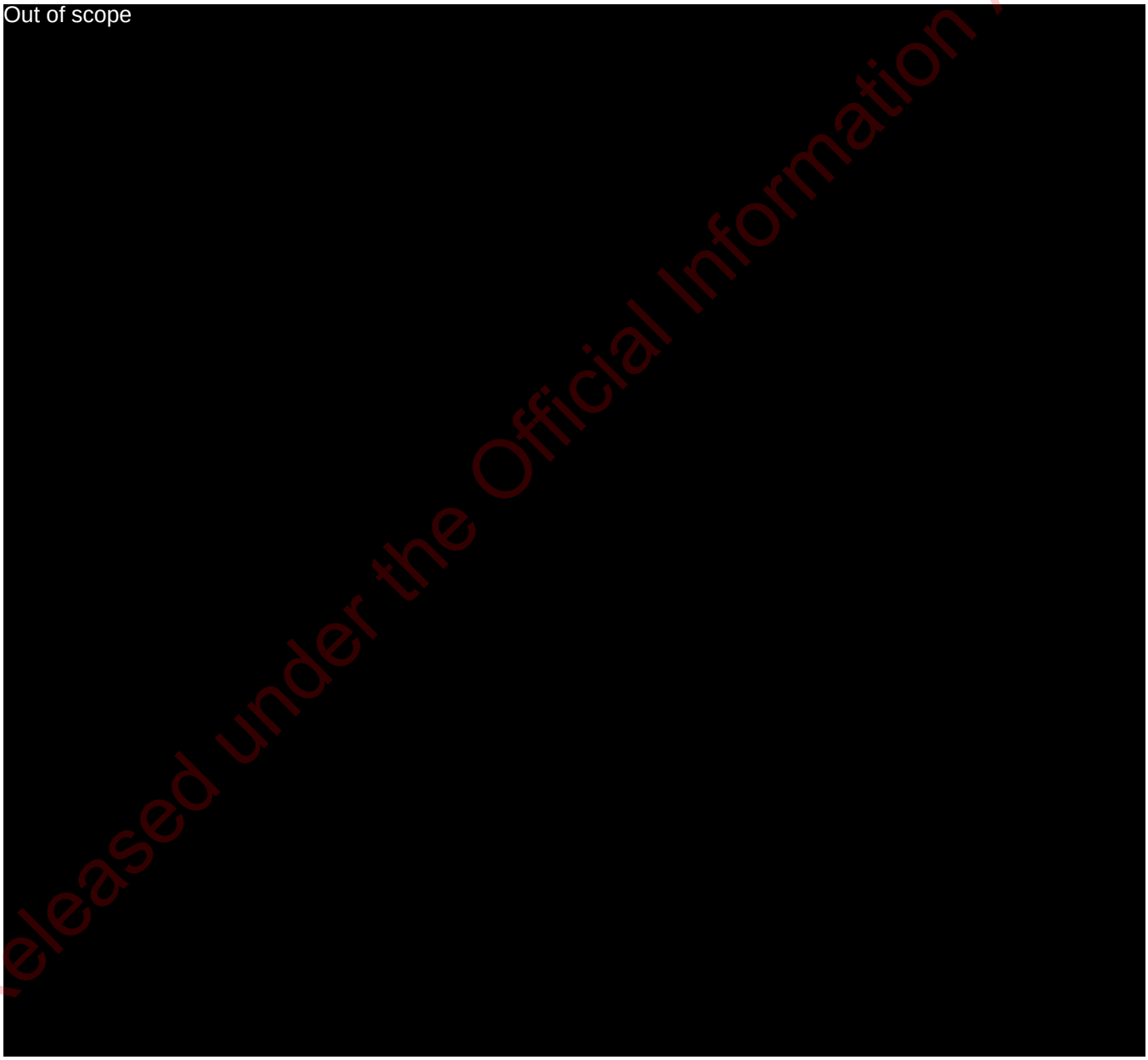
Patient bathrooms are sub-optimal and some handwash basins have cold running water only.

Safety of staff & patients is of concern in the current layout. Room 3 is leaking and is closed.

There is good indoor-outdoor flow with very good and recently landscaped gardens.

The unit was originally designed as a medical inpatient unit. Ideally the ward configuration should separate the acute patients from the dementia patients and all patients would have single bedrooms and be flexible enough to allow gender separation. Two bedrooms would need oxygen and suction for sicker patients with both medical and mental health issues.

Gender and cohort separation according to acuity and diagnosis is very difficult to achieve in the current layout.



Document 7

2019

Clinical Facility fitness for Purpose

CANTERBURY DISTRICT HEALTH BOARD

Author: Rose Macfarlane
Project: National Asset Management Plan
Date: 03 September 2019

Contents

Out of scope

Out of scope

1 Introduction

1.1 Aim of this Paper

The aim of this paper is to provide your DHB high-level feedback relating to each of the clinical units that underwent a Clinical Facility Fitness for Purpose (CFFFP) Assessment.

1.2 NAMP Background and Context

The Minister of Health has asked the Capital Investment Committee (CIC) to develop a National Health Asset Management Plan (NAMP) in response to capital expenditure intentions signalled by the DHB's for the next ten years, to a total of $14.2 billion (of which $9.2 billion would be Crown funded). The NAMP will provide a tool supported by the Ministry of Health and Treasury, so they can prioritise the investment of the Health Capital Envelope (HCE) funds at a national level.

Each DHB owns their assets and is accountable for the maintenance, remediation, replacement and growth of these assets to a fit for purpose standard. The current model has the management for health assets to each DHB with no mandate for the Ministry to hold a national view on standardised policy and procedures for health building and infrastructure, and therefore no ability for the ministry to be consistent in measuring performance of business case benefit across the health asset portfolio.

1.3 The NAMP Project

The NAMP project has been tasked with setting up a national framework that outlines the condition of health assets across the DHB's, which the ministry can then use as a tool to assist with their prioritisation of capital spending on health infrastructure.

The NAMP project has been set up with six streams of work as follows;

- Feasibility report
- Building & infrastructure
- Clinical facility fit for purpose
- Demand & capacity
- Ancillary assets
- Establish asset portfolio
- Clinical Facility Fit-for-Purpose Workstream

When the outputs of these workstreams are combined, the Ministry will be able to provide a pipeline for proposed capital expenditure based on several investment scenarios.

1.4 Clinical Facility Fit-for-Purpose Workstream

The aim of the CFFFP workstream was to assess physical aspects of key clinical areas/departments within 'critical infrastructure' at each DHB, to determine whether their environments were 'safe for patients and staff'.

Critical infrastructure at each DHB was determined using a criticality matrix. The MoH worked with each DHB and applied the matrix across all buildings on each DHB campus. The first wave of assessments by the MoH Building & Infrastructure team, involved only buildings that housed critical services and were over 20 years old. Critical services may be non-clinical e.g. plant or clinical.

Sometimes a key clinical service e.g. Intensive Care Unit or Emergency Department made a building critical.

The following five clinical areas on the emergency patient pathway were included in the assessment if they were accommodated in critical infrastructure over 20 years old;

Out of scope

And

- Adult Mental Health (MH) inpatient units in buildings over 10 years old (excluding forensic).

As we were only looking at older facilities across the country, we completed a CFFFP Assessment on one control unit for each clinical facility – Out of scope MHIPU. This was done to provide context for our assessments.

1.5 The CFFFP Assessment Tool

The assessment tool questionnaire was based on key international evidence-based design principles specific to the health sector that promote safe design for patients and staff. These principles were ratified by the NAMP Clinical Reference Group which was set up to oversee the CFFFP workstream.

The following table outlines these principles.

Principle	Safety Design Principles
#1	Provide appropriate external functional relationships to promote safe clinical care (i.e. the proximity of key health planning units outside the department being assessed)
#2	Provide appropriate internal functional relationships (e.g. do key space co-locations within a department support safe care delivery?)
#3	Improve access
#4	Provide appropriate and adequately sized space/s / layout for safe care delivery (e.g. what is the function of the room and is it adequately sized – based on AHFG[1] room sizes)
#5	Enhance communication/interaction between staff and patient (e.g. observation of patients in beds from staff stations and vice versa)
#6	Enhance privacy (e.g. audible, visual)
#7	Reduce patient infection risk (e.g. numbers of hand wash basins, isolation rooms etc.)
#8	Reduce medication errors
#9	Enhance security (patient, staff, facility) (e.g. can a department be locked down, after-hours access, position of security guards etc.)

[1] Australasian Health Facility Guidelines

Most of the principles had more than one question. The number of questions under each principle depended on the department being assessed.

1.6 The CFFFP Assessments

- The CFFFP Assessments followed a standard format.
- In each clinical unit we met with key clinical personnel who knew how the unit functioned. Almost always the nurse in charge was one of them, as they have a comprehensive overview of how the unit functioned.
- Each meeting was booked for 2 hours.
- The first part of the meeting involved a sit-down discussion. We explained the process, then the DHB staff gave a high-level overview of the model of care (MoC) of the unit.
- We reviewed and marked-up the floor plans in order to understand how the space was utilised.
- Key architectural metrics were recorded, e.g. how many bedrooms, how many bathrooms etc.
- Responses to the nine design principle questions were then recorded.
- The data was captured in a standard template and entered into a tablet in a data base called Survey123. Hard copy was also used as a backup.
- Following the discussion, we had a walk around the unit and took photographs of things of interest or to demonstrate issues that may have been raised in the discussion.

1.7 Information provided to DHB's in this report

1.7.1 Clinical Facilities visited in your DHB

This section lists the clinical facilities and dates the CFFFP Assessment/s took place in your DHB.

1.7.2 Gross Floor Area

In each clinical facility visited we measured its gross floor area (GFA). This section provides information of the space (m2) allocated to the main unit of measurement in each unit, (beds in inpatient units, operating rooms in OT suites) as a ratio of the GFA.

We have benchmarked your space allocation to a benchmark derived from the Australasian Health Facility Guidelines (AHFG) for each clinical facility, e.g. AHFG benchmark of 36m2/bed in an inpatient unit.

1.7.3 Total score of the CFFFP Assessment

The CFFFP Assessment template is based on nine design principles. Some of these principles had more than one question. These questions were modified slightly to match the clinical facility being assessed, which means the total score for each type of clinical facility may vary. Each question has been allocated a score of 1 to 5 with 1 being the optimal score, and 5 the least optimal, so the lower the score the more optimal the clinical facility being assessed. No weighting has been applied the principles.

This section provides you with the score of your clinical facility.

1.7.4 Supporting notes from CFFFP Assessment visit

Notes taken during the CFFFP Assessment visit are provided. These notes capture the discussion from the visit. They support the key architectural metrics and the design principle questionnaire.

2 District Health Board – Canterbury

2.1 Clinical facilities assessed in your DHB

The following facilities were assessed in your DHB:

DHB	Campus/Hospital	Clinical Unit	Date
Canterbury	Hillmorton	Mental health inpatient unit: PSAID	28 March 2019
	Hillmorton	Mental health inpatient unit: Te Awakura South	
	Hillmorton	Mental health inpatient unit: Tupuna Villa	
	Out of scope	[redacted]	

3 Findings per Clinical Facility

3.1 Hillmorton Hospital campus – Mental Health Inpatient Unit – Aroha Pai

3.1.1 Gross Floor Area

The AHFG recommend MH units are planned at approximately 80m2/bed. The Hillmorton Hospital MH inpatient unit, Aroha Pai, is approximately 61m2/bed which is 76% of the recommended size.

3.1.2 Total score of the CFFFP Assessment

The CFFFP assessment included nine principles most of which had multiple questions. The total score possible for a MH IPU was 275. The Hillmorton Hospital MH IPU, Aroha Pai, scored a total of 185/275.

Campus	Unit	Principle # 1 Appropriate *external* functional relationships	Principle # 2 Appropriate *internal* functional relationships	Principle # 3 Access	Principle # 4 Adequately sized / shape / layout key clinical spaces	Principle # 5 Enhance communication between staff and patients	Principle # 6 Enhance privacy	Principle # 7 Reduce patient infections	Principle # 8 Reduce medication errors	Principle # 9 Enhance staff & patient safety	Principle Total
Hillmorton	PSAID	17	21	5	29	26	5	35	15	32	185
	Total Possible Score	**20**	**30**	**15**	**55**	**30**	**5**	**35**	**20**	**65**	**275**

3.1.3 Supporting notes from CFFFP Assessment visit

Aroha Pai (PSAID) is a 15-bed unit with significant issues.

The unit is L shaped with a single central corridor. The poor layout hinders patient observation which raises safety concerns for both patients and staff.

There is a very complex cohort of male and female patients with complex needs and separation for gender, acuity, diagnosis and age is challenging in the current footprint. The range of diagnoses and characteristics is very diverse including; autism (over 50%), people who lack verbal skills, those who make noise and those who cannot tolerate it and multiple physical disabilities. Conflict is frequent.

All bedrooms are single and are undersized to AHFG. Two have dedicated ensuite bathrooms but the rest share bathroom facilities.

There is a lack of clinical support spaces; lounges, activity spaces, quiet spaces, etc.

There is a lack of access to safe and desirable outdoor spaces.

The unit has key access (no swipe) to all rooms within the unit which is a safety concern for staff.

The environment is poorly maintained and is run-down.

3.2 Hillmorton Hospital campus – Mental Health Inpatient Unit – Te Awakura South

3.2.1 Gross Floor Area

The AHFG recommend MH units are planned at approximately 80m2/bed. The Hillmorton Hospital MH inpatient unit, Te Awakura South, is approximately 39m2/bed which is 48% of the recommended size.

3.2.2 Total score of the CFFFP Assessment

The CFFFP assessment included nine principles most of which had multiple questions. The total score possible for a MH IPU was 275. The Hillmorton Hospital MH inpatient unit, Te Awakura South, scored a total of 154/275.

Campus	Unit	Principle # 1 Appropriate *external* functional relationships	Principle # 2 Appropriate *internal* functional relationships	Principle # 3 Access	Principle # 4 Adequately sized / shape / layout key clinical spaces	Principle # 5 Enhance communication between staff and patients	Principle # 6 Enhance privacy	Principle # 7 Reduce patient infections	Principle # 8 Reduce medication errors	Principle # 9 Enhance staff & patient safety	Principle Total
Hillmorton	Te Awakura Sth	17	17	3	22	24	5	27	3	36	154
	Total Possible Score	**20**	**30**	**15**	**55**	**30**	**5**	**35**	**20**	**65**	**275**

3.2.3 Supporting notes from CFFFP Assessment visit

Te Awakura South is in a building with three other inpatient units, North, East and West. South is L shaped with a single central corridor.

Te Awakura South is an acute adult inpatient unit with 16-beds including a 3 bed ICU with a dedicated courtyard. Three seclusion rooms are in an adjacent ward and are shared between the four inpatient units in the building.

The unit has with significant issues.

The patient group have complex needs and diagnoses. Separation of various cohorts of patients (age, diagnosis, acuity) is challenging in the current layout.

All bedrooms are single with doors that open into the main corridor. The corridor is narrow, and when opposing doors are open, visibility down the corridor is obstructed which raises safety concerns for staff and patients.

Four bedrooms have dedicated ensuites, the rest share bathroom facilities. All bedrooms are underside to the AHFG.

There is a lack of clinical support spaces; lounges, activity spaces, quiet spaces, etc.

There is a lack of access to safe and desirable outdoor spaces.

The unit has key access (no swipe) to all rooms within the unit which is a safety concern for staff.

The environment is poorly maintained and is run-down.

3.3 Hillmorton Hospital campus – Mental Health Inpatient Unit – Tupuna Villa

3.3.1 Gross Floor Area

The AHFG recommend MH units are planned at approximately 80m2/bed. The Hillmorton Hospital MH inpatient unit, Tupuna Villa, is approximately 82m2/bed which is 103% of the recommended size.

3.3.2 Total score of the CFFFP Assessment

The CFFFP assessment included nine principles most of which had multiple questions. The total score possible for a MH IPU was 275. The Hillmorton Hospital MH inpatient unit, Tupuna Villa, scored a total of 146/275.

Campus	Unit	Principle # 1 Appropriate *external* functional relationships	Principle # 2 Appropriate *internal* functional relationships	Principle # 3 Access	Principle # 4 Adequately sized / shape / layout key clinical spaces	Principle # 5 Enhance communication between staff and patients	Principle # 6 Enhance privacy	Principle # 7 Reduce patient infections	Principle # 8 Reduce medication errors	Principle # 9 Enhance staff & patient safety	Principle Total
Hillmorton	Tupuna	20	15	3	17	24	5	21	3	38	146
	Total Possible Score	**20**	**30**	**15**	**55**	**30**	**5**	**35**	**20**	**65**	**275**

3.3.3 Supporting notes from CFFFP Assessment visit

Tupuna Villa (extended care) is a 15-bed unit.

Patients are usually admitted from other mental health inpatient units rather than directly from the community. The length of stay is long; a minimum of three months, often much longer. Discharge is difficult as there are limited opportunities for placement in the community which impacts on the length of stay.

There is a very complex cohort of patients with various needs.

The unit has significant issues.

The building is a donut shape with internal courtyard which is poorly maintained.

The donut shape with single central corridor constrains patient observation, which raises safety concerns for both patients and staff.

On the whole bedrooms are large as it was once utilised as a single and multi bed bedroom unit, and now the multi-bed bedrooms accommodate only one person. No bedrooms have dedicated ensuite bathrooms, so all bathroom facilities are shared.

There is a large dining room which overlooks a second small internal courtyard. Staff accompany patients who use that courtyard.

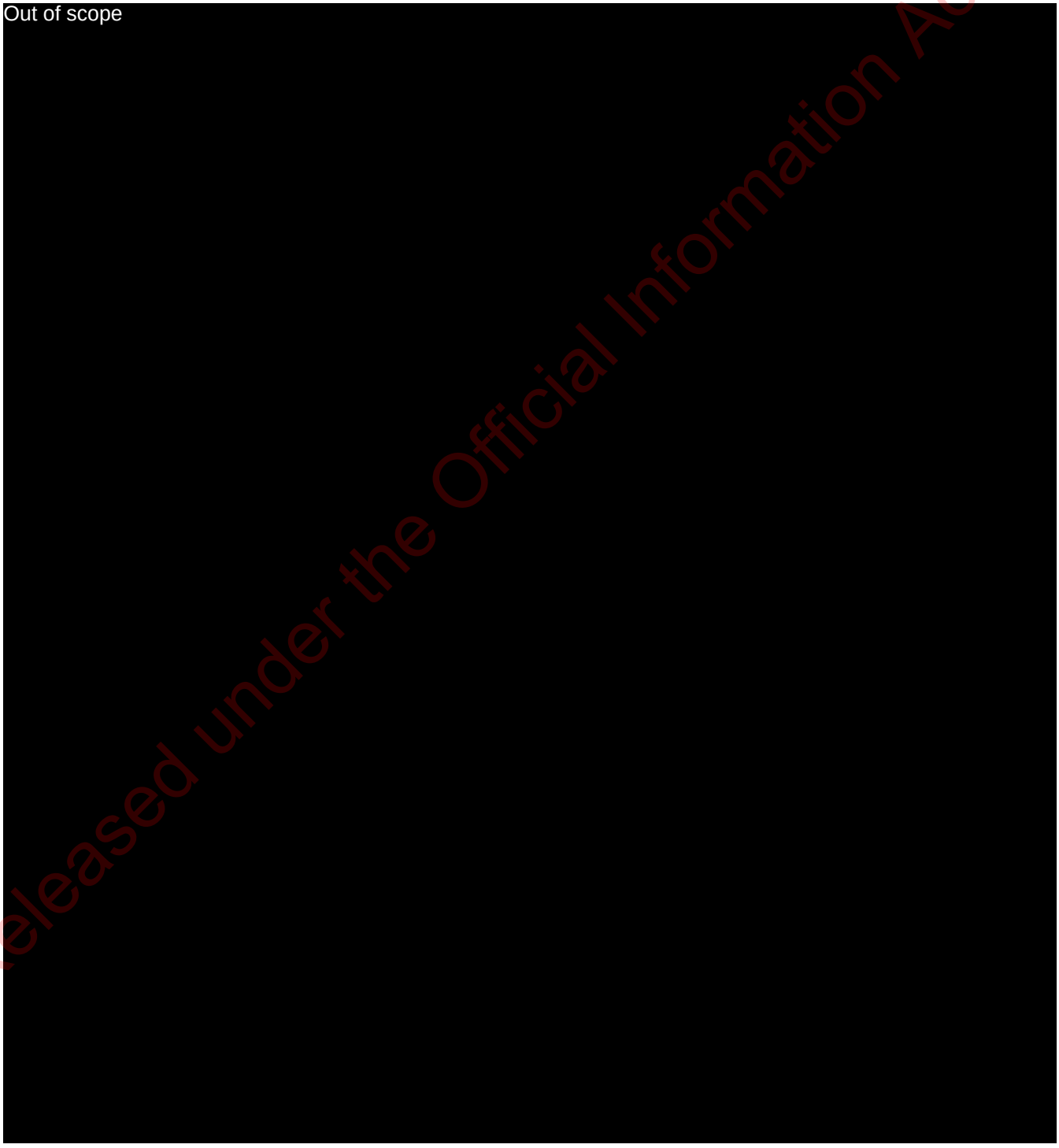
A lounge/activity room overlooks and opens into the main internal courtyard.

There is a lack of clinical support spaces; lounges, activity spaces, quiet spaces, etc.

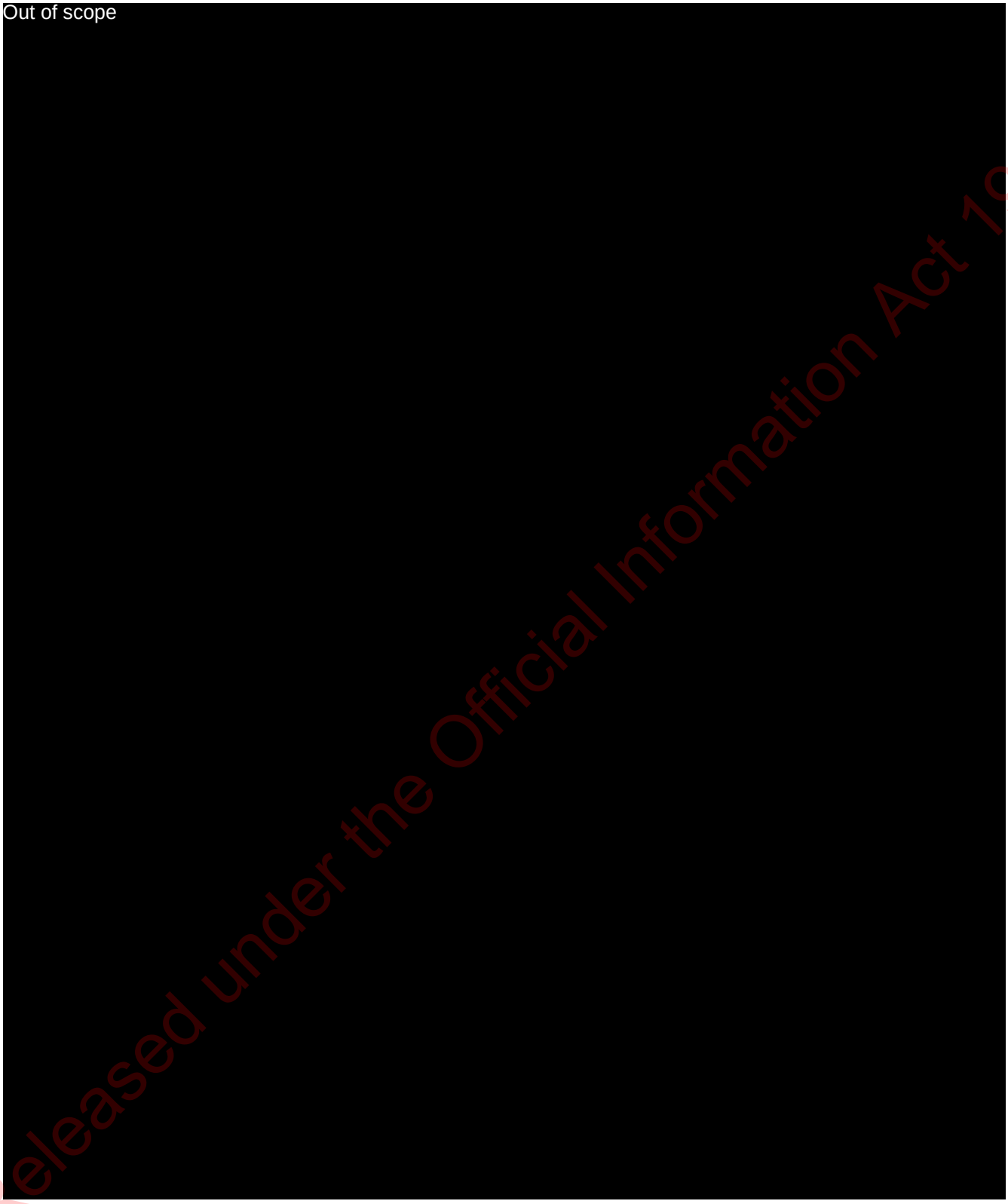
The unit has key access (no swipe) to all rooms within the unit which is a safety concern for staff.

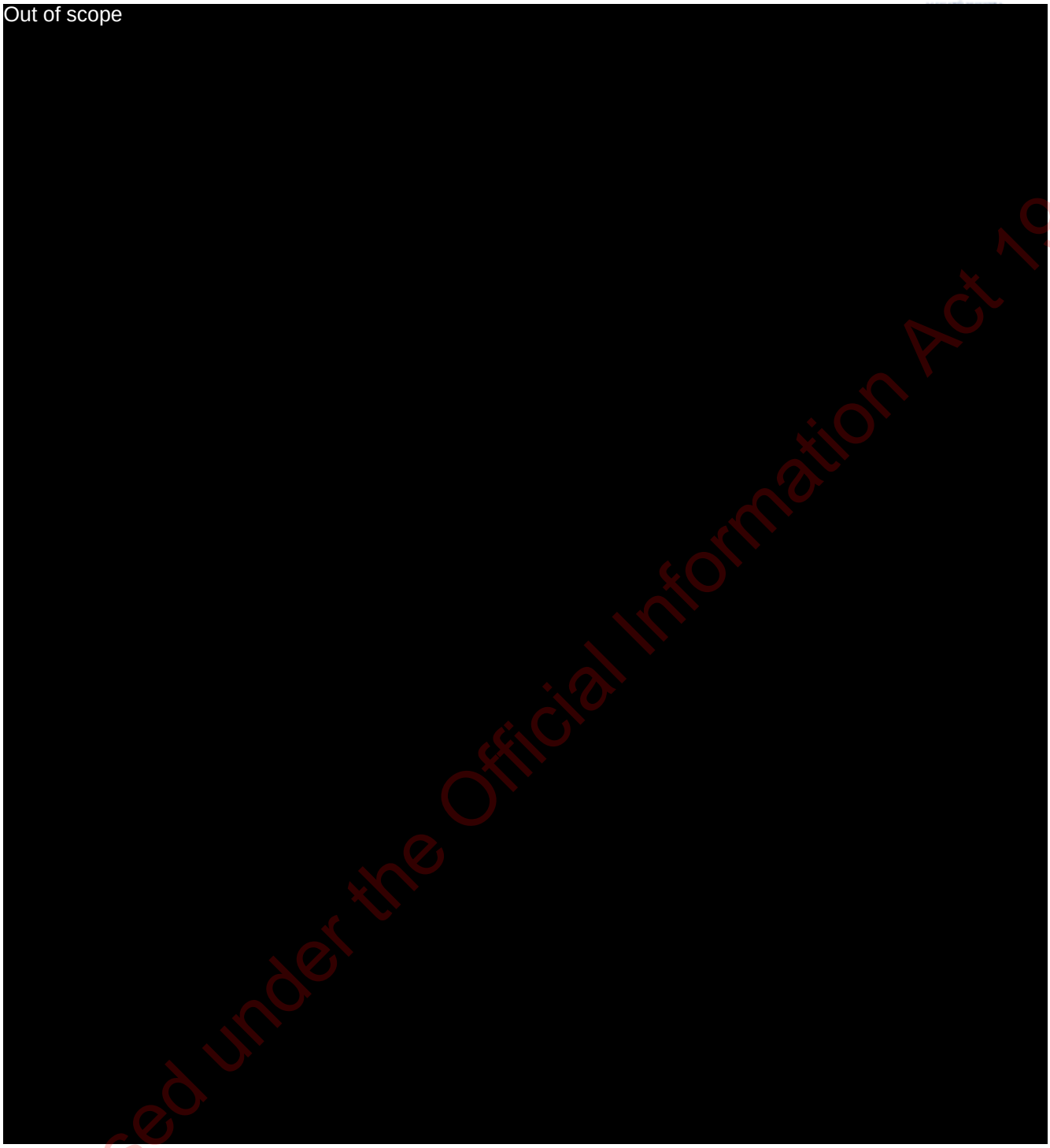
The environment is poorly maintained and is run-down.

Out of scope



Out of scope





Document 10

2019

Clinical Facility fitness for Purpose

SOUTH CANTERBURY DISTRICT HEALTH BOARD

Author: Rose Macfarlane
Project: National Asset Management Plan
Date: 03 September 2019

Document 10

Contents

1 Introduction

1.1 Aim of this Paper

The aim of this paper is to provide your DHB high-level feedback relating to each of the clinical units that underwent a Clinical Facility Fitness for Purpose (CFFFP) Assessment.

1.2 NAMP Background and Context

The Minister of Health has asked the Capital Investment Committee (CIC) to develop a National Health Asset Management Plan (NAMP) in response to capital expenditure intentions signalled by the DHB's for the next ten years, to a total of $14.2 billion (of which $9.2 billion would be Crown funded). The NAMP will provide a tool supported by the Ministry of Health and Treasury, so they can prioritise the investment of the Health Capital Envelope (HCE) funds at a national level.

Each DHB owns their assets and is accountable for the maintenance, remediation, replacement and growth of these assets to a fit for purpose standard. The current model has the management for health assets to each DHB with no mandate for the Ministry to hold a national view on standardised policy and procedures for health building and infrastructure, and therefore no ability for the ministry to be consistent in measuring performance of business case benefit across the health asset portfolio.

1.3 The NAMP Project

The NAMP project has been tasked with setting up a national framework that outlines the condition of health assets across the DHB's, which the ministry can then use as a tool to assist with their prioritisation of capital spending on health infrastructure.

The NAMP project has been set up with six streams of work as follows;

- Feasibility report
- Building & infrastructure
- Clinical facility fit for purpose
- Demand & capacity
- Ancillary assets
- Establish asset portfolio
- Clinical Facility Fit-for-Purpose Workstream

When the outputs of these workstreams are combined, the Ministry will be able to provide a pipeline for proposed capital expenditure based on several investment scenarios.

1.4 Clinical Facility Fit-for-Purpose Workstream

The aim of the CFFFP workstream was to assess physical aspects of key clinical areas/departments within 'critical infrastructure' at each DHB, to determine whether their environments were 'safe for patients and staff'.

Critical infrastructure at each DHB was determined using a criticality matrix. The MoH worked with each DHB and applied the matrix across all buildings on each DHB campus. The first wave of assessments by the MoH Building & Infrastructure team, involved only buildings that housed critical services and were over 20 years old. Critical services may be non-clinical e.g. plant or clinical.

Sometimes a key clinical service e.g. Intensive Care Unit or Emergency Department made a building critical.

The following five clinical areas on the emergency patient pathway were included in the assessment if they were accommodated in critical infrastructure over 20 years old;

Out of scope

And

- Adult Mental Health (MH) inpatient units in buildings over 10 years old (excluding forensic).

As we were only looking at older facilities across the country, we completed a CFFFP Assessment on one control unit for each clinical facility – Out of scope. This was done to provide context for our assessments.

1.5 The CFFFP Assessment Tool

The assessment tool questionnaire was based on key international evidence-based design principles specific to the health sector that promote safe design for patients and staff. These principles were ratified by the NAMP Clinical Reference Group which was set up to oversee the CFFFP workstream.

The following table outlines these principles.

Principle	Safety Design Principles
#1	Provide appropriate external functional relationships to promote safe clinical care (i.e. the proximity of key health planning units outside the department being assessed)
#2	Provide appropriate internal functional relationships (e.g. do key space co-locations within a department support safe care delivery?)
#3	Improve access
#4	Provide appropriate and adequately sized space/s / layout for safe care delivery (e.g. what is the function of the room and is it adequately sized – based on AHFG[1] room sizes)
#5	Enhance communication/interaction between staff and patient (e.g. observation of patients in beds from staff stations and vice versa)
#6	Enhance privacy (e.g. audible, visual)
#7	Reduce patient infection risk (e.g. numbers of hand wash basins, isolation rooms etc.)
#8	Reduce medication errors
#9	Enhance security (patient, staff, facility) (e.g. can a department be locked down, after-hours access, position of security guards etc.)

[1] Australasian Health Facility Guideline

Most of the principles had more than one question. The number of questions under each principle depended on the department being assessed.

1.6 The CFFFP Assessments

- The CFFFP Assessments followed a standard format.
- In each clinical unit we met with key clinical personnel who knew how the unit functioned. Almost always the nurse in charge was one of them, as they have a comprehensive overview of how the unit functioned.
- Each meeting was booked for 2 hours.
- The first part of the meeting involved a sit-down discussion. We explained the process, then the DHB staff gave a high-level overview of the model of care (MoC) of the unit.
- We reviewed and marked-up the floor plans in order to understand how the space was utilised.
- Key architectural metrics were recorded, e.g. how many bedrooms, how many bathrooms etc.
- Responses to the nine design principle questions were then recorded.
- The data was captured in a standard template and entered into a tablet in a data base called Survey123. Hard copy was also used as a backup.
- Following the discussion, we had a walk around the unit and took photographs of things of interest or to demonstrate issues that may have been raised in the discussion.

1.7 Information provided to DHB's in this report

1.7.1 Clinical Facilities visited in your DHB

This section lists the clinical facilities and dates the CFFFP Assessment/s took place in your DHB.

1.7.2 Gross Floor Area

In each clinical facility visited we measured its gross floor area (GFA). This section provides information of the space (m2) allocated to the main unit of measurement in each unit, (beds in inpatient units, operating rooms in OT suites) as a ratio of the GFA.

We have benchmarked your space allocation to a benchmark derived from the Australasian Health Facility Guidelines (AHFG) for each clinical facility, e.g. AHFG benchmark of 36m2/bed in an inpatient unit.

1.7.3 Total score of the CFFFP Assessment

The CFFFP Assessment template is based on nine design principles. Some of these principles had more than one question. These questions were modified slightly to match the clinical facility being assessed, which means the total score for each type of clinical facility may vary. Each question has been allocated a score of 1 to 5 with 1 being the optimal score, and 5 the least optimal, so the lower the score the more optimal the clinical facility being assessed. No weighting has been applied the principles.

This section provides you with the score of your clinical facility.

1.7.4 Supporting notes from CFFFP Assessment visit

Notes taken during the CFFFP Assessment visit are provided. These notes capture the discussion from the visit. They support the key architectural metrics and the design principle questionnaire.

2 District Health Board – South Canterbury

2.1 Clinical facilities assessed in your DHB

The following facilities were assessed in your DHB:

DHB	Campus/Hospital	Clinical Unit	Date
South Canterbury	Timaru	Out of scope Mental Health inpatient unit Ou sc	03 & 04 April 2019

3 Findings per Clinical Facility

Out of scope

3.2 Timaru Hospital – Mental Health Inpatient Unit – Kensington

3.2.1 Gross Floor Area

The AHFG recommend MH units are planned at approximately 80m2/bed. The Timaru Hospital MH inpatient unit is approximately 54m2/bed which is 67% of the recommended size.

3.2.2 Total score of the CFFFP Assessment

The CFFFP assessment included nine principles most of which had multiple questions. The total score possible for a MH IPU was 275. The Timaru Hospital MH IPU scored a total of 102/275.

Campus	Unit	Principle # 1 Appropriate *external* functional relationships	Principle # 2 Appropriate *internal* functional relationships	Principle # 3 Access	Principle # 4 Adequately sized / shape / layout key clinical spaces	Principle # 5 Enhance communication between staff and patients	Principle # 6 Enhance privacy	Principle # 7 Reduce patient infections	Principle # 8 Reduce medication errors	Principle # 9 Enhance staff & patient safety	Principle Total
Timaru	MHIPU	15	9	3	19	14	3	17	3	19	102
	Total Possible Score	**20**	**30**	**15**	**55**	**30**	**5**	**35**	**20**	**65**	**275**

3.2.3 Supporting notes from CFFFP Assessment visit

Kensington is a 12-bed unit refurbished in 2017.

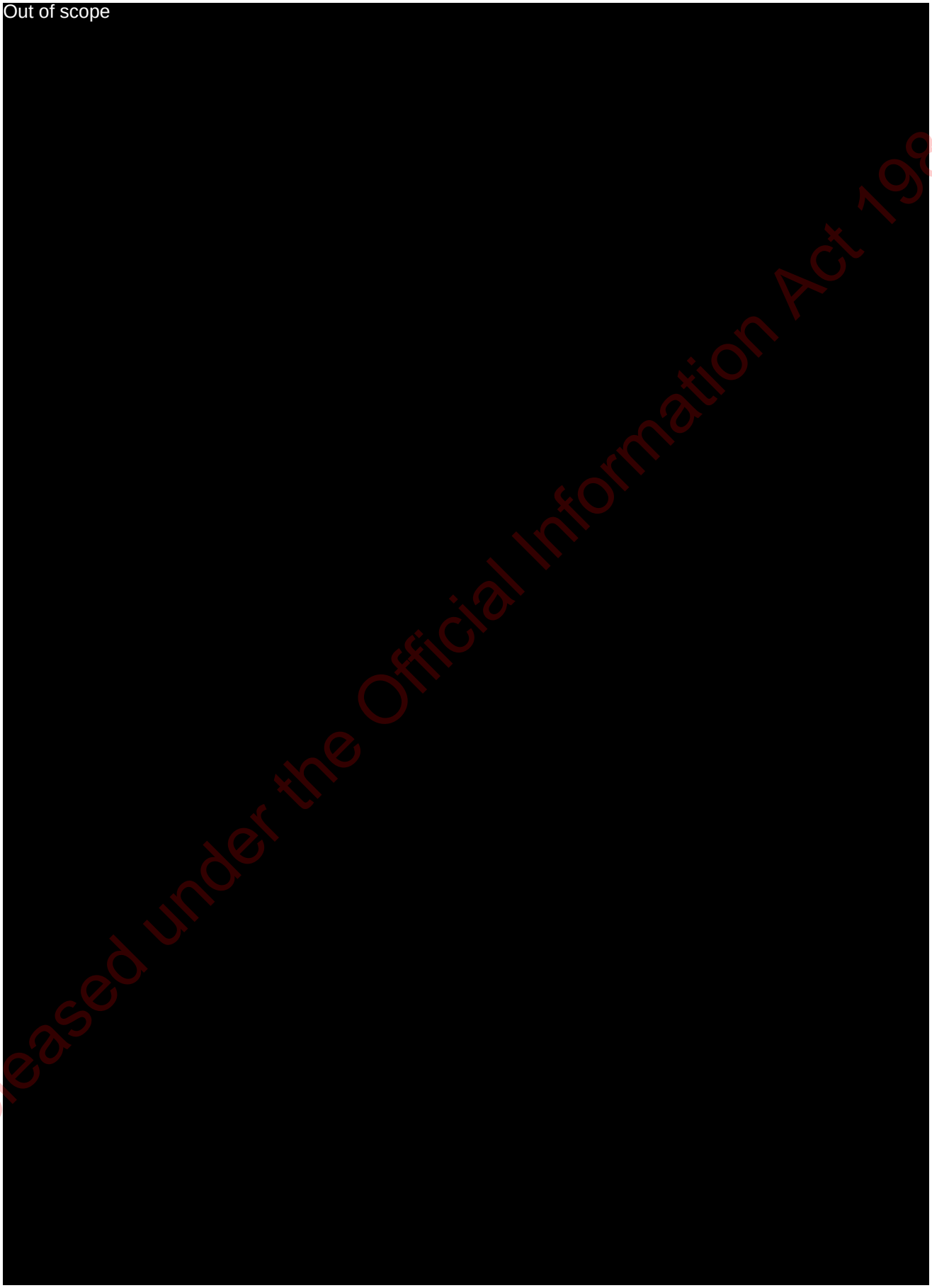
All bedrooms but one are undersized to the AHFG. Two bedrooms have ensuites, the rest use shared bathroom facilities.

The building has a reasonable layout which supports the MoC.

There is a lack of clinical spaces (lounges, meeting room indoor exercise room etc.) as these were sacrificed during the renovation which created the single bedroom unit.

The seclusion / de-escalation space was reasonable.

Out of scope



Document 11

2019

Clinical Facility fitness for Purpose

WEST COAST DISTRICT HEALTH BOARD

Author: Rose Macfarlane
Project: National Asset Management Plan
Date: 03 September 2019

Contents

1 Introduction

1.1 Aim of this Paper

The aim of this paper is to provide your DHB high-level feedback relating to each of the clinical units that underwent a Clinical Facility Fitness for Purpose (CFFFP) Assessment.

1.2 NAMP Background and Context

The Minister of Health has asked the Capital Investment Committee (CIC) to develop a National Health Asset Management Plan (NAMP) in response to capital expenditure intentions signalled by the DHB's for the next ten years, to a total of $14.2 billion (of which $9.2 billion would be Crown funded). The NAMP will provide a tool supported by the Ministry of Health and Treasury, so they can prioritise the investment of the Health Capital Envelope (HCE) funds at a national level.

Each DHB owns their assets and is accountable for the maintenance, remediation, replacement and growth of these assets to a fit for purpose standard. The current model has the management for health assets to each DHB with no mandate for the Ministry to hold a national view on standardised policy and procedures for health building and infrastructure, and therefore no ability for the ministry to be consistent in measuring performance of business case benefit across the health asset portfolio.

1.3 The NAMP Project

The NAMP project has been tasked with setting up a national framework that outlines the condition of health assets across the DHB's, which the ministry can then use as a tool to assist with their prioritisation of capital spending on health infrastructure.

The NAMP project has been set up with six streams of work as follows;

- Feasibility report
- Building & infrastructure
- Clinical facility fit for purpose
- Demand & capacity
- Ancillary assets
- Establish asset portfolio
- Clinical Facility Fit-for-Purpose Workstream

When the outputs of these workstreams are combined, the Ministry will be able to provide a pipeline for proposed capital expenditure based on several investment scenarios.

1.4 Clinical Facility Fit-for-Purpose Workstream

The aim of the CFFFP workstream was to assess physical aspects of key clinical areas/departments within 'critical infrastructure' at each DHB, to determine whether their environments were 'safe for patients and staff'.

Critical infrastructure at each DHB was determined using a criticality matrix. The MoH worked with each DHB and applied the matrix across all buildings on each DHB campus. The first wave of assessments by the MoH Building & Infrastructure team, involved only buildings that housed critical services and were over 20 years old. Critical services may be non-clinical e.g. plant or clinical.

Sometimes a key clinical service e.g. Intensive Care Unit or Emergency Department made a building critical.

The following five clinical areas on the emergency patient pathway were included in the assessment if they were accommodated in critical infrastructure over 20 years old;

Out of scope

And

- Adult Mental Health (MH) inpatient units in buildings over 10 years old (excluding forensic).

As we were only looking at older facilities across the country, we completed a CFFFP Assessment on one control unit for each clinical facility – Out of scope MHIPU. This was done to provide context for our assessments.

1.5 The CFFFP Assessment Tool

The assessment tool questionnaire was based on key international evidence-based design principles specific to the health sector that promote safe design for patients and staff. These principles were ratified by the NAMP Clinical Reference Group which was set up to oversee the CFFFP workstream.

The following table outlines these principles.

Principle	Safety Design Principles
#1	Provide appropriate external functional relationships to promote safe clinical care (i.e. the proximity of key health planning units outside the department being assessed)
#2	Provide appropriate internal functional relationships (e.g. do key space co-locations within a department support safe care delivery?)
#3	Improve access
#4	Provide appropriate and adequately sized space/s / layout for safe care delivery (e.g. what is the function of the room and is it adequately sized – based on AHFG[1] room sizes)
#5	Enhance communication/interaction between staff and patient (e.g. observation of patients in beds from staff stations and vice versa)
#6	Enhance privacy (e.g. audible, visual)
#7	Reduce patient infection risk (e.g. numbers of hand wash basins, isolation rooms etc.)
#8	Reduce medication errors
#9	Enhance security (patient, staff, facility) (e.g. can a department be locked down, after-hours access, position of security guards etc.)

[1] Australasian Health Facility Guidelines

Most of the principles had more than one question. The number of questions under each principle depended on the department being assessed.

1.6 The CFFFP Assessments

- The CFFFP Assessments followed a standard format.
- In each clinical unit we met with key clinical personnel who knew how the unit functioned. Almost always the nurse in charge was one of them, as they have a comprehensive overview of how the unit functioned.
- Each meeting was booked for 2 hours.
- The first part of the meeting involved a sit-down discussion. We explained the process, then the DHB staff gave a high-level overview of the model of care (MoC) of the unit.
- We reviewed and marked-up the floor plans in order to understand how the space was utilised.
- Key architectural metrics were recorded, e.g. how many bedrooms, how many bathrooms etc.
- Responses to the nine design principle questions were then recorded.
- The data was captured in a standard template and entered into a tablet in a data base called Survey123. Hard copy was also used as a backup.
- Following the discussion, we had a walk around the unit and took photographs of things of interest or to demonstrate issues that may have been raised in the discussion.

1.7 Information provided to DHB's in this report

1.7.1 Clinical Facilities visited in your DHB

This section lists the clinical facilities and dates the CFFFP Assessment/s took place in your DHB.

1.7.2 Gross Floor Area

In each clinical facility visited we measured its gross floor area (GFA). This section provides information of the space (m2) allocated to the main unit of measurement in each unit, (beds in inpatient units, operating rooms in OT suites) as a ratio of the GFA.

We have benchmarked your space allocation to a benchmark derived from the Australasian Health Facility Guidelines (AHFG) for each clinical facility, e.g. AHFG benchmark of 36m2/bed in an inpatient unit.

1.7.3 Total score of the CFFFP Assessment

The CFFFP Assessment template is based on nine design principles. Some of these principles had more than one question. These questions were modified slightly to match the clinical facility being assessed, which means the total score for each type of clinical facility may vary. Each question has been allocated a score of 1 to 5 with 1 being the optimal score, and 5 the least optimal, so the lower the score the more optimal the clinical facility being assessed. No weighting has been applied the principles.

This section provides you with the score of your clinical facility.

1.7.4 Supporting notes from CFFFP Assessment visit

Notes taken during the CFFFP Assessment visit are provided. These notes capture the discussion from the visit. They support the key architectural metrics and the design principle questionnaire.

2 District Health Board – West Coast

2.1 Clinical facility assessed in your DHB

The following facility were assessed in your DHB:

DHB	Campus/Hospital	Clinical Unit	Date
West Coast	Greymouth Hospital	Adult MH inpatient unit	02 April 2019

3 Findings per Clinical Facility

3.1 Grey Base Hospital – Mental Health Inpatient Unit

3.1.1 Gross Floor Area

The AHFG recommend MH units are planned at approximately 80m2/bed. The West Coast Hospital MH inpatient unit is approximately 123m2/bed which is 154% of the recommended size.

3.1.2 Total score of the CFFFP Assessment

The CFFFP assessment included nine principles most of which had multiple questions. The total score possible for a MH IPU was 275. The West Coast Hospital MH IPU scored a total of 118/275.

Campus	Unit	Principle # 1 Appropriate *external* functional relationships	Principle # 2 Appropriate *internal* functional relationships	Principle # 3 Access	Principle # 4 Adequately sized / shape / layout key clinical spaces	Principle # 5 Enhance communication between staff and patients	Principle # 6 Enhance privacy	Principle # 7 Reduce patient infections	Principle # 8 Reduce medication errors	Principle # 9 Enhance staff & patient safety	Principle Total
Greymouth	MHIPU	14	11	1	21	16	5	15	3	32	118
	Total Possible Score	**20**	**30**	**15**	**55**	**30**	**5**	**35**	**20**	**65**	**275**

3.1.3 Supporting notes from CFFFP Assessment visit

The Greymouth MH IPU is a 9-bed unit (5 single and 2 double rooms) created by the conversion of the original Maternity unit (the remainder of the floor being converted to offices for the Greymouth community mental health team). Therefore, adjacency to that team is good, however, there are also teams in Buller and Hokitika.

All but 2 of the bedrooms are undersized (to AHFG). Most have shared ablution facilities (one single room and one double room have ensuites).

The building has a reasonable layout which supports the MoC.

Visibility is good to all but one bedroom from the staff station, which is at the end of the main corridor, near the entrance.

There is good natural light and outlook, but inadequate indoor exercise space and limited outdoor space.

The seclusion / de-escalation space was reasonable, with 2 rooms (one of which is not used for that purpose, but rather for vulnerable female or youths before being transitioned to Canterbury or for overflow).

As there is a floor below giving service access, and a reasonable structural grid, then if some space could be taken from the adjacent community team offices, the unit could be refitted to AHFG standard within the existing building footprint. However, we understand that the seismic status of the building may preclude this.

Overall the unit was reasonable.

Document 12

2019

Clinical Facility fitness for Purpose

WHANGANUI DISTRICT HEALTH BOARD

Author: Rose Macfarlane
Project: National Asset Management Plan
Date: 03 September 2019

Document 12

Contents

Out of scope

1 Introduction

1.1 Aim of this Paper

The aim of this paper is to provide your DHB high-level feedback relating to each of the clinical units that underwent a Clinical Facility Fitness for Purpose (CFFFP) Assessment.

1.2 NAMP Background and Context

The Minister of Health has asked the Capital Investment Committee (CIC) to develop a National Health Asset Management Plan (NAMP) in response to capital expenditure intentions signalled by the DHB's for the next ten years, to a total of $14.2 billion (of which $9.2 billion would be Crown funded). The NAMP will provide a tool supported by the Ministry of Health and Treasury, so they can prioritise the investment of the Health Capital Envelope (HCE) funds at a national level.

Each DHB owns their assets and is accountable for the maintenance, remediation, replacement and growth of these assets to a fit for purpose standard. The current model has the management for health assets to each DHB with no mandate for the Ministry to hold a national view on standardised policy and procedures for health building and infrastructure, and therefore no ability for the ministry to be consistent in measuring performance of business case benefit across the health asset portfolio.

1.3 The NAMP Project

The NAMP project has been tasked with setting up a national framework that outlines the condition of health assets across the DHB's, which the ministry can then use as a tool to assist with their prioritisation of capital spending on health infrastructure.

The NAMP project has been set up with six streams of work as follows;

- Feasibility report
- Building & infrastructure
- Clinical facility fit for purpose
- Demand & capacity
- Ancillary assets
- Establish asset portfolio
- Clinical Facility Fit-for-Purpose Workstream

When the outputs of these workstreams are combined, the Ministry will be able to provide a pipeline for proposed capital expenditure based on several investment scenarios.

1.4 Clinical Facility Fit-for-Purpose Workstream

The aim of the CFFFP workstream was to assess physical aspects of key clinical areas/departments within 'critical infrastructure' at each DHB, to determine whether their environments were 'safe for patients and staff'.

Critical infrastructure at each DHB was determined using a criticality matrix. The MoH worked with each DHB and applied the matrix across all buildings on each DHB campus. The first wave of assessments by the MoH Building & Infrastructure team, involved only buildings that housed critical services and were over 20 years old. Critical services may be non-clinical e.g. plant or clinical.

Sometimes a key clinical service e.g. Intensive Care Unit or Emergency Department made a building critical.

The following five clinical areas on the emergency patient pathway were included in the assessment if they were accommodated in critical infrastructure over 20 years old;

Out of scope

And

- Adult Mental Health (MH) inpatient units in buildings over 10 years old (excluding forensic).

As we were only looking at older facilities across the country, we completed a CFFFP Assessment on one control unit for each clinical facility – Out of scope MHIPU. This was done to provide context for our assessments.

1.5 The CFFFP Assessment Tool

The assessment tool questionnaire was based on key international evidence-based design principles specific to the health sector that promote safe design for patients and staff. These principles were ratified by the NAMP Clinical Reference Group which was set up to oversee the CFFFP workstream.

The following table outlines these principles.

Principle	Safety Design Principles
#1	Provide appropriate external functional relationships to promote safe clinical care (i.e. the proximity of key health planning units outside the department being assessed)
#2	Provide appropriate internal functional relationships (e.g. do key space co-locations within a department support safe care delivery?)
#3	Improve access
#4	Provide appropriate and adequately sized space/s / layout for safe care delivery (e.g. what is the function of the room and is it adequately sized – based on AHFG[1] room sizes)
#5	Enhance communication/interaction between staff and patient (e.g. observation of patients in beds from staff stations and vice versa)
#6	Enhance privacy (e.g. audible, visual)
#7	Reduce patient infection risk (e.g. numbers of hand wash basins, isolation rooms etc.)
#8	Reduce medication errors
#9	Enhance security (patient, staff, facility) (e.g. can a department be locked down, after-hours access, position of security guards etc.)

[1] Australasian Health Facility Guidelines

Most of the principles had more than one question. The number of questions under each principle depended on the department being assessed.

1.6 The CFFFP Assessments

- The CFFFP Assessments followed a standard format.
- In each clinical unit we met with key clinical personnel who knew how the unit functioned. Almost always the nurse in charge was one of them, as they have a comprehensive overview of how the unit functioned.
- Each meeting was booked for 2 hours.
- The first part of the meeting involved a sit-down discussion. We explained the process, then the DHB staff gave a high-level overview of the model of care (MoC) of the unit.
- We reviewed and marked-up the floor plans in order to understand how the space was utilised.
- Key architectural metrics were recorded, e.g. how many bedrooms, how many bathrooms etc.
- Responses to the nine design principle questions were then recorded.
- The data was captured in a standard template and entered into a tablet in a data base called Survey123. Hard copy was also used as a backup.
- Following the discussion, we had a walk around the unit and took photographs of things of interest or to demonstrate issues that may have been raised in the discussion.

1.7 Information provided to DHB's in this report

1.7.1 Clinical Facilities visited in your DHB

This section lists the clinical facilities and dates the CFFFP Assessment/s took place in your DHB.

1.7.2 Gross Floor Area

In each clinical facility visited we measured its gross floor area (GFA). This section provides information of the space (m2) allocated to the main unit of measurement in each unit, (beds in inpatient units, operating rooms in OT suites) as a ratio of the GFA.

We have benchmarked your space allocation to a benchmark derived from the Australasian Health Facility Guidelines (AHFG) for each clinical facility, e.g. AHFG benchmark of 36m2/bed in an inpatient unit.

1.7.3 Total score of the CFFFP Assessment

The CFFFP Assessment template is based on nine design principles. Some of these principles had more than one question. These questions were modified slightly to match the clinical facility being assessed, which means the total score for each type of clinical facility may vary. Each question has been allocated a score of 1 to 5 with 1 being the optimal score, and 5 the least optimal, so the lower the score the more optimal the clinical facility being assessed. No weighting has been applied the principles.

This section provides you with the score of your clinical facility.

1.7.4 Supporting notes from CFFFP Assessment visit

Notes taken during the CFFFP Assessment visit are provided. These notes capture the discussion from the visit. They support the key architectural metrics and the design principle questionnaire.

2 District Health Board – Whanganui

2.1 Clinical facilities assessed in your DHB

The following facilities were assessed in your DHB:

DHB	Campus/Hospital	Clinical Unit	Date
Out of scope	[redacted]	[redacted]	[redacted]
Whanganui	Whanganui	Adult MH inpatient unit	16 April 2019

3 Findings per Clinical Facility

Out of scope

[redacted]

3.2 Whanganui Hospital – Mental Health Inpatient Unit – Te Awhina

3.2.1 Gross Floor Area

The AHFG recommend MH units are planned at approximately 80m2/bed. The Whanganui Hospital MH inpatient unit is approximately 148m2/bed which is 184% of the recommended size.

3.2.2 Total score of the CFFFP Assessment

The CFFFP assessment included nine principles most of which had multiple questions. The total score possible for a MH IPU was 275. The Whanganui Hospital MH IPU scored a total of 68/275.

Campus	Unit	Principle # 1 Appropriate *external* functional relationships	Principle # 2 Appropriate *internal* functional relationships	Principle # 3 Access	Principle # 4 Adequately sized / shape / layout key clinical spaces	Principle # 5 Enhance communication between staff and patients	Principle # 6 Enhance privacy	Principle # 7 Reduce patient infections	Principle # 8 Reduce medication errors	Principle # 9 Enhance staff & patient safety	Principle Total
Whanganui	Te Awhina MHIPU	15	6	1	10	6	1	13	3	13	68
	Total Possible Score	**20**	**30**	**15**	**55**	**30**	**5**	**35**	**20**	**65**	**275**

3.2.3 Supporting notes from CFFFP Assessment visit

Te Awhina is a 12-bed unit, which has 1 x seclusion, 2 x Intensive Psychiatric Care (IPC) beds, 1 x special room and 8 x acute beds.

The unit underwent a functional reorganisation of space in 2013.

The unit has a good layout that works well for their MoC.

The unit has good clinical support spaces: lounge/activity/activity and good access to 6 x separate outside courtyards.

There is clever design of space which provides the ability to flex the use of two bedrooms to include or not, adjacent ensuite/lounge/and courtyard spaces. This pod is an extremely useful feature due to its flexibility and is highly utilised in its various configurations.

The seclusion suite is also adequate, with its own access to outside courtyard.

There is adequate space in IPC pod.

The unit is a little run-down in terms of finishes but works well for the staff and patients. CCTV's are used in internal and external patient spaces.

There is swipe access for staff throughout the unit.

2 x spaces are used as bedrooms when capacity is met, however these improvised bedrooms are deemed adequate for purpose.

Document 13

2019

Clinical Facility fitness for Purpose

AUCKLAND DISTRICT HEALTH BOARD

Author: Rose Macfarlane
Project: National Asset Management Plan
Date: 18 September 2019

Contents

Out of scope

1 Introduction

1.1 Aim of this Paper

The aim of this paper is to provide your DHB high-level feedback relating to each of the clinical units that underwent a Clinical Facility Fitness for Purpose (CFFFP) Assessment.

1.2 NAMP Background and Context

The Minister of Health has asked the Capital Investment Committee (CIC) to develop a National Health Asset Management Plan (NAMP) in response to capital expenditure intentions signalled by the DHB's for the next ten years, to a total of $14.2 billion (of which $9.2 billion would be Crown funded). The NAMP will provide a tool supported by the Ministry of Health and Treasury, so they can prioritise the investment of the Health Capital Envelope (HCE) funds at a national level.

Each DHB owns their assets and is accountable for the maintenance, remediation, replacement and growth of these assets to a fit for purpose standard. The current model has the management for health assets to each DHB with no mandate for the Ministry to hold a national view on standardised policy and procedures for health building and infrastructure, and therefore no ability for the ministry to be consistent in measuring performance of business case benefit across the health asset portfolio.

1.3 The NAMP Project

The NAMP project has been tasked with setting up a national framework that outlines the condition of health assets across the DHB's, which the ministry can then use as a tool to assist with their prioritisation of capital spending on health infrastructure.

The NAMP project has been set up with six streams of work as follows;

- Feasibility report
- Building & infrastructure
- Clinical facility fit for purpose
- Demand & capacity
- Ancillary assets
- Establish asset portfolio
- Clinical Facility Fit-for-Purpose Workstream

When the outputs of these workstreams are combined, the Ministry will be able to provide a pipeline for proposed capital expenditure based on several investment scenarios.

1.4 Clinical Facility Fit-for-Purpose Workstream

The aim of the CFFFP workstream was to assess physical aspects of key clinical areas/departments within 'critical infrastructure' at each DHB, to determine whether their environments were 'safe for patients and staff'.

Critical infrastructure at each DHB was determined using a criticality matrix. The MoH worked with each DHB and applied the matrix across all buildings on each DHB campus. The first wave of assessments by the MoH Building & Infrastructure team, involved only buildings that housed critical services and were over 20 years old. Critical services may be non-clinical e.g. plant or clinical.

Sometimes a key clinical service e.g. Intensive Care Unit or Emergency Department made a building critical.

The following five clinical areas on the emergency patient pathway were included in the assessment if they were accommodated in critical infrastructure over 20 years old;

Out of scope

And

- Adult Mental Health (MH) inpatient units in buildings over 10 years old (excluding forensic).

As we were only looking at older facilities across the country, we completed a CFFFP Assessment on one control unit for each clinical facility – Out of scope MHIPU. This was done to provide context for our assessments.

1.5 The CFFFP Assessment Tool

The assessment tool questionnaire was based on key international evidence-based design principles specific to the health sector that promote safe design for patients and staff. These principles were ratified by the NAMP Clinical Reference Group which was set up to oversee the CFFFP workstream.

The following table outlines these principles.

Principle	Safety Design Principles
#1	Provide appropriate external functional relationships to promote safe clinical care (i.e. the proximity of key health planning units outside the department being assessed)
#2	Provide appropriate internal functional relationships (e.g. do key space co-locations within a department support safe care delivery?)
#3	Improve access
#4	Provide appropriate and adequately sized space/s / layout for safe care delivery (e.g. what is the function of the room and is it adequately sized – based on AHFG[1] room sizes)
#5	Enhance communication/interaction between staff and patient (e.g. observation of patients in beds from staff stations and vice versa)
#6	Enhance privacy (e.g. audible, visual)
#7	Reduce patient infection risk (e.g. numbers of hand wash basins, isolation rooms etc.)
#8	Reduce medication errors
#9	Enhance security (patient, staff, facility) (e.g. can a department be locked down, after-hours access, position of security guards etc.)

[1] Australasian Health Facility Guidelines (AHFG)

Most of the principles had more than one question. The number of questions under each principle depended on the department being assessed.

1.6 The CFFFP Assessments

- The CFFFP Assessments followed a standard format.
- In each clinical unit we met with key clinical personnel who knew how the unit functioned. Almost always the nurse in charge was one of them, as they have a comprehensive overview of how the unit functioned.
- Each meeting was booked for 2 hours.
- The first part of the meeting involved a sit-down discussion. We explained the process, then the DHB staff gave a high-level overview of the model of care (MoC) of the unit.
- We reviewed and marked-up the floor plans in order to understand how the space was utilised.
- Key architectural metrics were recorded, e.g. how many bedrooms, how many bathrooms etc.
- Responses to the nine design principle questions were then recorded.
- The data was captured in a standard template and entered into a tablet in a data base called Survey123. Hard copy was also used as a backup.
- Following the discussion, we had a walk around the unit and took photographs of things of interest or to demonstrate issues that may have been raised in the discussion.

1.7 Information provided to DHB's in this report

1.7.1 Clinical Facilities visited in your DHB

This section lists the clinical facilities and dates the CFFFP Assessment/s took place in your DHB.

1.7.2 Gross Floor Area

In each clinical facility visited we measured its gross floor area (GFA). This section provides information of the space (m2) allocated to the main unit of measurement in each unit, (beds in inpatient units, operating rooms in operating theatre (OT) suites) as a ratio of the GFA.

We have benchmarked your space allocation to a benchmark derived from the Australasian Health Facility Guidelines (AHFG) for each clinical facility, e.g. AHFG benchmark of 36m2/bed in an inpatient unit.

1.7.3 Total score of the CFFFP Assessment

The CFFFP Assessment template is based on nine design principles. Some of these principles had more than one question. These questions were modified slightly to match the clinical facility being assessed, which means the total score for each type of clinical facility may vary. Each question has been allocated a score of 1 to 5 with 1 being the optimal score, and 5 the least optimal, so the lower the score the more optimal the clinical facility being assessed. No weighting has been applied the principles.

This section provides you with the score of your clinical facility.

1.7.4 Supporting notes from CFFFP Assessment visit

Supporting notes taken during the CFFFP Assessment visit are provided. These notes capture the discussion from the visit. They support the key architectural metrics and the design principle questionnaire.

2 District Health Board - Auckland

2.1 Clinical facilities assessed in your DHB

The following facilities were assessed in your DHB:

DHB	Campus/Hospital	Clinical Unit	Date
Auckland	Auckland City	Mental Health inpatient unit (MHIPU) – Te Whetu Tawera	7 May 2019
[redacted]	[redacted]	Out of scope [redacted]	[redacted]
Auckland	Port Chevalier	MHIPU - Buchanan	11 June 2019

3 Findings per Clinical Facility

3.1 Auckland City Hospital – Mental Health Inpatient Unit - Te Whetu Tawera

3.1.1 Gross Floor Area

The AHFG recommend MH IPU's are planned at approximately 80m2/bed. Te Whetu Tawera is approximately 72m2/bed which is 90% of the recommended size.

3.1.2 Total score of the CFFFP Assessment

The CFFFP assessment included nine principles most of which had multiple questions. The total score possible for a MH IPU was 275. Te Whetu Tawera scored a total of 125/275.

Campus	Unit	Principle # 1 Appropriate *external* functional relationships	Principle # 2 Appropriate *internal* functional relationships	Principle # 3 Access	Principle # 4 Adequately sized / shape / layout key clinical spaces	Principle # 5 Enhance communication between staff and patients	Principle # 6 Enhance privacy	Principle # 7 Reduce patient infections	Principle # 8 Reduce medication errors	Principle # 9 Enhance staff & patient safety	Principle Total
Auckland City	B35 MHIPU TWT	15	7	11	12	16	1	23	3	37	125
	Total Possible Score	20	30	15	55	30	5	35	20	65	275

3.1.3 Supporting notes from CFFFP Assessment visit

Te Whetu Tawera (TWT) opened in approximately 2002. It is a 62-bed standalone facility but is resourced for 58 beds. It has three wards and one administration area:

- A: Te Whitinga 25/23 beds,
- B: Te Kakenga 25/23 beds &
- C: Te Tumanoko ICU 12 beds with
- Staff admin facilities upstairs.

A & B are open[2] wards and C runs a closed[3] model of care.

TWT has a large complex floor plan which has a reasonably logical layout for the model of care with good corridor separation between services, patients and visitors. Each ward has a central staff base with two or three single corridor fingers accommodating the bedrooms, radiating out from them so visibility is afforded down the fingers.

Each ward has access to clinical support spaces; lounges, dining, interview, activity etc. but overall, they could do with more of these spaces to support the number of patients and activities. There are no dedicated whanau spaces.

Wards A & B (up to 50 patients), have no access to fenced outdoor spaces which is sub-optimal, however, ICU patients do have access to a secure concrete courtyard.

Most bedrooms are ensuited (AHFG recommends single bedrooms each with its own ensuite bathroom). The 2 seclusion rooms do not have ensuites.

Overall TWT has poor storage and environmental systems (air conditioning, ventilation and heating/cooling systems).

TWT has mixed swipe card & key access to most spaces. Swipe card entry to all locked spaces is desirable.

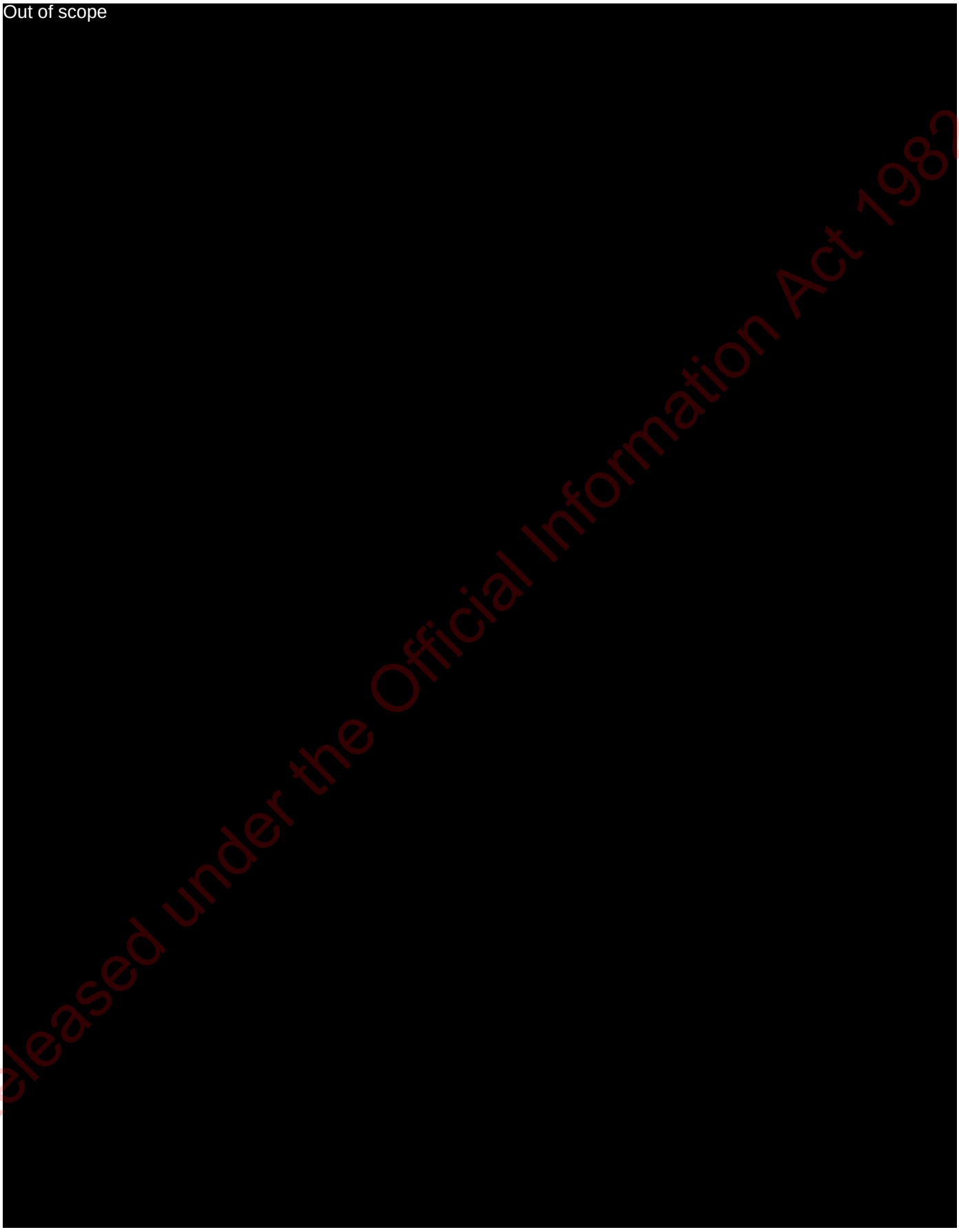
Overall the facility is tired with shabby walls, furniture, fittings and carpets. Ablution facilities are run down and difficult to clean. These issues raise infection control concerns.

ADHB Feedback 09/09/19: In July 2019, the Auckland District Health Board approved expenditure to implement environment changes in the secure areas: Intensive Care (Te Whetu Tawera) and High Dependency Unit (Child and Family Unit). This will be used to change bedroom/bathroom doors and fittings in those units. Ligature risks exist in both secure and open (non-secure) areas of acute mental health inpatient units. The need remains to scope suitable environmental improvement options in the non-secure clinical areas of Te Whetu Tawera, Fraser McDonald Unit and Child and Family Unit. This is to reduce the risk of death or serious harm by suicide attempts due to hanging or strangulation.

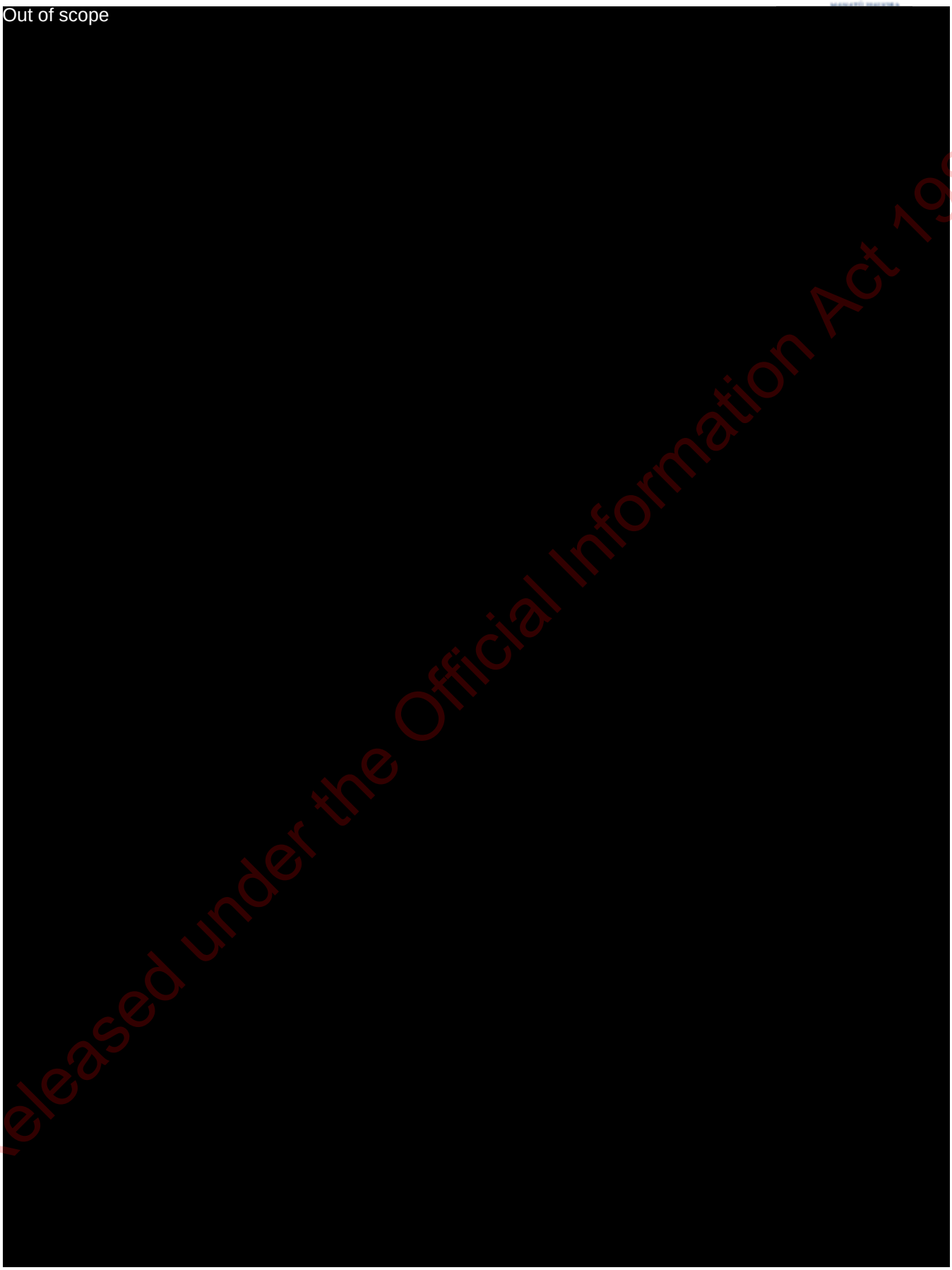
Out of scope

[2] Open unit patients can come and go of their own accord
[3] Closed unit patients are restricted in their ability to come and go of their own accord

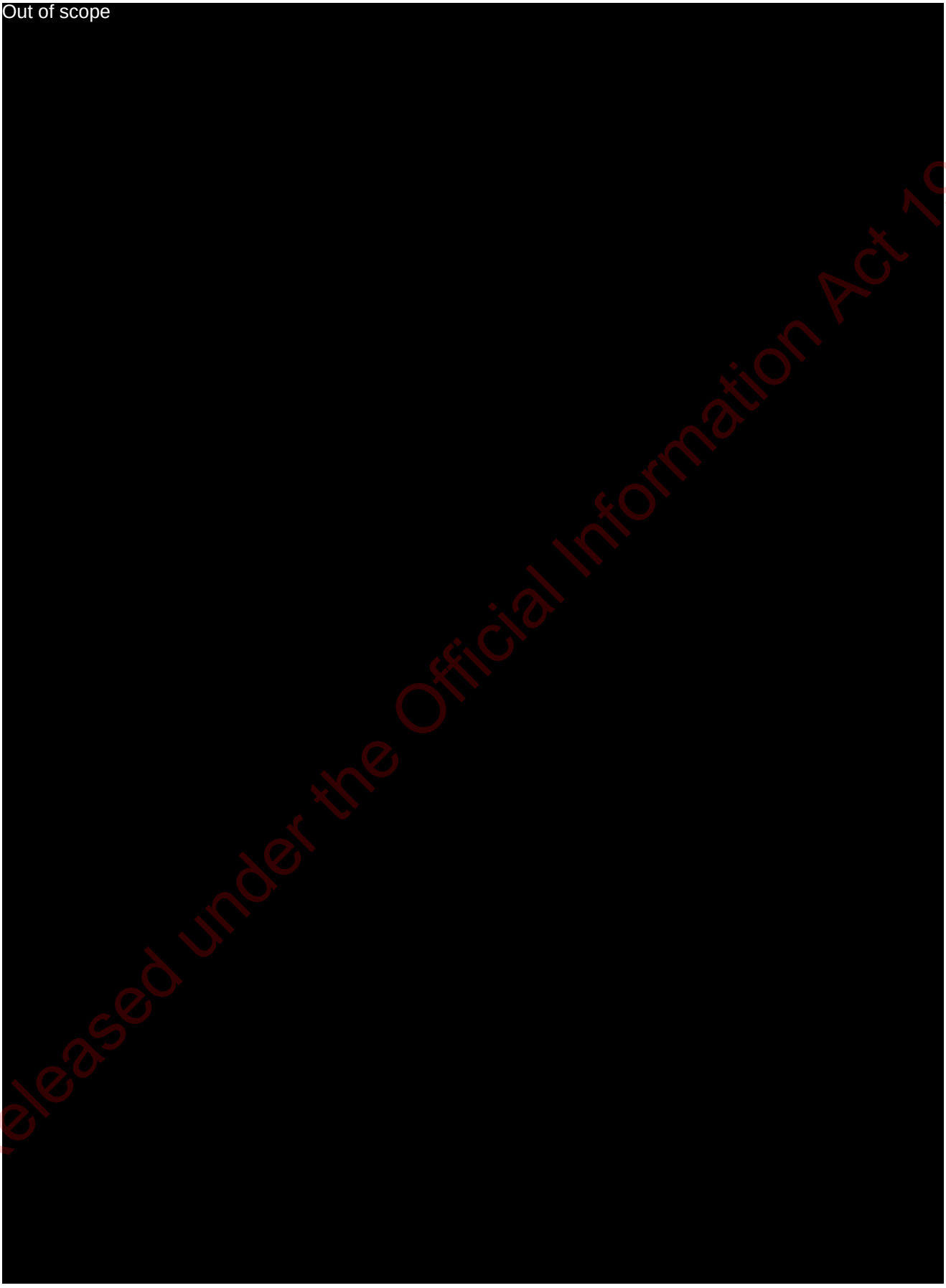
Out of scope

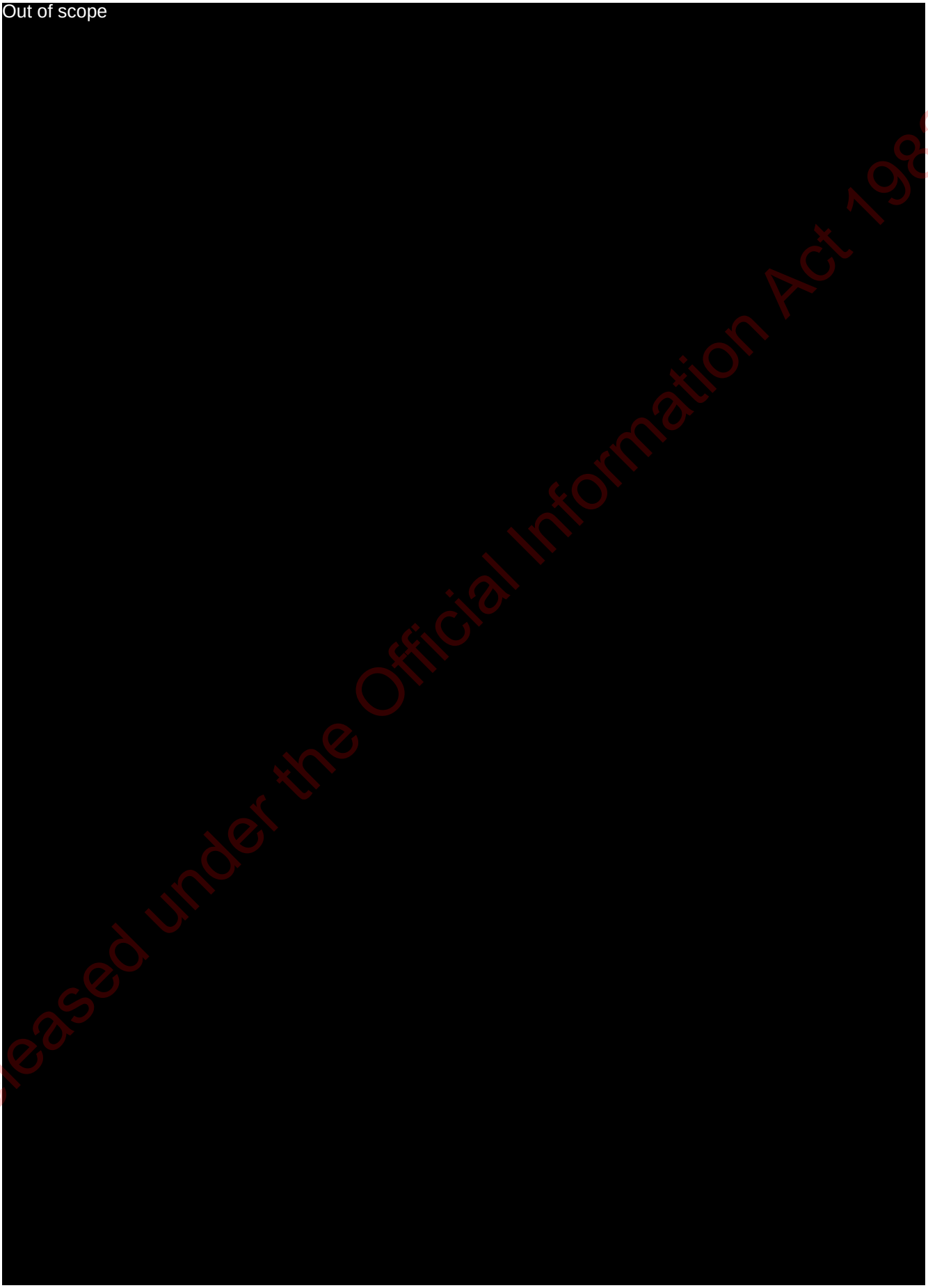


Out of scope

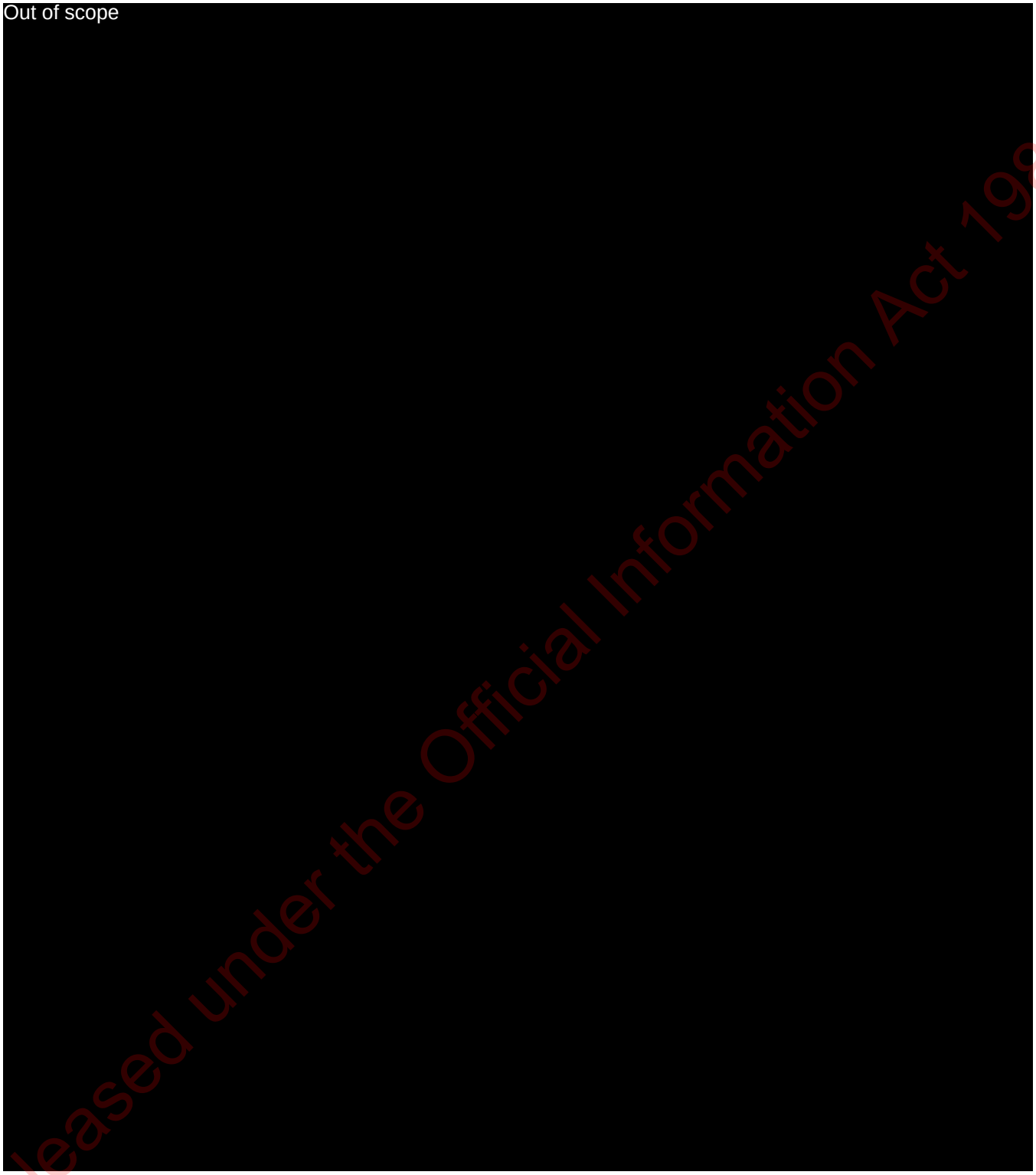


Out of scope





Out of scope



3.8 Port Chevalier - Buchanan Mental Health Inpatient Unit

3.8.1 Gross Floor Area

The AHFG recommend MH units are planned at approximately 80m2/bed. Buchanan is approximately 130m2/bed which is 162% of the recommended size.

3.8.2 Total score of the CFFFP Assessment

The CFFFP assessment included nine principles most of which had multiple questions. The total score possible for a MH IPU was 275. Buchanan scored a total of 126/275.

Campus	Unit	Principle # 1 Appropriate *external* functional relationships	Principle # 2 Appropriate *internal* functional relationships	Principle # 3 Access	Principle # 4 Adequately sized / shape / layout key clinical spaces	Principle # 5 Enhance communication between staff and patients	Principle # 6 Enhance privacy	Principle # 7 Reduce patient infections	Principle # 8 Reduce medication errors	Principle # 9 Enhance staff & patient safety	Principle Total
Buchanan	Buchanan	15	15	3	12	12	1	16	7	45	126
	Total Possible Score	20	30	15	55	30	5	35	20	65	275

3.8.3 Supporting notes from CFFFP Assessment visit

Buchanan is an open inpatient unit. The building is a standalone narrow H shaped building which results in long distances and multiple entry/exit points within the footprint. The spread-out plan creates issues with the observation of patients both inside and outside.

The unit was refreshed 7 years ago. Asbestos was reported in the walls, and there is no Wi-Fi. All locked doors are keyed, with no swipe access which is a safety issue.

A therapy unit is desirable in the community service space.

Bedrooms are variable in size, there are no ensuite bathrooms, and there are limited accessible facilities. All bedrooms have inward opening doors, which may compromise safety.

There is some drainage breakage reported below floors, and maintenance is compromised by a lack of service access and asbestos.

DHB Feedback 09/09/19: Please note that the Buchanan Rehabilitation Centre now has Wi-Fi installed.

Document 14

2019

Clinical Facility fitness for Purpose

BAY OF PLENTY DISTRICT HEALTH BOARD

Author: Rose Macfarlane
Project: National Asset Management Plan
Date: 18 September 2019

Contents

Out of scope

[redacted]

1 Introduction

1.1 Aim of this Paper

The aim of this paper is to provide your DHB high-level feedback relating to each of the clinical units that underwent a Clinical Facility Fitness for Purpose (CFFFP) Assessment.

1.2 NAMP Background and Context

The Minister of Health has asked the Capital Investment Committee (CIC) to develop a National Health Asset Management Plan (NAMP) in response to capital expenditure intentions signalled by the DHB's for the next ten years, to a total of $14.2 billion (of which $9.2 billion would be Crown funded). The NAMP will provide a tool supported by the Ministry of Health and Treasury, so they can prioritise the investment of the Health Capital Envelope (HCE) funds at a national level.

Each DHB owns their assets and is accountable for the maintenance, remediation, replacement and growth of these assets to a fit for purpose standard. The current model has the management for health assets to each DHB with no mandate for the Ministry to hold a national view on standardised policy and procedures for health building and infrastructure, and therefore no ability for the ministry to be consistent in measuring performance of business case benefit across the health asset portfolio.

1.3 The NAMP Project

The NAMP project has been tasked with setting up a national framework that outlines the condition of health assets across the DHB's, which the ministry can then use as a tool to assist with their prioritisation of capital spending on health infrastructure.

The NAMP project has been set up with six streams of work as follows;

- Feasibility report
- Building & infrastructure
- Clinical facility fit for purpose
- Demand & capacity
- Ancillary assets
- Establish asset portfolio
- Clinical Facility Fit-for-Purpose Workstream

When the outputs of these workstreams are combined, the Ministry will be able to provide a pipeline for proposed capital expenditure based on several investment scenarios.

1.4 Clinical Facility Fit-for-Purpose Workstream

The aim of the CFFFP workstream was to assess physical aspects of key clinical areas/departments within 'critical infrastructure' at each DHB, to determine whether their environments were 'safe for patients and staff'.

Critical infrastructure at each DHB was determined using a criticality matrix. The MoH worked with each DHB and applied the matrix across all buildings on each DHB campus. The first wave of assessments by the MoH Building & Infrastructure team, involved only buildings that housed critical services and were over 20 years old. Critical services may be non-clinical e.g. plant or clinical.

Sometimes a key clinical service e.g. Intensive Care Unit or Emergency Department made a building critical.

The following five clinical areas on the emergency patient pathway were included in the assessment if they were accommodated in critical infrastructure over 20 years old;

Out of scope

And

- Adult Mental Health (MH) inpatient units in buildings over 10 years old (excluding forensic).

As we were only looking at older facilities across the country, we completed a CFFFP Assessment on one control unit for each clinical facility – Out of scope MHIPU. This was done to provide context for our assessments.

1.5 The CFFFP Assessment Tool

The assessment tool questionnaire was based on key international evidence-based design principles specific to the health sector that promote safe design for patients and staff. These principles were ratified by the NAMP Clinical Reference Group which was set up to oversee the CFFFP workstream.

The following table outlines these principles.

Principle	Safety Design Principles
#1	Provide appropriate external functional relationships to promote safe clinical care (i.e. the proximity of key health planning units outside the department being assessed)
#2	Provide appropriate internal functional relationships (e.g. do key space co-locations within a department support safe care delivery?)
#3	Improve access
#4	Provide appropriate and adequately sized space/s / layout for safe care delivery (e.g. what is the function of the room and is it adequately sized – based on AHFG[1] room sizes)
#5	Enhance communication/interaction between staff and patient (e.g. observation of patients in beds from staff stations and vice versa)
#6	Enhance privacy (e.g. audible, visual)
#7	Reduce patient infection risk (e.g. numbers of hand wash basins, isolation rooms etc.)
#8	Reduce medication errors
#9	Enhance security (patient, staff, facility) (e.g. can a department be locked down, after-hours access, position of security guards etc.)

[1] Australasian Health Facility Guidelines

Most of the principles had more than one question. The number of questions under each principle depended on the department being assessed.

1.6 The CFFFP Assessments

- The CFFFP Assessments followed a standard format.
- In each clinical unit we met with key clinical personnel who knew how the unit functioned. Almost always the nurse in charge was one of them, as they have a comprehensive overview of how the unit functioned.
- Each meeting was booked for 2 hours.
- The first part of the meeting involved a sit-down discussion. We explained the process, then the DHB staff gave a high-level overview of the model of care (MoC) of the unit.
- We reviewed and marked-up the floor plans in order to understand how the space was utilised.
- Key architectural metrics were recorded, e.g. how many bedrooms, how many bathrooms etc.
- Responses to the nine design principle questions were then recorded.
- The data was captured in a standard template and entered into a tablet in a data base called Survey123. Hard copy was also used as a backup.
- Following the discussion, we had a walk around the unit and took photographs of things of interest or to demonstrate issues that may have been raised in the discussion.

1.7 Information provided to DHB's in this report

1.7.1 Clinical Facilities visited in your DHB

This section lists the clinical facilities and dates the CFFFP Assessment/s took place in your DHB.

1.7.2 Gross Floor Area

In each clinical facility visited we measured its gross floor area (GFA). This section provides information of the space (m2) allocated to the main unit of measurement in each unit, (beds in inpatient units, operating rooms in OT suites) as a ratio of the GFA.

We have benchmarked your space allocation to a benchmark derived from the Australasian Health Facility Guidelines (AHFG) for each clinical facility, e.g. AHFG benchmark of 36m2/bed in an inpatient unit.

1.7.3 Total score of the CFFFP Assessment

The CFFFP Assessment template is based on nine design principles. Some of these principles had more than one question. These questions were modified slightly to match the clinical facility being assessed, which means the total score for each type of clinical facility may vary. Each question has been allocated a score of 1 to 5 with 1 being the optimal score, and 5 the least optimal, so the lower the score the more optimal the clinical facility being assessed. No weighting has been applied the principles.

This section provides you with the score of your clinical facility.

1.7.4 Supporting notes from CFFFP visit

Notes taken during the CFFFP Assessment visit are provided. These notes capture the discussion from the visit. They support the key architectural metrics and the design principle questionnaire.

2 District Health Board – Bay of Plenty

2.1 Clinical facilities assessed in your DHB

The following facilities were assessed in your DHB:

DHB	Campus/Hospital	Clinical Unit	Date
Bay of Plenty	Tauranga Hospital	MH IPU	09 April 2019
Out of scope	[redacted]	[redacted]	[redacted]

3 Findings per Clinical Facility

3.1 Tauranga Hospital – Mental Health Inpatient Unit – Te Whare Maiangiangi

3.1.1 Gross Floor Area

The AHFG recommend MH units are planned at approximately 80m2/bed. The Tauranga Hospital MH inpatient unit, TWM, is approximately 79m2/bed which is 99% of the recommended size.

3.1.2 Total score of the CFFFP Assessment

The CFFFP assessment included nine principles most of which had multiple questions. The total score possible for a MH IPU was 275. The Tauranga Hospital MH IPU, TWM, scored a total of 151/275.

Campus	Unit	Principle # 1 Appropriate *external* functional relationships	Principle # 2 Appropriate *internal* functional relationships	Principle # 3 Access	Principle # 4 Adequately sized / shape / layout key clinical spaces	Principle # 5 Enhance communication between staff and patients	Principle # 6 Enhance privacy	Principle # 7 Reduce patient infections	Principle # 8 Reduce medication errors	Principle # 9 Enhance staff & patient safety	Principle Total
Tauranga	MHIPU	20	16	1	27	24	3	19	7	34	151
	Total Possible Score	20	30	15	55	30	5	35	20	65	275

3.1.3 Supporting notes from CFFFP visit

Te Whare Maiangiangi (TWM) has a total of 24 beds, including 20 open beds and 4 x intensive psychiatric care (IPC) and 3 x seclusion beds (2 of which are commissioned). Two of the inpatient beds are adapted as medical beds for MH patients with medical issues. TWM is a standalone building on the Tauranga Hospital campus.

There are ombudsman reports into recent issues.

Demand exceeds capacity and when demand dictates up to 30 beds are put into use, by using the seclusion area and patient lounges, thus exceeding their capacity of 24 beds.

The unit is planned in a panopticon style which severely compromises model of care delivery. There is low natural light for main internal living areas and the wide bedroom corridors use up a lot of floor area in low quality, dark circulation space. Patient privacy is compromised and the dashboard screen in the staff base is visible to patients and visitors. The staff base windows to the seclusion area not appropriate. There are issues around fire egress out of the inpatient bedroom wings.

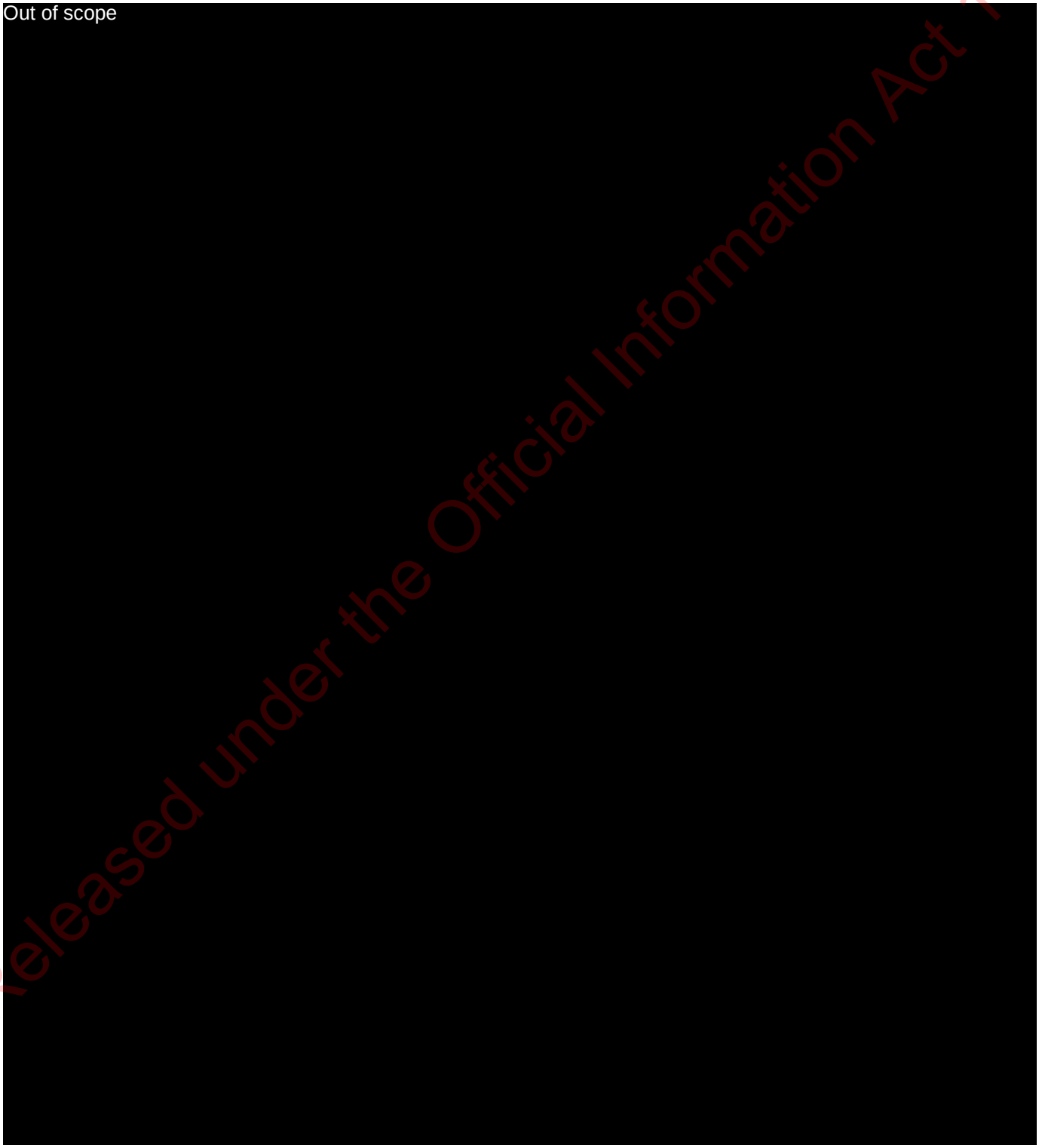
There are serious staff and patient safety issues especially around IPC area, especially around the lack of capacity. The entry to the IPC is not visible from the main staff base. Power sockets in the IPC are accessible to patients and the floor level is uneven, so the door into the IPC dining area catches.

Access around the unit is controlled by mixture of keys and swipe cards.

Service traffic is not separated from patient traffic.

Staff expressed concern about the 8-10 bed Whakatane MH unit, Ward 8. This concern was reported to MOH persons concerned.

Out of scope



Document 15

2019

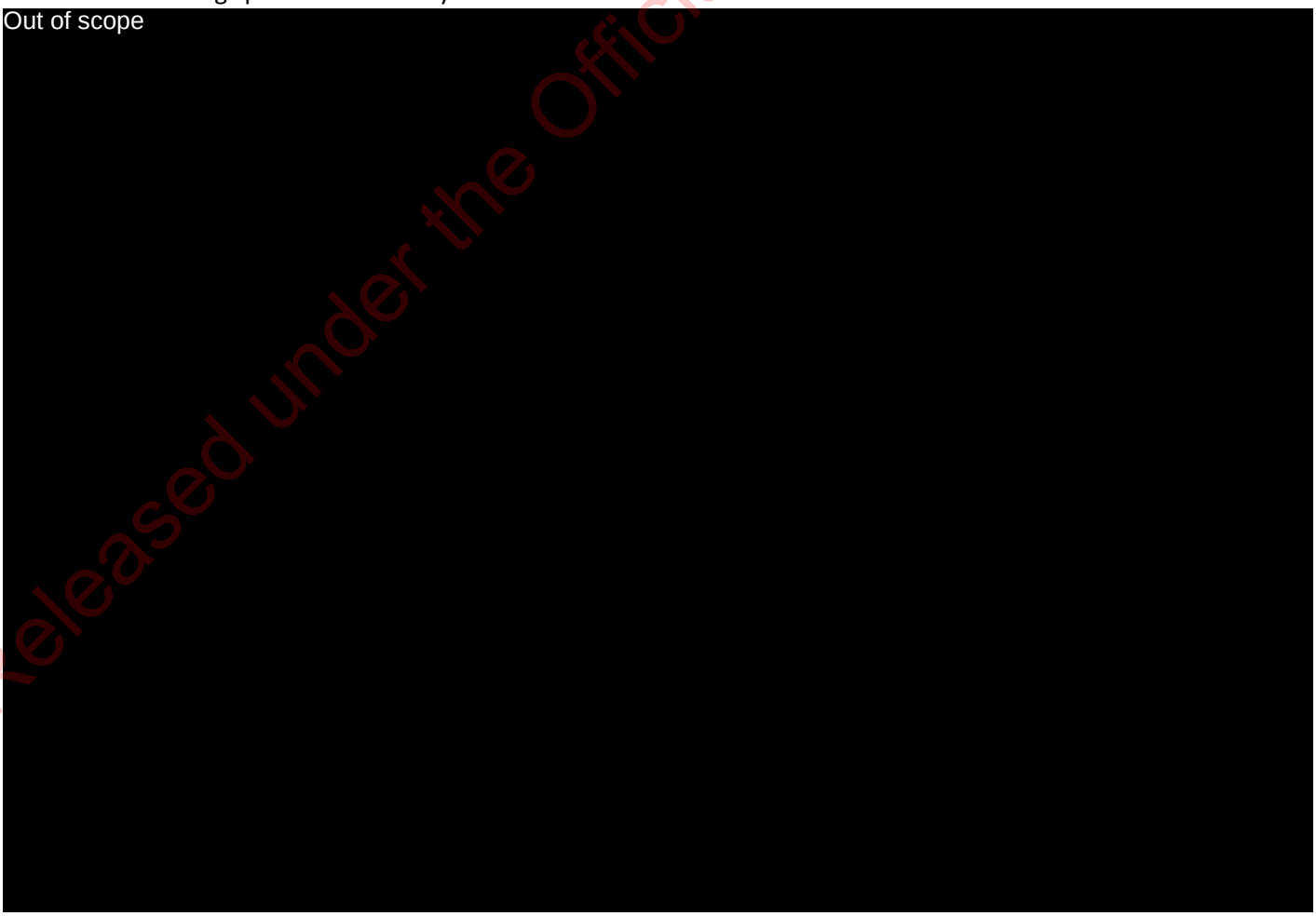
Clinical Facility fitness for Purpose

COUNTIES MANAKAU DISTRICT HEALTH BOARD

Author: Rose Macfarlane
Project: National Asset Management Plan
Date: 18 September 2019

Contents

Out of scope



Out of scope

Out of scope

1 Introduction

1.1 Aim of this Paper

The aim of this paper is to provide your DHB high-level feedback relating to each of the clinical units that underwent a Clinical Facility Fitness for Purpose (CFFFP) Assessment.

1.2 NAMP Background and Context

The Minister of Health has asked the Capital Investment Committee (CIC) to develop a National Health Asset Management Plan (NAMP) in response to capital expenditure intentions signalled by the DHB's for the next ten years, to a total of $14.2 billion (of which $9.2 billion would be Crown funded). The NAMP will provide a tool supported by the Ministry of Health and Treasury, so they can prioritise the investment of the Health Capital Envelope (HCE) funds at a national level.

Each DHB owns their assets and is accountable for the maintenance, remediation, replacement and growth of these assets to a fit for purpose standard. The current model has the management for health assets to each DHB with no mandate for the Ministry to hold a national view on standardised policy and procedures for health building and infrastructure, and therefore no ability for the ministry to be consistent in measuring performance of business case benefit across the health asset portfolio.

1.3 The NAMP Project

The NAMP project has been tasked with setting up a national framework that outlines the condition of health assets across the DHB's, which the ministry can then use as a tool to assist with their prioritisation of capital spending on health infrastructure.

The NAMP project has been set up with six streams of work as follows;

- Feasibility report
- Building & infrastructure
- Clinical facility fit for purpose
- Demand & capacity
- Ancillary assets
- Establish asset portfolio
- Clinical Facility Fit-for-Purpose Workstream

When the outputs of these workstreams are combined, the Ministry will be able to provide a pipeline for proposed capital expenditure based on several investment scenarios.

1.4 Clinical Facility Fit-for-Purpose Workstream

The aim of the CFFFP workstream was to assess physical aspects of key clinical areas/departments within 'critical infrastructure' at each DHB, to determine whether their environments were 'safe for patients and staff'.

Critical infrastructure at each DHB was determined using a criticality matrix. The MoH worked with each DHB and applied the matrix across all buildings on each DHB campus. The first wave of assessments by the MoH Building & Infrastructure team, involved only buildings that housed critical services and were over 20 years old. Critical services may be non-clinical e.g. plant or clinical.

Sometimes a key clinical service e.g. Intensive Care Unit or Emergency Department made a building critical.

The following five clinical areas on the emergency patient pathway were included in the assessment if they were accommodated in critical infrastructure over 20 years old;

Out of scope

And

- Adult Mental Health (MH) inpatient units in buildings over 10 years old (excluding forensic).

As we were only looking at older facilities across the country, we completed a CFFFP Assessment on one control unit for each clinical facility – Out of scope MHIPU. This was done to provide context for our assessments.

1.5 The CFFFP Assessment Tool

The assessment tool questionnaire was based on key international evidence-based design principles specific to the health sector that promote safe design for patients and staff. These principles were ratified by the NAMP Clinical Reference Group which was set up to oversee the CFFFP workstream.

The following table outlines these principles.

Principle	Safety Design Principles
#1	Provide appropriate external functional relationships to promote safe clinical care (i.e. the proximity of key health planning units outside the department being assessed)
#2	Provide appropriate internal functional relationships (e.g. do key space co-locations within a department support safe care delivery?)
#3	Improve access
#4	Provide appropriate and adequately sized space/s / layout for safe care delivery (e.g. what is the function of the room and is it adequately sized – based on AHFG[1] room sizes)
#5	Enhance communication/interaction between staff and patient (e.g. observation of patients in beds from staff stations and vice versa)
#6	Enhance privacy (e.g. audible, visual)
#7	Reduce patient infection risk (e.g. numbers of hand wash basins, isolation rooms etc.)
#8	Reduce medication errors
#9	Enhance security (patient, staff, facility) (e.g. can a department be locked down, after-hours access, position of security guards etc.)

[1] Australasian Health Facility Guidelines (AHFG)

Most of the principles had more than one question. The number of questions under each principle depended on the department being assessed.

1.6 The CFFFP Assessments

- The CFFFP Assessments followed a standard format.
- In each clinical unit we met with key clinical personnel who knew how the unit functioned. Almost always the nurse in charge was one of them, as they have a comprehensive overview of how the unit functioned.
- Each meeting was booked for 2 hours.
- The first part of the meeting involved a sit-down discussion. We explained the process, then the DHB staff gave a high-level overview of the model of care (MoC) of the unit.
- We reviewed and marked-up the floor plans in order to understand how the space was utilised.
- Key architectural metrics were recorded, e.g. how many bedrooms, how many bathrooms etc.
- Responses to the nine design principle questions were then recorded.
- The data was captured in a standard template and entered into a tablet in a data base called Survey123. Hard copy was also used as a backup.
- Following the discussion, we had a walk around the unit and took photographs of things of interest or to demonstrate issues that may have been raised in the discussion.

1.7 Information provided to DHB's in this report

1.7.1 Clinical Facilities visited in your DHB

This section lists the clinical facilities and dates the CFFFP Assessment/s took place in your DHB.

1.7.2 Gross Floor Area

In each clinical facility visited we measured its gross floor area (GFA). This section provides information of the space (m2) allocated to the main unit of measurement in each unit, (beds in inpatient units, operating rooms in OT suites) as a ratio of the GFA.

We have benchmarked your space allocation to a benchmark derived from the Australasian Health Facility Guidelines (AHFG) for each clinical facility, e.g. AHFG benchmark of 36m2/bed in an inpatient unit.

1.7.3 Total score of the CFFFP Assessment

The CFFFP Assessment template is based on nine design principles. Some of these principles had more than one question. These questions were modified slightly to match the clinical facility being assessed, which means the total score for each type of clinical facility may vary. Each question has been allocated a score of 1 to 5 with 1 being the optimal score, and 5 the least optimal, so the lower the score the more optimal the clinical facility being assessed. No weighting has been applied the principles.

This section provides you with the score of your clinical facility.

1.7.4 Supporting notes from CFFFP Assessment visit

Supporting notes taken during the CFFFP Assessment visit are provided. These notes capture the discussion from the visit. They support the key architectural metrics and the design principle questionnaire.

2 District Health Board – Counties Manakau

2.1 Clinical facilities assessed in your DHB

The following facilities were assessed in your DHB:

DHB	Campus/Hospital	Clinical Unit	Date
Out of scope	[redacted]	[redacted]	[redacted]
C/M	Otara	Tamaki Oranga, Mental Health Inpatient Unit (MHIPU)	06 May 2019
Out of scope	[redacted]	[redacted]	[redacted]
C/M	Middlemore	Tiaho Mai – MH IPU CONTROL	06 May 2019
[redacted]	Out of scope [redacted]	[redacted]	[redacted]

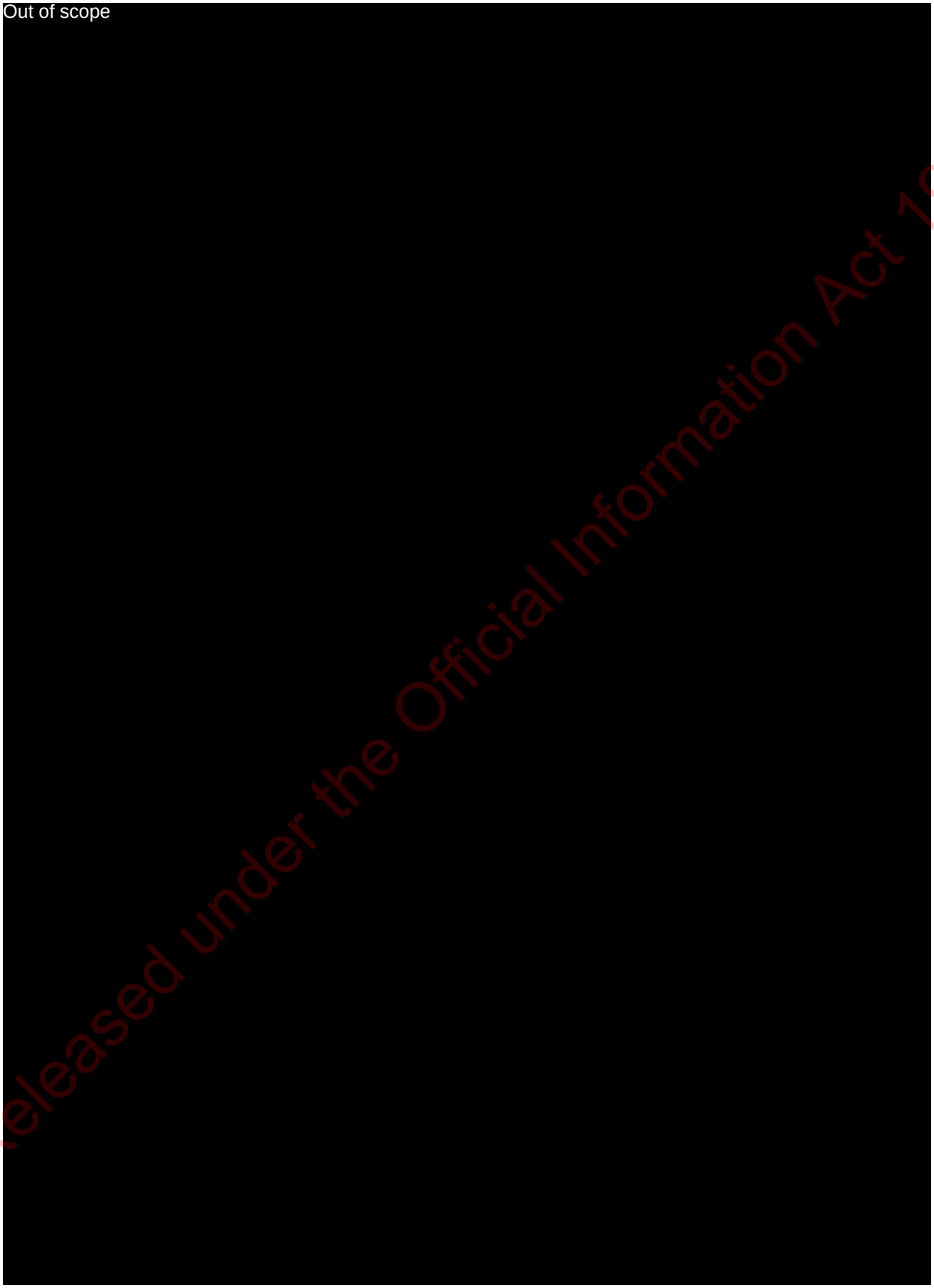
3 Findings per Clinical Facility

Out of scope

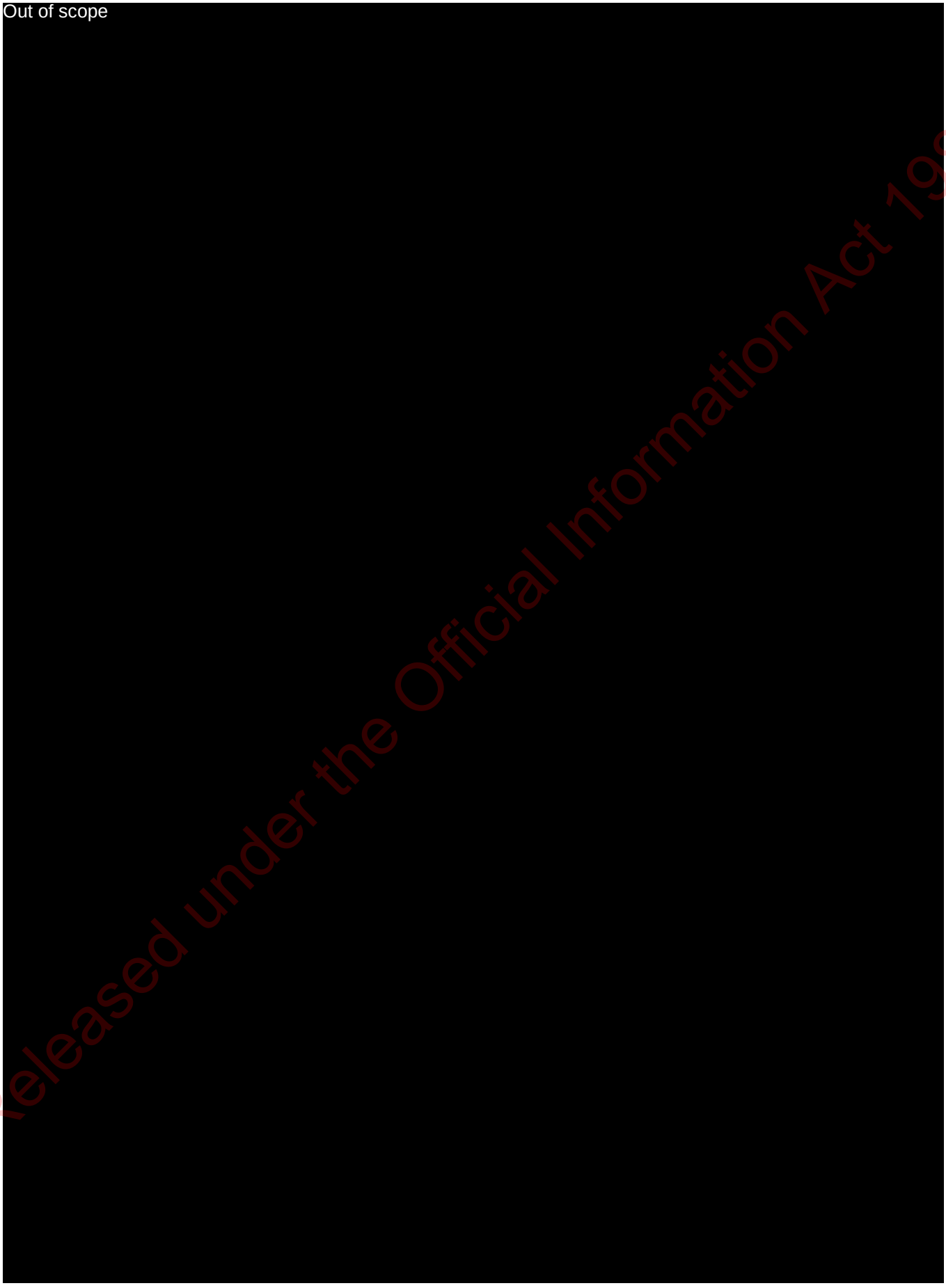
[redacted]

[2] High Dependency Unit
[3] Neonatal Intensive Care Unit

Out of scope



Out of scope



Out of scope

3.4 Otara Campus – Mental Health Inpatient Unit – Tamaki Oranga

3.4.1 Gross Floor Area

The AHFG recommend MH inpatient units are planned at approximately 80m2/bed. Tamaki Oranga is approximately 76m2/bed which is 95% of the recommended size.

3.4.2 Total score of the CFFFP Assessment

The CFFFP assessment included nine principles most of which had multiple questions. The total score possible for a MH IPU was 275. Tamaki Oranga scored a total of 154/275.

Campus	Unit	Principle # 1 Appropriate *external* functional relationships	Principle # 2 Appropriate *internal* functional relationships	Principle # 3 Access	Principle # 4 Adequately sized / shape / layout key clinical spaces	Principle # 5 Enhance communication between staff and patients	Principle # 6 Enhance privacy	Principle # 7 Reduce patient infections	Principle # 8 Reduce medication errors	Principle # 9 Enhance staff & patient safety	Principle Total
Otara	Tamaki Oranga MHIP	20	17	7	27	17	5	22	7	32	154
	Total Possible Score	**20**	**30**	**15**	**55**	**30**	**5**	**35**	**20**	**65**	**275**

3.4.3 Supporting notes from CFFFP Assessment visit

This unit was originally designed as spinal unit and converted to its current use as a mental health inpatient unit.

All patients in the unit are admitted under the MH Act and all are male. There are 20 beds. Some patients stay up to 2 years. It provides a regional service and caters for other DHB's.

The facility has an institutional feel and is not conducive or suitable for current MoC.

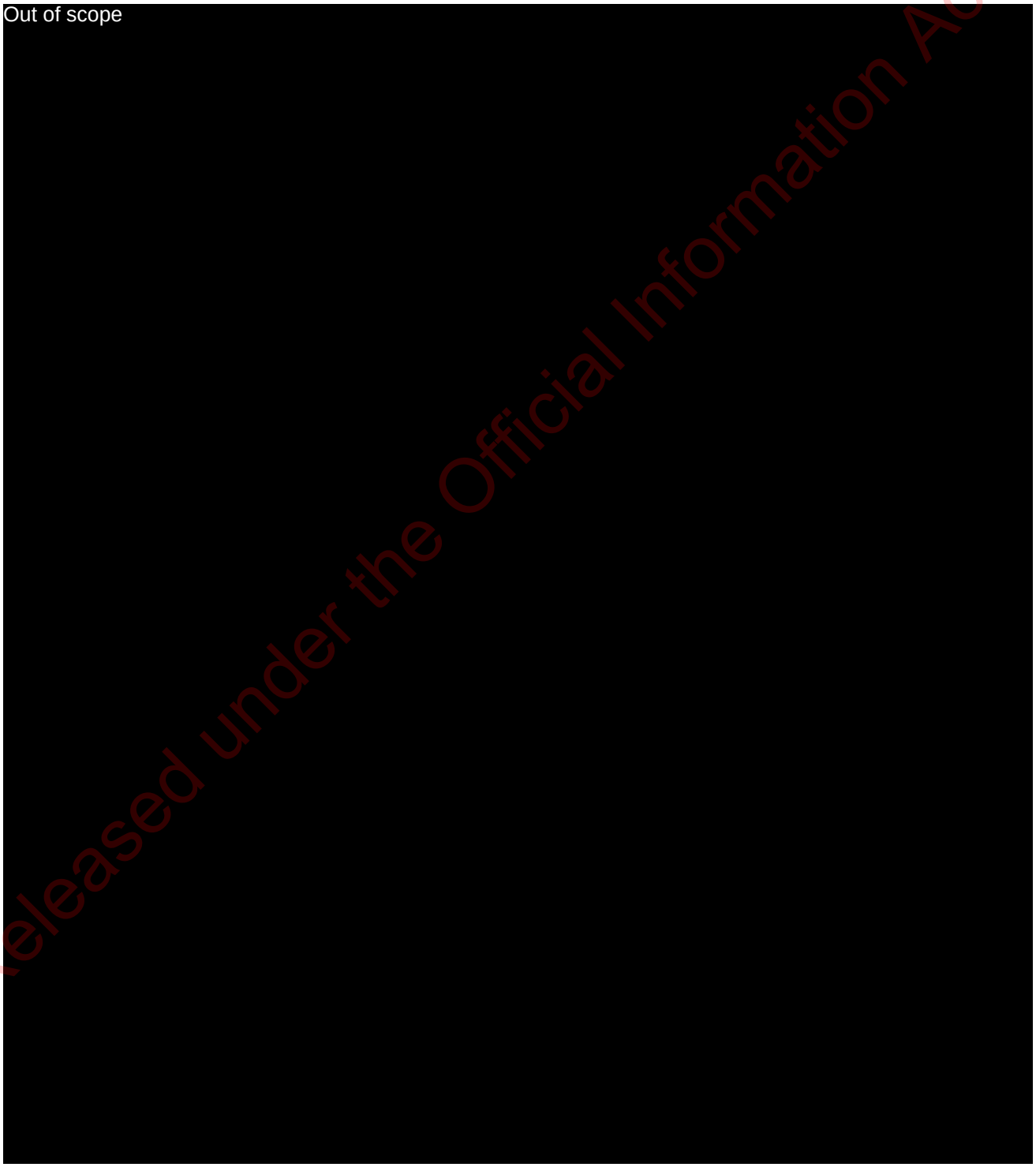
There is one bedroom with ensuite, the rest of the bathrooms are shared. The AHFG recommend single bedrooms in mental health inpatient units with a dedicated ensuite per bedroom.

The unit is tired, run-down and shabby with poor maintenance. There are asbestos issues. Leaking room in C area, which is especially prevalent through light fittings. Leaking stains are visible in the main dining room. Some windows are not sealed and all single glazed.

A unit that supports 'community' living would be desirable.

There is one external courtyard with a semi-secure fence for all patients.

Out of scope



Out of scope

3.6 Middlemore Campus – Mental Health Inpatient Unit - Tiaho Mai

3.6.1 Gross Floor Area

The AHFG recommend MH inpatient units are planned at approximately 80m2/bed. Tiaho Mai is approximately 87m2/bed which is 109% of the recommended size.

3.6.2 Total score of the CFFFP Assessment

The CFFFP assessment included nine principles most of which had multiple questions. The total score possible for a MH IPU was 275. Tiaho Mai scored a total of 64/275.

Campus	Unit	Principle # 1 Appropriate *external* functional relationships	Principle # 2 Appropriate *internal* functional relationships	Principle # 3 Access	Principle # 4 Adequately sized / shape / layout key clinical spaces	Principle # 5 Enhance communication between staff and patients	Principle # 6 Enhance privacy	Principle # 7 Reduce patient infections	Principle # 8 Reduce medication errors	Principle # 9 Enhance staff & patient safety	Principle Total
Middlemore	Tiaho Mai CONTROL	17	5	3	9	6	1	7	3	13	64
	Total Possible Score	**20**	**30**	**15**	**55**	**30**	**5**	**35**	**20**	**65**	**275**

3.6.3 Supporting notes from CFFFP Assessment visit

This mental health inpatient unit was used as the control unit for the CFFFP Assessments.

The first half of the unit (38 beds) is built and occupied while the other half is under construction. Some future spaces to be shared between both halves are not yet accessible as a result.

There is an option to enter the unit via the Whare.

There are 38 single bedrooms with accessible ensuited bathrooms for each. Higher dependency, HDU; 14 beds & Lower dependency, LDU; 24 beds with 2 x flex beds between the HDU/LDU areas. All beds are arranged into three donuts (1 for HDU, 2 for LDU) which enclose internal courtyards. Doors area placed strategically in corridors allow additional options to manage beds, gender separation etc. There 2 x larger 'special' bedrooms with ensuites in each donut. All bedrooms have 1.5 width doors for increased access.

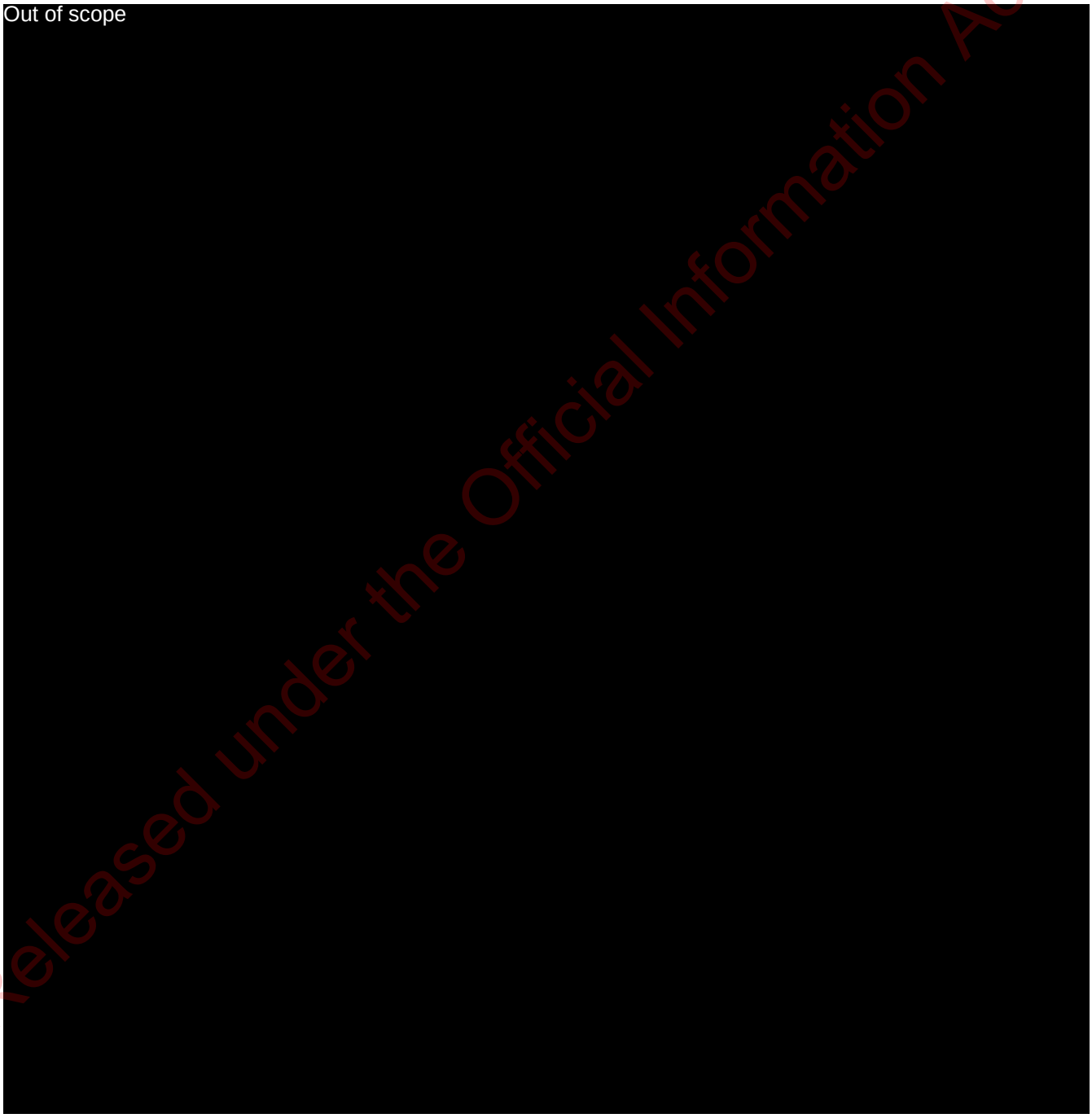
The donut shapes provide excellent visibility through the courtyards that enable high visibility of patients by staff and vice versa. Staff bases also placed within communal spaces to give staff higher visibility / ability to supervise while they are 'on stage'.

There is a superior security system to monitor all doors and increase staff and patient safety – monitored at a central staff base in HDU. There is staff swipe card access throughout unit and patients have swipe access to their own bedrooms.

There is enough clinical support space to meet needs of diverse patient cohort and families.

Good separation of service and patient and visitor flows.

Out of scope



[4] Post Anaesthetic Care Unit

Out of scope

Document 16

2019

Clinical Facility fitness for Purpose

SOUTHERN DISTRICT HEALTH BOARD

Author: Rose Macfarlane
Project: National Asset Management Plan
Date: 18 September 2019

Contents

1 Introduction

1.1 Aim of this Paper

The aim of this paper is to provide your DHB high-level feedback relating to each of the clinical units that underwent a Clinical Facility Fitness for Purpose (CFFFP) Assessment.

1.2 NAMP Background and Context

The Minister of Health has asked the Capital Investment Committee (CIC) to develop a National Health Asset Management Plan (NAMP) in response to capital expenditure intentions signalled by the DHB's for the next ten years, to a total of $14.2 billion (of which $9.2 billion would be Crown funded). The NAMP will provide a tool supported by the Ministry of Health and Treasury, so they can prioritise the investment of the Health Capital Envelope (HCE) funds at a national level.

Each DHB owns their assets and is accountable for the maintenance, remediation, replacement and growth of these assets to a fit for purpose standard. The current model has the management for health assets to each DHB with no mandate for the Ministry to hold a national view on standardised policy and procedures for health building and infrastructure, and therefore no ability for the ministry to be consistent in measuring performance of business case benefit across the health asset portfolio.

1.3 The NAMP Project

The NAMP project has been tasked with setting up a national framework that outlines the condition of health assets across the DHB's, which the ministry can then use as a tool to assist with their prioritisation of capital spending on health infrastructure.

The NAMP project has been set up with six streams of work as follows;

- Feasibility report
- Building & infrastructure
- Clinical facility fit for purpose
- Demand & capacity
- Ancillary assets
- Establish asset portfolio
- Clinical Facility Fit-for-Purpose Workstream

When the outputs of these workstreams are combined, the Ministry will be able to provide a pipeline for proposed capital expenditure based on several investment scenarios.

1.4 Clinical Facility Fit-for-Purpose Workstream

The aim of the CFFFP workstream was to assess physical aspects of key clinical areas/departments within 'critical infrastructure' at each DHB, to determine whether their environments were 'safe for patients and staff'.

Critical infrastructure at each DHB was determined using a criticality matrix. The MoH worked with each DHB and applied the matrix across all buildings on each DHB campus. The first wave of assessments by the MoH Building & Infrastructure team, involved only buildings that housed critical services and were over 20 years old. Critical services may be non-clinical e.g. plant or clinical.

Sometimes a key clinical service e.g. Intensive Care Unit or Emergency Department made a building critical.

The following five clinical areas on the emergency patient pathway were included in the assessment if they were accommodated in critical infrastructure over 20 years old;

Out of scope

And

- Adult Mental Health (MH) inpatient units in buildings over 10 years old (excluding forensic).

As we were only looking at older facilities across the country, we completed a CFFFP Assessment on one control unit for each clinical facility – Out of scope MHIPU. This was done to provide context for our assessments.

1.5 The CFFFP Assessment Tool

The assessment tool questionnaire was based on key international evidence-based design principles specific to the health sector that promote safe design for patients and staff. These principles were ratified by the NAMP Clinical Reference Group which was set up to oversee the CFFFP workstream.

The following table outlines these principles.

Principle	Safety Design Principles
#1	Provide appropriate external functional relationships to promote safe clinical care (i.e. the proximity of key health planning units outside the department being assessed)
#2	Provide appropriate internal functional relationships (e.g. do key space co-locations within a department support safe care delivery?)
#3	Improve access
#4	Provide appropriate and adequately sized space/s / layout for safe care delivery (e.g. what is the function of the room and is it adequately sized – based on AHFG[1] room sizes)
#5	Enhance communication/interaction between staff and patient (e.g. observation of patients in beds from staff stations and vice versa)
#6	Enhance privacy (e.g. audible, visual)
#7	Reduce patient infection risk (e.g. numbers of hand wash basins, isolation rooms etc.)
#8	Reduce medication errors
#9	Enhance security (patient, staff, facility) (e.g. can a department be locked, after-hours access, position of security guards etc.)

[1] Australasian Health Facility Guidelines

Most of the principles had more than one question. The number of questions under each principle depended on the department being assessed.

1.6 The CFFFP Assessments

- The CFFFP Assessments followed a standard format.
- In each clinical unit we met with key clinical personnel who knew how the unit functioned. Almost always the nurse in charge was one of them, as they have a comprehensive overview of how the unit functioned.
- Each meeting was booked for 2 hours.
- The first part of the meeting involved a sit-down discussion. We explained the process, then the DHB staff gave a high-level overview of the model of care (MoC) of the unit.
- We reviewed and marked-up the floor plans in order to understand how the space was utilised.
- Key architectural metrics were recorded, e.g. how many bedrooms, how many bathrooms etc.
- Responses to the nine design principle questions were then recorded.
- The data was captured in a standard template and entered into a tablet in a data base called Survey123. Hard copy was also used as a backup.
- Following the discussion, we had a walk around the unit and took photographs of things of interest or to demonstrate issues that may have been raised in the discussion.

1.7 Information provided to DHB's in this report

1.7.1 Clinical Facilities visited in your DHB

This section lists the clinical facilities and dates the CFFFP Assessment/s took place in your DHB.

1.7.2 Gross Floor Area

In each clinical facility visited we measured its gross floor area (GFA). This section provides information of the space (m2) allocated to the main unit of measurement in each unit, (beds in inpatient units, operating rooms in OT suites) as a ratio of the GFA.

We have benchmarked your space allocation to a benchmark derived from the Australasian Health Facility Guidelines (AHFG) for each clinical facility, e.g. AHFG benchmark of 36m2/bed in an inpatient unit.

1.7.3 Total score of the CFFFP Assessment

The CFFFP Assessment template is based on nine design principles. Some of these principles had more than one question. These questions were modified slightly to match the clinical facility being assessed, which means the total score for each type of clinical facility may vary. Each question has been allocated a score of 1 to 5 with 1 being the optimal score, and 5 the least optimal, so the lower the score the more optimal the clinical facility being assessed. No weighting has been applied the principles.

This section provides you with the score of your clinical facility.

1.7.4 Supporting notes from CFFFP Assessment visit

Notes taken during the CFFFP Assessment visit are provided. These notes capture the discussion from the visit. They support the key architectural metrics and the design principle questionnaire.

2 District Health Board – Southern

2.1 Clinical facilities assessed in your DHB

The following facilities were assessed in your DHB:

DHB	Campus/Hospital	Clinical Unit	Date
Southern	Wakari	Mental health inpatient unit: Ward 9B	29 April 2019
	Wakari	Mental health inpatient unit: Ward 11, Helensburgh House	
	Invercargill Hospital	Mental health inpatient unit: Ward 11, Helensburgh House	30 April 2019

3 Findings per Clinical Facility

3.1 Wakari Hospital campus – Mental Health Inpatient Unit – Ward 9B

3.1.1 Gross Floor Area

The AHFG recommend MH units are planned at approximately 80m2/bed. The Wakari Hospital MH inpatient unit, Ward 9B, is approximately 68m2/bed which is 85% of the recommended size.

3.1.2 Total score of the CFFFP Assessment

The CFFFP assessment included nine principles most of which had multiple questions. The total score possible for a MH IPU was 275. The Wakari Hospital MH inpatient unit, Ward 9B, scored a total of 156/275.

Campus	Unit	Principle # 1 Appropriate *external* functional relationships	Principle # 2 Appropriate *internal* functional relationships	Principle # 3 Access	Principle # 4 Adequately sized / shape / layout key clinical spaces	Principle # 5 Enhance communication between staff and patients	Principle # 6 Enhance privacy	Principle # 7 Reduce patient infections	Principle # 8 Reduce medication errors	Principle # 9 Enhance staff & patient safety	Principle Total
Wakari	Villa 9B	20	13	1	42	16	3	21	10	30	156
	Total Possible Score	**20**	**30**	**15**	**55**	**30**	**5**	**35**	**20**	**65**	**275**

3.1.3 Supporting notes from CFFFP Assessment visit

Ward 9B is a 15-bed adult unit. It has 10 x ICU beds, 5 x acute beds and 2 x seclusion rooms.

The unit is T shaped with a central corridor. Two corridors have inpatient beds and the third has patient activity, communal and staff support spaces. The bedroom doors open into the corridors and when opposing doors are wide open, visibility down the corridors is obstructed, creating a safety issue for staff and patients.

Although it is a single bedroom unit only four bedrooms have ensuites which include a WC only - no showers. All shower facilities in the unit are shared.

There are several issues with the T layout;

- The layout of the unit does not support the model of care, e.g. separation of patient cohorts (gender, age, diagnose, acuity).

- a unit designed in pods would allow flexibility and flexing of patients depending on acuity would be more appropriate.

Lack of designated HDU area means that seclusion spaces are used more than they should be.

There is a lack of communal and activity space for patients, inadequate support space for staff (offices). There is limited ability to manage negative interactions between patients.

The unit has good natural light and well-established gardens in outdoor courtyards and gym.

The size and shape of the unit would limit the ability to re-plan within footprint.

The unit has key access throughout (as opposed to swipe).

Unit is outdated and shabby for current day model of care.

3.2 Wakari Hospital campus – Mental Health Inpatient Unit – Helensburgh, Ward 11

3.2.1 Gross Floor Area

The AHFG recommend MH units are planned at approximately 80m2/bed. The Wakari Hospital MH inpatient unit, Helensburgh, Ward 11, is approximately 50m2/bed which is 62% of the recommended size.

3.2.2 Total score of the CFFFP Assessment

The CFFFP assessment included nine principles most of which had multiple questions. The total score possible for a MH IPU was 275. The Wakari Hospital MH inpatient unit, Helensburgh, Ward 11, scored a total of 185/275.

Campus	Unit	Principle # 1 Appropriate *external* functional relationships	Principle # 2 Appropriate *internal* functional relationships	Principle # 3 Access	Principle # 4 Adequately sized / shape / layout key clinical spaces	Principle # 5 Enhance communication between staff and patients	Principle # 6 Enhance privacy	Principle # 7 Reduce patient infections	Principle # 8 Reduce medication errors	Principle # 9 Enhance staff & patient safety	Principle Total
Wakari	Helensburgh 11	19	18	15	21	26	5	31	11	39	185
	Total Possible Score	20	30	15	55	30	5	35	20	65	275

3.2.3 Supporting notes from CFFFP Assessment visit

The unit has 16 single bedrooms and offers a rehabilitation, or more realistically a transition service. Patients are admitted from other inpatient units on campus, as well as some community referred patients. The average length of stay is approximately two weeks but sometimes extends to months or even years.

Ward 11 is situated on Level 3 of former nurses' residence. Neither the location in the building nor the floor layout support the model of care.

The Cleveland Z shape is long and narrow with long central single corridor running the entire length.

There are beds on the ends and staff support and some patient communal spaces in the central core.

Observation of patients is difficult with the layout and all bedroom doors open into the corridor, so when opposing ones are open the view down the corridors is obstructed causing concern for patient and staff safety.

There are not enough spaces for patient engagement and there is no external access to courtyards or gardens as it is on Level 3 of the building.

All bedrooms are less than AHFG size and none have ensuites, so all bathroom facilities are shared. There are not enough bathrooms.

There is a lack of key clinical support spaces (activity, lounges etc)

There is a lack of privacy for patients.

There is no ability to isolate patients.

There is a lack of staff spaces, especially access to office/workstations for MDT.

The ward is run down with multiple 'styles' of fittings & fixtures, irregular wall, floor & ceiling coverings.

Key access throughout.

Public lifts enter directly into ward.

The unit has good natural light.

The size and shape of the unit prevent any significant planning. Location on upper floor means no external access is possible.

3.1 Invercargill Hospital campus – Mental Health Inpatient Unit

3.1.1 Gross Floor Area

The AHFG recommend MH units are planned at approximately 80m2/bed. The Invercargill Hospital MH inpatient unit is approximately 74m2/bed which is 92% of the recommended size.

3.1.2 Total score of the CFFFP Assessment

The CFFFP assessment included nine principles most of which had multiple questions. The total score possible for a MH IPU was 275. The Invercargill Hospital MH IPU scored a total of 71/275.

Campus	Unit	Principle # 1 Appropriate *external* functional relationships	Principle # 2 Appropriate *internal* functional relationships	Principle # 3 Access	Principle # 4 Adequately sized / shape / layout key clinical spaces	Principle # 5 Enhance communication between staff and patients	Principle # 6 Enhance privacy	Principle # 7 Reduce patient infections	Principle # 8 Reduce medication errors	Principle # 9 Enhance staff & patient safety	Principle Total
Invercargill	MHIPU	20	6	1	8	6	1	15	3	11	71
	Total Possible Score	**20**	**30**	**15**	**55**	**30**	**5**	**35**	**20**	**65**	**275**

3.1.3 Supporting notes from CFFFP Assessment visit

The Mental Health Inpatient Unit at Southland Hospital was opened in 2004, so is approximately 15 years old.

From an interior perspective, it appears to be a well-designed, well-built and well-maintained facility.

All bedrooms are approximately AHFG size (width slightly less but compensated by depth) each with their own ensuite.

There is good visibility from the central staff station to most areas in the unit and good provision for patient/ staff interaction.

The staff have added touches, such as the old side board in the central space, that have reduced the institutional feeling and made it feel more homely.

The central, undesignated, space by the staff station created a valuable hub for the unit, facilitating positive staff/ patient interaction.

Staff did mention some planning issues, such as location of de-escalation and seclusion, which they would do slightly differently if they were doing it again but didn't consider these too significant.

No indoor exercise space, and staff felt that this would be beneficial. Activity/ therapy spaces were part of other spaces such as dining, but the staff felt that this had some advantages over separating out therapy into a separate space.

Apart from minor dimensional differences in bedrooms, this unit appears to comply with AHFG and

The staff seemed to be very positive about the unit in general.

The connection to the community team is good (with the rider that this is only one of the community teams, with others geographically remote, however staff said that they used technology to overcome the issues of distance).

Document 18

Sensitivity: General

CFFFP Phase	DHB	Building	Category	Department or Unit	Type of Ward	Scores of Nine Principles									Average of all scores
						Principle 1 External	Principle 2 Internal	Principle 3 Access	Principle 4 Spaces	Principle 5 Communic	Principle 6 Privacy	Principle 7 Infection	Principle 8 Medication	Principle 9 Security	
1	Auckland	ADHB Pt Chev Buchanar	General MH	Buchanan	Adult, Rehabilitatior	5	3	1	1.5	2	1	2.7	2.5	3.9	2.51
1	Auckland	ADHB ACH Te Whetu Tawera Te Whetu Tawer	General MH	Te Whetu Tawera	Adult, Acute	5	2	3.7	1.5	2.7	1	3.3	2	3.3	2.72
1	Bay of Plenty	BOPDHB Tauranga T01 Adult MH	General MH	Te Whare Maiangiang	Adult, Acute	5	3.6	3.7	3	4	5	2.7	2.5	3.4	3.66
1	Canterbury	CDHB Hillmorton Tu Puna	General MH	Tupuna Villa	Adult, Extended Care	5	3	3.7	2.4	4	5	3	1	4.2	3.48
1	Canterbury	CDHB Hillmorton Te Awakura Sth	General MH	Te Awakura South	Adult, Acute	4.3	3.4	4.3	3.7	4	5	3.9	1	3.5	3.68
1	Canterbury	CDHB Hillmorton Aroha Pai PSAID	Intellectual Disability, General MH	Aroha Pai PSAID	Adult, ID, Dual Diagnosis	4.3	4.2	5	4.1	4.3	5	5	5	4	4.54
1	Capital & Coast	CCDHB Kenepuru Geriatric	General MH	Te Whare Ra Uta	Older Persons, Acute	4	4	3.7	3.4	3	3	3.3	2	1.8	3.13
1	Counties Manukau	CMDHB Middlemore Acute MH	General MH	Tiaho Mai	Adult, Acute	4.3	1	1	1.3	1	1	1	1	1.4	1.44
1	Counties Manukau	CMDHB Otara Tamaki Oranga	General MH	Tamaki Oranga	Adult, Rehabilitatior	5	3.4	2.3	3.9	3	5	2.4	2.5	3.4	3.43
1	Hutt Valley	HVDHB Hutt TW Ahurua	General MH	TW Ahurua	Adult, Acute	5	4.3	3.7	3	4.7	5	3	3.5	3.5	3.97
1	Lakes District	LDHB Rotorua Acute Psych	General MH	Te Whare Oranga Tangata o Whakaue	Adult, Acute	5	4.6	5	2.8	4.7	5	5	2	4	4.23
1	Mid Central	MCDHB PNH Block D MHIPL	General MH	Ward 21	Adult, Acute	4.3	5	4.3	4.3	4.3	5	2.4	2.5	3.2	3.92
1	Nelson Marlborough	NMDHB Nelson 63 Tipahi MHIPL	General MH	Wahi Oranga	Adult, Acute	5	1.4	4.3	2.8	3	3	2.3	2.7	2.8	3.03
1	South Canterbury	SCDHB Timaru Kensington MHIPU	General MH	Kensington	Adult, Acute	5	1.5	3	2.1	2.3	3	2.4	1	2.2	2.50
1	Southern	SDHB Southland Inpatient MH	General MH	Southland Hospital MHIPU	Adult, Acute	4.8	1	1	1	1	1	2.1	1	1	1.54
1	Southern	SDHB Wakari Ward 9A/B MHIPU	General MH	Ward 9B	Adult, Acute	5	2.6	3	4.2	2.7	3	3	2	2.8	3.14
1	Southern	SDHB Wakari Helensburgh W11 MHIPU	General MH	Helensburgh Ward 11	Adult, Transitional Care	4.8	3.6	5	3.4	4.3	5	4.2	4	4.5	4.31
1	Tairawhiti	TaiDHB Gisborne Psychiatric W11 MHIPL	General MH	Ward 11	Adult, Acute	4.3	3.4	3.7	3	4.3	5	3.9	2	3.8	3.71
1	Taranaki	TarDHB Taranaki Te Puna Waio MHIPL	General MH	Te Puna Waiora	Adult, Acute + Dementia	3.5	3.4	4	2.3	2.7	5	3.9	1	2.8	3.18
1	Waikato	WkDHB Hamilton Henry Bennett MHIPL	General MH	Wards 35 & 36	Adult, Acute	4.3	4.6	5	4	5	5	4.7	4	3.5	4.46
1	Waitemata	WtDHB Waitakere Waiatarau AMHIL	General MH	Waiatarau	Adult, Acute	5	2.8	1.7	1.7	2	1	1.3	2	2.3	2.20
1	Waitemata	WtDHB Nth Shore Geriatric MHIPL	General MH	MHSOA MHIPU	Older Persons, Acute	4.3	3.7	1	3.8	3.7	5	3.9	2	3.2	3.40
1	West Coast	WCDHB Grey Main MHIPU	General MH	Grey Base Hospital MHIPL	Adult, Acute	3.5	1.8	2.3	1.9	2.7	5	2.1	1	3.2	2.61
1	Whanganui	WDHB Whanganui Te Awhina MHIPL	General MH	Te Awhina	Adult, Acute	5	1.2	1	1	1	1	1.9	1	1.4	1.61

Document 19

KEY: Very poor Poor Average Good Very good

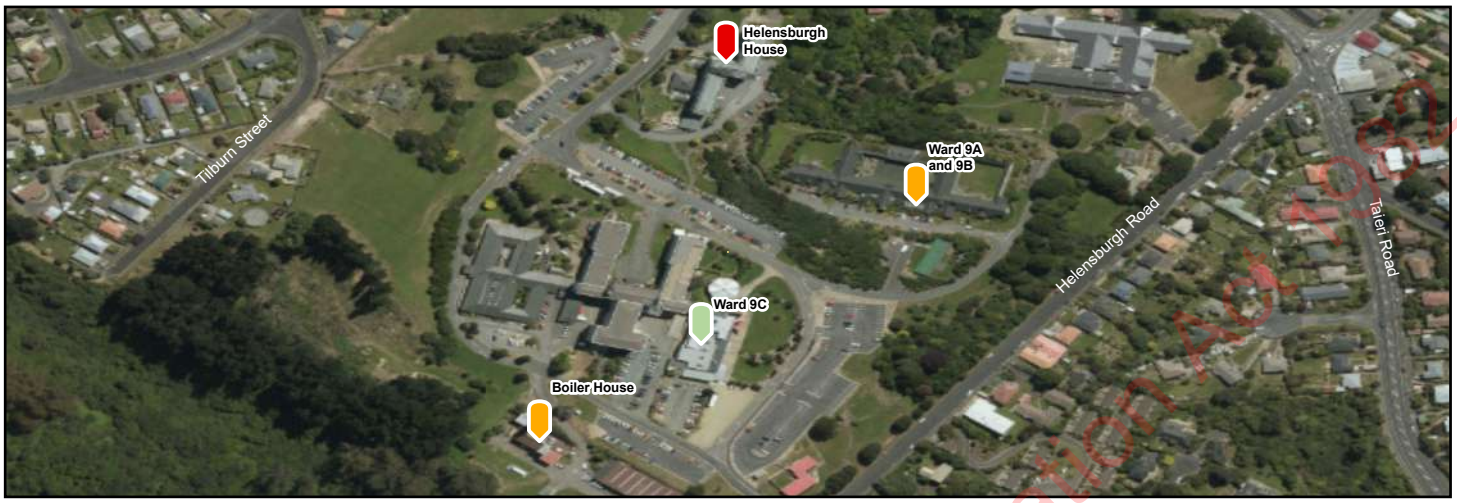
DHB	Building	First DimB	Year Built	Mean Overall Condition Score	Building Component Scores: Mean of Fabric	Mean of Electrical	Mean of Mechanical	Graded NBS Scores	Importance Level	Fire Separation Issues	Likelihood of Asbestos	Seismic Restraint Issues	Clinical Facility Fitness for Purpose: Average of CFFFP Score	Count of Facility	Category	Type of Ward
Auckland DHB																
Auckland DHB	ADHB ACH Te Whetu Tawera	10022	2003	2.39	2.20	2.40	2.70	A	IL3	Low	Low	High	2.72	1	General MH	Adult, Acute
Auckland DHB	ADHB Pt Chev Buchanan	10054	1973	3.15	3.30	2.90	3.40	B	IL2	Medium	High	High	2.51	1	General MH	Adult, Rehabilitation
Bay of Plenty DHB																
Bay of Plenty DHB	BOPDHB Tauranga T01 Adult MH	10068	2002	2.07	1.90	2.00	2.40	A	IL3	Low	Low	High	3.66	1	General MH	Adult, Acute
Capital and Coast DHB																
Capital and Coast DHB	CCDHB Kenepuru Geriatric	10225	2006	1.93	1.90	2.00		A+	IL3	Low	Low	High	3.13	1	General MH	Older Persons, Acute
Canterbury DHB																
Canterbury DHB	CDHB Hillmorton Aroha Pai	10198	1960	2.79	2.20	3.20	3.50	B	IL2	Low	Low	High	4.54	1	Intellectual Disability, General MH	Adult, ID, Dual Diagnosis
Canterbury DHB	CDHB Hillmorton Te Awakura	10204	1980	2.30	1.90	3.00	2.50	B	IL3	Low	Low	High	4.68	1	General MH	Adult, Acute
Canterbury DHB	CDHB Hillmorton Tu Puna	10208	1974	2.84	2.10	3.40	3.70	A	IL2	Low	Medium	High	3.48	1	General MH	Adult, Extended Care
Counties Manukau DHB																
Counties Manukau DHB	CMDHB Middlemore Acute MH	10301	2018	1.00	1.00	1.00	1.00	NA	IL3	NA	NA	NA	1.44	1	General MH	Adult, Acute
Counties Manukau DHB	CMDHB Otara Tamaki Oranga	10327	1970	3.25	3.20	3.50	3.50	B	IL3	Medium	High	High	3.43	1	General MH	Adult, Rehabilitation
Hutt Valley DHB																
Hutt Valley DHB	HVDHB Hutt TW Ahurua	10429	1997	2.32	2.60	1.50	2.40	A	IL3	Low	Low	High	3.97	1	General MH	Adult, Acute
Lakes DHB																
Lakes DHB	LDHB Rotorua Acute Pysch	10432	1976	2.33	1.70	2.90	3.00	B	IL4	Low	Medium	High	4.23	1	General MH	Adult, Acute
MidCentral DHB																
MidCentral DHB	MCDHB PNH Block D	10488	2001	2.45	2.60	2.00	2.50	A	IL3	Low	Low	High	3.92	1	General MH	Adult, Acute
Nelson Marlborough DHB																
Nelson Marlborough DHB	NMDHB Nelson 63 Tipahi	10580	2000	1.98	1.50	1.50	3.10	B	IL3	NA	NA	NA	3.03	1	General MH	Adult, Acute
South Canterbury DHB																
South Canterbury DHB	SCDHB Timaru Kensington	10769	1986	2.14	1.60	2.20	3.00	NA	IL3	Low	Low	High	2.50	1	General MH	Adult, Acute
Southern DHB																
Southern DHB	SDHB Southland Inpatient MH	10802	2004	2.44	2.70	1.70	2.50	A+	IL2	Low	Low	High	1.54	1	General MH	Adult, Acute
Southern DHB	SDHB Wakari Helensburgh	10810	1955/2012	3.44	3.30	2.50	4.30	A	IL3	High	Medium	High	4.31	1	General MH	Adult, Transitional Care
Southern DHB	SDHB Wakari Ward 9A/B	10814	1992	2.85	2.50	2.60	3.60	A	IL3	Low	Low	High	3.14	1	General MH	Adult, Acute
Tairāwhiti DHB																
Tairāwhiti DHB	TaiDHB Gisborne Psychiatric	10887	1982	2.69	2.50	2.70	3.00	B	IL4	Low	Low	High	3.71	1	General MH	Adult, Acute
Taranaki DHB																
Taranaki DHB	TarDHB Taranaki Te Puna Waio	10975	1987	2.16	2.30	1.90	2.10	A	IL3	Low	Low	High	3.18	1	General MH	Adult, Acute + Dementia
West Coast DHB																
West Coast DHB	WCDHB Grey Main	11198		3.08	3.10	2.40	3.50	E	IL3	Medium	High	High	2.61	1	General MH	Adult, Acute
Whanganui DHB																
Whanganui DHB	WDHB Whanganui Te Awhina	11216	1981	1.91	1.70	2.30	2.00	A	IL3	Low	Low	High	1.61	1	General MH	Adult, Acute
Waikato DHB																
Waikato DHB	WkDHB Hamilton Henry Bennett	10995	1990	1.91	1.80	1.90	2.10	NA	IL4	Low	Low	High	4.46	1	General MH	Adult, Acute
Waitematā DHB																
Waitematā DHB	WtDHB Nth Shore Geriatric	11135	1972 (1999	3.27	3.2	2.5	3.9	A+	IL3	Medium	High	High	3.4	1	General MH	Older Persons, Acute
Waitematā DHB	WtDHB Waitakere Waiatarau AMHIU	11171	2007	2.24	1.8	1.6	3.4	B	IL3	Low	Low	Medium	2.2	1	General MH	Adult, Acute
TOTAL														**TOTAL**		
17 DHBs														**24**		

Wakari

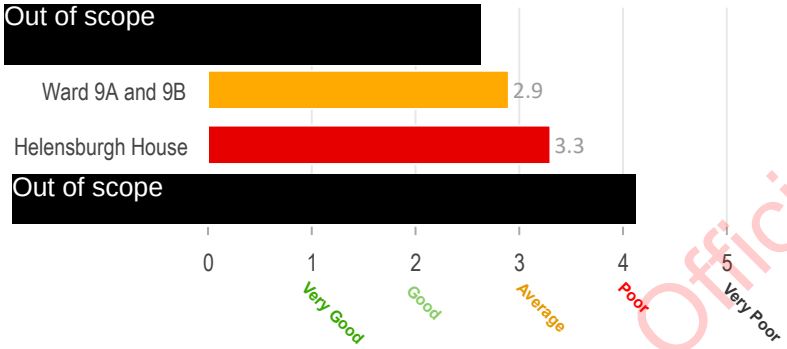
Southern DHB

Beca Campus ID: 819
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 28/08/2019

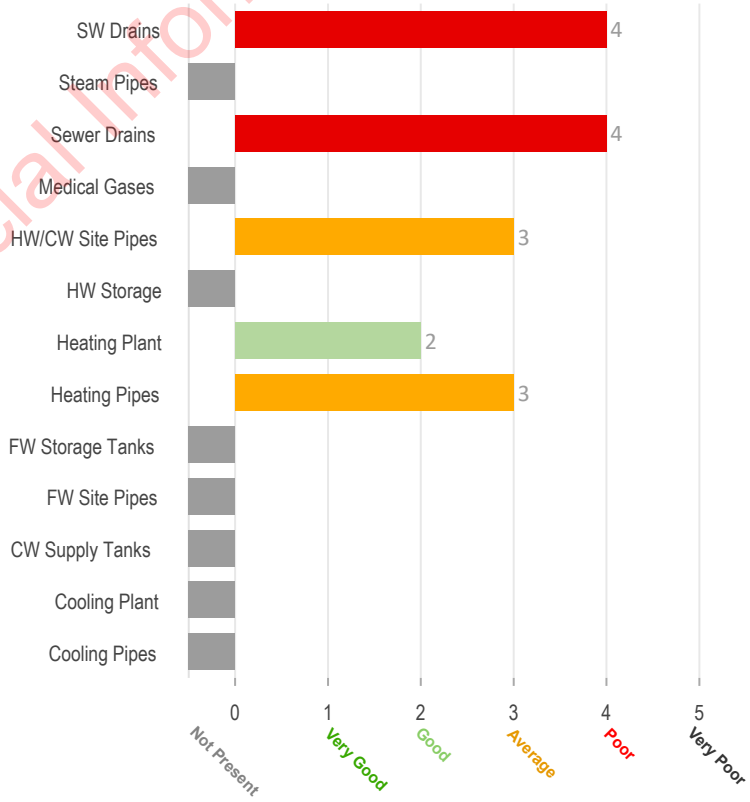
Site Overview



Buildings Surveyed



Site wide Mechanical Infrastructure Condition



Site wide Electrical Infrastructure Condition

Engineering Commentary

Out of scope ecure and Acute Unit (Wards 9A+9B) are critical buildings. Out of scope The plastered cladding system of the Secure and Acute Unit is performing well (given it is 28 years old) but the surrounding ground level is high in places and the system is unlikely to include a drained cavity. The curved roof apex appears to be leaking in numerous places.

The electrical infrastructure is generally beyond the end of its life expectancy. The majority of switchgear supplying each block is located in the basement, but not accessible due to asbestos.

Mechanical services generally aging, with significant spend likely on wards 9a&b in next 5 years. Out of scope . Limited cold water storage worthy of review.

Out of scope

Out of scope

Ward 9A and 9B

Wakari (Southern DHB)

Beca Building ID: 239
NAMP ID: 10814
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior

Services & Fabric Score

2.9

DHB Assessed % *NBS* Rating

No Data

General Building Information

Approximate Building Age: 1992

Survey date: 28/04/2019

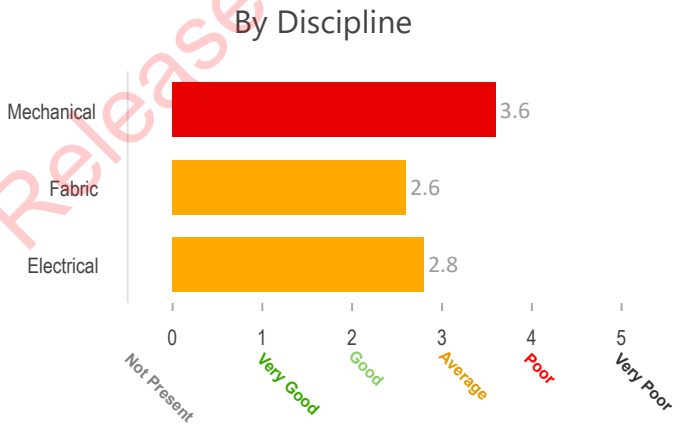
Gross Floor Area (m2): 2595

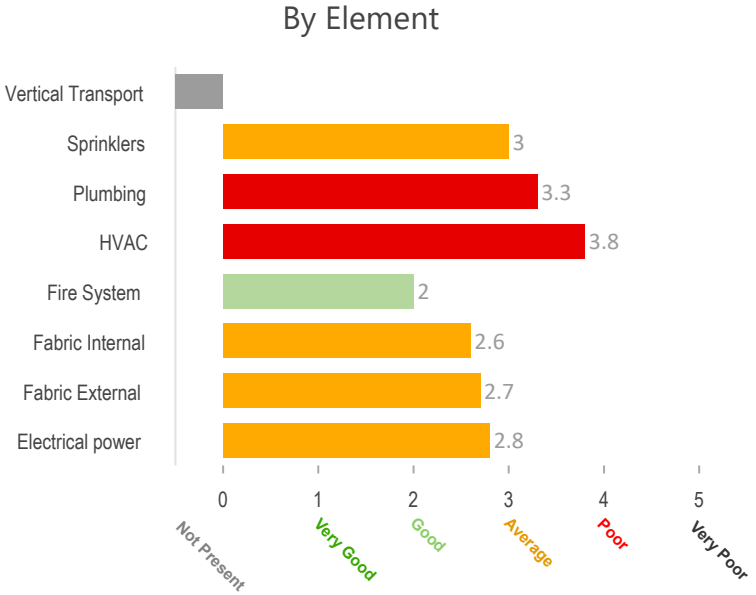
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Low likelihood of issues

Seismic Services Restraint: Poor

Summary of building condition



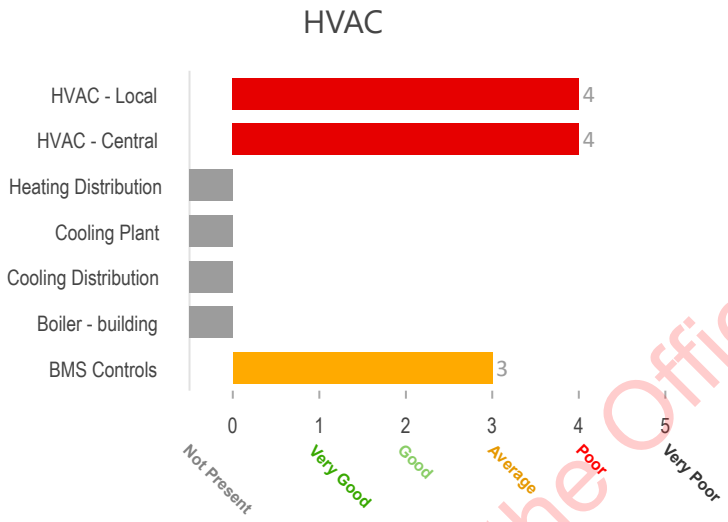


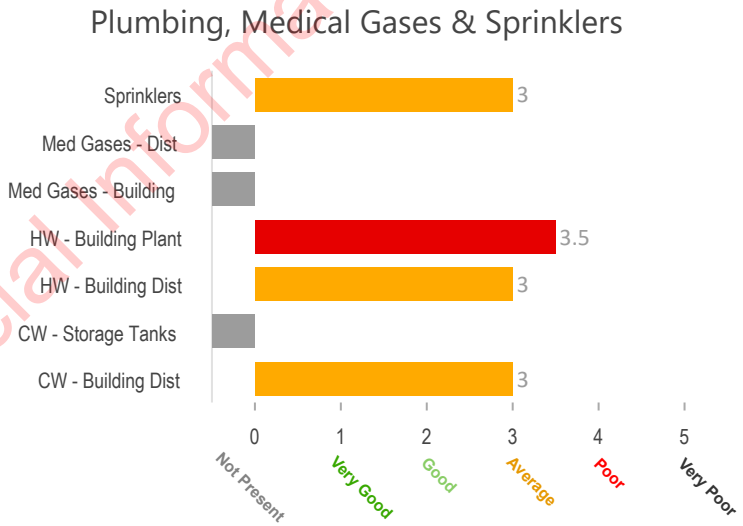
Beca Building ID: 239
NAMP ID: 10814
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

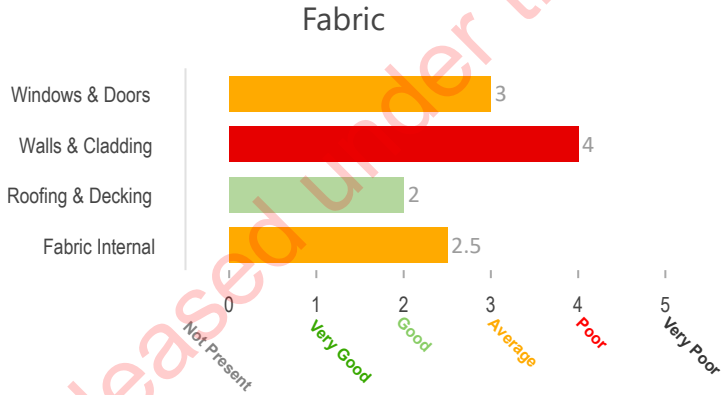
Approximate building location

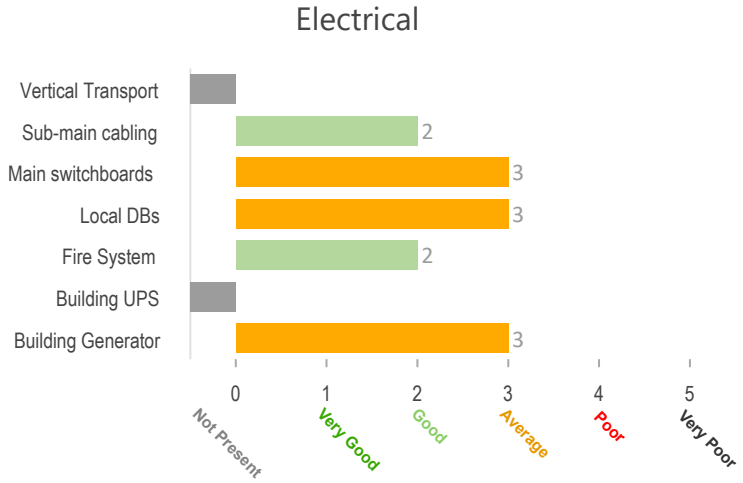
Ward 9A and 9B

Summary of building element condition details









Condition Definitions

Rating	Condition	Definition (Services and Fabric)
	Not Present	Assets were not present or inaccessible when site was visited.
1	Very Good	Assets displaying no deterioration or only normal routine maintenance required. New or near new condition. Some wear or discoloration but no evidence of damage. Can include repaired assets where the repair is as good as the original.
2	Good	Assets displaying limited deterioration which does not affect their use, or where limited restoration has been performed. Minor reactive maintenance may be required. Acceptable physical condition, with minor deterioration or damage that may affect performance (includes most repaired assets)
3	Average	Assets which have deteriorated to a degree where maintenance is obviously due, but not to the extent where the function is significantly impaired or very substantial repairs are needed. Failure unlikely in near future but further deterioration is likely
4	Poor	Repair or renewal is required in the short term. Significant deterioration or damage is evident and severely impacting performance. Asset is barely serviceable and failure likely in short term
5	Very Poor	Immediate repair or renewal required. Asset is not in use or unserviceable (i.e. has failed) or failure is imminent. Asset may pose occupational health and safety problems. Requires urgent attention.

Helensburgh House

Wakari (Southern DHB)

Beca Building ID: 238
NAMP ID: 10810
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior

Services & Fabric Score

3.3

DHB Assessed % *NBS* Rating

No Data

General Building Information

Approximate Building Age: 1955

Survey date: 28/04/2019

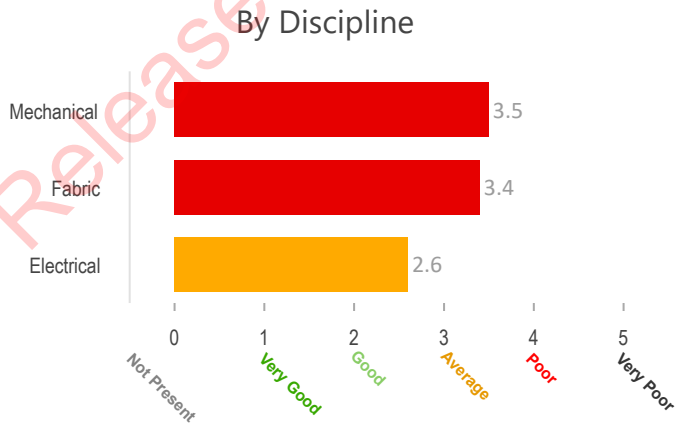
Gross Floor Area (m2): 5623

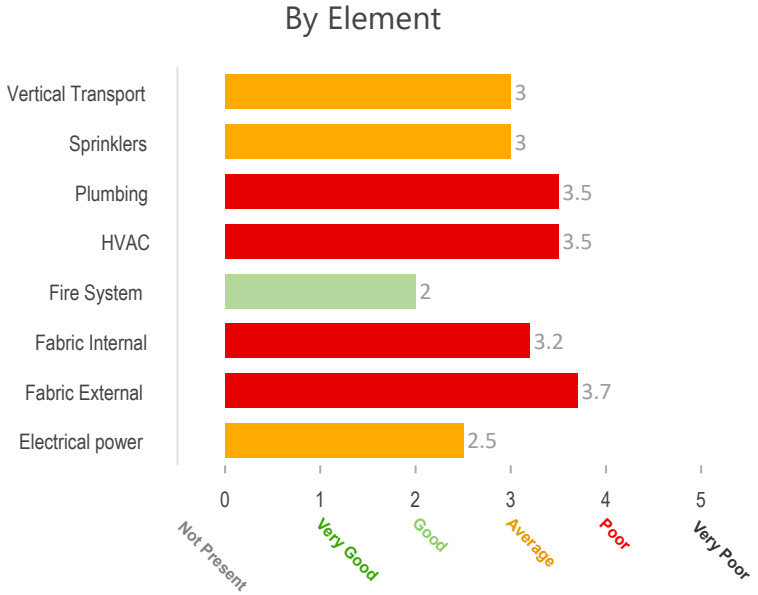
Fire Separation Issues: Significant known issues

Asbestos Issues: Limited issues observed/known

Seismic Services Restraint: Poor

Summary of building condition

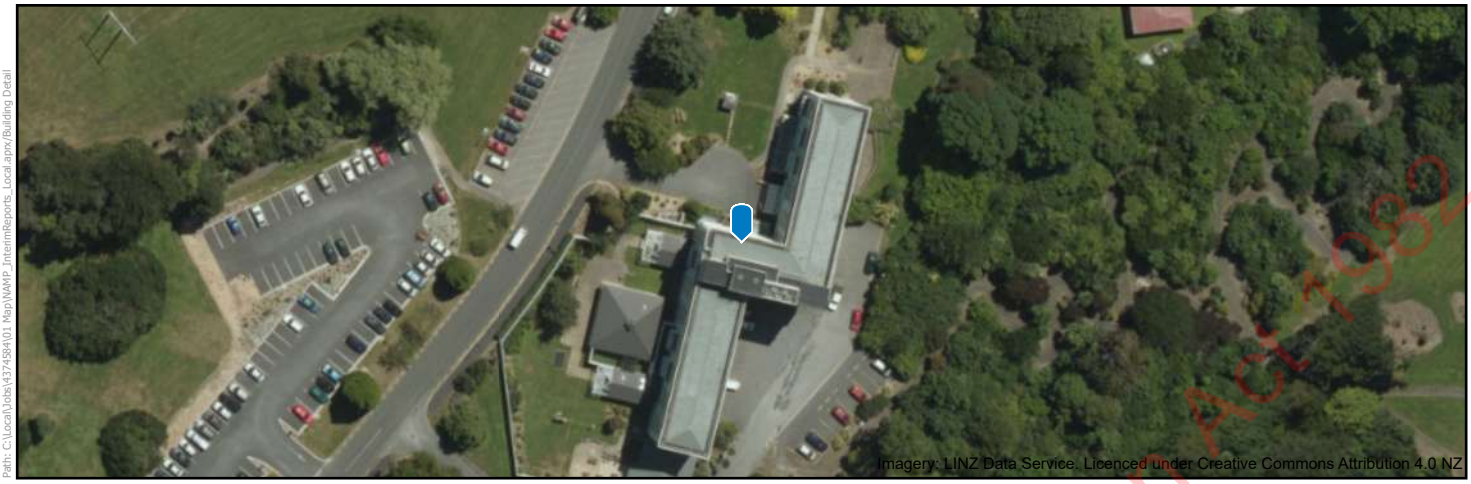




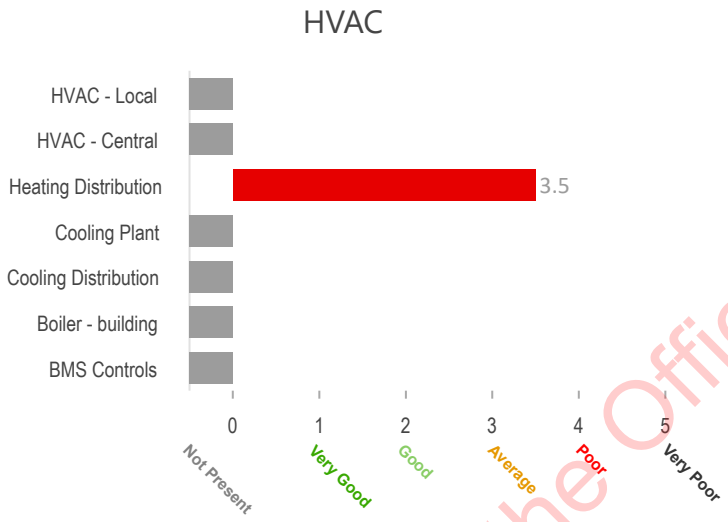
Beca Building ID: 238
NAMP ID: 10810
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

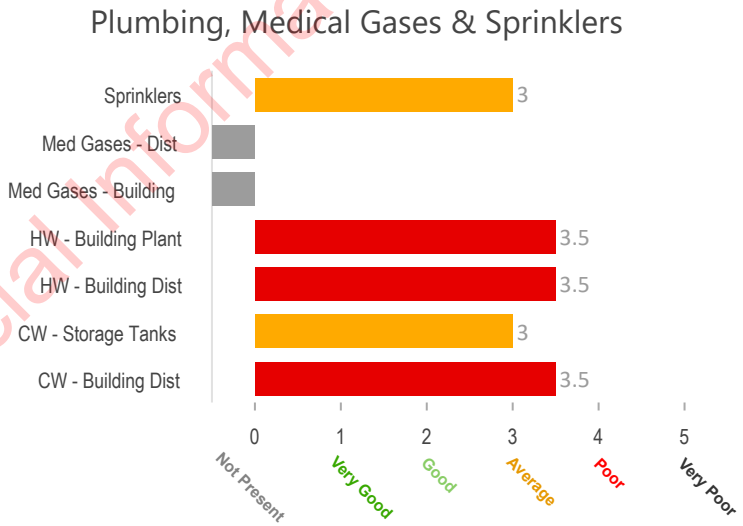
Approximate building location

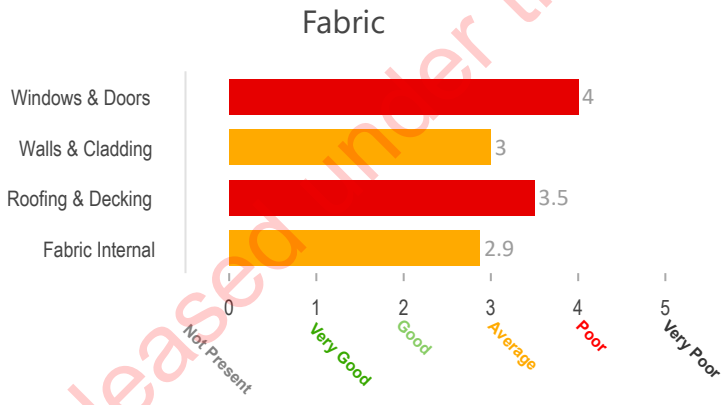
Helensburgh House

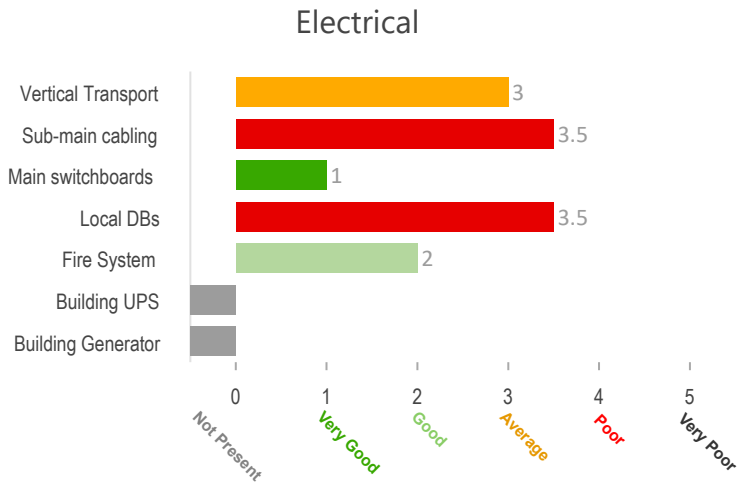


Summary of building element condition details









Condition Definitions

Rating	Condition	Definition (Services and Fabric)
	Not Present	Assets were not present or inaccessible when site was visited.
1	Very Good	Assets displaying no deterioration or only normal routine maintenance required. New or near new condition. Some wear or discoloration but no evidence of damage. Can include repaired assets where the repair is as good as the original.
2	Good	Assets displaying limited deterioration which does not affect their use, or where limited restoration has been performed. Minor reactive maintenance may be required. Acceptable physical condition, with minor deterioration or damage that may affect performance (includes most repaired assets)
3	Average	Assets which have deteriorated to a degree where maintenance is obviously due, but not to the extent where the function is significantly impaired or very substantial repairs are needed. Failure unlikely in near future but further deterioration is likely
4	Poor	Repair or renewal is required in the short term. Significant deterioration or damage is evident and severely impacting performance. Asset is barely serviceable and failure likely in short term
5	Very Poor	Immediate repair or renewal required. Asset is not in use or unserviceable (i.e. has failed) or failure is imminent. Asset may pose occupational health and safety problems. Requires urgent attention.

Out of scope

Out of scope

Services and Fabric - Survey Methodology and scope:

The main uses of this condition review are:

- To inform the MoH on the general condition of the critical buildings within the NZ health estate
- To be a base for future development of building condition
- To assist in making decisions between projects vying for a finite capital spend budget
- To provide for comparison between DHBs and inform long term, high level budget planning (projects >$10M)

Scoring of the assets is on a scale of 1(very good) to 5 (very poor). Building scores have been obtained from a weighted average of elements reflecting their estimated percentage of an overall building replacement cost.

In addition to the condition, the score/rating of each element also accounts for the age and variability (whether the element in the building was of a similar condition throughout the building ie some lifts that are good condition and others that are poor condition/age) of the element assessed.

Each element has been factored, with the weighting criteria applied to each element condition score according to their proportional cost impact on the building (ie HVAC attracts a higher impact than plumbing).

Services plant and equipment have been assessed under the building in which they are housed, unless the plant/equipment also serves other buildings on the site, in which case these have been assessed under site wide infrastructure.

Full details of the survey methodology are contained in the Beca NAMP Asset Condition Survey Data Standard and Methodology Rev.D, dated 25th April 2019.

Services and Fabric - Survey Assumptions and Exclusions:

The survey is to inform high level MoH decision making, not DHB asset management purposes, and has been based around a combination of information provided by DHB site representatives and limited site observation.

Our site inspection and survey comprise a high level visual inspection only. No inspections were undertaken of wall framing, ceiling voids, floor voids or other parts of the asset which were covered, unexposed or inaccessible and we are therefore unable to report that any such part of the property is free from significant defect. The survey should not be construed as a detailed building condition survey for specific asset repair and maintenance budget planning, since service and location specific methodology around replacement is likely to be required.

Our site inspection data has been provided as an 'indicative assessment' generalising the current condition by discipline only. Its purpose is to support general system level commentary to assist in directing master planning decisions. The review does not provide assessment of:

- Performance, reliability or fitness for purpose
- Capacity of plant or systems
- Operational efficiency of specific plant or systems.
- Resilience and redundancy of systems

It is assumed that a building, its services (and any alterations) have been designed and constructed in accordance with the Building Code current at the time of the construction. Infrastructure assessments have been primarily based on advice from site teams with visual observation where accessible and provided.

A number of aspects were not requested to form part of the survey scope and are noted as excluded from this report. These include:

- Clinical Equipment
- Cool Rooms and Refrigeration Equipment
- Information and Communication Technology (data and comm's)
- Carriageways or civil works
- Other General Equipment (e.g. kitchen)
- Other Specialised Equipment (e.g. biosafety and fume cabinets, Lamson Tube system)
- Security, Nurse Call Services & the like
- On site Structural engineering reviews

DHB Assessed *% NBS* Ratings:

The DHB assessed *%NBS* ratings included in this report have been provided by the DHBs via the Ministry of Health and have not been reviewed, checked or validated for accuracy or completeness.

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									
Wakari	Helensburgh House	Electrical Power	Building Main Switchboard		Present		1	1	3 to 10
Wakari	Helensburgh House	Electrical Power	Local DBs		Present		3	2	original
Wakari	Helensburgh House	Electrical Power	Sub-main cabling		Present		3	2	original
Wakari	Helensburgh House	Electrical Power	Building UPS		Not Present				
Wakari	Helensburgh House	Electrical Power	Building Generator		Not Present				
Wakari	Helensburgh House	Electrical Power	Site Generator			yes			
Wakari	Helensburgh House	Fabric External	Roofing and Decking	Iron/metal	Present		4	1	original
Wakari	Helensburgh House	Fabric External	Walls and Cladding	Concrete	Present		3	1	original
Wakari	Helensburgh House	Fabric External	Windows and Doors	Metal	Present		4	2	original
Wakari	Helensburgh House	Fabric Internal	4		Present		3	1	10+
Wakari	Helensburgh House	Fabric Internal	B1		Present				
Wakari	Helensburgh House	Fabric Internal	5		Present		5	1	original
Wakari	Helensburgh House	Fabric Internal	3		Present		3	1	10+
Wakari	Helensburgh House	Fabric Internal	2		Present		3	1	10+
Wakari	Helensburgh House	Fire Alarm	Sprinklers		Present		2	1	original

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Wakari	Helensburgh House	HVAC	Boiler Plant - Site Plant			yes			
Wakari	Helensburgh House	HVAC	Boiler Plant in building		Not Present				
Wakari	Helensburgh House	HVAC	Heating Distribution		Present		3	2	original
Wakari	Helensburgh House	HVAC	Cooling Plant - Site Plant			no			
Wakari	Helensburgh House	HVAC	Cooling Plant in building		Not Present				
Wakari	Helensburgh House	HVAC	Cooling Distribution		Not Present				
Wakari	Helensburgh House	HVAC	Building HVAC - Central plant		Not Present				
Wakari	Helensburgh House	HVAC	Building HVAC - Local plant		Not Present				
Wakari	Helensburgh House	HVAC	BMS Controls		Not Present	no	3	1	3 to 10
Wakari	Helensburgh House	Plumbing	Hot water - Site Plant			no			
Wakari	Helensburgh House	Plumbing	Hot water - Building plant		Present		3	2	original
Wakari	Helensburgh House	Plumbing	Hot water - Building distribution		Present		3	2	original
Wakari	Helensburgh House	Plumbing	Cold water - Site storage and mains			no			
Wakari	Helensburgh House	Plumbing	Cold water - Building storage tanks		Present		3	1	original
Wakari	Helensburgh House	Plumbing	Cold water - Building distribution		Present		3	2	original
Wakari	Helensburgh House	Plumbing	Medical gases and vacuum - Site Plant			no			
Wakari	Helensburgh House	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Wakari	Helensburgh House	Plumbing	Medical gases and vacuum distribution		Not Present				
Wakari	Helensburgh House	Sprinklers	Sprinklers		Present		3	1	original
Wakari	Helensburgh House	Vertical Transport			Present		3	1	original
Wakari	Site Wide	Electrical Infrastructure	Substations		Present		2	1	original
Wakari	Site Wide	Electrical Infrastructure	Main switchboards		Present		3	1	original
Wakari	Site Wide	Electrical Infrastructure	Site generators		Present		2	1	original
Wakari	Site Wide	Electrical Infrastructure	Site distribution mains		Present		2	1	original
Wakari	Site Wide	Mechanical Infrastructure	Site Heating Plant		Present		2	1	3 to 10
Wakari	Site Wide	Mechanical Infrastructure	Site Heating pipes		Present		3	1	original
Wakari	Site Wide	Mechanical Infrastructure	Site Steam pipes		Not Present				
Wakari	Site Wide	Mechanical Infrastructure	Site Cooling plant		Not Present				
Wakari	Site Wide	Mechanical Infrastructure	Site Cooling pipes		Not Present				
Wakari	Site Wide	Mechanical Infrastructure	Site Cold Water supply tanks		Not Present				
Wakari	Site Wide	Mechanical Infrastructure	Site Hot Water storage		Not Present				
Wakari	Site Wide	Mechanical Infrastructure	Site Hot and Cold Water site pipes		Present		3	2	mixed
Wakari	Site Wide	Mechanical Infrastructure	Site Fire Water storage tanks		Not Present				
Wakari	Site Wide	Mechanical Infrastructure	Site Fire Water site pipes		Not Present				
Wakari	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Not Present				
Wakari	Site Wide	Mechanical Infrastructure	Site sewer drains		Present		3	3	original
Wakari	Site Wide	Mechanical Infrastructure	Site storm water drains		Present		3	3	original
Wakari	Site Wide	Mechanical Infrastructure	Site Heating Plant		Present		3	1	10+
Wakari	Ward 9A & 9B	Fabric Internal	G		Present		3	1	original
Wakari	Ward 9A & 9B	Fabric Internal	1		Present		2	1	original
Wakari	Ward 9A and 9B	Electrical Power	Building Main Switchboard		Present		3	1	original
Wakari	Ward 9A and 9B	Electrical Power	Local DBs		Present		3	1	original
Wakari	Ward 9A and 9B	Electrical Power	Sub-main cabling		Present		2	1	original
Wakari	Ward 9A and 9B	Electrical Power	Building UPS		Not Present				
Wakari	Ward 9A and 9B	Electrical Power	Building Generator		Present		3	1	original

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Wakari	Ward 9A and 9B	Electrical Power	Site Generator			no			
Wakari	Ward 9A and 9B	Fabric External	Roofing and Decking	Iron/metal	Present		2	1	original
Wakari	Ward 9A and 9B	Fabric External	Walls and Cladding	Sheet	Present		4	2	original
Wakari	Ward 9A and 9B	Fabric External	Windows and Doors	Aluminium	Present		3	1	original
Wakari	Ward 9A and 9B	Fire Alarm	Sprinkler		Present		2	1	original
Wakari	Ward 9A and 9B	HVAC	Boiler Plant - Site Plant			no			
Wakari	Ward 9A and 9B	HVAC	Boiler Plant in building		Not Present				
Wakari	Ward 9A and 9B	HVAC	Heating Distribution		Not Present				
Wakari	Ward 9A and 9B	HVAC	Cooling Plant - Site Plant			no			
Wakari	Ward 9A and 9B	HVAC	Cooling Plant in building		Not Present				
Wakari	Ward 9A and 9B	HVAC	Cooling Distribution		Not Present				
Wakari	Ward 9A and 9B	HVAC	Building HVAC - Central plant		Present		3	3	original
Wakari	Ward 9A and 9B	HVAC	Building HVAC - Local plant		Present		4	2	original
Wakari	Ward 9A and 9B	HVAC	BMS Controls		Present		3	1	original
Wakari	Ward 9A and 9B	Plumbing	Hot water - Site Plant			no			
Wakari	Ward 9A and 9B	Plumbing	Hot water - Building plant		Present		3	2	original
Wakari	Ward 9A and 9B	Plumbing	Hot water - Building distribution		Present		3	1	original
Wakari	Ward 9A and 9B	Plumbing	Cold water - Site storage and mains			no			
Wakari	Ward 9A and 9B	Plumbing	Cold water - Building storage tanks		Not Present				
Wakari	Ward 9A and 9B	Plumbing	Cold water - Building distribution		Present		3	1	original
Wakari	Ward 9A and 9B	Plumbing	Medical gases and vacuum - Site Plant			no			
Wakari	Ward 9A and 9B	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Wakari	Ward 9A and 9B	Plumbing	Medical gases and vacuum distribution		Not Present				
Wakari	Ward 9A and 9B	Sprinklers	Sprinklers		Present		3	1	original
Wakari	Ward 9A and 9B	Vertical Transport			Not Present				

Out of scope

[redacted]

Raw Condition Scores

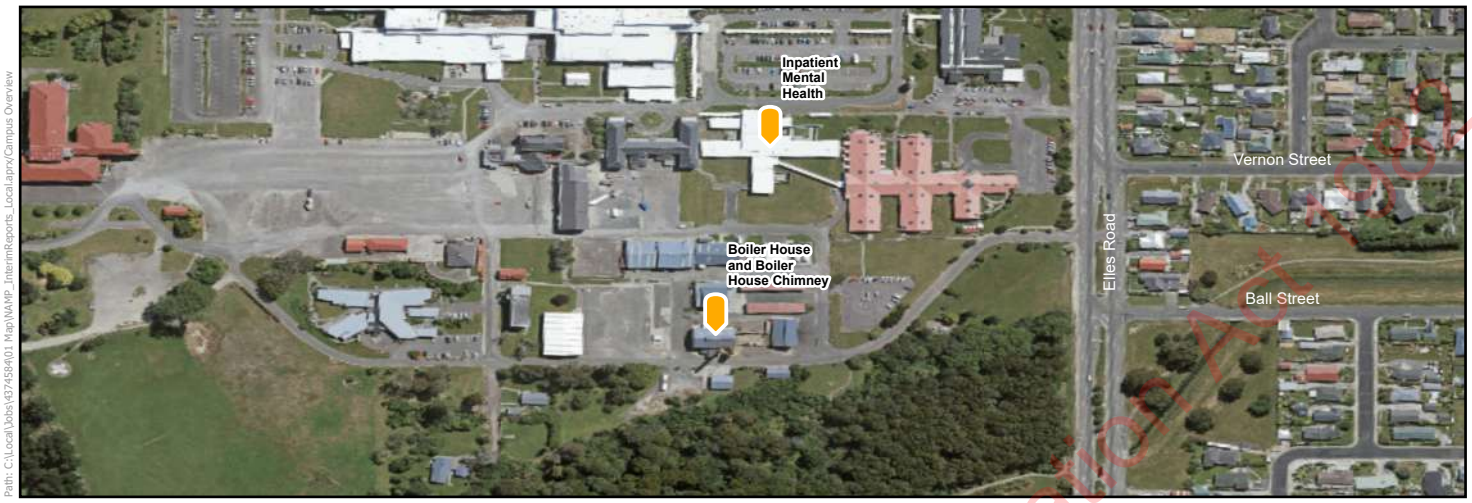
Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									

Southland

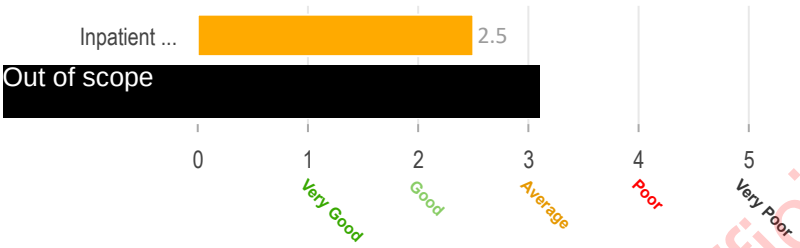
Southern DHB

Beca Campus ID: 818
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 28/08/2019

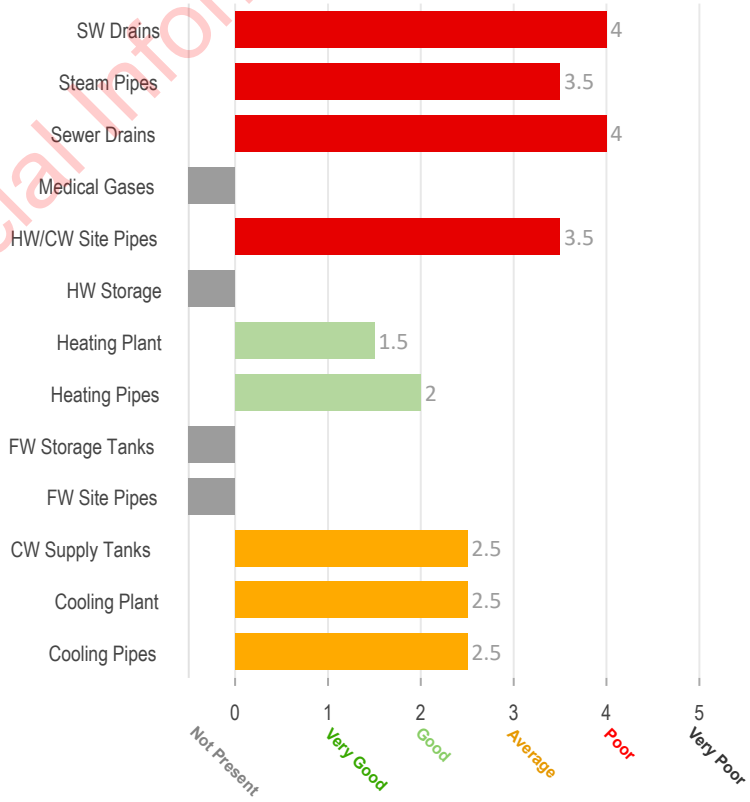
Site Overview



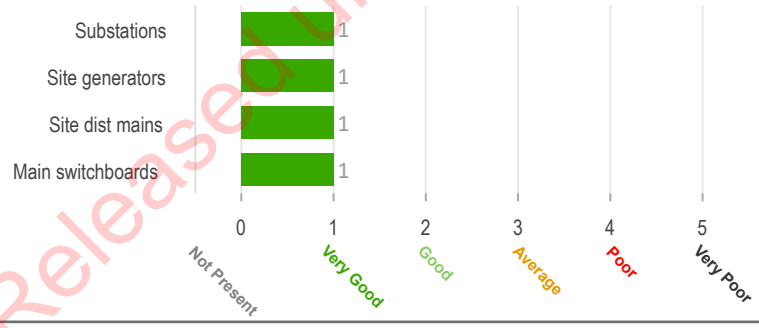
Buildings Surveyed



Site wide Mechanical Infrastructure Condition



Site wide Electrical Infrastructure Condition



Engineering Commentary

There are issues with blockwork cracking to block panels on the Mental Health inpatient Unit. There is roof water ingress into enclosed walkway linking Mental Health inpatient Unit with Community Mental Health

Out of scope

The electrical infrastructure generally is in good condition and well maintained. The 11kV infrastructure is relatively new. Distribution services are of varying condition with particular issues around cold water distribution. Review of site water storage is recommended. IPMH services in good condition.

Inpatient Mental Health

Southland (Southern DHB)

Beca Building ID: 197
NAMP ID: 10802
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior

Services & Fabric Score

2.5

DHB Assessed % *NBS* Rating

No Data

General Building Information

Approximate Building Age: 2004

Survey date: 29/04/2019

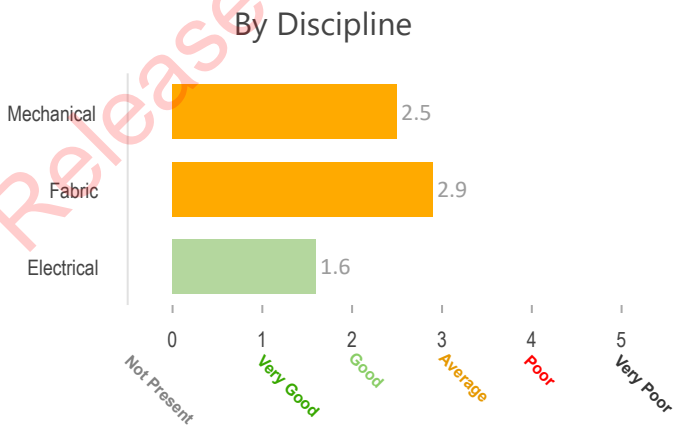
Gross Floor Area (m2): 1740

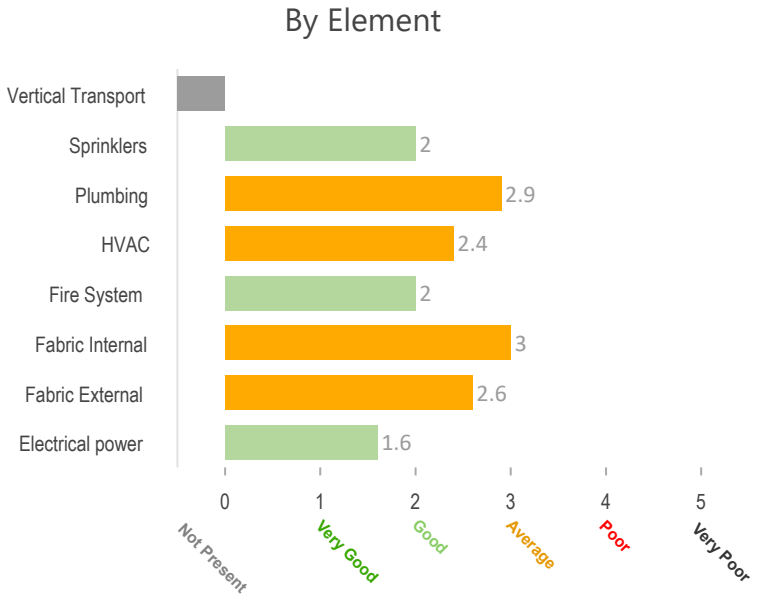
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Low likelihood of issues

Seismic Services Restraint: Poor

Summary of building condition



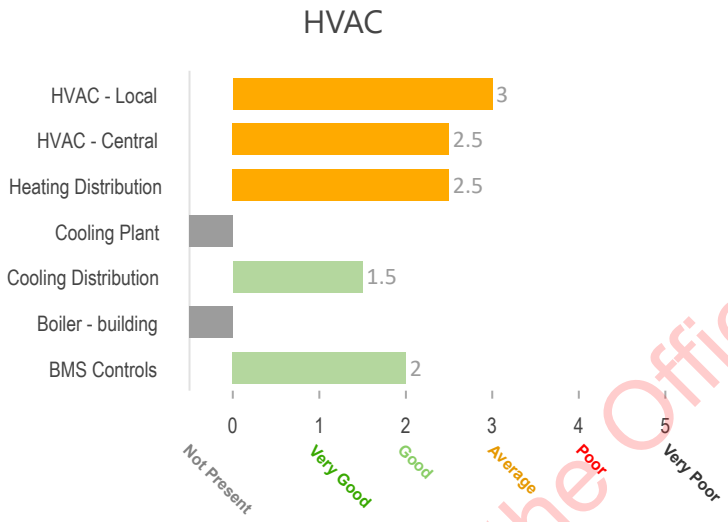


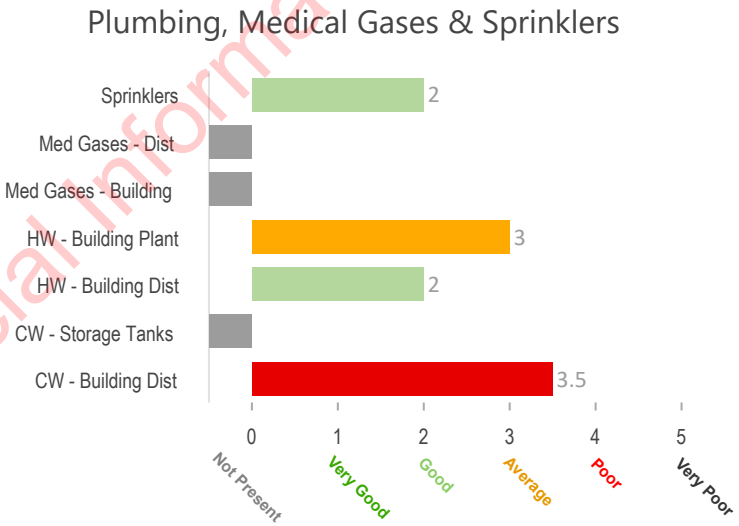
Beca Building ID: 197
NAMP ID: 10802
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

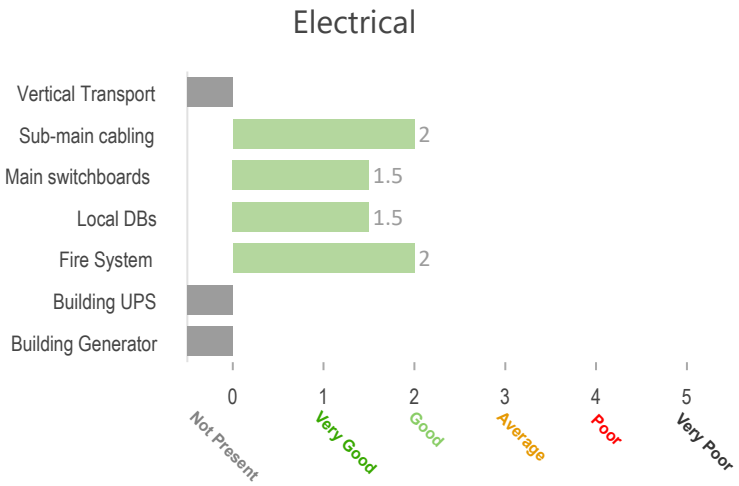
Approximate building location

Inpatient Mental Health

Summary of building element condition details







Condition Definitions

Out of scope

Out of scope

Services and Fabric - Survey Methodology and scope:

The main uses of this condition review are:

- To inform the MoH on the general condition of the critical buildings within the NZ health estate
- To be a base for future development of building condition
- To assist in making decisions between projects vying for a finite capital spend budget
- To provide for comparison between DHBs and inform long term, high level budget planning (projects >$10M)

Scoring of the assets is on a scale of 1(very good) to 5 (very poor). Building scores have been obtained from a weighted average of elements reflecting their estimated percentage of an overall building replacement cost.

In addition to the condition, the score/rating of each element also accounts for the age and variability (whether the element in the building was of a similar condition throughout the building ie some lifts that are good condition and others that are poor condition/age) of the element assessed.

Each element has been factored, with the weighting criteria applied to each element condition score according to their proportional cost impact on the building (ie HVAC attracts a higher impact than plumbing).

Services plant and equipment have been assessed under the building in which they are housed, unless the plant/equipment also serves other buildings on the site, in which case these have been assessed under site wide infrastructure.

Full details of the survey methodology are contained in the Beca NAMP Asset Condition Survey Data Standard and Methodology Rev.D, dated 25th April 2019.

Services and Fabric - Survey Assumptions and Exclusions:

The survey is to inform high level MoH decision making, not DHB asset management purposes, and has been based around a combination of information provided by DHB site representatives and limited site observation.

Our site inspection and survey comprise a high level visual inspection only. No inspections were undertaken of wall framing, ceiling voids, floor voids or other parts of the asset which were covered, unexposed or inaccessible and we are therefore unable to report that any such part of the property is free from significant defect. The survey should not be construed as a detailed building condition survey for specific asset repair and maintenance budget planning, since service and location specific methodology around replacement is likely to be required.

Our site inspection data has been provided as an 'indicative assessment' generalising the current condition by discipline only. Its purpose is to support general system level commentary to assist in directing master planning decisions. The review does not provide assessment of:

- Performance, reliability or fitness for purpose
- Capacity of plant or systems
- Operational efficiency of specific plant or systems.
- Resilience and redundancy of systems

It is assumed that a building, its services (and any alterations) have been designed and constructed in accordance with the Building Code current at the time of the construction. Infrastructure assessments have been primarily based on advice from site teams with visual observation where accessible and provided.

A number of aspects were not requested to form part of the survey scope and are noted as excluded from this report. These include:

- Clinical Equipment
- Cool Rooms and Refrigeration Equipment
- Information and Communication Technology (data and comm's)
- Carriageways or civil works
- Other General Equipment (e.g. kitchen)
- Other Specialised Equipment (e.g. biosafety and fume cabinets, Lamson Tube system)
- Security, Nurse Call Services & the like
- On site Structural engineering reviews

DHB Assessed *% NBS* Ratings:

The DHB assessed *%NBS* ratings included in this report have been provided by the DHBs via the Ministry of Health and have not been reviewed, checked or validated for accuracy or completeness.

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									
Southland	Inpatient Mental Health	Electrical Power	Building Generator		Not Present				
Southland	Inpatient Mental Health	Electrical Power	Building Main Switchboard		Present		2	1	3 to 10
Southland	Inpatient Mental Health	Electrical Power	Building UPS		Not Present				
Southland	Inpatient Mental Health	Electrical Power	Local DBs		Present		2	1	3 to 10
Southland	Inpatient Mental Health	Electrical Power	Site Generator			yes			
Southland	Inpatient Mental Health	Electrical Power	Sub-main cabling		Present		2	1	original
Southland	Inpatient Mental Health	Fabric External	Roofing and Decking	Iron/metal	Present		3	1	original
Southland	Inpatient Mental Health	Fabric External	Walls and Cladding	Masonry	Present		3	1	original
Southland	Inpatient Mental Health	Fabric External	Walls and Cladding	Other/mixed	Present		3	1	original
Southland	Inpatient Mental Health	Fabric External	Windows and Doors	Aluminium	Present		2	1	original
Southland	Inpatient Mental Health	Fabric Internal	G		Present		3	1	original
Southland	Inpatient Mental Health	Fire Alarm	Sprinkler		Present		2	1	original

Raw Condition Scores

RL VERSIONS

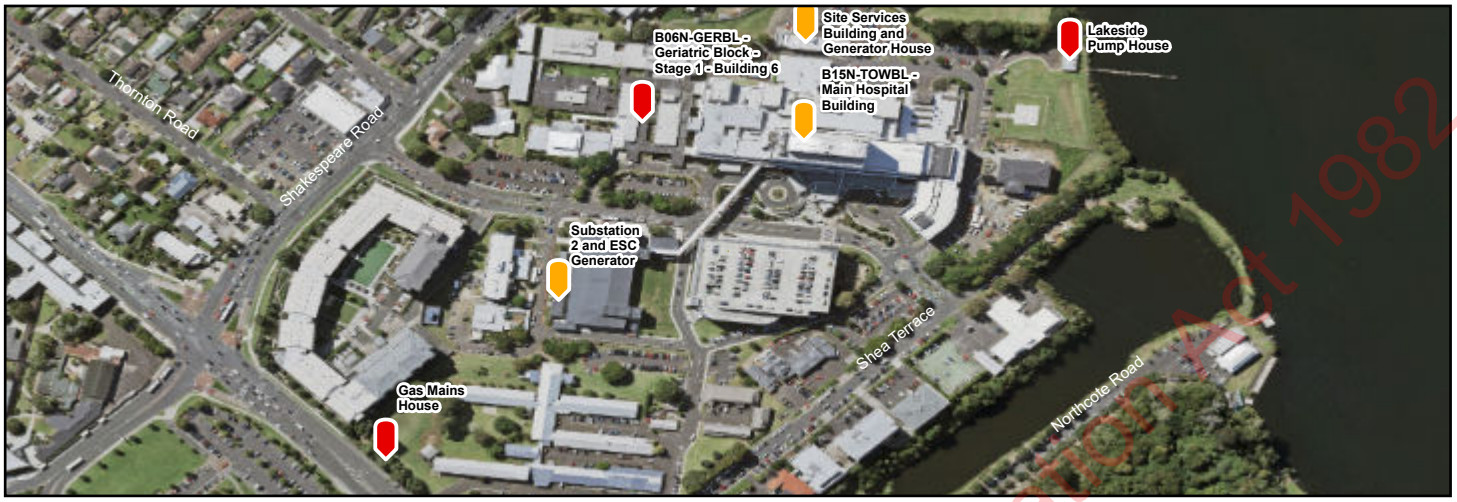
Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Southland	Inpatient Mental Health	HVAC	BMS Controls		Present		2	1	original
Southland	Inpatient Mental Health	HVAC	Boiler Plant - Site Plant			yes			
Southland	Inpatient Mental Health	HVAC	Boiler Plant in building		Not Present				
Southland	Inpatient Mental Health	HVAC	Building HVAC - Central plant		Present		3	1	10+
Southland	Inpatient Mental Health	HVAC	Building HVAC - Local plant		Present		3	1	original
Southland	Inpatient Mental Health	HVAC	Cooling Distribution		Present		2	1	10+
Southland	Inpatient Mental Health	HVAC	Cooling Plant - Site Plant			yes			
Southland	Inpatient Mental Health	HVAC	Cooling Plant in building		Not Present				
Southland	Inpatient Mental Health	HVAC	Heating Distribution		Present		3	1	10+
Southland	Inpatient Mental Health	Plumbing	Cold water - Building distribution		Present		3	2	original
Southland	Inpatient Mental Health	Plumbing	Cold water - Building storage tanks		Not Present				
Southland	Inpatient Mental Health	Plumbing	Cold water - Site storage and mains			no			
Southland	Inpatient Mental Health	Plumbing	Hot water - Building distribution		Present		2	2	10+
Southland	Inpatient Mental Health	Plumbing	Hot water - Building plant		Present		3	1	original
Southland	Inpatient Mental Health	Plumbing	Hot water - Site Plant			no			
Southland	Inpatient Mental Health	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Southland	Inpatient Mental Health	Plumbing	Medical gases and vacuum - Site Plant			no			
Southland	Inpatient Mental Health	Plumbing	Medical gases and vacuum distribution		Not Present				
Southland	Inpatient Mental Health	Sprinklers	Sprinklers		Present		2	1	original
Southland	Inpatient Mental Health	Vertical Transport			Not Present				
Southland	Site Wide	Electrical Infrastructure	Main switchboards		Present		1	1	0 to 3
Southland	Site Wide	Electrical Infrastructure	Site distribution mains		Present		1	1	0 to 3
Southland	Site Wide	Electrical Infrastructure	Site generators		Present		1	1	0 to 3
Southland	Site Wide	Electrical Infrastructure	Substations		Present		1	1	0 to 3
Southland	Site Wide	Mechanical Infrastructure	Site Cold Water supply tanks		Present		3	1	10+
Southland	Site Wide	Mechanical Infrastructure	Site Cooling pipes		Present		3	1	10+
Southland	Site Wide	Mechanical Infrastructure	Site Cooling plant		Present		3	1	10+
Southland	Site Wide	Mechanical Infrastructure	Site Fire Water site pipes		Not Present				
Southland	Site Wide	Mechanical Infrastructure	Site Fire Water storage tanks		Not Present				
Southland	Site Wide	Mechanical Infrastructure	Site Heating pipes		Present		2	2	10+
Southland	Site Wide	Mechanical Infrastructure	Site Heating Plant		Present		2	1	10+
Southland	Site Wide	Mechanical Infrastructure	Site Hot and Cold Water site pipes		Present		4	2	10+
Southland	Site Wide	Mechanical Infrastructure	Site Hot Water storage		Not Present				
Southland	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Not Present				
Southland	Site Wide	Mechanical Infrastructure	Site sewer drains		Present		3	3	original
Southland	Site Wide	Mechanical Infrastructure	Site Steam pipes		Present		3	2	original
Southland	Site Wide	Mechanical Infrastructure	Site storm water drains		Present		3	3	original

North Shore Hospital

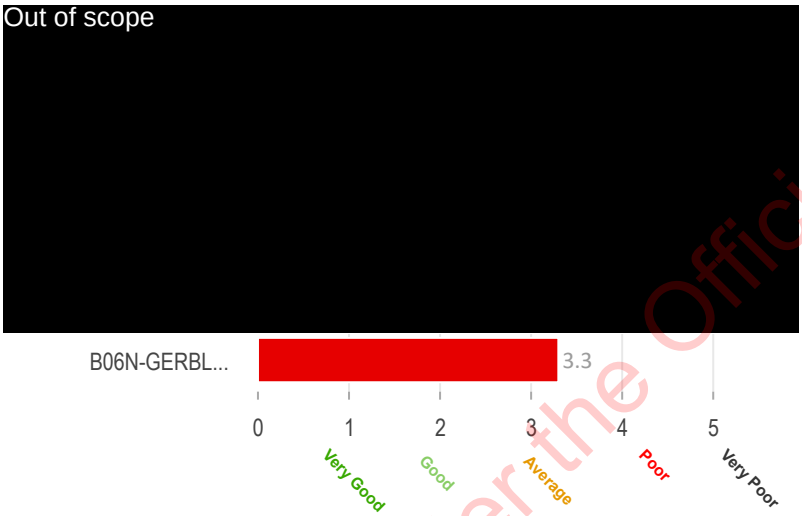
Waitemata DHB

Beca Campus ID: 823
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 6/09/2019

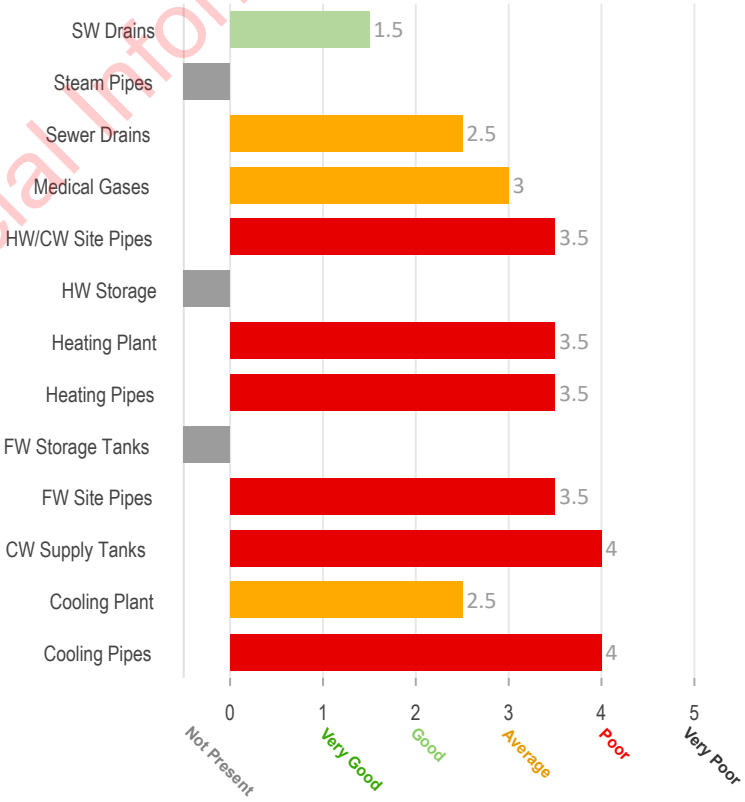
Site Overview



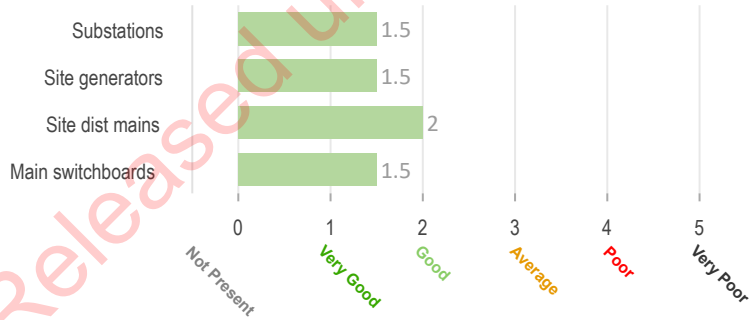
Buildings Surveyed



Site wide Mechanical Infrastructure Condition



Site wide Electrical Infrastructure Condition



Engineering Commentary

Generally buildings inspected were of average condition with some variability. Deficiencies noted in some of the fabric components, particularly metal and membrane roofing. Known asbestos issues.
Site Main Switchboard has been replaced within the last 10 years. Main switchboard for Building 6 being replaced at the time of inspection.
Submains in varying condition. Some have been replaced, but others are old MIMs cables junctioned to new switchboards.
Mechanical services are a mixture of average (chiller system) and poor (boiler system – dual burner but cannot work with diesel) condition. Some areas lack ventilation and active cooling. No sitewide fire storage tanks. Sitewide cold water and fire water mains are in poor condition (site staff reported asbestos cement pipes and failing valves underground - pipes themselves are average). No central medical gases and vacuum systems present. Out of scope
Equipment (boilers etc) located within the building that serve the hospital site have been assessed under sitewide infrastructure.
DHB information regarding fire system, BMS controls, sprinklers and CW storage tanks not received.

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

B06N-GERBL - Geriatric Block - Stage 1

North Shore Hospital (Waitemata DHB)

Beca Building ID: 171
NAMP ID: 11135
DHB Ref: B06N
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior

Services & Fabric Score

3.3

DHB Assessed % *NBS* Rating

No Data

General Building Information

Approximate Building Age: 1972 (1999 Geriatric

Survey date: 1/04/2019

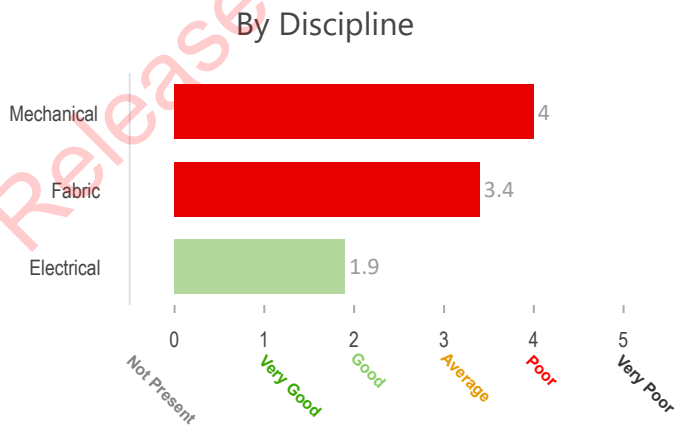
Gross Floor Area (m2): 9500

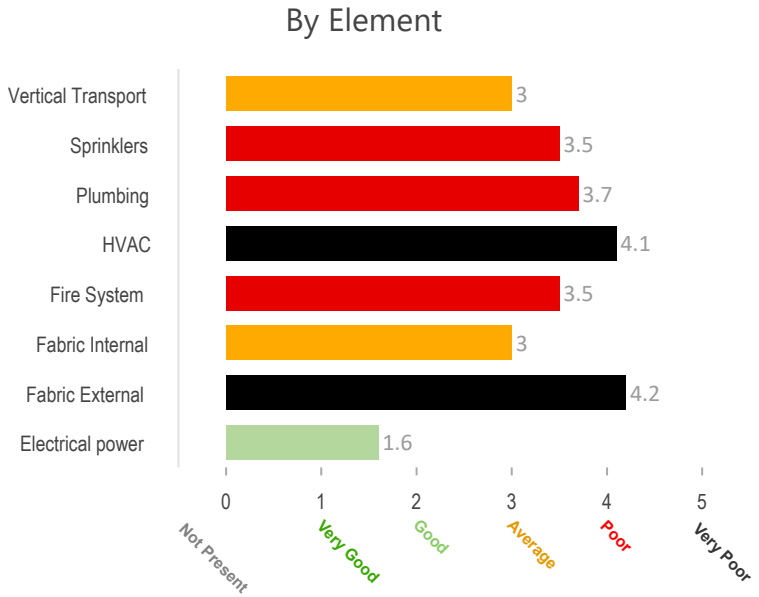
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Significant known issues

Seismic Services Restraint: Poor

Summary of building condition



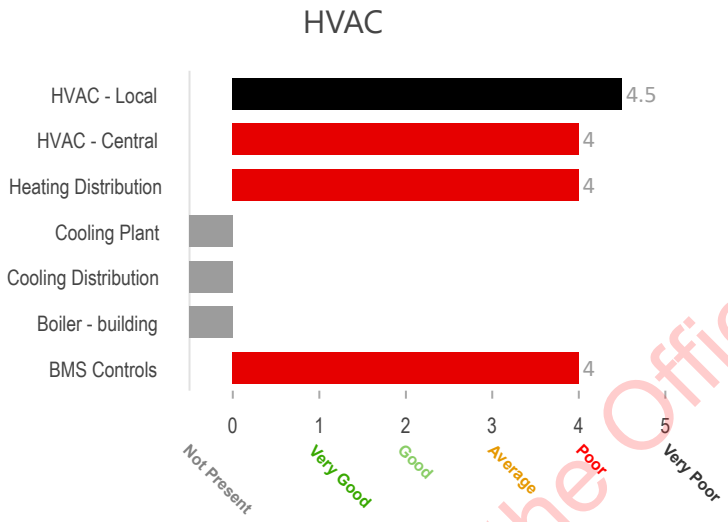


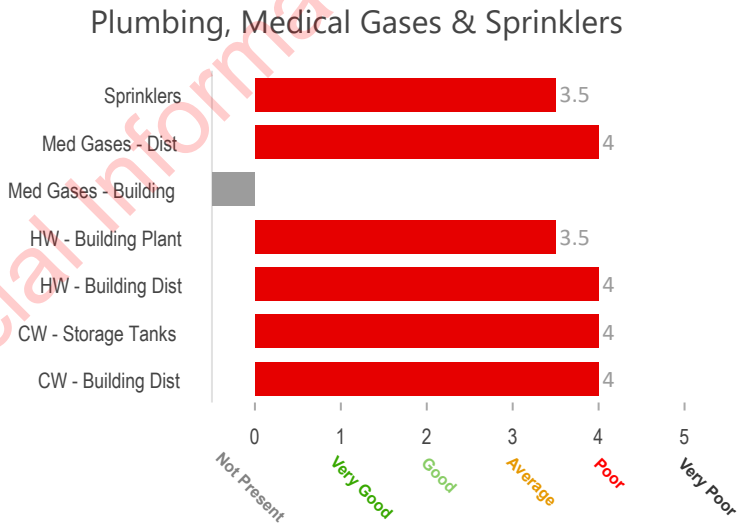
Beca Building ID: 171
NAMP ID: 11135
DHB Ref: B06N
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

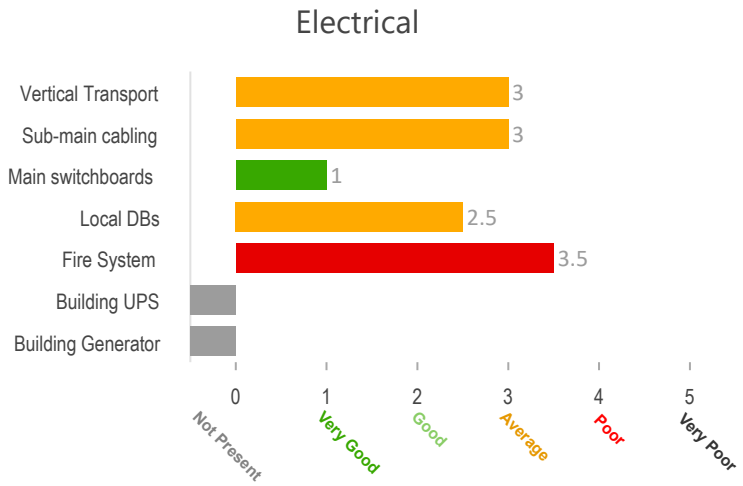
Approximate building location

B06N-GERBL - Geriatric Block - Stage 1 - Building 6

Summary of building element condition details







Condition Definitions

Rating	Condition	Definition (Services and Fabric)
	Not Present	Assets were not present or inaccessible when site was visited.
1	Very Good	Assets displaying no deterioration or only normal routine maintenance required. New or near new condition. Some wear or discoloration but no evidence of damage. Can include repaired assets where the repair is as good as the original.
2	Good	Assets displaying limited deterioration which does not affect their use, or where limited restoration has been performed. Minor reactive maintenance may be required. Acceptable physical condition, with minor deterioration or damage that may affect performance (includes most repaired assets)
3	Average	Assets which have deteriorated to a degree where maintenance is obviously due, but not to the extent where the function is significantly impaired or very substantial repairs are needed. Failure unlikely in near future but further deterioration is likely
4	Poor	Repair or renewal is required in the short term. Significant deterioration or damage is evident and severely impacting performance. Asset is barely serviceable and failure likely in short term
5	Very Poor	Immediate repair or renewal required. Asset is not in use or unserviceable (i.e. has failed) or failure is imminent. Asset may pose occupational health and safety problems. Requires urgent attention.

Services and Fabric - Survey Methodology and scope:

The main uses of this condition review are:

- To inform the MoH on the general condition of the critical buildings within the NZ health estate
- To be a base for future development of building condition
- To assist in making decisions between projects vying for a finite capital spend budget
- To provide for comparison between DHBs and inform long term, high level budget planning (projects >$10M)

Scoring of the assets is on a scale of 1(very good) to 5 (very poor). Building scores have been obtained from a weighted average of elements reflecting their estimated percentage of an overall building replacement cost.

In addition to the condition, the score/rating of each element also accounts for the age and variability (whether the element in the building was of a similar condition throughout the building ie some lifts that are good condition and others that are poor condition/age) of the element assessed.

Each element has been factored, with the weighting criteria applied to each element condition score according to their proportional cost impact on the building (ie HVAC attracts a higher impact than plumbing).

Services plant and equipment have been assessed under the building in which they are housed, unless the plant/equipment also serves other buildings on the site, in which case these have been assessed under site wide infrastructure.

Full details of the survey methodology are contained in the Beca NAMP Asset Condition Survey Data Standard and Methodology Rev.D, dated 25th April 2019.

Services and Fabric - Survey Assumptions and Exclusions:

The survey is to inform high level MoH decision making, not DHB asset management purposes, and has been based around a combination of information provided by DHB site representatives and limited site observation.

Our site inspection and survey comprise a high level visual inspection only. No inspections were undertaken of wall framing, ceiling voids, floor voids or other parts of the asset which were covered, unexposed or inaccessible and we are therefore unable to report that any such part of the property is free from significant defect. The survey should not be construed as a detailed building condition survey for specific asset repair and maintenance budget planning, since service and location specific methodology around replacement is likely to be required.

Our site inspection data has been provided as an 'indicative assessment' generalising the current condition by discipline only. Its purpose is to support general system level commentary to assist in directing master planning decisions. The review does not provide assessment of:

- Performance, reliability or fitness for purpose
- Capacity of plant or systems
- Operational efficiency of specific plant or systems.
- Resilience and redundancy of systems

It is assumed that a building, its services (and any alterations) have been designed and constructed in accordance with the Building Code current at the time of the construction. Infrastructure assessments have been primarily based on advice from site teams with visual observation where accessible and provided.

A number of aspects were not requested to form part of the survey scope and are noted as excluded from this report. These include:

- Clinical Equipment
- Cool Rooms and Refrigeration Equipment
- Information and Communication Technology (data and comm's)
- Carriageways or civil works
- Other General Equipment (e.g. kitchen)
- Other Specialised Equipment (e.g. biosafety and fume cabinets, Lamson Tube system)
- Security, Nurse Call Services & the like
- On site Structural engineering reviews

DHB Assessed *% NBS* Ratings:

The DHB assessed *%NBS* ratings included in this report have been provided by the DHBs via the Ministry of Health and have not been reviewed, checked or validated for accuracy or completeness.

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
North Shore Hospital	B06N-GERBL - Geriatric Block - Stage 1 - Building 6	Fabric External	Roofing and Decking	Asbestos/super six	Present		5	3	original
North Shore Hospital	B06N-GERBL - Geriatric Block - Stage 1 - Building 6	Fabric External	Roofing and Decking	Iron/metal	Present		5	2	original
North Shore Hospital	B06N-GERBL - Geriatric Block - Stage 1 - Building 6	Fabric External	Walls and Cladding	Concrete	Present		2	1	original
North Shore Hospital	B06N-GERBL - Geriatric Block - Stage 1 - Building 6	Fabric External	Walls and Cladding	Masonry	Present		3	2	original
North Shore Hospital	B06N-GERBL - Geriatric Block - Stage 1 - Building 6	Fabric External	Windows and Doors	Metal	Present		4	2	original
North Shore Hospital	B06N-GERBL - Geriatric Block - Stage 1 - Building 6	HVAC	BMS Controls		Present		4	2	original
North Shore Hospital	B06N-GERBL - Geriatric Block - Stage 1 - Building 6	HVAC	Boiler Plant - Site Plant			yes			
North Shore Hospital	B06N-GERBL - Geriatric Block - Stage 1 - Building 6	HVAC	Boiler Plant in building		Not Present				
North Shore Hospital	B06N-GERBL - Geriatric Block - Stage 1 - Building 6	HVAC	Building HVAC - Central plant		Present		4	2	mixed
North Shore Hospital	B06N-GERBL - Geriatric Block - Stage 1 - Building 6	HVAC	Building HVAC - Local plant		Present		4	3	original
North Shore Hospital	B06N-GERBL - Geriatric Block - Stage 1 - Building 6	HVAC	Cooling Distribution		Not Present				
North Shore Hospital	B06N-GERBL - Geriatric Block - Stage 1 - Building 6	HVAC	Cooling Plant - Site Plant			no			
North Shore Hospital	B06N-GERBL - Geriatric Block - Stage 1 - Building 6	HVAC	Cooling Plant in building		Not Present				
North Shore Hospital	B06N-GERBL - Geriatric Block - Stage 1 - Building 6	HVAC	Heating Distribution		Present		4	2	original
North Shore Hospital	B06N-GERBL - Geriatric Block - Stage 1 - Building 6	Plumbing	Cold water - Building distribution		Present		4	2	original
North Shore Hospital	B06N-GERBL - Geriatric Block - Stage 1 - Building 6	Plumbing	Cold water - Building storage tanks		Present		4	2	original
North Shore Hospital	B06N-GERBL - Geriatric Block - Stage 1 - Building 6	Plumbing	Cold water - Site storage and mains			yes			
North Shore Hospital	B06N-GERBL - Geriatric Block - Stage 1 - Building 6	Plumbing	Hot water - Building distribution		Present		4	2	original
North Shore Hospital	B06N-GERBL - Geriatric Block - Stage 1 - Building 6	Plumbing	Hot water - Building plant		Present		3	2	original
North Shore Hospital	B06N-GERBL - Geriatric Block - Stage 1 - Building 6	Plumbing	Hot water - Site Plant			yes			
North Shore Hospital	B06N-GERBL - Geriatric Block - Stage 1 - Building 6	Plumbing	Medical gases and vacuum - Building plant		Not Present				
North Shore Hospital	B06N-GERBL - Geriatric Block - Stage 1 - Building 6	Plumbing	Medical gases and vacuum - Site Plant			yes			
North Shore Hospital	B06N-GERBL - Geriatric Block - Stage 1 - Building 6	Plumbing	Medical gases and vacuum distribution		Present		4	2	original
North Shore Hospital	B06N-GERBL - Geriatric Block - Stage 1 - Building 6	Sprinklers	Sprinklers		Present		4	1	original
North Shore Hospital	B06N-GERBL - Geriatric Block Stage 1 - Building 6	Electrical Power	Building Generator		Not Present				
North Shore Hospital	B06N-GERBL - Geriatric Block Stage 1 - Building 6	Electrical Power	Building Main Switchboard		Present		1	1	0 to 3
North Shore Hospital	B06N-GERBL - Geriatric Block Stage 1 - Building 6	Electrical Power	Building UPS		Not Present				
North Shore Hospital	B06N-GERBL - Geriatric Block Stage 1 - Building 6	Electrical Power	Local DBs		Present		2	3	mixed
North Shore Hospital	B06N-GERBL - Geriatric Block Stage 1 - Building 6	Electrical Power	Site Generator			yes			
North Shore Hospital	B06N-GERBL - Geriatric Block Stage 1 - Building 6	Electrical Power	Sub-main cabling		Present		3	2	mixed
North Shore Hospital	B06N-GERBL - Geriatric Block Stage 1 - Building 6	Fabric Internal	B1		Present		3	2	10+
North Shore Hospital	B06N-GERBL - Geriatric Block Stage 1 - Building 6	Fabric Internal	G		Present		3	2	10+
North Shore Hospital	B06N-GERBL - Geriatric Block Stage 1 - Building 6	Fire Alarm	Wormald		Present		3	2	original
North Shore Hospital	B06N-GERBL - Geriatric Block Stage 1 - Building 6	Vertical Transport	Hydraulic lift		Present		3	1	original

Out of scope

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age

Out of scope

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age

Out of scope

Raw Condition Scores

RL VERSIONS

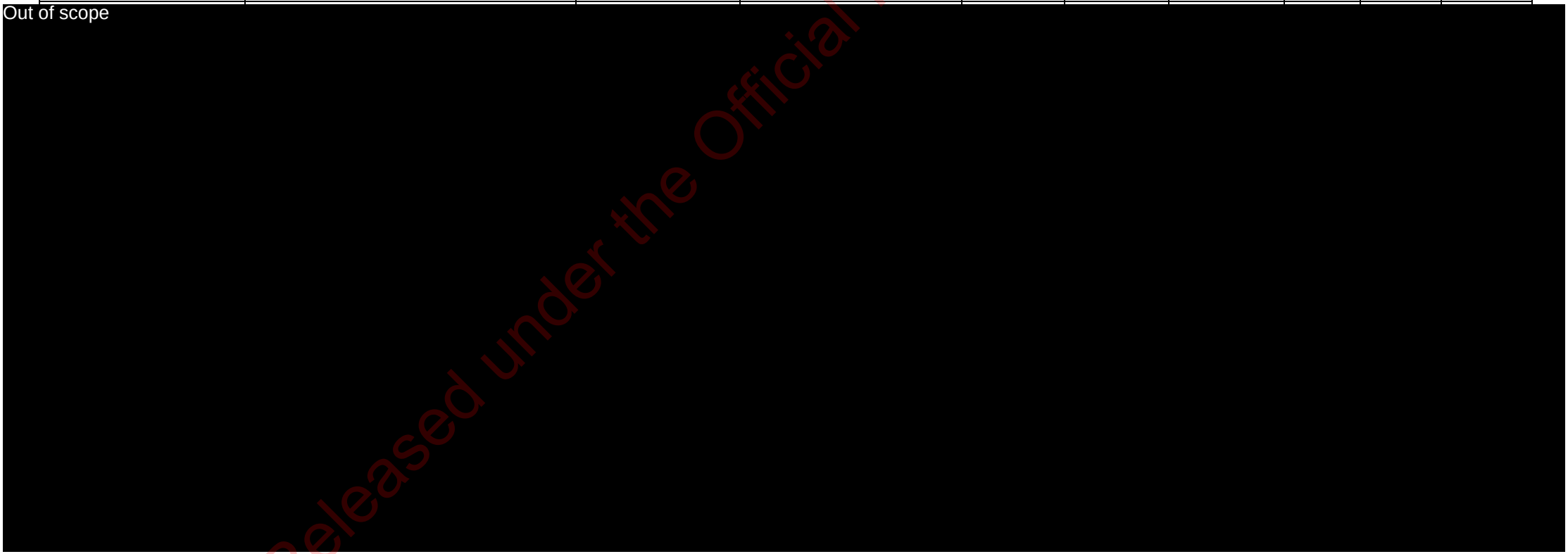
Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									
North Shore Hospital	Site Wide	Electrical Infrastructure	Main switchboards		Present		2	1	3 to 10
North Shore Hospital	Site Wide	Electrical Infrastructure	Main switchboards		Present		2	1	3 to 10
North Shore Hospital	Site Wide	Electrical Infrastructure	Site distribution mains		Present		2	2	mixed
North Shore Hospital	Site Wide	Electrical Infrastructure	Site distribution mains		Present		2	2	mixed
North Shore Hospital	Site Wide	Electrical Infrastructure	Site generators		Present		2	1	3 to 10

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
North Shore Hospital	Site Wide	Electrical Infrastructure	Site generators		Present		2	1	3 to 10
North Shore Hospital	Site Wide	Electrical Infrastructure	Substations		Present		2	1	mixed
North Shore Hospital	Site Wide	Electrical Infrastructure	Substations		Present		2	1	mixed
North Shore Hospital	Site Wide	Mechanical Infrastructure	Site Cold Water supply tanks		Present		4	2	original
North Shore Hospital	Site Wide	Mechanical Infrastructure	Site Cooling pipes		Present		4	2	original
North Shore Hospital	Site Wide	Mechanical Infrastructure	Site Cooling plant		Present		3	1	10+
North Shore Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water site pipes		Present		4	1	original
North Shore Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water storage tanks		Not Present				
North Shore Hospital	Site Wide	Mechanical Infrastructure	Site Heating pipes		Present		3	2	original
North Shore Hospital	Site Wide	Mechanical Infrastructure	Site Heating Plant		Present		4	1	original
North Shore Hospital	Site Wide	Mechanical Infrastructure	Site Hot and Cold Water site pipes		Present		4	1	original
North Shore Hospital	Site Wide	Mechanical Infrastructure	Site Hot Water storage		Not Present				
North Shore Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		3	2	mixed
North Shore Hospital	Site Wide	Mechanical Infrastructure	Site sewer drains		Present		2	2	original
North Shore Hospital	Site Wide	Mechanical Infrastructure	Site Steam pipes		Not Present				
North Shore Hospital	Site Wide	Mechanical Infrastructure	Site storm water drains		Present		2	1	mixed

Out of scope



Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									

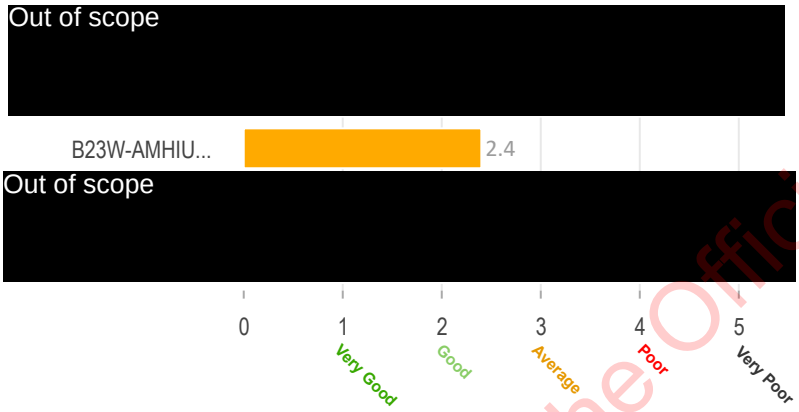
Waitakere Hospital - 55 Lincoln Rd

Waitemata DHB

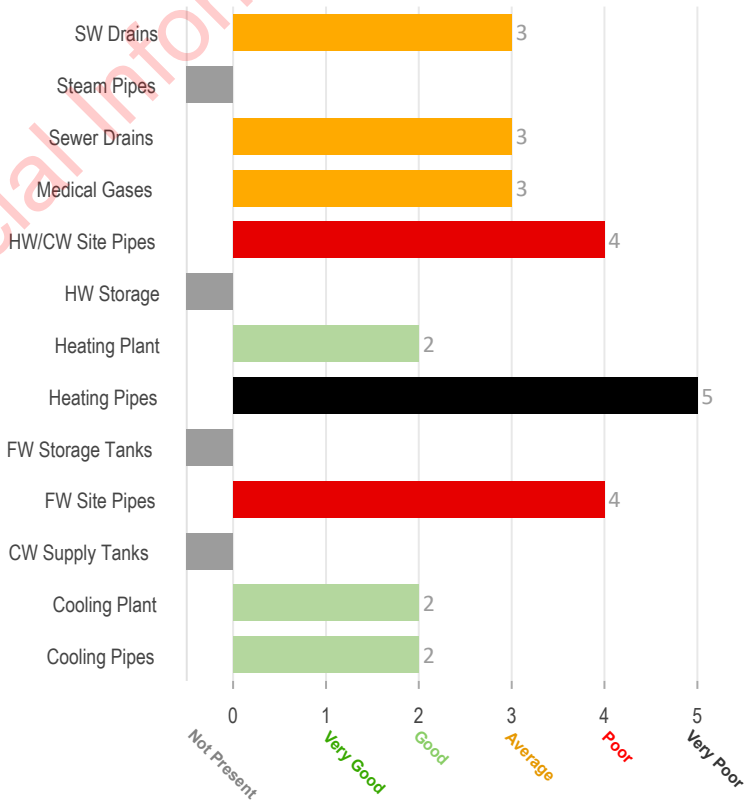
Beca Campus ID: 824
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 29/08/2019

Site Overview

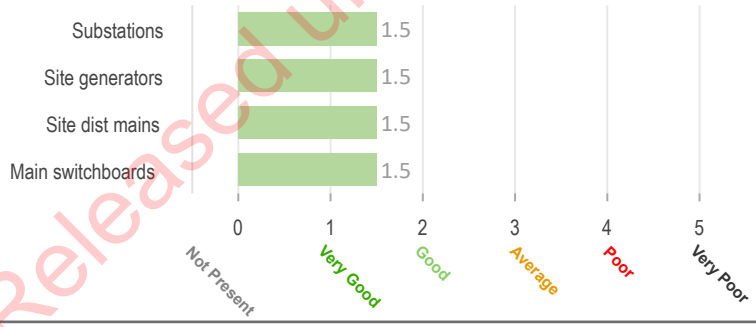
Buildings Surveyed



Site wide Mechanical Infrastructure Condition



Site wide Electrical Infrastructure Condition



Engineering Commentary

Generally buildings inspected were of average condition. Deficiencies noted in some of the fabric components, particularly the membrane roofing and the metal cladding. Known Asbestos issues.

Out of scope

Mechanical services are generally in good condition. Some areas lack ventilation and mechanical cooling. Out of scope Heating hot water pipework in services tunnels is in very poor condition. Sitewide cold water and fire water mains are in poor conditions. No sitewide fire storage and water tanks

Out of scope

Out of scope

Out of scope

Out of scope

B23W-AMHIU - Waiatarau Mental

Waitakere Hospital - 55 Lincoln Rd (Waitemata

Beca Building ID: 234
NAMP ID: 11171
DHB Ref: B23W
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior

Services & Fabric Score

2.4

DHB Assessed % *NBS* Rating

No Data

General Building Information

Approximate Building Age: 2007

Survey date: 2/04/2019

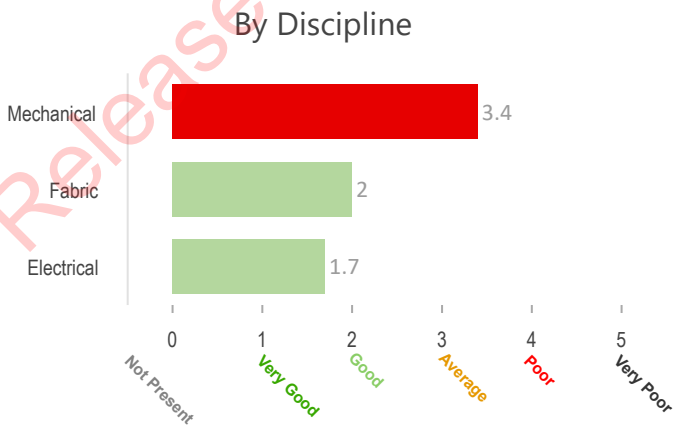
Gross Floor Area (m2): 600

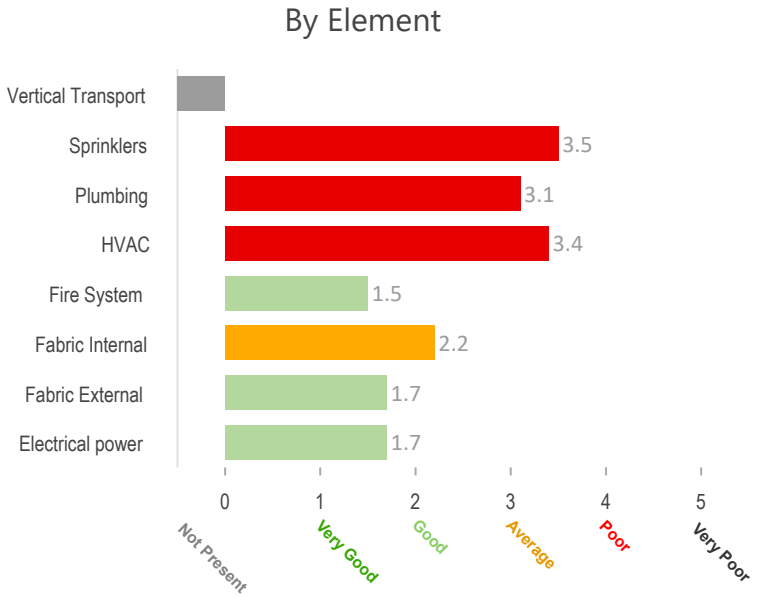
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Low likelihood of issues

Seismic Services Restraint: Moderate

Summary of building condition



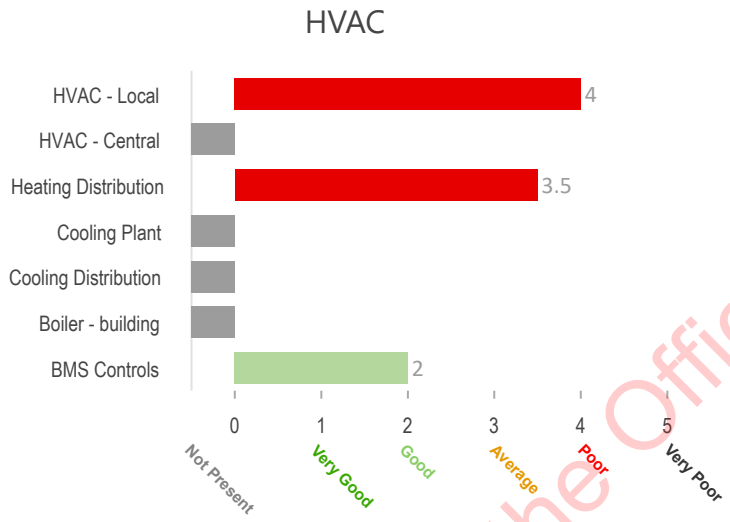


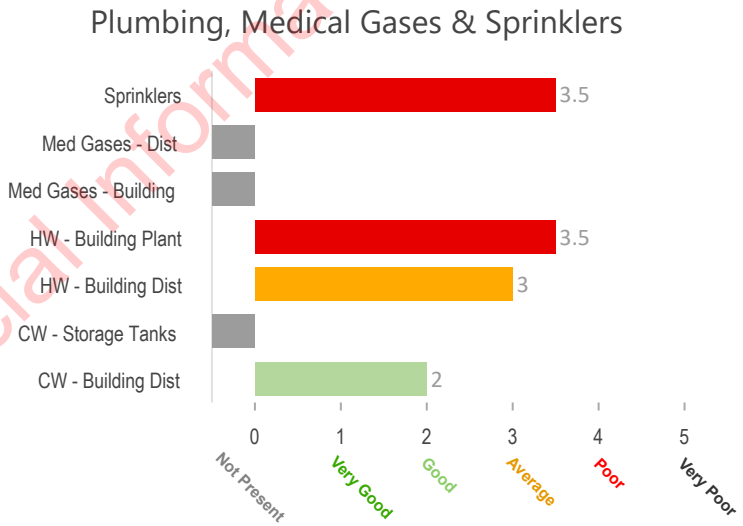
Beca Building ID: 234
NAMP ID: 11171
DHB Ref: B23W
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

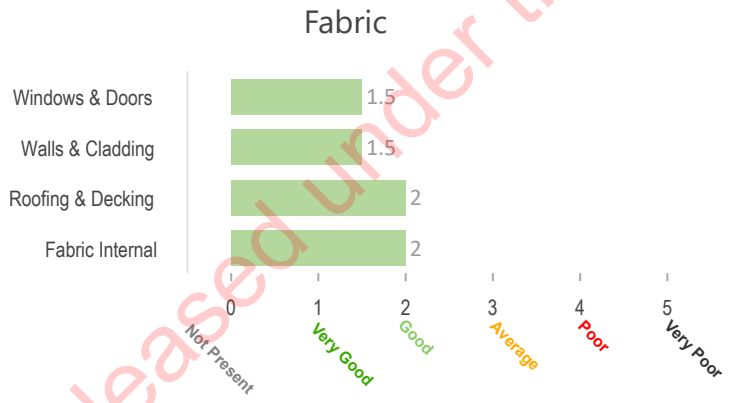
Approximate building location

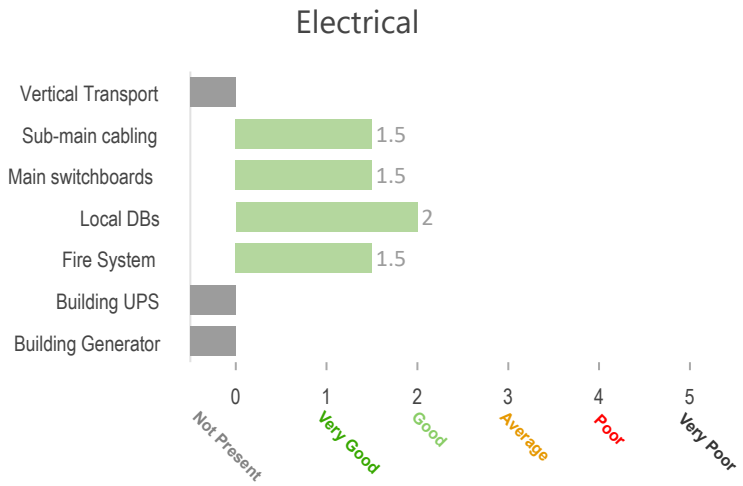
B23W-AMHIU - Waiatarau Mental Health Unit - Building 23

Summary of building element condition details









Condition Definitions

Rating	Condition	Definition (Services and Fabric)
	Not Present	Assets were not present or inaccessible when site was visited.
1	Very Good	Assets displaying no deterioration or only normal routine maintenance required. New or near new condition. Some wear or discoloration but no evidence of damage. Can include repaired assets where the repair is as good as the original.
2	Good	Assets displaying limited deterioration which does not affect their use, or where limited restoration has been performed. Minor reactive maintenance may be required. Acceptable physical condition, with minor deterioration or damage that may affect performance (includes most repaired assets)
3	Average	Assets which have deteriorated to a degree where maintenance is obviously due, but not to the extent where the function is significantly impaired or very substantial repairs are needed. Failure unlikely in near future but further deterioration is likely
4	Poor	Repair or renewal is required in the short term. Significant deterioration or damage is evident and severely impacting performance. Asset is barely serviceable and failure likely in short term
5	Very Poor	Immediate repair or renewal required. Asset is not in use or unserviceable (i.e. has failed) or failure is imminent. Asset may pose occupational health and safety problems. Requires urgent attention.

Out of scope

Out of scope

Out of scope

Out of scope

Services and Fabric - Survey Methodology and scope:

The main uses of this condition review are:

- To inform the MoH on the general condition of the critical buildings within the NZ health estate
- To be a base for future development of building condition
- To assist in making decisions between projects vying for a finite capital spend budget
- To provide for comparison between DHBs and inform long term, high level budget planning (projects >$10M)

Scoring of the assets is on a scale of 1(very good) to 5 (very poor). Building scores have been obtained from a weighted average of elements reflecting their estimated percentage of an overall building replacement cost.

In addition to the condition, the score/rating of each element also accounts for the age and variability (whether the element in the building was of a similar condition throughout the building ie some lifts that are good condition and others that are poor condition/age) of the element assessed.

Each element has been factored, with the weighting criteria applied to each element condition score according to their proportional cost impact on the building (ie HVAC attracts a higher impact than plumbing).

Services plant and equipment have been assessed under the building in which they are housed, unless the plant/equipment also serves other buildings on the site, in which case these have been assessed under site wide infrastructure.

Full details of the survey methodology are contained in the Beca NAMP Asset Condition Survey Data Standard and Methodology Rev.D, dated 25th April 2019.

Services and Fabric - Survey Assumptions and Exclusions:

The survey is to inform high level MoH decision making, not DHB asset management purposes, and has been based around a combination of information provided by DHB site representatives and limited site observation.

Our site inspection and survey comprise a high level visual inspection only. No inspections were undertaken of wall framing, ceiling voids, floor voids or other parts of the asset which were covered, unexposed or inaccessible and we are therefore unable to report that any such part of the property is free from significant defect. The survey should not be construed as a detailed building condition survey for specific asset repair and maintenance budget planning, since service and location specific methodology around replacement is likely to be required.

Our site inspection data has been provided as an 'indicative assessment' generalising the current condition by discipline only. Its purpose is to support general system level commentary to assist in directing master planning decisions. The review does not provide assessment of:

- Performance, reliability or fitness for purpose
- Capacity of plant or systems
- Operational efficiency of specific plant or systems.
- Resilience and redundancy of systems

It is assumed that a building, its services (and any alterations) have been designed and constructed in accordance with the Building Code current at the time of the construction. Infrastructure assessments have been primarily based on advice from site teams with visual observation where accessible and provided.

A number of aspects were not requested to form part of the survey scope and are noted as excluded from this report. These include:

- Clinical Equipment
- Cool Rooms and Refrigeration Equipment
- Information and Communication Technology (data and comm's)
- Carriageways or civil works
- Other General Equipment (e.g. kitchen)
- Other Specialised Equipment (e.g. biosafety and fume cabinets, Lamson Tube system)
- Security, Nurse Call Services & the like
- On site Structural engineering reviews

DHB Assessed *% NBS* Ratings:

The DHB assessed *%NBS* ratings included in this report have been provided by the DHBs via the Ministry of Health and have not been reviewed, checked or validated for accuracy or completeness.

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Electrical Power	Building Main Switchboard		Present		2	1	10+
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Electrical Power	Local DBs		Present	yes	2	1	original
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Electrical Power	Sub-main cabling		Present		2	1	10+
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Electrical Power	Building UPS		Not Present				
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Electrical Power	Building Generator		Not Present				
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Electrical Power	Site Generator			yes			
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Fabric External	Roofing and Decking	Iron/metal	Present		1	2	original
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Fabric External	Walls and Cladding	Concrete	Present		1	1	original
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Fabric External	Walls and Cladding	Other/mixed	Present		1	1	original
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Fabric External	Walls and Cladding	Sheet	Present		1	1	original
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Fabric External	Windows and Doors	Aluminium	Present		1	1	original
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Fabric Internal	G		Present		2	1	original
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Fabric Internal	1		Present		2	1	original
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Fire Alarm			Present		2	1	10+
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Fire Alarm			Present		2	1	10+
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	HVAC	Boiler Plant - Site Plant			yes			
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	HVAC	Boiler Plant in building		Not Present				
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	HVAC	Heating Distribution		Present		3	2	original
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	HVAC	Cooling Plant - Site Plant			no			
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	HVAC	Cooling Plant in building		Not Present				
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	HVAC	Cooling Distribution		Not Present				
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	HVAC	Building HVAC - Central plant		Not Present				
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	HVAC	BMS Controls		Present		2	1	original
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	HVAC	Building HVAC - Local plant		Present		4	2	original
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Plumbing	Hot water - Site Plant			yes			

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Plumbing	Hot water - Building plant		Present		3	2	original
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Plumbing	Hot water - Building distribution		Present		3	1	original
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Plumbing	Cold water - Site storage and mains			yes			
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Plumbing	Cold water - Building storage tanks		Not Present				
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Plumbing	Cold water - Building distribution		Present		2	1	original
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Plumbing	Medical gases and vacuum - Site Plant			no			
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Plumbing	Medical gases and vacuum distribution		Not Present				
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Sprinklers	Sprinklers		Present		3	2	original
Waitakere Hospital - 55 Lincoln Rd	B23W-AMHIU - Waiatarau Mental Health Unit - Building 23	Vertical Transport			Not Present				

Out of scope

[redacted]

Waitakere Hospital - 55 Lincoln Rd	Site Wide	Electrical Infrastructure	Main switchboards		Present		2	1	10+
Waitakere Hospital - 55 Lincoln Rd	Site Wide	Electrical Infrastructure	Site generators		Present		2	1	10+

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Waitakere Hospital - 55 Lincoln Rd	Site Wide	Electrical Infrastructure	Site distribution mains		Present		2	1	10+
Waitakere Hospital - 55 Lincoln Rd	Site Wide	Electrical Infrastructure	Substations		Present		2	1	10+
Waitakere Hospital - 55 Lincoln Rd	Site Wide	Mechanical Infrastructure	Site Fire Water site pipes		Present		4	2	original
Waitakere Hospital - 55 Lincoln Rd	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		3	2	mixed
Waitakere Hospital - 55 Lincoln Rd	Site Wide	Mechanical Infrastructure	Site sewer drains		Present		3	1	original
Waitakere Hospital - 55 Lincoln Rd	Site Wide	Mechanical Infrastructure	Site storm water drains		Present		3	1	original
Waitakere Hospital - 55 Lincoln Rd	Site Wide	Mechanical Infrastructure	Site Heating pipes		Present		5	3	original
Waitakere Hospital - 55 Lincoln Rd	Site Wide	Mechanical Infrastructure	Site Steam pipes		Not Present				
Waitakere Hospital - 55 Lincoln Rd	Site Wide	Mechanical Infrastructure	Site Cooling plant		Present		2	2	mixed
Waitakere Hospital - 55 Lincoln Rd	Site Wide	Mechanical Infrastructure	Site Cooling pipes		Present		2	2	mixed
Waitakere Hospital - 55 Lincoln Rd	Site Wide	Mechanical Infrastructure	Site Cold Water supply tanks		Not Present				
Waitakere Hospital - 55 Lincoln Rd	Site Wide	Mechanical Infrastructure	Site Hot Water storage		Not Present				
Waitakere Hospital - 55 Lincoln Rd	Site Wide	Mechanical Infrastructure	Site Fire Water storage tanks		Not Present				
Waitakere Hospital - 55 Lincoln Rd	Site Wide	Mechanical Infrastructure	Site Heating Plant		Present		2	2	mixed
Waitakere Hospital - 55 Lincoln Rd	Site Wide	Mechanical Infrastructure	Site Hot and Cold Water site pipes		Present		4	2	original

Out of scope

[redacted]

Raw Condition Scores

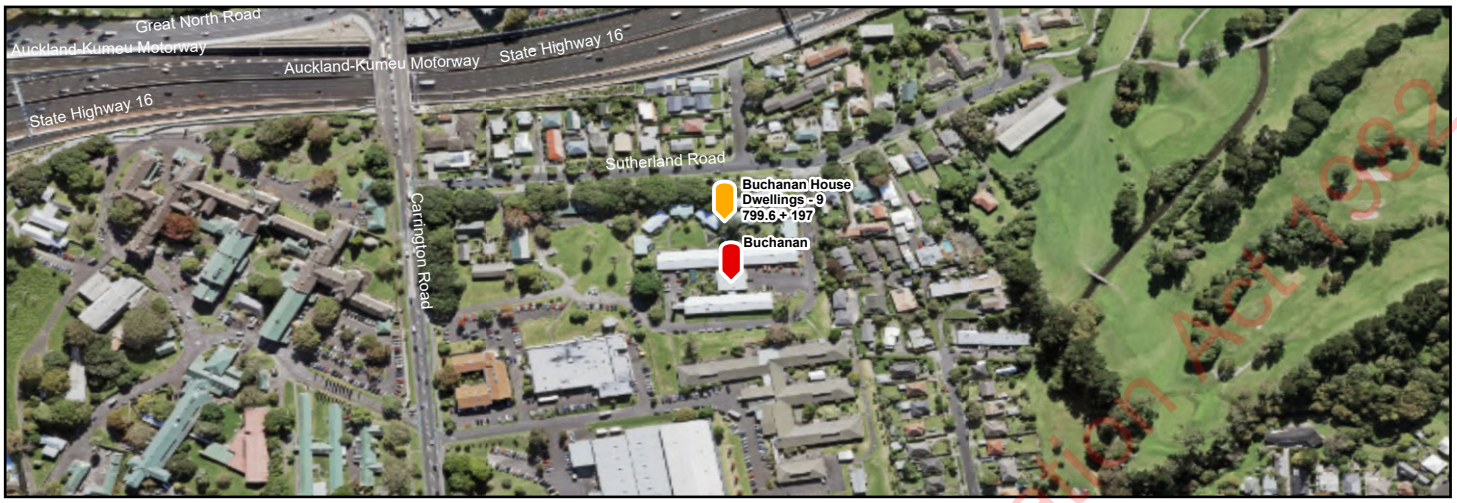
Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									

Point Chevalier

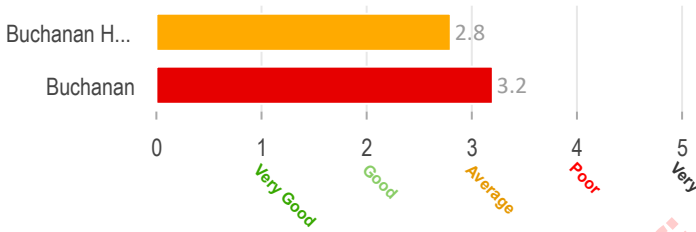
Auckland DHB

Beca Campus ID: 803
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 27/08/2019

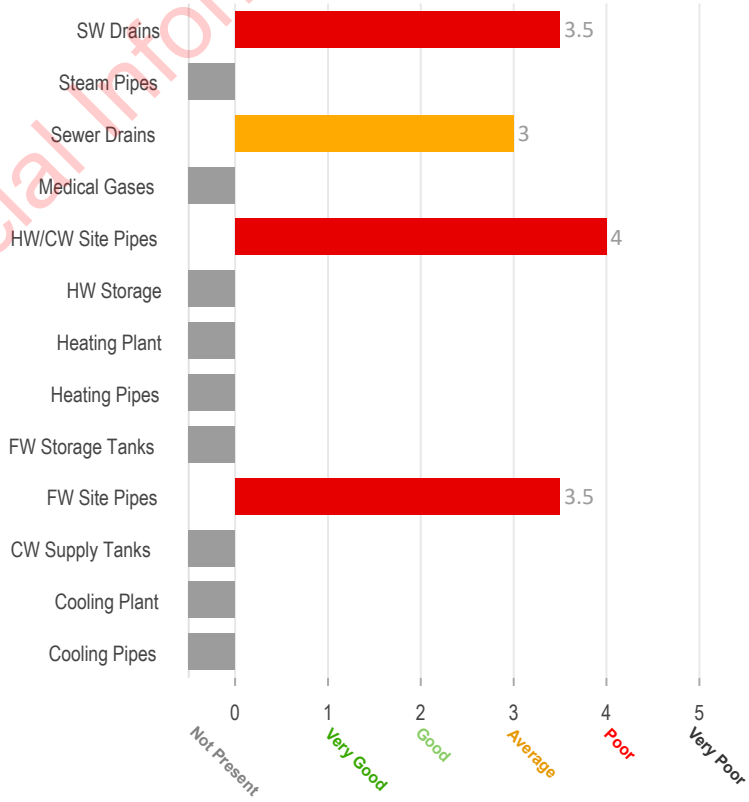
Site Overview



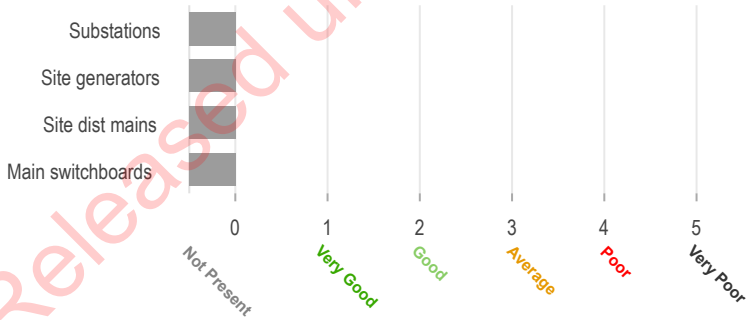
Buildings Surveyed



Site wide Mechanical Infrastructure Condition



Site wide Electrical Infrastructure Condition



Engineering Commentary

Generally buildings inspected were of average condition. Roof maintenance to the House Dwellings will help prolong their life. Known Asbestos issues.

Main switchboard, substation or mains cabling infrastructure were not inspected due to maintenance contractors unable to locate onsite. We understand the maintenance contractors have recently taken over the maintenance contract.

Mechanical services were generally of average to poor condition. Equipment are original and generally near the end of their economical life. Some areas lack ventilation and active cooling. No sitewide fire and water storage tanks. No central medical gases and vacuum systems present.

Buchanan House Dwellings - 9 799.6 +

Point Chevalier (Auckland DHB)

Beca Building ID: 188
NAMP ID: 10055
DHB Ref: 26-34
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior

Services & Fabric Score

2.8

DHB Assessed % *NBS* Rating

No Data

General Building Information

Approximate Building Age: 2002

Survey date: 10/05/2019

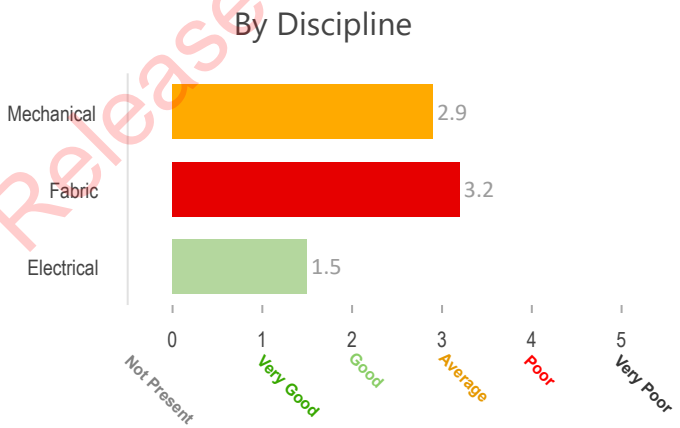
Gross Floor Area (m2): 996.6

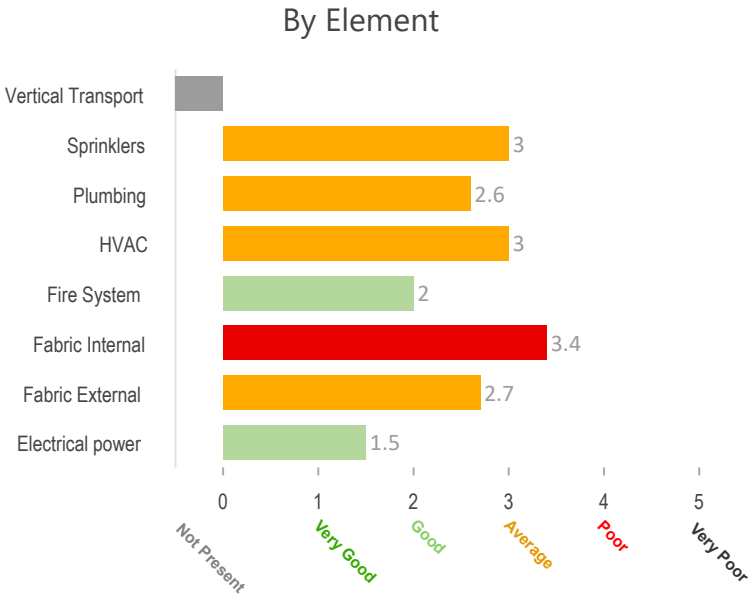
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Low likelihood of issues

Seismic Services Restraint: Very Poor

Summary of building condition





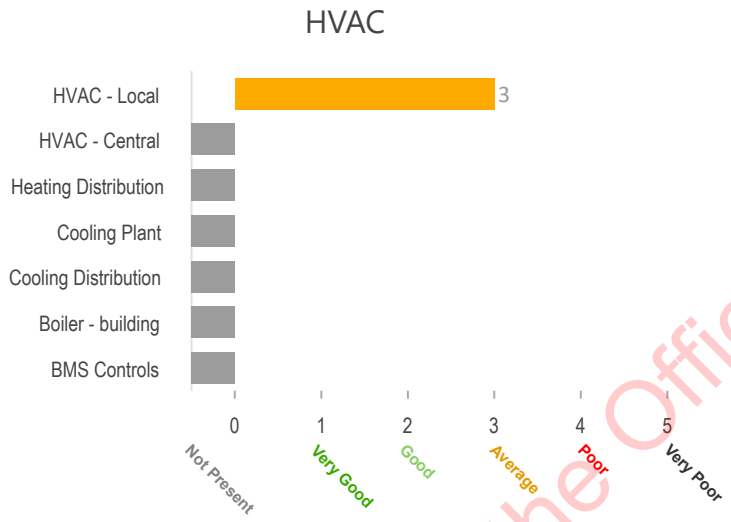
Beca Building ID: 188
NAMP ID: 10055
DHB Ref: 26-34
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

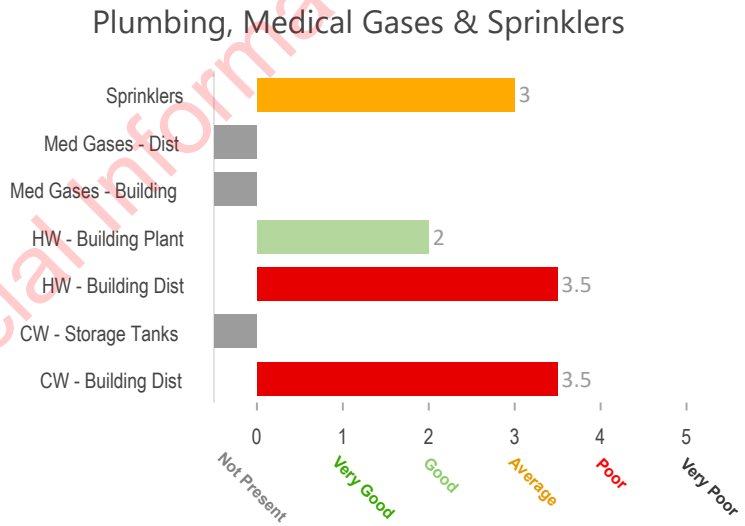
Approximate building location

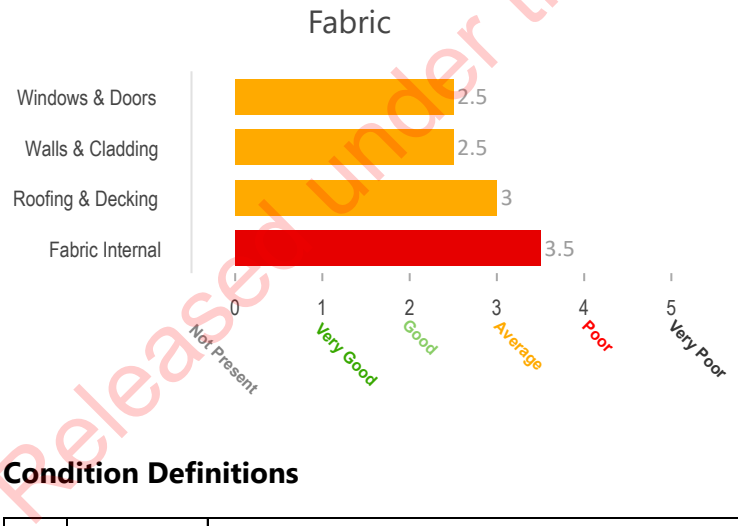
Buchanan House Dwellings - 9 799.6 + 197

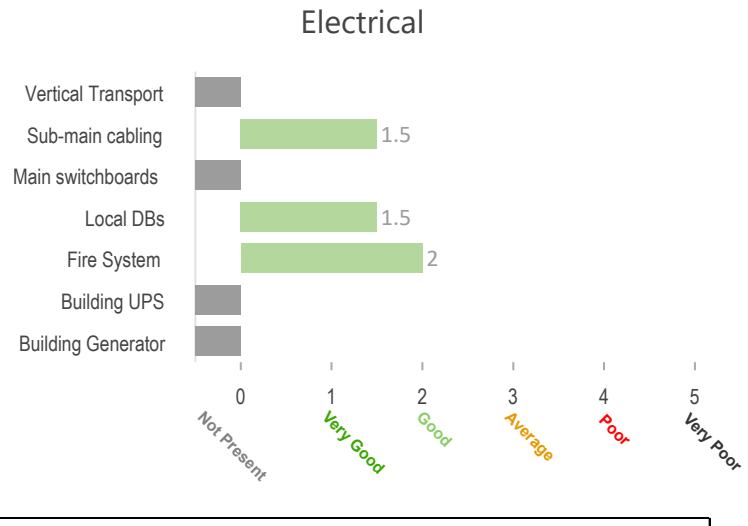
Path: C:\Local\Jobs\437458\01 Map\NAMP_InterimReports_Local.aprx/Building Detail

Summary of building element condition details









Condition Definitions

Rating	Condition	Definition (Services and Fabric)
	Not Present	Assets were not present or inaccessible when site was visited.
1	Very Good	Assets displaying no deterioration or only normal routine maintenance required. New or near new condition. Some wear or discoloration but no evidence of damage. Can include repaired assets where the repair is as good as the original.
2	Good	Assets displaying limited deterioration which does not affect their use, or where limited restoration has been performed. Minor reactive maintenance may be required. Acceptable physical condition, with minor deterioration or damage that may affect performance (includes most repaired assets)
3	Average	Assets which have deteriorated to a degree where maintenance is obviously due, but not to the extent where the function is significantly impaired or very substantial repairs are needed. Failure unlikely in near future but further deterioration is likely
4	Poor	Repair or renewal is required in the short term. Significant deterioration or damage is evident and severely impacting performance. Asset is barely serviceable and failure likely in short term
5	Very Poor	Immediate repair or renewal required. Asset is not in use or unserviceable (i.e. has failed) or failure is imminent. Asset may pose occupational health and safety problems. Requires urgent attention.

Buchanan

Point Chevalier (Auckland DHB)

Beca Building ID: 187
NAMP ID: 10054
DHB Ref: 25
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior

Services & Fabric Score

3.2

DHB Assessed % *NBS* Rating

75% IL2

General Building Information

Approximate Building Age: 1973

Survey date: 9/05/2019

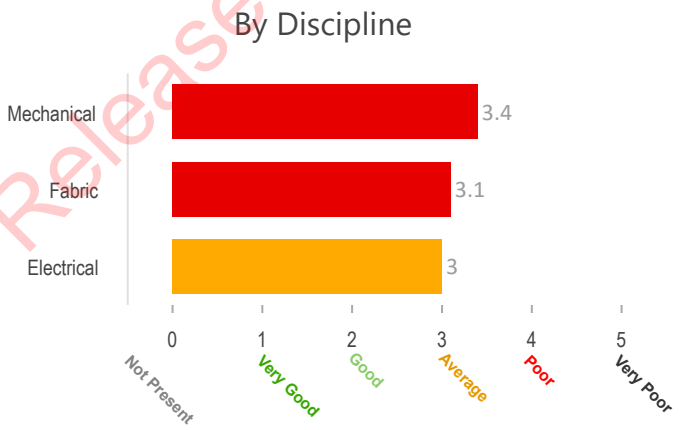
Gross Floor Area (m2): 2294.25

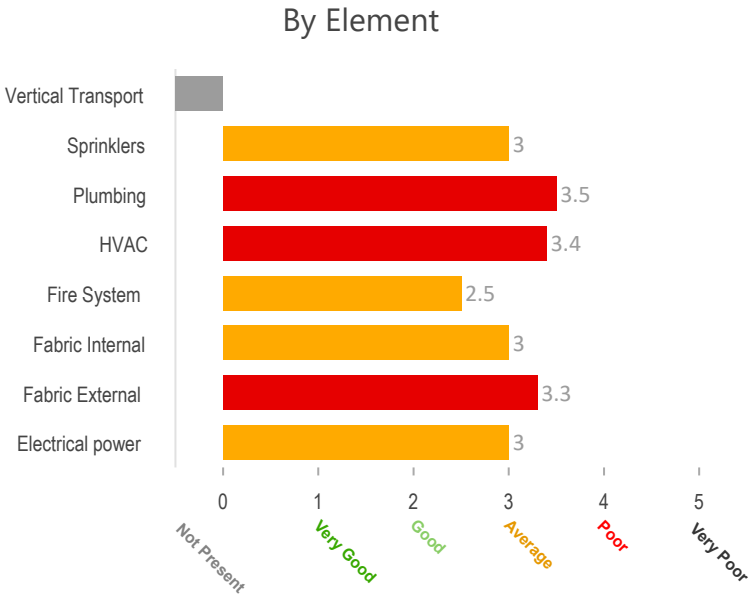
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Significant known issues

Seismic Services Restraint: Very Poor

Summary of building condition



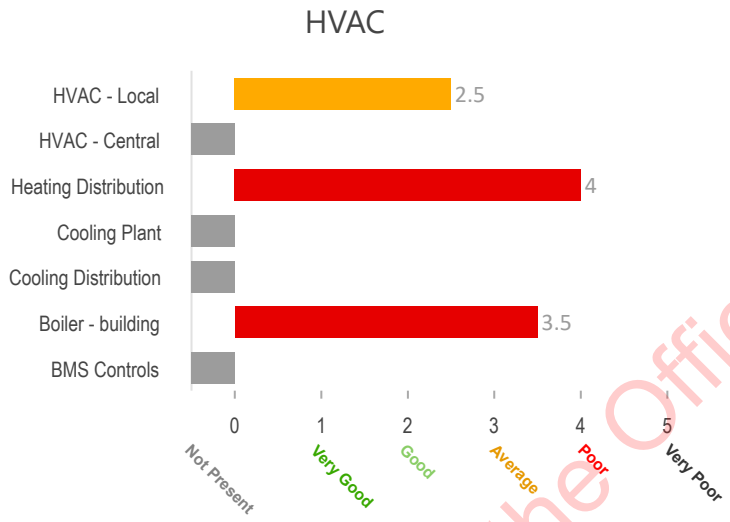


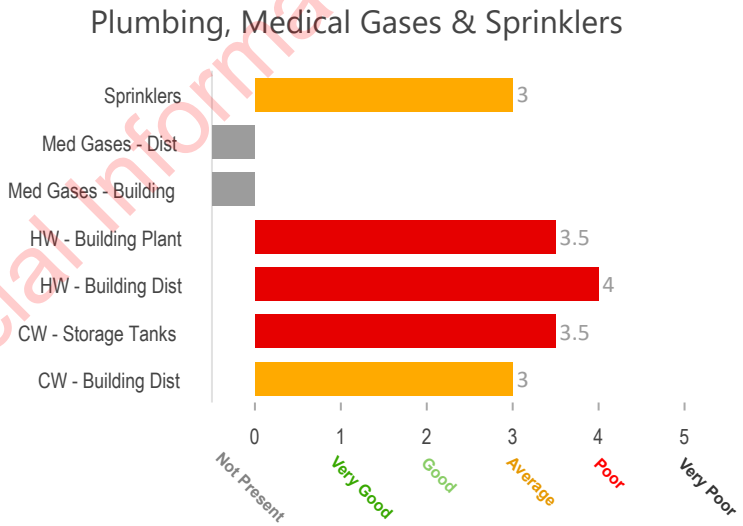
Beca Building ID: 187
NAMP ID: 10054
DHB Ref: 25
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

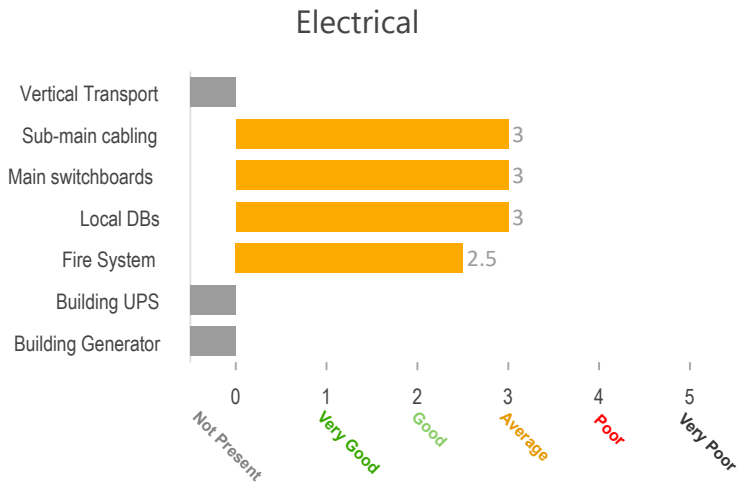
Approximate building location

Buchanan

Summary of building element condition details







Condition Definitions

Rating	Condition	Definition (Services and Fabric)
	Not Present	Assets were not present or inaccessible when site was visited.
1	Very Good	Assets displaying no deterioration or only normal routine maintenance required. New or near new condition. Some wear or discoloration but no evidence of damage. Can include repaired assets where the repair is as good as the original.
2	Good	Assets displaying limited deterioration which does not affect their use, or where limited restoration has been performed. Minor reactive maintenance may be required. Acceptable physical condition, with minor deterioration or damage that may affect performance (includes most repaired assets)
3	Average	Assets which have deteriorated to a degree where maintenance is obviously due, but not to the extent where the function is significantly impaired or very substantial repairs are needed. Failure unlikely in near future but further deterioration is likely
4	Poor	Repair or renewal is required in the short term. Significant deterioration or damage is evident and severely impacting performance. Asset is barely serviceable and failure likely in short term
5	Very Poor	Immediate repair or renewal required. Asset is not in use or unserviceable (i.e. has failed) or failure is imminent. Asset may pose occupational health and safety problems. Requires urgent attention.

Services and Fabric - Survey Methodology and scope:

The main uses of this condition review are:

- To inform the MoH on the general condition of the critical buildings within the NZ health estate
- To be a base for future development of building condition
- To assist in making decisions between projects vying for a finite capital spend budget
- To provide for comparison between DHBs and inform long term, high level budget planning (projects >$10M)

Scoring of the assets is on a scale of 1(very good) to 5 (very poor). Building scores have been obtained from a weighted average of elements reflecting their estimated percentage of an overall building replacement cost.

In addition to the condition, the score/rating of each element also accounts for the age and variability (whether the element in the building was of a similar condition throughout the building ie some lifts that are good condition and others that are poor condition/age) of the element assessed.

Each element has been factored, with the weighting criteria applied to each element condition score according to their proportional cost impact on the building (ie HVAC attracts a higher impact than plumbing).

Services plant and equipment have been assessed under the building in which they are housed, unless the plant/equipment also serves other buildings on the site, in which case these have been assessed under site wide infrastructure.

Full details of the survey methodology are contained in the Beca NAMP Asset Condition Survey Data Standard and Methodology Rev.D, dated 25th April 2019.

Services and Fabric - Survey Assumptions and Exclusions:

The survey is to inform high level MoH decision making, not DHB asset management purposes, and has been based around a combination of information provided by DHB site representatives and limited site observation.

Our site inspection and survey comprise a high level visual inspection only. No inspections were undertaken of wall framing, ceiling voids, floor voids or other parts of the asset which were covered, unexposed or inaccessible and we are therefore unable to report that any such part of the property is free from significant defect. The survey should not be construed as a detailed building condition survey for specific asset repair and maintenance budget planning, since service and location specific methodology around replacement is likely to be required.

Our site inspection data has been provided as an 'indicative assessment' generalising the current condition by discipline only. Its purpose is to support general system level commentary to assist in directing master planning decisions. The review does not provide assessment of:

- Performance, reliability or fitness for purpose
- Capacity of plant or systems
- Operational efficiency of specific plant or systems.
- Resilience and redundancy of systems

It is assumed that a building, its services (and any alterations) have been designed and constructed in accordance with the Building Code current at the time of the construction. Infrastructure assessments have been primarily based on advice from site teams with visual observation where accessible and provided.

A number of aspects were not requested to form part of the survey scope and are noted as excluded from this report. These include:

- Clinical Equipment
- Cool Rooms and Refrigeration Equipment
- Information and Communication Technology (data and comm's)
- Carriageways or civil works
- Other General Equipment (e.g. kitchen)
- Other Specialised Equipment (e.g. biosafety and fume cabinets, Lamson Tube system)
- Security, Nurse Call Services & the like
- On site Structural engineering reviews

DHB Assessed *% NBS* Ratings:

The DHB assessed *%NBS* ratings included in this report have been provided by the DHBs via the Ministry of Health and have not been reviewed, checked or validated for accuracy or completeness.

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Point Chevalier	Buchanan	Electrical Power	Sub-main cabling		Present		3	2	mixed
Point Chevalier	Buchanan	Electrical Power	Building Generator		Not Present				
Point Chevalier	Buchanan	Electrical Power	Site Generator			no			
Point Chevalier	Buchanan	Electrical Power	Building UPS		Not Present				
Point Chevalier	Buchanan	Electrical Power	Local DBs		Present		3	1	original
Point Chevalier	Buchanan	Electrical Power	Building Main Switchboard		Present		3	1	original
Point Chevalier	Buchanan	Fabric External	Roofing and Decking	Iron/metal	Present		3	2	10+
Point Chevalier	Buchanan	Fabric External	Walls and Cladding	Masonry	Present		3	2	original
Point Chevalier	Buchanan	Fabric External	Walls and Cladding	Sheet	Present		3	2	original
Point Chevalier	Buchanan	Fabric External	Walls and Cladding	Curtain Wall	Present		3	2	original
Point Chevalier	Buchanan	Fabric External	Windows and Doors	Wood	Present		3	2	original
Point Chevalier	Buchanan	Fabric External	Windows and Doors	Aluminium	Present		3	2	original
Point Chevalier	Buchanan	Fabric Internal	G		Present		3	2	3 to 10
Point Chevalier	Buchanan	Fire Alarm	Petronic		Present		3	1	10+
Point Chevalier	Buchanan	HVAC	Boiler Plant - Site Plant			no			
Point Chevalier	Buchanan	HVAC	Boiler Plant in building		Present		4	1	original
Point Chevalier	Buchanan	HVAC	Heating Distribution		Present		4	2	original
Point Chevalier	Buchanan	HVAC	Cooling Plant - Site Plant			no			
Point Chevalier	Buchanan	HVAC	Cooling Plant in building		Not Present				
Point Chevalier	Buchanan	HVAC	Cooling Distribution		Not Present				
Point Chevalier	Buchanan	HVAC	Building HVAC - Central plant		Not Present				
Point Chevalier	Buchanan	HVAC	Building HVAC - Local plant		Present		2	2	10+
Point Chevalier	Buchanan	HVAC	BMS Controls		Not Present				
Point Chevalier	Buchanan	Plumbing	Hot water - Site Plant			no			
Point Chevalier	Buchanan	Plumbing	Hot water - Building plant		Present		4	1	original
Point Chevalier	Buchanan	Plumbing	Hot water - Building distribution		Present		4	2	original
Point Chevalier	Buchanan	Plumbing	Cold water - Site storage and mains			yes			
Point Chevalier	Buchanan	Plumbing	Cold water - Building storage tanks		Present		4	1	original
Point Chevalier	Buchanan	Plumbing	Cold water - Building distribution		Present		3	1	original
Point Chevalier	Buchanan	Plumbing	Medical gases and vacuum - Site Plant			no			
Point Chevalier	Buchanan	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Point Chevalier	Buchanan	Plumbing	Medical gases and vacuum distribution		Not Present				
Point Chevalier	Buchanan	Sprinklers	Sprinklers		Present		3	1	original
Point Chevalier	Buchanan	Vertical Transport			Not Present				
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	Electrical Power	Building Main Switchboard		Not Present				
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	Electrical Power	Local DBs		Present		2	1	3 to 10
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	Electrical Power	Sub-main cabling		Present		2	1	10+
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	Electrical Power	Building UPS		Not Present				
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	Electrical Power	Building Generator		Not Present				
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	Electrical Power	Site Generator			no			
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	Fabric External	Roofing and Decking	Iron/metal	Present		3	2	10+
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	Fabric External	Walls and Cladding	Sheet	Present		2	2	original
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	Fabric External	Windows and Doors	Aluminium	Present		2	2	original
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	Fabric Internal	G		Present		3	2	original
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	Fire Alarm	Petronic		Present		2	1	original

Raw Condition Scores

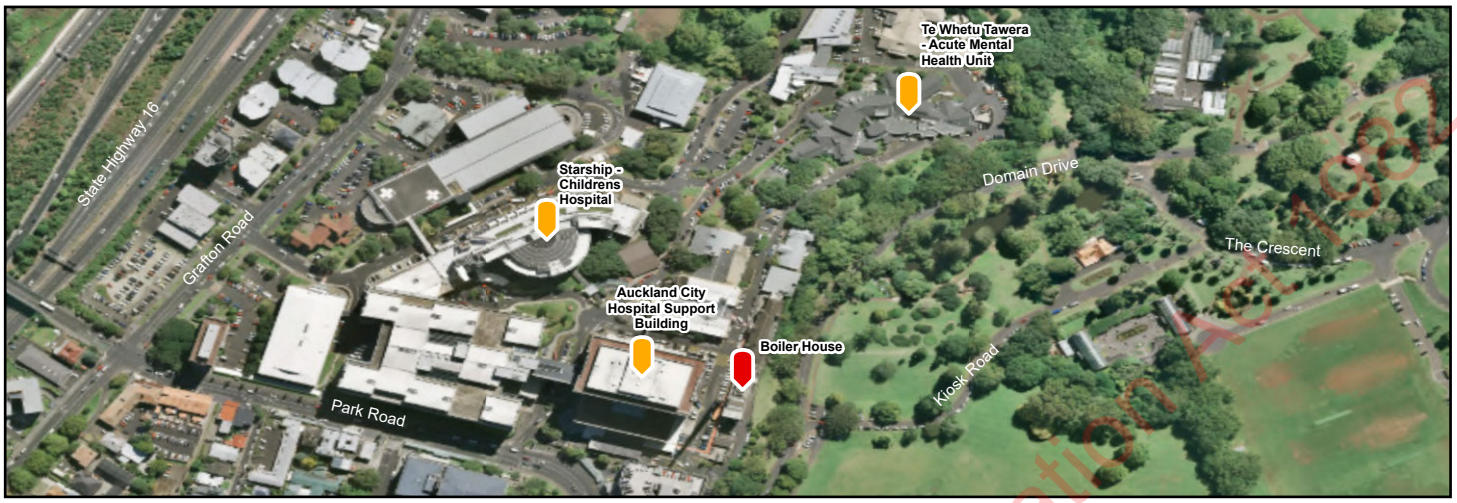
Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	HVAC	Boiler Plant - Site Plant			no			
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	HVAC	Boiler Plant in building		Not Present				
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	HVAC	Heating Distribution		Not Present				
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	HVAC	Cooling Plant - Site Plant			no			
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	HVAC	Cooling Plant in building		Not Present				
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	HVAC	Cooling Distribution		Not Present				
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	HVAC	Building HVAC - Central plant		Not Present				
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	HVAC	Building HVAC - Local plant		Present		3	1	original
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	HVAC	BMS Controls		Not Present				
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	Plumbing	Hot water - Site Plant			no			
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	Plumbing	Hot water - Building plant		Present		2	1	original
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	Plumbing	Hot water - Building distribution		Present		3	2	original
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	Plumbing	Cold water - Site storage and mains			yes			
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	Plumbing	Cold water - Building storage tanks		Not Present				
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	Plumbing	Cold water - Building distribution		Present		3	2	original
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	Plumbing	Medical gases and vacuum - Site Plant			no			
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	Plumbing	Medical gases and vacuum distribution		Not Present				
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	Sprinklers	Sprinklers		Present		3	1	original
Point Chevalier	Buchanan House Dwellings - 9 799.6 + 197	Vertical Transport			Not Present				
Point Chevalier	Site Wide	Electrical Infrastructure	Site generators		Not Present				
Point Chevalier	Site Wide	Electrical Infrastructure	Substations	No information/access					
Point Chevalier	Site Wide	Electrical Infrastructure	Main switchboards	No information/access					
Point Chevalier	Site Wide	Electrical Infrastructure	Site distribution mains	No information/access					
Point Chevalier	Site Wide	Mechanical Infrastructure	Site Heating Plant		Not Present				
Point Chevalier	Site Wide	Mechanical Infrastructure	Site Heating pipes		Not Present				
Point Chevalier	Site Wide	Mechanical Infrastructure	Site Steam pipes		Not Present				
Point Chevalier	Site Wide	Mechanical Infrastructure	Site Cooling plant		Not Present				
Point Chevalier	Site Wide	Mechanical Infrastructure	Site Cooling pipes		Not Present				
Point Chevalier	Site Wide	Mechanical Infrastructure	Site Cold Water supply tanks		Not Present				
Point Chevalier	Site Wide	Mechanical Infrastructure	Site Hot Water storage		Not Present				
Point Chevalier	Site Wide	Mechanical Infrastructure	Site Hot and Cold Water site pipes		Present		3	3	original
Point Chevalier	Site Wide	Mechanical Infrastructure	Site Fire Water storage tanks		Not Present				
Point Chevalier	Site Wide	Mechanical Infrastructure	Site Fire Water site pipes		Present		3	2	original
Point Chevalier	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Not Present				
Point Chevalier	Site Wide	Mechanical Infrastructure	Site sewer drains		Present		3	1	original
Point Chevalier	Site Wide	Mechanical Infrastructure	Site storm water drains		Present		3	2	original

Auckland City Hospital

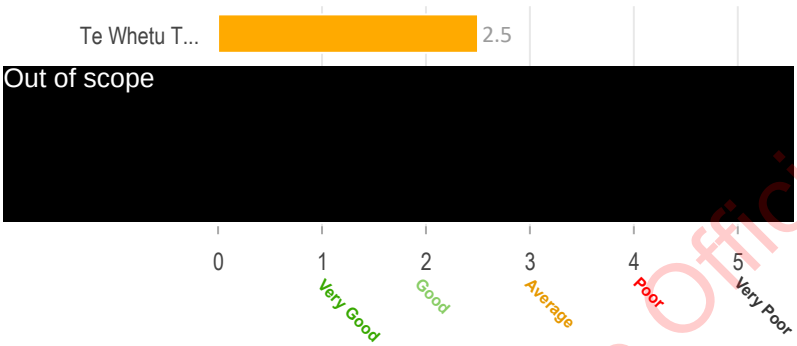
Auckland DHB

Beca Campus ID: 801
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 27/08/2019

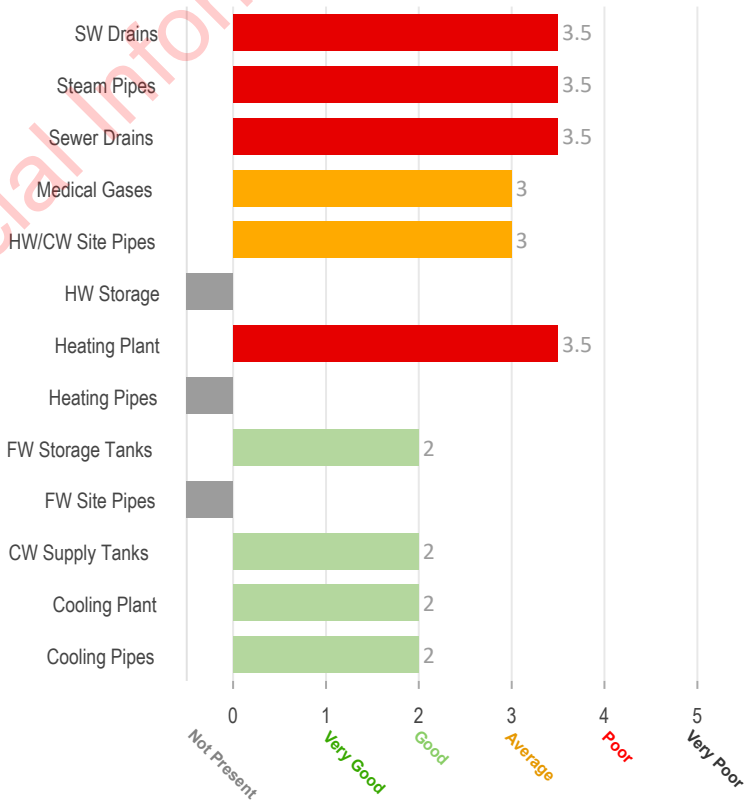
Site Overview



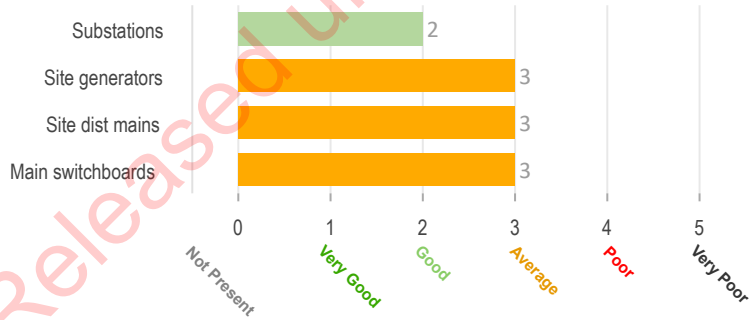
Buildings Surveyed



Site wide Mechanical Infrastructure Condition



Site wide Electrical Infrastructure Condition



Engineering Commentary

Generally buildings inspected were of average condition except the Boiler House which was poor condition. Internal fabric of the buildings generally faring better than the exterior. Main deficiencies noted are the failing of roofing, particularly waterproofing membranes and sheet cladding at the Mental health unit. Significant known Asbestos issues.

Incoming HV power supply to the site has been recently upgraded in 2018. Capacity has been sized to accommodate projected load growth to 2040. Backup power generation is provided via 2 x 1.8MW gas boilers (operated by Pioneer Energy), and 3 no. diesel generators. An additional 2 x 1.8MW diesel generators will be installed by the end of 2019. Some of the LV main switchboards serving the site and significant buildings were observed to be original (circa 1960s) and we understand spare parts are no longer available.

Mechanical services are mixture of good (chiller system) and poor (boilers system) condition. No chilled water site ring mains, chilled water pipework in star formation only. Some areas lack ventilation and active cooling. Asbestos present in many areas (e.g. services tunnels, most part of Boiler House). Site wide fire and water tanks do not serve all the buildings.

Te Whetu Tawera - Acute Mental Health

Auckland City Hospital (Auckland DHB)

Beca Building ID: 100
NAMP ID: 10022
DHB Ref: 35
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior

Services & Fabric Score

2.5

DHB Assessed % *NBS* Rating

100% IL3

General Building Information

Approximate Building Age: 2003

Survey date: 6/05/2019

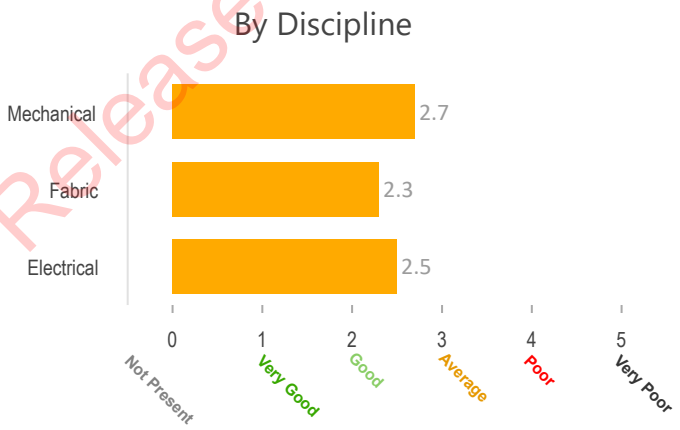
Gross Floor Area (m2): 5013.6

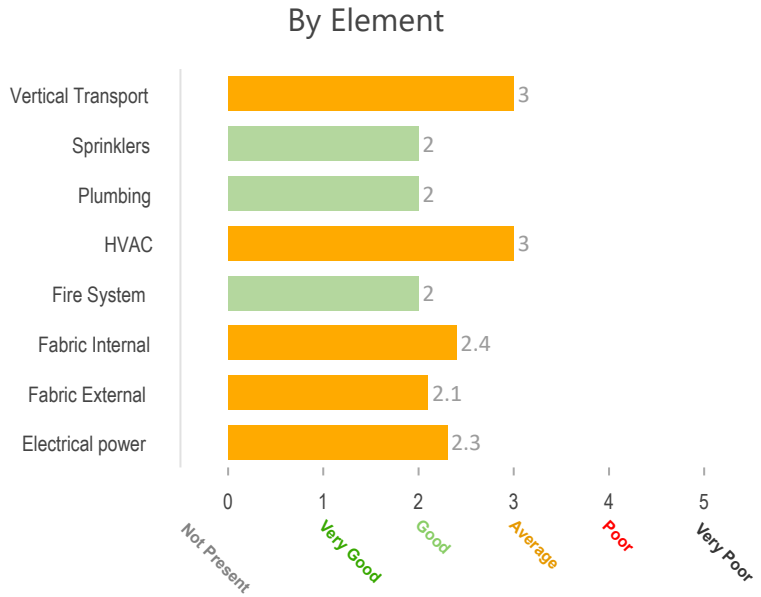
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Low likelihood of issues

Seismic Services Restraint: Very Poor

Summary of building condition



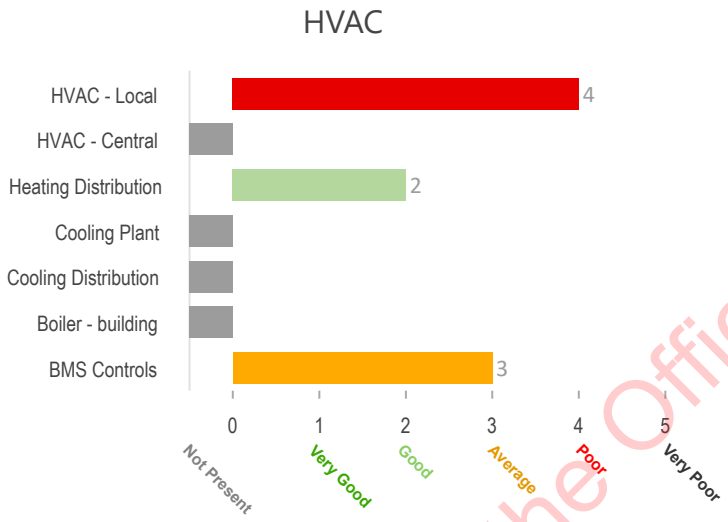


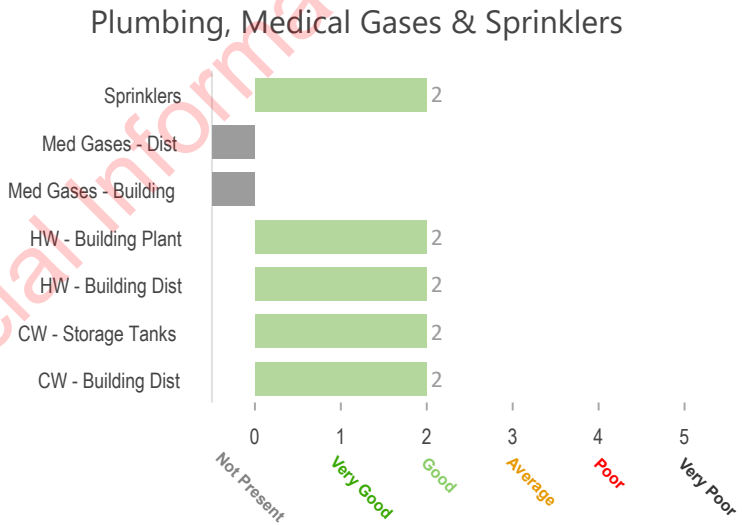
Beca Building ID: 100
NAMP ID: 10022
DHB Ref: 35
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

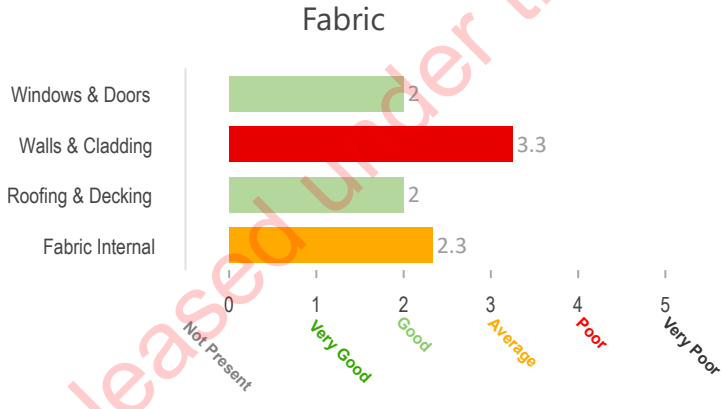
Approximate building location

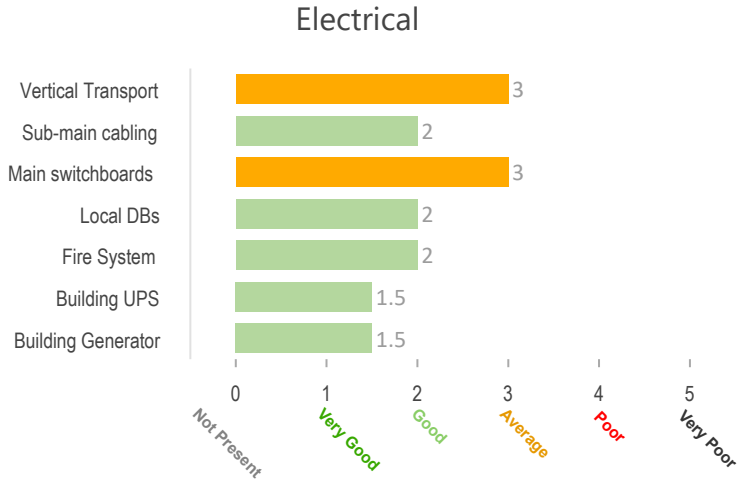
Te Whetu Tawera - Acute Mental Health Unit

Summary of building element condition details









Condition Definitions

Rating	Condition	Definition (Services and Fabric)
	Not Present	Assets were not present or inaccessible when site was visited.
1	Very Good	Assets displaying no deterioration or only normal routine maintenance required. New or near new condition. Some wear or discoloration but no evidence of damage. Can include repaired assets where the repair is as good as the original.
2	Good	Assets displaying limited deterioration which does not affect their use, or where limited restoration has been performed. Minor reactive maintenance may be required. Acceptable physical condition, with minor deterioration or damage that may affect performance (includes most repaired assets)
3	Average	Assets which have deteriorated to a degree where maintenance is obviously due, but not to the extent where the function is significantly impaired or very substantial repairs are needed. Failure unlikely in near future but further deterioration is likely
4	Poor	Repair or renewal is required in the short term. Significant deterioration or damage is evident and severely impacting performance. Asset is barely serviceable and failure likely in short term
5	Very Poor	Immediate repair or renewal required. Asset is not in use or unserviceable (i.e. has failed) or failure is imminent. Asset may pose occupational health and safety problems. Requires urgent attention.

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Services and Fabric - Survey Methodology and scope:

The main uses of this condition review are:

- To inform the MoH on the general condition of the critical buildings within the NZ health estate
- To be a base for future development of building condition
- To assist in making decisions between projects vying for a finite capital spend budget
- To provide for comparison between DHBs and inform long term, high level budget planning (projects >$10M)

Scoring of the assets is on a scale of 1(very good) to 5 (very poor). Building scores have been obtained from a weighted average of elements reflecting their estimated percentage of an overall building replacement cost.

In addition to the condition, the score/rating of each element also accounts for the age and variability (whether the element in the building was of a similar condition throughout the building ie some lifts that are good condition and others that are poor condition/age) of the element assessed.

Each element has been factored, with the weighting criteria applied to each element condition score according to their proportional cost impact on the building (ie HVAC attracts a higher impact than plumbing).

Services plant and equipment have been assessed under the building in which they are housed, unless the plant/equipment also serves other buildings on the site, in which case these have been assessed under site wide infrastructure.

Full details of the survey methodology are contained in the Beca NAMP Asset Condition Survey Data Standard and Methodology Rev.D, dated 25th April 2019.

Services and Fabric - Survey Assumptions and Exclusions:

The survey is to inform high level MoH decision making, not DHB asset management purposes, and has been based around a combination of information provided by DHB site representatives and limited site observation.

Our site inspection and survey comprise a high level visual inspection only. No inspections were undertaken of wall framing, ceiling voids, floor voids or other parts of the asset which were covered, unexposed or inaccessible and we are therefore unable to report that any such part of the property is free from significant defect. The survey should not be construed as a detailed building condition survey for specific asset repair and maintenance budget planning, since service and location specific methodology around replacement is likely to be required.

Our site inspection data has been provided as an 'indicative assessment' generalising the current condition by discipline only. Its purpose is to support general system level commentary to assist in directing master planning decisions. The review does not provide assessment of:

- Performance, reliability or fitness for purpose
- Capacity of plant or systems
- Operational efficiency of specific plant or systems.
- Resilience and redundancy of systems

It is assumed that a building, its services (and any alterations) have been designed and constructed in accordance with the Building Code current at the time of the construction. Infrastructure assessments have been primarily based on advice from site teams with visual observation where accessible and provided.

A number of aspects were not requested to form part of the survey scope and are noted as excluded from this report. These include:

- Clinical Equipment
- Cool Rooms and Refrigeration Equipment
- Information and Communication Technology (data and comm's)
- Carriageways or civil works
- Other General Equipment (e.g. kitchen)
- Other Specialised Equipment (e.g. biosafety and fume cabinets, Lamson Tube system)
- Security, Nurse Call Services & the like
- On site Structural engineering reviews

DHB Assessed *% NBS* Ratings:

The DHB assessed *%NBS* ratings included in this report have been provided by the DHBs via the Ministry of Health and have not been reviewed, checked or validated for accuracy or completeness.

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									
Auckland City Hospital	Site Wide	Electrical Infrastructure	Main switchboards		Present		3	2	mixed
Auckland City Hospital	Site Wide	Electrical Infrastructure	Site generators		Present		3	2	mixed
Auckland City Hospital	Site Wide	Electrical Infrastructure	Site distribution mains		Present		3	2	mixed
Auckland City Hospital	Site Wide	Mechanical Infrastructure	Site Heating Plant		Present		4	2	mixed
Auckland City Hospital	Site Wide	Mechanical Infrastructure	Site Steam pipes		Present		3	2	original
Auckland City Hospital	Site Wide	Mechanical Infrastructure	Site Heating pipes		Not Present				
Auckland City Hospital	Site Wide	Mechanical Infrastructure	Site Cooling plant		Present		2	2	mixed

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Auckland City Hospital	Site Wide	Mechanical Infrastructure	Site Cooling pipes		Present		2	2	mixed
Auckland City Hospital	Site Wide	Mechanical Infrastructure	Site Cold Water supply tanks		Present		2	1	original
Auckland City Hospital	Site Wide	Mechanical Infrastructure	Site Hot Water storage		Not Present				
Auckland City Hospital	Site Wide	Mechanical Infrastructure	Site Hot and Cold Water site pipes		Present		3	2	mixed
Auckland City Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water storage tanks		Present		2	1	original
Auckland City Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water site pipes		Not Present				
Auckland City Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		3	2	mixed
Auckland City Hospital	Site Wide	Mechanical Infrastructure	Site sewer drains		Present		3	2	original
Auckland City Hospital	Site Wide	Mechanical Infrastructure	Site storm water drains		Present		3	2	original

Out of scope

[redacted]

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Electrical Power	Local DBs		Present		2	1	original
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Electrical Power	Site Generator			no			
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Electrical Power	Building Generator		Present		2	1	10+
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Electrical Power	Building UPS		Present		2	1	3 to 10
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Electrical Power	Building Main Switchboard		Present		3	1	original
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Electrical Power	Sub-main cabling		Present		2	1	original
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Fabric External	Roofing and Decking	Iron/metal	Present		2	1	original
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Fabric External	Roofing and Decking	Rubber Sheet	Present		2	1	original
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Fabric External	Walls and Cladding	Concrete	Present		2	2	original
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Fabric External	Walls and Cladding	Sheet	Present		3	2	original
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Fabric External	Windows and Doors	Aluminium	Present		2	1	original
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Fabric Internal	G		Present		2	2	original
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Fabric Internal	1		Present		2	2	original
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Fabric Internal	B1		Present		2	1	original
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Fire Alarm	Tyco		Present		2	1	original
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	HVAC	Boiler Plant - Site Plant			yes			
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	HVAC	Boiler Plant in building		Not Present				
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	HVAC	Heating Distribution		Present		2	1	original
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	HVAC	Cooling Plant - Site Plant			no			
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	HVAC	Cooling Plant in building		Not Present				
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	HVAC	Cooling Distribution		Not Present				
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	HVAC	Building HVAC - Central plant		Not Present				
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	HVAC	Building HVAC - Local plant		Present		4	2	mixed
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	HVAC	BMS Controls		Present		3	1	original
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Plumbing	Hot water - Site Plant			no			
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Plumbing	Hot water - Building plant		Present		2	1	original
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Plumbing	Hot water - Building distribution		Present		2	1	original
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Plumbing	Cold water - Site storage and mains			yes			
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Plumbing	Cold water - Building storage tanks		Present		2	1	original
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Plumbing	Cold water - Building distribution		Present		2	1	original
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Plumbing	Medical gases and vacuum - Site Plant			yes			
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Plumbing	Medical gases and vacuum distribution		Not Present				
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Sprinklers	Sprinklers		Present		2	1	original
Auckland City Hospital	Te Whetu Tawera - Acute Mental Health Unit	Vertical Transport	Lift 1		Present		3	1	original

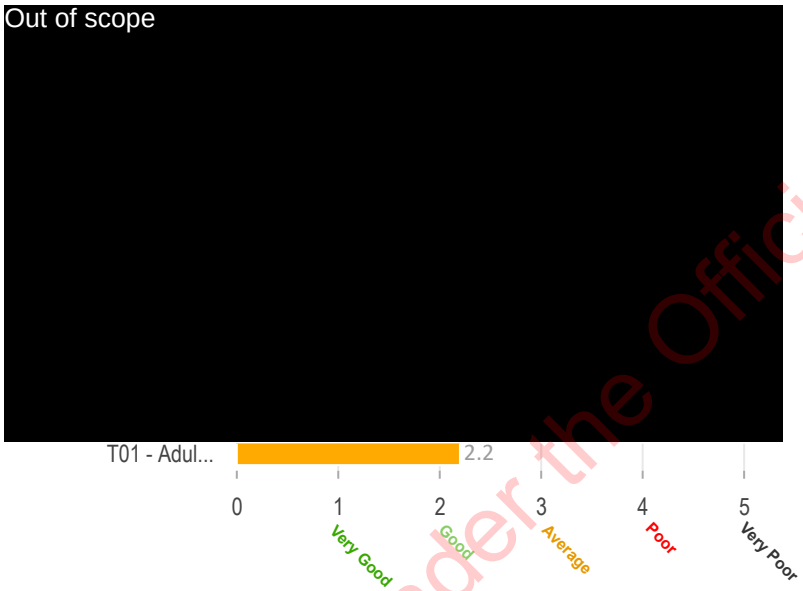
Tauranga Hospital

Bay of Plenty DHB

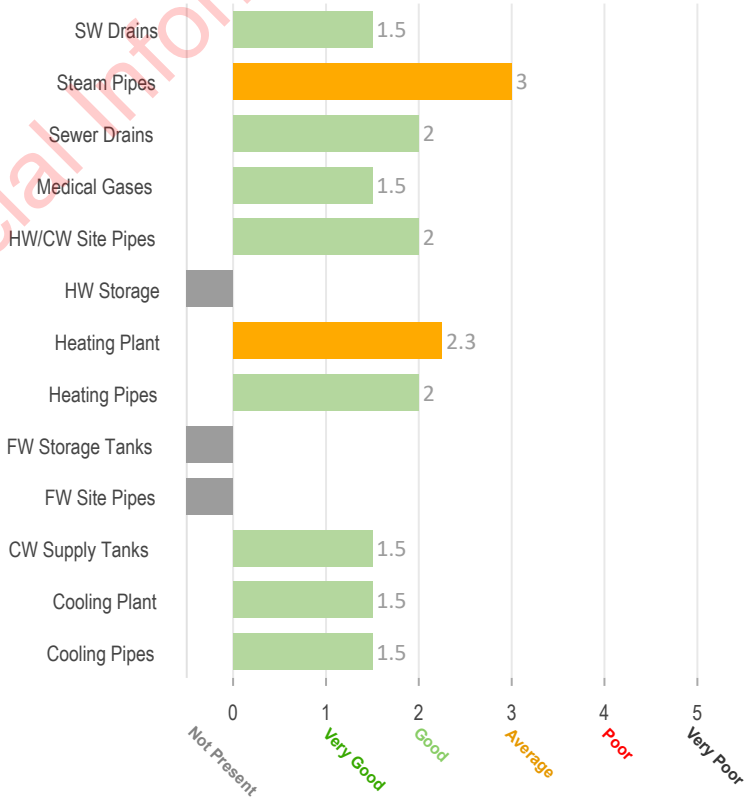
Beca Campus ID: 804
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 27/08/2019

Site Overview

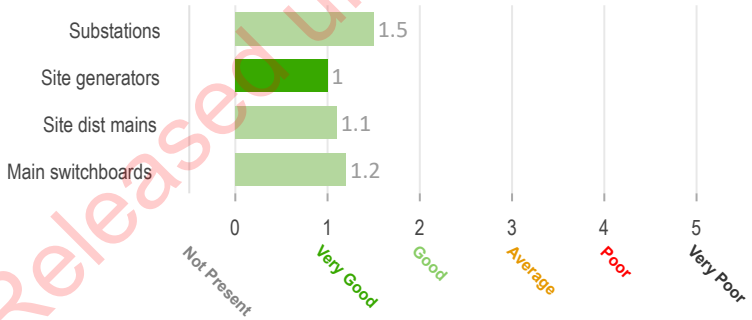
Buildings Surveyed



Site wide Mechanical Infrastructure Condition



Site wide Electrical Infrastructure Condition



Engineering Commentary

Generally a well maintained hospital, Out of scope

The electrical infrastructure is generally in good condition with some small exceptions. A significant project was completed on the standby generator system three years ago including adding additional capacity and improved resilience. Some of the major HV reticulation cables are from the original installation but in good condition.

Mechanical infrastructure was generally in good condition, with the exception of buildings which were not included in the major refurbishment undertaken circa 2007.

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

T01 - Adult Mental Health

Tauranga Hospital (Bay of Plenty DHB)

Beca Building ID: 215
NAMP ID: 10068
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior

Services & Fabric Score

2.2

DHB Assessed % *NBS* Rating

100% IL3

General Building Information

Approximate Building Age: 2002

Survey date: 1/04/2019

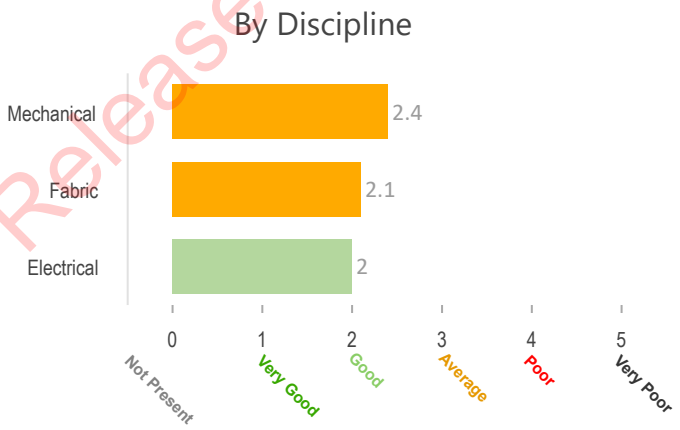
Gross Floor Area (m2): 2219

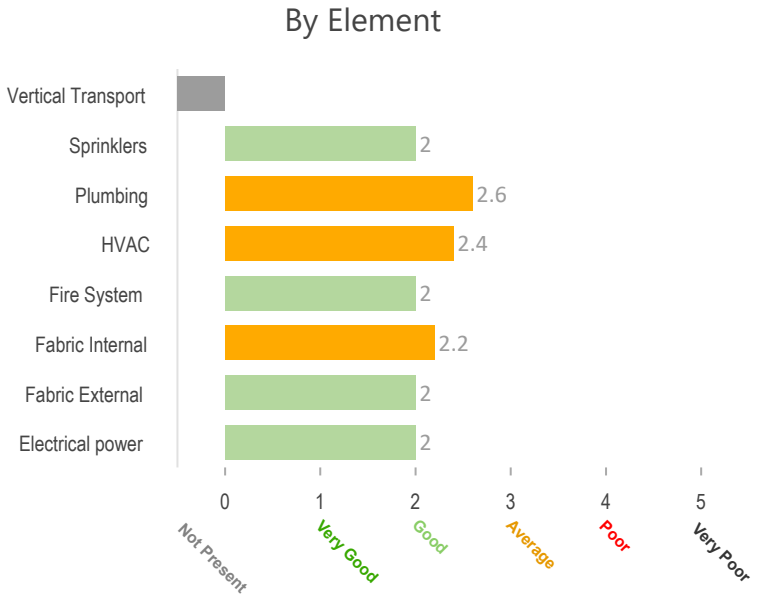
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Low likelihood of issues

Seismic Services Restraint: Poor

Summary of building condition





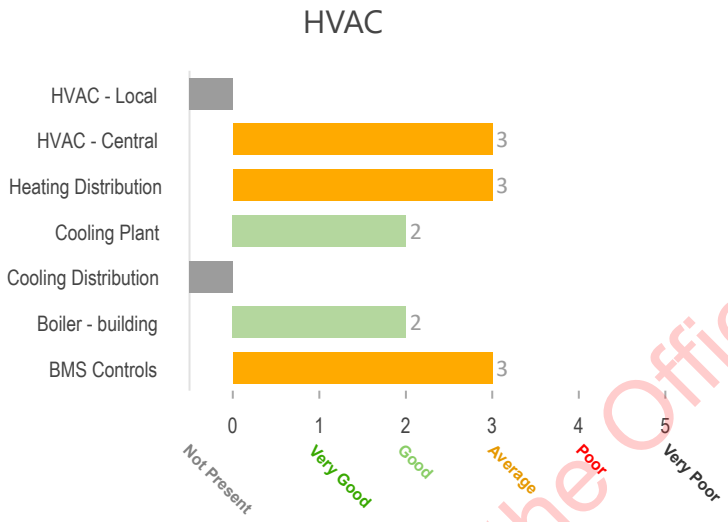
Beca Building ID: 215
NAMP ID: 10068
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

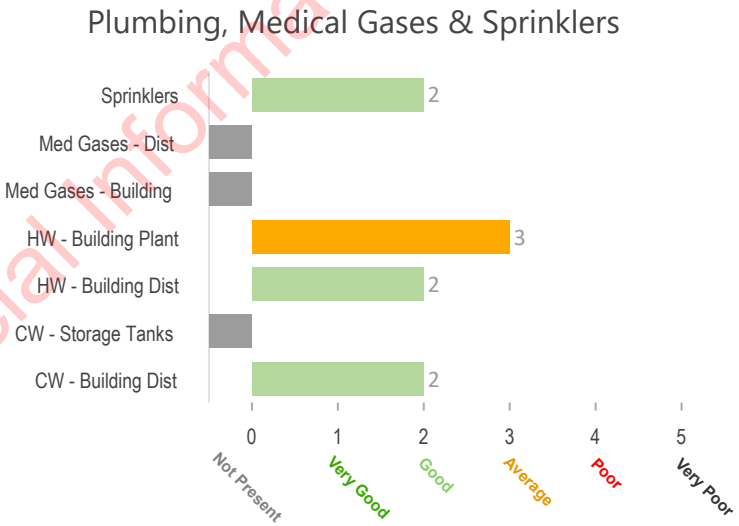
Approximate building location

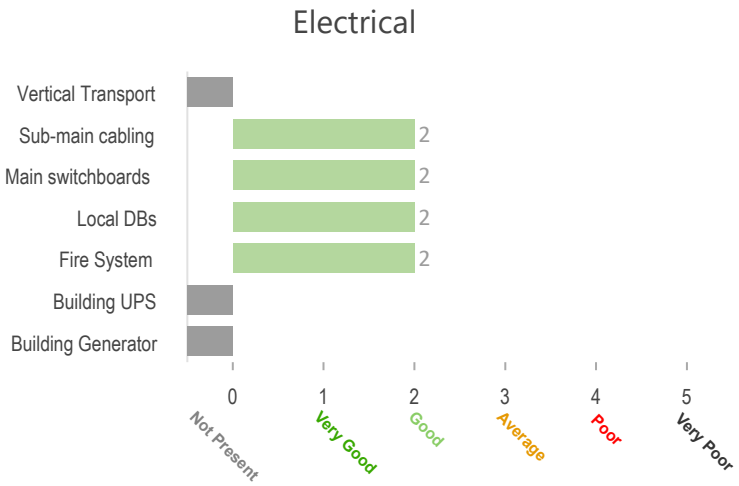
T01 - Adult Mental Health

Path: C:\Local\Jobs\437458\01 Map\NAMP_InterimReports_Local.aprx/Building Detail

Summary of building element condition details







Condition Definitions

Rating	Condition	Definition (Services and Fabric)
	Not Present	Assets were not present or inaccessible when site was visited.
1	Very Good	Assets displaying no deterioration or only normal routine maintenance required. New or near new condition. Some wear or discoloration but no evidence of damage. Can include repaired assets where the repair is as good as the original.
2	Good	Assets displaying limited deterioration which does not affect their use, or where limited restoration has been performed. Minor reactive maintenance may be required. Acceptable physical condition, with minor deterioration or damage that may affect performance (includes most repaired assets)
3	Average	Assets which have deteriorated to a degree where maintenance is obviously due, but not to the extent where the function is significantly impaired or very substantial repairs are needed. Failure unlikely in near future but further deterioration is likely
4	Poor	Repair or renewal is required in the short term. Significant deterioration or damage is evident and severely impacting performance. Asset is barely serviceable and failure likely in short term
5	Very Poor	Immediate repair or renewal required. Asset is not in use or unserviceable (i.e. has failed) or failure is imminent. Asset may pose occupational health and safety problems. Requires urgent attention.

Services and Fabric - Survey Methodology and scope:

The main uses of this condition review are:

- To inform the MoH on the general condition of the critical buildings within the NZ health estate
- To be a base for future development of building condition
- To assist in making decisions between projects vying for a finite capital spend budget
- To provide for comparison between DHBs and inform long term, high level budget planning (projects >$10M)

Scoring of the assets is on a scale of 1(very good) to 5 (very poor). Building scores have been obtained from a weighted average of elements reflecting their estimated percentage of an overall building replacement cost.

In addition to the condition, the score/rating of each element also accounts for the age and variability (whether the element in the building was of a similar condition throughout the building ie some lifts that are good condition and others that are poor condition/age) of the element assessed.

Each element has been factored, with the weighting criteria applied to each element condition score according to their proportional cost impact on the building (ie HVAC attracts a higher impact than plumbing).

Services plant and equipment have been assessed under the building in which they are housed, unless the plant/equipment also serves other buildings on the site, in which case these have been assessed under site wide infrastructure.

Full details of the survey methodology are contained in the Beca NAMP Asset Condition Survey Data Standard and Methodology Rev.D, dated 25th April 2019.

Services and Fabric - Survey Assumptions and Exclusions:

The survey is to inform high level MoH decision making, not DHB asset management purposes, and has been based around a combination of information provided by DHB site representatives and limited site observation.

Our site inspection and survey comprise a high level visual inspection only. No inspections were undertaken of wall framing, ceiling voids, floor voids or other parts of the asset which were covered, unexposed or inaccessible and we are therefore unable to report that any such part of the property is free from significant defect. The survey should not be construed as a detailed building condition survey for specific asset repair and maintenance budget planning, since service and location specific methodology around replacement is likely to be required.

Our site inspection data has been provided as an 'indicative assessment' generalising the current condition by discipline only. Its purpose is to support general system level commentary to assist in directing master planning decisions. The review does not provide assessment of:

- Performance, reliability or fitness for purpose
- Capacity of plant or systems
- Operational efficiency of specific plant or systems.
- Resilience and redundancy of systems

It is assumed that a building, its services (and any alterations) have been designed and constructed in accordance with the Building Code current at the time of the construction. Infrastructure assessments have been primarily based on advice from site teams with visual observation where accessible and provided.

A number of aspects were not requested to form part of the survey scope and are noted as excluded from this report. These include:

- Clinical Equipment
- Cool Rooms and Refrigeration Equipment
- Information and Communication Technology (data and comm's)
- Carriageways or civil works
- Other General Equipment (e.g. kitchen)
- Other Specialised Equipment (e.g. biosafety and fume cabinets, Lamson Tube system)
- Security, Nurse Call Services & the like
- On site Structural engineering reviews

DHB Assessed *% NBS* Ratings:

The DHB assessed *%NBS* ratings included in this report have been provided by the DHBs via the Ministry of Health and have not been reviewed, checked or validated for accuracy or completeness.

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Tauranga Hospital	Site Wide	Electrical Infrastructure	Main switchboards		Present		2	1	10+
Tauranga Hospital	Site Wide	Electrical Infrastructure	Main switchboards		Present		1	1	3 to 10
Tauranga Hospital	Site Wide	Electrical Infrastructure	Main switchboards		Present		1	1	3 to 10
Tauranga Hospital	Site Wide	Electrical Infrastructure	Main switchboards		Present		3	1	10+
Tauranga Hospital	Site Wide	Electrical Infrastructure	Main switchboards		Present		1	1	0 to 3
Tauranga Hospital	Site Wide	Electrical Infrastructure	Site distribution mains		Present		2	1	original
Tauranga Hospital	Site Wide	Electrical Infrastructure	Site distribution mains		Present		1	1	3 to 10
Tauranga Hospital	Site Wide	Electrical Infrastructure	Site distribution mains		Present		1	1	3 to 10
Tauranga Hospital	Site Wide	Electrical Infrastructure	Site distribution mains		Present		2	1	10+
Tauranga Hospital	Site Wide	Electrical Infrastructure	Site distribution mains		Present		1	1	0 to 3
Tauranga Hospital	Site Wide	Electrical Infrastructure	Site generators		Present		1	1	10+
Tauranga Hospital	Site Wide	Electrical Infrastructure	Substations		Present		2	1	10+
Tauranga Hospital	Site Wide	Electrical Infrastructure	Substations		Present		2	1	10+
Tauranga Hospital	Site Wide	Electrical Infrastructure	Substations		Present		2	1	10+
Tauranga Hospital	Site Wide	Mechanical Infrastructure	Site Cold Water supply tanks		Present		2	1	3 to 10
Tauranga Hospital	Site Wide	Mechanical Infrastructure	Site Cooling pipes		Present		2	1	10+
Tauranga Hospital	Site Wide	Mechanical Infrastructure	Site Cooling plant		Present		2	1	10+
Tauranga Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water site pipes		Not Present				
Tauranga Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water storage tanks		Not Present				
Tauranga Hospital	Site Wide	Mechanical Infrastructure	Site Heating pipes		Present		2	2	mixed
Tauranga Hospital	Site Wide	Mechanical Infrastructure	Site Heating Plant		Present		2	1	10+
Tauranga Hospital	Site Wide	Mechanical Infrastructure	Site Heating Plant		Present		3	1	original
Tauranga Hospital	Site Wide	Mechanical Infrastructure	Site Hot and Cold Water site pipes		Present		2	2	mixed
Tauranga Hospital	Site Wide	Mechanical Infrastructure	Site Hot Water storage		Not Present				
Tauranga Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		2	1	10+
Tauranga Hospital	Site Wide	Mechanical Infrastructure	Site sewer drains		Present		2	2	10+
Tauranga Hospital	Site Wide	Mechanical Infrastructure	Site Steam pipes		Present		3	2	mixed
Tauranga Hospital	Site Wide	Mechanical Infrastructure	Site storm water drains		Present		2	1	10+
Tauranga Hospital	T01 - Adult Mental Health	Electrical Power	Building Generator		Not Present				
Tauranga Hospital	T01 - Adult Mental Health	Electrical Power	Building Main Switchboard		Present		2	1	original
Tauranga Hospital	T01 - Adult Mental Health	Electrical Power	Building UPS		Not Present				
Tauranga Hospital	T01 - Adult Mental Health	Electrical Power	Local DBs		Present		2	1	original
Tauranga Hospital	T01 - Adult Mental Health	Electrical Power	Site Generator			yes			
Tauranga Hospital	T01 - Adult Mental Health	Electrical Power	Sub-main cabling		Present		2	1	original
Tauranga Hospital	T01 - Adult Mental Health	Fabric External	Roofing and Decking	Iron/metal	Present		2	1	original
Tauranga Hospital	T01 - Adult Mental Health	Fabric External	Walls and Cladding	Masonry	Present		2	1	original
Tauranga Hospital	T01 - Adult Mental Health	Fabric External	Walls and Cladding	Other/mixed	Present		2	1	10+
Tauranga Hospital	T01 - Adult Mental Health	Fabric External	Windows and Doors	Metal	Present		2	1	original
Tauranga Hospital	T01 - Adult Mental Health	Fabric External	Windows and Doors	Aluminium	Present		2	1	original
Tauranga Hospital	T01 - Adult Mental Health	Fabric Internal	G		Present		2	1	original
Tauranga Hospital	T01 - Adult Mental Health	Fire Alarm	Fire Main - Pertronic		Present		2	1	original
Tauranga Hospital	T01 - Adult Mental Health	Fire Alarm	Vesda		Present		2	1	original
Tauranga Hospital	T01 - Adult Mental Health	HVAC	BMS Controls		Present		3	1	10+

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Tauranga Hospital	T01 - Adult Mental Health	HVAC	Boiler Plant - Site Plant			no			
Tauranga Hospital	T01 - Adult Mental Health	HVAC	Boiler Plant in building		Present		2	1	original
Tauranga Hospital	T01 - Adult Mental Health	HVAC	Building HVAC - Central plant		Present		3	1	original
Tauranga Hospital	T01 - Adult Mental Health	HVAC	Building HVAC - Local plant		Not Present				
Tauranga Hospital	T01 - Adult Mental Health	HVAC	Cooling Distribution		Not Present				
Tauranga Hospital	T01 - Adult Mental Health	HVAC	Cooling Plant - Site Plant			no			
Tauranga Hospital	T01 - Adult Mental Health	HVAC	Cooling Plant in building		Present		2	2	10+
Tauranga Hospital	T01 - Adult Mental Health	HVAC	Heating Distribution		Present		3	1	original
Tauranga Hospital	T01 - Adult Mental Health	Plumbing	Cold water - Building distribution		Present		2	1	original
Tauranga Hospital	T01 - Adult Mental Health	Plumbing	Cold water - Building storage tanks		Not Present				
Tauranga Hospital	T01 - Adult Mental Health	Plumbing	Cold water - Site storage and mains			yes			
Tauranga Hospital	T01 - Adult Mental Health	Plumbing	Hot water - Building distribution		Present		2	1	original
Tauranga Hospital	T01 - Adult Mental Health	Plumbing	Hot water - Building plant		Present		3	1	original
Tauranga Hospital	T01 - Adult Mental Health	Plumbing	Hot water - Site Plant			no			
Tauranga Hospital	T01 - Adult Mental Health	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Tauranga Hospital	T01 - Adult Mental Health	Plumbing	Medical gases and vacuum - Site Plant			no			
Tauranga Hospital	T01 - Adult Mental Health	Plumbing	Medical gases and vacuum distribution		Not Present				
Tauranga Hospital	T01 - Adult Mental Health	Sprinklers	Sprinklers		Present		2	1	original
Tauranga Hospital	T01 - Adult Mental Health	Vertical Transport			Not Present				

Out of scope

[redacted]

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age

Out of scope

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age

Out of scope

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age

Out of scope

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age

Out of scope

[redacted]

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age

Out of scope

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									

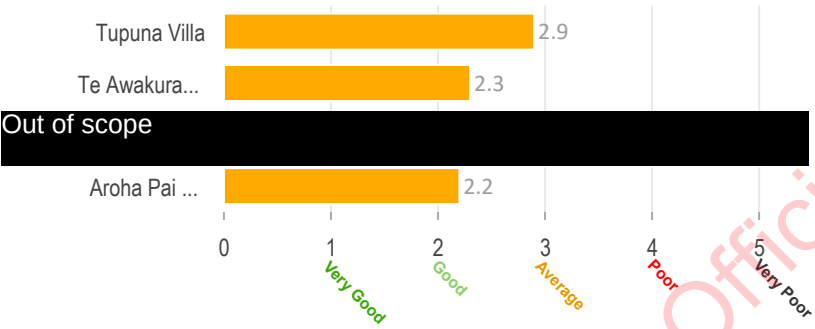
Hillmorton Hospital

Canterbury DHB

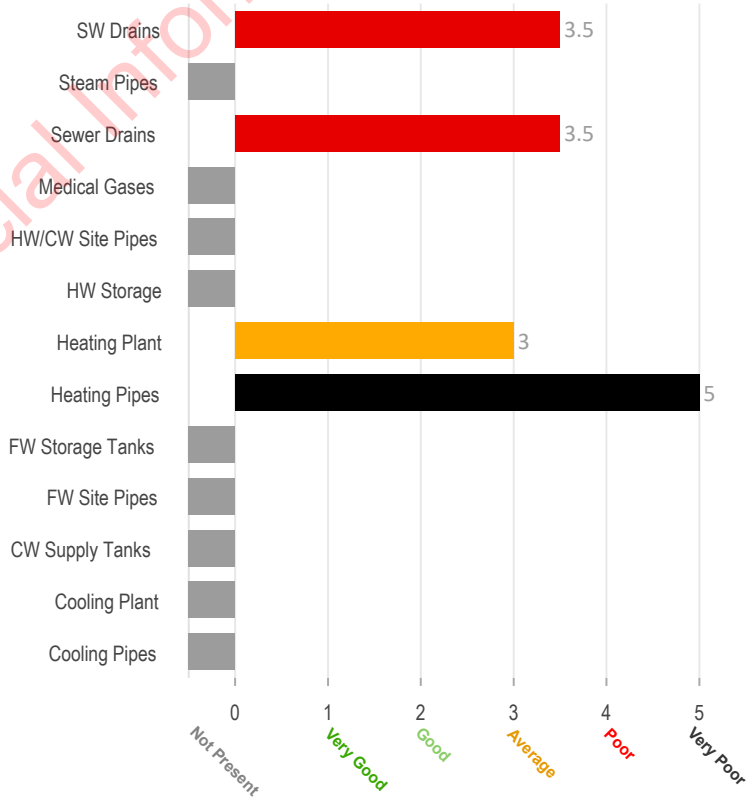
Beca Campus ID: 806
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 27/08/2019

Site Overview

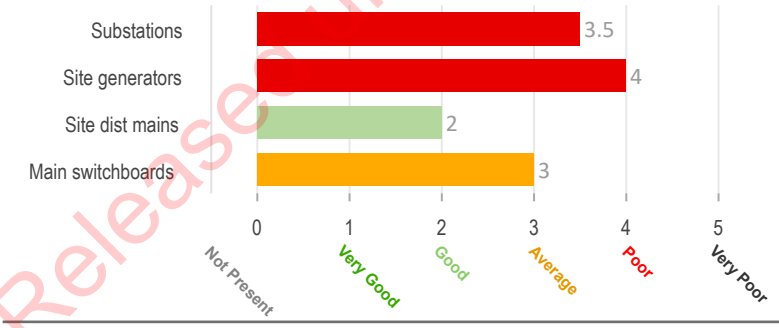
Buildings Surveyed



Site wide Mechanical Infrastructure Condition



Site wide Electrical Infrastructure Condition



Engineering Commentary

Generally single level buildings from the 1960's, 70's and 80's in average condition and showing their age. The 1974 Tupuna Villas have asbestos containing cladding panels.

The electrical infrastructure generally is beyond its life expectancy. We understand the generator has suffered failure of dampener (3 times). Tupuna Villa switchboards appear beyond life expectancy. Nuisance tripping of power circuits has been reported. Some buildings were refurbished circa 2000.

Mechanical services were generally of average to poor condition, noting there is some variability. Appeared to be no site wide cooling and cold water storage provisions.

Tupuna Villa

Hillmorton Hospital (Canterbury DHB)

Beca Building ID: 153
NAMP ID: 10208
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior

Services & Fabric Score

2.9

DHB Assessed % *NBS* Rating

80% IL2

General Building Information

Approximate Building Age: 1974

Survey date: 26/03/2019

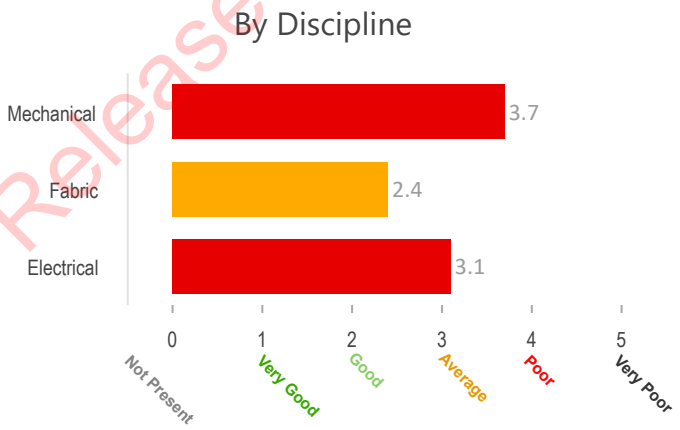
Gross Floor Area (m2): 1257

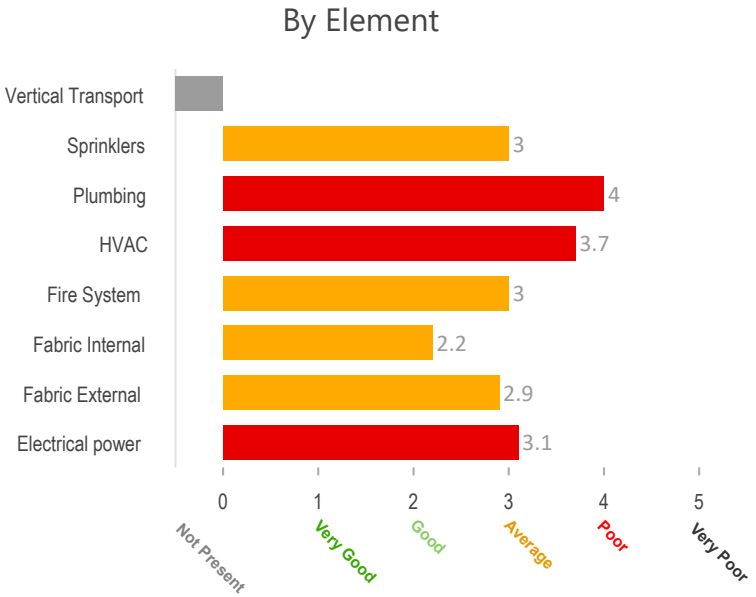
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Limited issues observed/known

Seismic Services Restraint: Poor

Summary of building condition





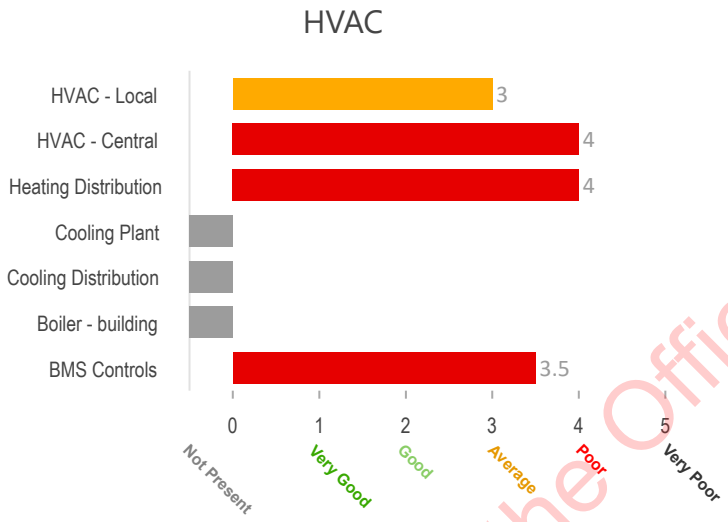
Beca Building ID: 153
NAMP ID: 10208
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

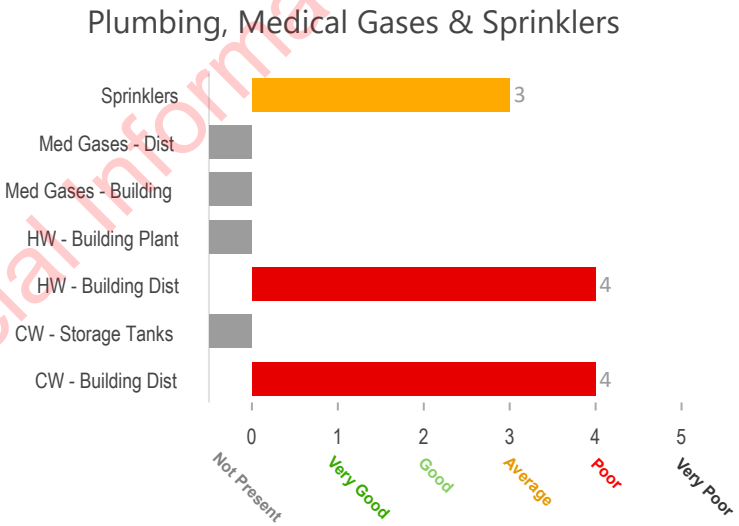
Approximate building location

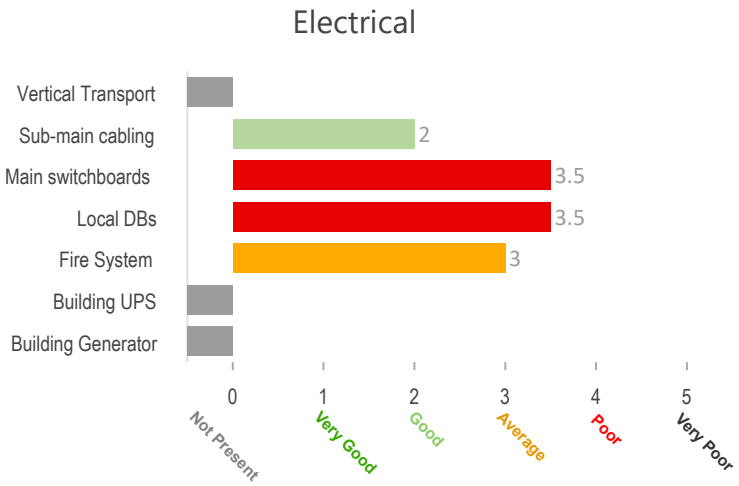
Tupuna Villa

Path: C:\Local\Jobs\437458\01 Map\NAMP_InterimReports_Local.aprx/Building Detail

Summary of building element condition details







Condition Definitions

Rating	Condition	Definition (Services and Fabric)
	Not Present	Assets were not present or inaccessible when site was visited.
1	Very Good	Assets displaying no deterioration or only normal routine maintenance required. New or near new condition. Some wear or discoloration but no evidence of damage. Can include repaired assets where the repair is as good as the original.
2	Good	Assets displaying limited deterioration which does not affect their use, or where limited restoration has been performed. Minor reactive maintenance may be required. Acceptable physical condition, with minor deterioration or damage that may affect performance (includes most repaired assets)
3	Average	Assets which have deteriorated to a degree where maintenance is obviously due, but not to the extent where the function is significantly impaired or very substantial repairs are needed. Failure unlikely in near future but further deterioration is likely
4	Poor	Repair or renewal is required in the short term. Significant deterioration or damage is evident and severely impacting performance. Asset is barely serviceable and failure likely in short term
5	Very Poor	Immediate repair or renewal required. Asset is not in use or unserviceable (i.e. has failed) or failure is imminent. Asset may pose occupational health and safety problems. Requires urgent attention.

Te Awakura - Stewart - Acute; Med;

Hillmorton Hospital (Canterbury DHB)

Beca Building ID: 152
NAMP ID: 10204
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior

Services & Fabric Score

2.3

DHB Assessed % *NBS* Rating

70% IL3

General Building Information

Approximate Building Age: 1980

Survey date: 26/03/2019

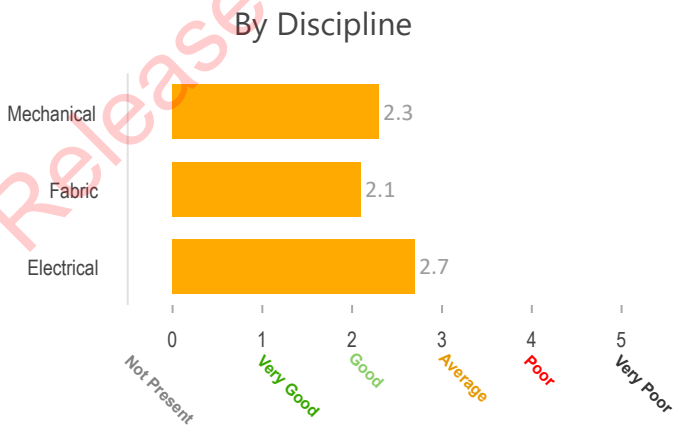
Gross Floor Area (m2): 4323

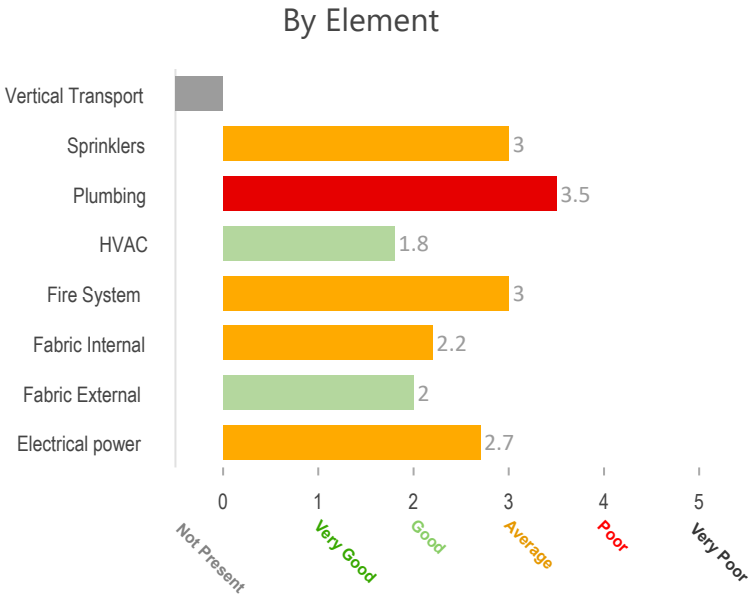
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Low likelihood of issues

Seismic Services Restraint: Poor

Summary of building condition

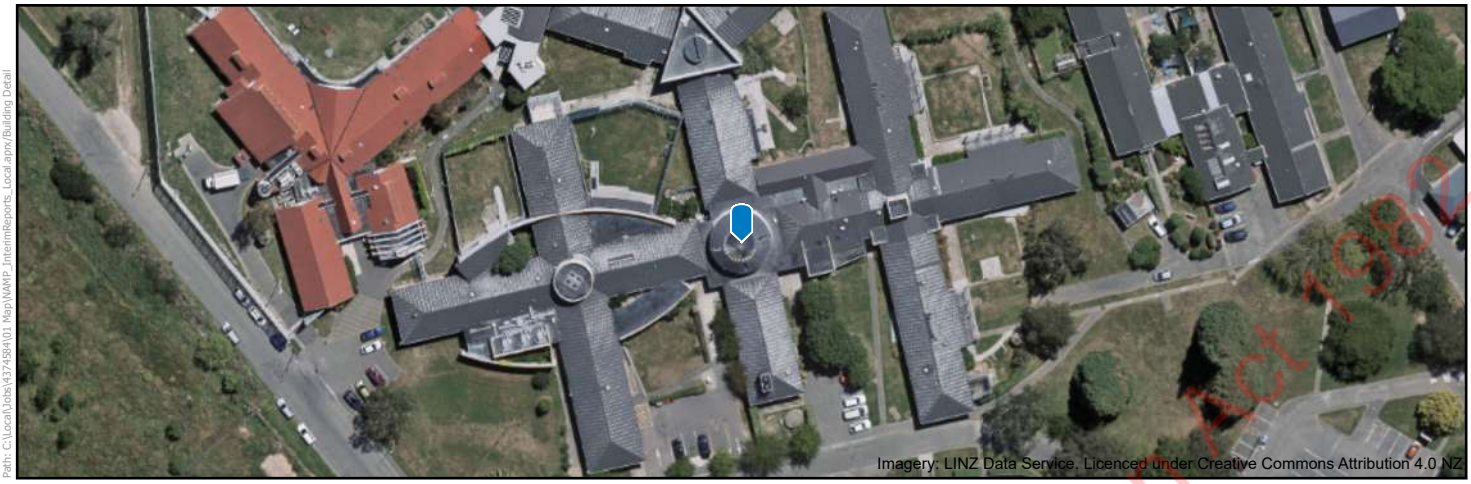




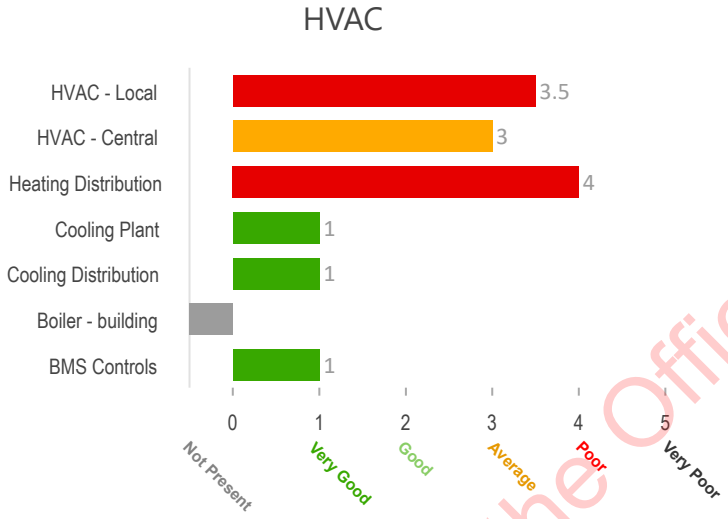
Beca Building ID: 152
NAMP ID: 10204
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

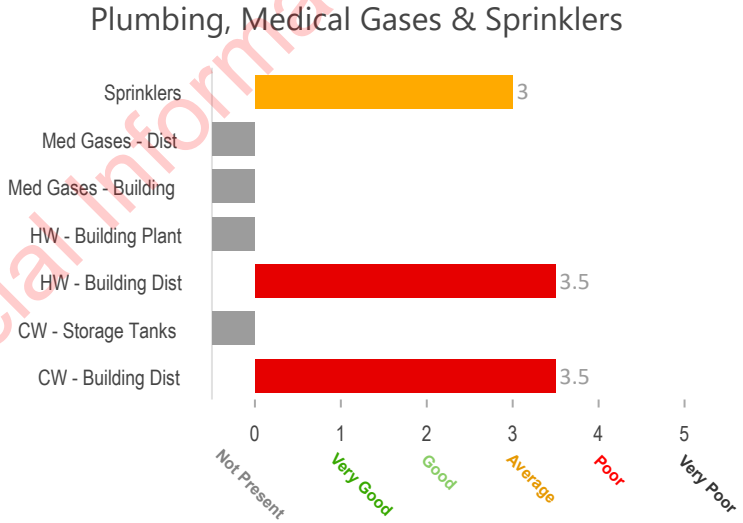
Approximate building location

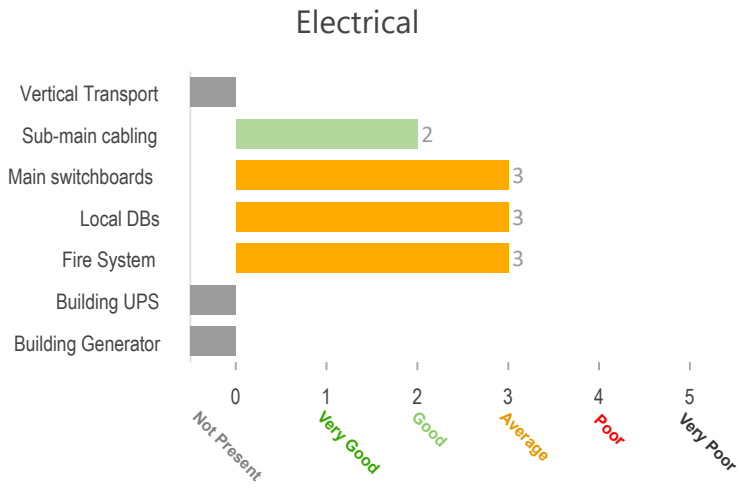
Te Awakura - Stewart - Acute; Med; Inten



Summary of building element condition details







Condition Definitions

Rating	Condition	Definition (Services and Fabric)
	Not Present	Assets were not present or inaccessible when site was visited.
1	Very Good	Assets displaying no deterioration or only normal routine maintenance required. New or near new condition. Some wear or discoloration but no evidence of damage. Can include repaired assets where the repair is as good as the original.
2	Good	Assets displaying limited deterioration which does not affect their use, or where limited restoration has been performed. Minor reactive maintenance may be required. Acceptable physical condition, with minor deterioration or damage that may affect performance (includes most repaired assets)
3	Average	Assets which have deteriorated to a degree where maintenance is obviously due, but not to the extent where the function is significantly impaired or very substantial repairs are needed. Failure unlikely in near future but further deterioration is likely
4	Poor	Repair or renewal is required in the short term. Significant deterioration or damage is evident and severely impacting performance. Asset is barely serviceable and failure likely in short term
5	Very Poor	Immediate repair or renewal required. Asset is not in use or unserviceable (i.e. has failed) or failure is imminent. Asset may pose occupational health and safety problems. Requires urgent attention.

Out of scope

Out of scope

Aroha Pai - Randolph - PSAID; AT&R

Hillmorton Hospital (Canterbury DHB)

Beca Building ID: 150
NAMP ID: 10198
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior

Services & Fabric Score

2.2

DHB Assessed % *NBS* Rating

67% IL2

General Building Information

Approximate Building Age: 1960

Survey date: 26/03/2019

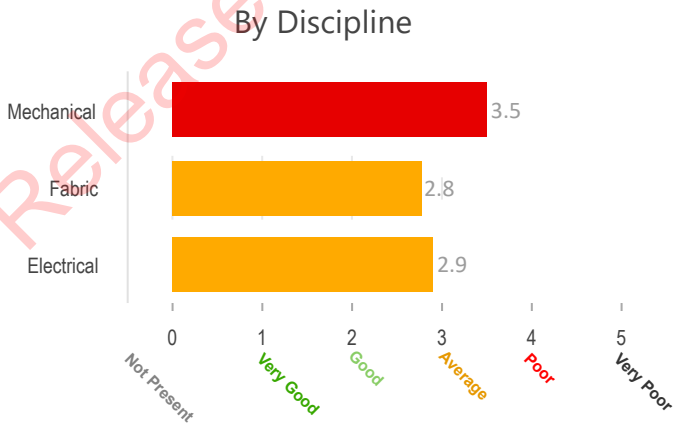
Gross Floor Area (m2): 2067

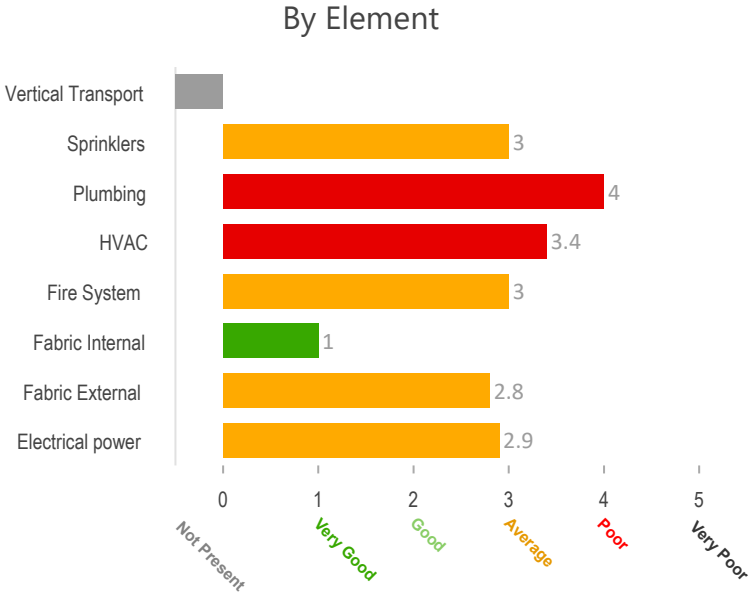
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Low likelihood of issues

Seismic Services Restraint: Poor

Summary of building condition

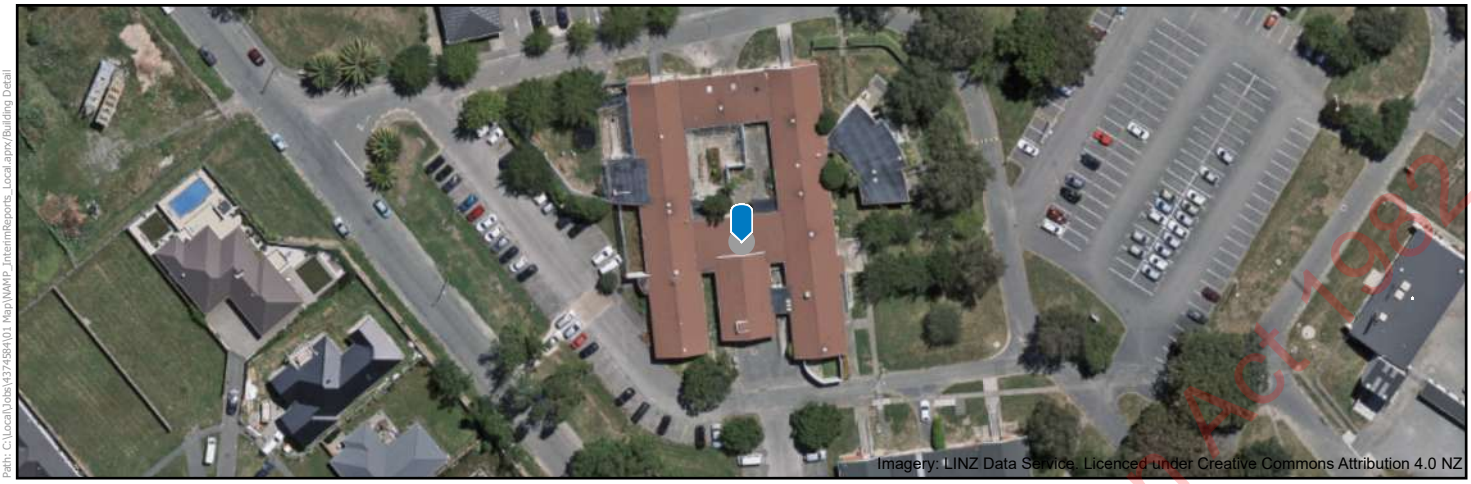




Beca Building ID: 150
NAMP ID: 10198
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

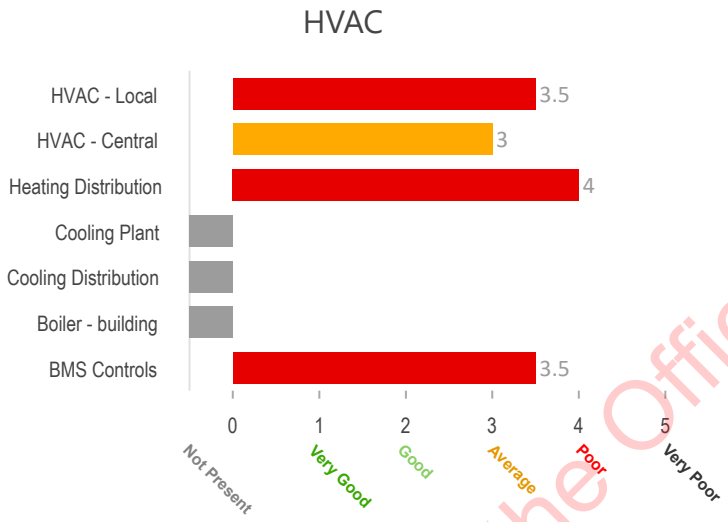
Approximate building location

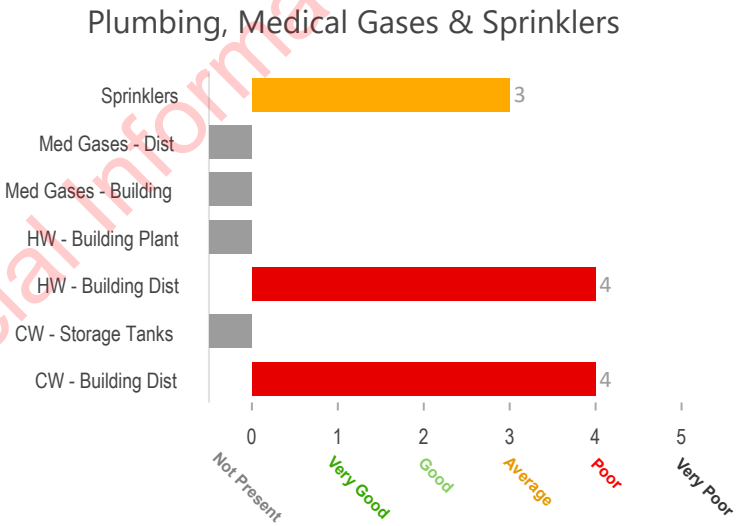
Aroha Pai - Randolph - PSAID; AT&R

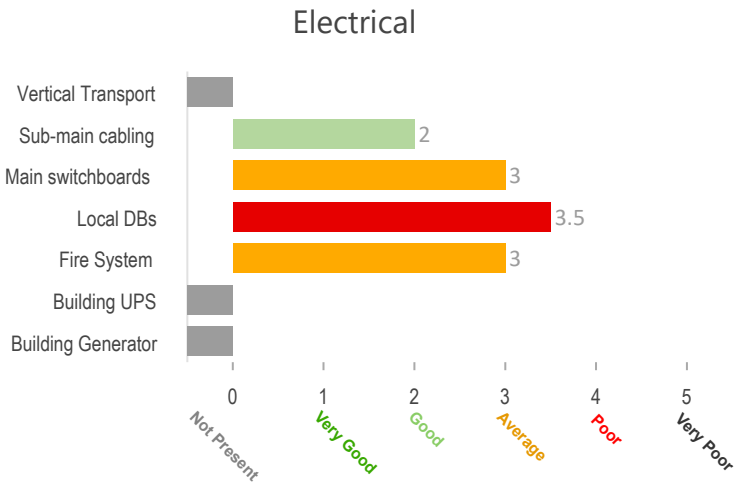


Path: C:\Local\Jobs\437458\01 Map\NAMP_InterimReports_Local.aprx/Building Detail

Summary of building element condition details







Condition Definitions

Rating	Condition	Definition (Services and Fabric)
	Not Present	Assets were not present or inaccessible when site was visited.
1	Very Good	Assets displaying no deterioration or only normal routine maintenance required. New or near new condition. Some wear or discoloration but no evidence of damage. Can include repaired assets where the repair is as good as the original.
2	Good	Assets displaying limited deterioration which does not affect their use, or where limited restoration has been performed. Minor reactive maintenance may be required. Acceptable physical condition, with minor deterioration or damage that may affect performance (includes most repaired assets)
3	Average	Assets which have deteriorated to a degree where maintenance is obviously due, but not to the extent where the function is significantly impaired or very substantial repairs are needed. Failure unlikely in near future but further deterioration is likely
4	Poor	Repair or renewal is required in the short term. Significant deterioration or damage is evident and severely impacting performance. Asset is barely serviceable and failure likely in short term
5	Very Poor	Immediate repair or renewal required. Asset is not in use or unserviceable (i.e. has failed) or failure is imminent. Asset may pose occupational health and safety problems. Requires urgent attention.

Services and Fabric - Survey Methodology and scope:

The main uses of this condition review are:

- To inform the MoH on the general condition of the critical buildings within the NZ health estate
- To be a base for future development of building condition
- To assist in making decisions between projects vying for a finite capital spend budget
- To provide for comparison between DHBs and inform long term, high level budget planning (projects >$10M)

Scoring of the assets is on a scale of 1(very good) to 5 (very poor). Building scores have been obtained from a weighted average of elements reflecting their estimated percentage of an overall building replacement cost.

In addition to the condition, the score/rating of each element also accounts for the age and variability (whether the element in the building was of a similar condition throughout the building ie some lifts that are good condition and others that are poor condition/age) of the element assessed.

Each element has been factored, with the weighting criteria applied to each element condition score according to their proportional cost impact on the building (ie HVAC attracts a higher impact than plumbing).

Services plant and equipment have been assessed under the building in which they are housed, unless the plant/equipment also serves other buildings on the site, in which case these have been assessed under site wide infrastructure.

Full details of the survey methodology are contained in the Beca NAMP Asset Condition Survey Data Standard and Methodology Rev.D, dated 25th April 2019.

Services and Fabric - Survey Assumptions and Exclusions:

The survey is to inform high level MoH decision making, not DHB asset management purposes, and has been based around a combination of information provided by DHB site representatives and limited site observation.

Our site inspection and survey comprise a high level visual inspection only. No inspections were undertaken of wall framing, ceiling voids, floor voids or other parts of the asset which were covered, unexposed or inaccessible and we are therefore unable to report that any such part of the property is free from significant defect. The survey should not be construed as a detailed building condition survey for specific asset repair and maintenance budget planning, since service and location specific methodology around replacement is likely to be required.

Our site inspection data has been provided as an 'indicative assessment' generalising the current condition by discipline only. Its purpose is to support general system level commentary to assist in directing master planning decisions. The review does not provide assessment of:

- Performance, reliability or fitness for purpose
- Capacity of plant or systems
- Operational efficiency of specific plant or systems.
- Resilience and redundancy of systems

It is assumed that a building, its services (and any alterations) have been designed and constructed in accordance with the Building Code current at the time of the construction. Infrastructure assessments have been primarily based on advice from site teams with visual observation where accessible and provided.

A number of aspects were not requested to form part of the survey scope and are noted as excluded from this report. These include:

- Clinical Equipment
- Cool Rooms and Refrigeration Equipment
- Information and Communication Technology (data and comm's)
- Carriageways or civil works
- Other General Equipment (e.g. kitchen)
- Other Specialised Equipment (e.g. biosafety and fume cabinets, Lamson Tube system)
- Security, Nurse Call Services & the like
- On site Structural engineering reviews

DHB Assessed *% NBS* Ratings:

The DHB assessed *%NBS* ratings included in this report have been provided by the DHBs via the Ministry of Health and have not been reviewed, checked or validated for accuracy or completeness.

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; AT&R	Fabric External	Walls and Cladding	Masonry	Present		2	1	original
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; AT&R	Fabric External	Walls and Cladding	Sheet	Present		3	1	original
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; AT&R	Fabric External	Windows and Doors	Wood	Present		3	1	original
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; AT&R	Fabric External	Windows and Doors	Aluminium	Present		2	1	original
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; AT&R	Fabric External	Roofing and Decking	Iron/metal	Present		3	1	original
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; AT&R	Fabric Internal	G		Present				original
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; AT&R	HVAC	Boiler Plant - Site Plant			yes			
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; AT&R	HVAC	Boiler Plant in building		Not Present				
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; AT&R	HVAC	Heating Distribution		Present		3	3	original
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; AT&R	HVAC	Cooling Plant - Site Plant			no			
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; AT&R	HVAC	Cooling Plant in building		Not Present				
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; AT&R	HVAC	Cooling Distribution		Not Present				
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; AT&R	HVAC	Building HVAC - Central plant		Present		3	2	10+
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; AT&R	HVAC	Building HVAC - Local plant		Present		3	2	10+
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; AT&R	HVAC	BMS Controls		Present		4	1	original
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; AT&R	Plumbing	Hot water - Site Plant			yes			
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; AT&R	Plumbing	Hot water - Building plant		Not Present				
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; AT&R	Plumbing	Hot water - Building distribution		Present		3	3	original
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; AT&R	Plumbing	Cold water - Site storage and mains			no			
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; AT&R	Plumbing	Cold water - Building storage tanks		Not Present				
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; AT&R	Plumbing	Cold water - Building distribution		Present		3	3	original
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; AT&R	Plumbing	Medical gases and vacuum - Site Plant			no			
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; AT&R	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; AT&R	Plumbing	Medical gases and vacuum distribution		Not Present				
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; AT&R	Sprinklers	Sprinklers		Present		3	1	original
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; ATandR	Electrical Power	Building Main Switchboard		Present	yes	3	1	original
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; ATandR	Electrical Power	Local DBs		Present	yes	3	2	original
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; ATandR	Electrical Power	Building Generator		Not Present				
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; ATandR	Electrical Power	Building UPS		Not Present				
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; ATandR	Electrical Power	Site Generator			yes			
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; ATandR	Electrical Power	Sub-main cabling		Present		2	1	original
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; ATandR	Fire Alarm	Sprinklers		Present		3	1	original
Hillmorton Hospital	Aroha Pai - Randolph - PSAID; ATandR	Vertical Transport			Not Present				

Out of scope

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									
Hillmorton Hospital	Site Wide	Electrical Infrastructure	Site generators		Present		3	3	original
Hillmorton Hospital	Site Wide	Electrical Infrastructure	Main switchboards		Present		3	1	original
Hillmorton Hospital	Site Wide	Electrical Infrastructure	Substations		Present		3	2	original
Hillmorton Hospital	Site Wide	Electrical Infrastructure	Site distribution mains		Present		2	1	original
Hillmorton Hospital	Site Wide	Mechanical Infrastructure	Site Heating Plant		Present		3	2	3 to 10
Hillmorton Hospital	Site Wide	Mechanical Infrastructure	Site Heating pipes		Present		5	3	original
Hillmorton Hospital	Site Wide	Mechanical Infrastructure	Site Steam pipes		Not Present				
Hillmorton Hospital	Site Wide	Mechanical Infrastructure	Site Cooling plant		Not Present				
Hillmorton Hospital	Site Wide	Mechanical Infrastructure	Site Cooling pipes		Not Present				
Hillmorton Hospital	Site Wide	Mechanical Infrastructure	Site Cold Water supply tanks		Not Present				
Hillmorton Hospital	Site Wide	Mechanical Infrastructure	Site Hot Water storage		Not Present				
Hillmorton Hospital	Site Wide	Mechanical Infrastructure	Site Hot and Cold Water site pipes		Not Present				
Hillmorton Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water storage tanks		Not Present				
Hillmorton Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water site pipes		Not Present				
Hillmorton Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Not Present				
Hillmorton Hospital	Site Wide	Mechanical Infrastructure	Site sewer drains		Present		3	2	original
Hillmorton Hospital	Site Wide	Mechanical Infrastructure	Site storm water drains		Present		3	2	original
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	Electrical Power	Building Main Switchboard		Present	yes	3	1	original
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	Electrical Power	Local DBs		Present	yes	3	1	original
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	Electrical Power	Building Generator		Not Present				
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	Electrical Power	Building UPS		Not Present				
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	Electrical Power	Sub-main cabling		Present		2	1	original
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	Electrical Power	Site Generator			yes			
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	Fabric External	Roofing and Decking	Iron/metal	Present		2	1	original
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	Fabric External	Walls and Cladding	Masonry	Present		2	1	original
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	Fabric External	Walls and Cladding	Applied	Present		3	1	original

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	Fabric External	Windows and Doors	Metal	Present		2	1	original
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	Fabric External	Windows and Doors	Aluminium	Present		2	1	original
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	Fire Alarm	Sprinklers		Present		3	1	original
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	HVAC	Boiler Plant - Site Plant			yes			
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	HVAC	Boiler Plant in building		Not Present				
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	HVAC	Heating Distribution		Present		3	3	original
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	HVAC	Cooling Plant - Site Plant			no			
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	HVAC	Cooling Plant in building		Present		1	1	0 to 3
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	HVAC	Cooling Distribution		Present		2	1	0 to 3
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	HVAC	Building HVAC - Central plant		Present		3	2	10+
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	HVAC	Building HVAC - Local plant		Present		3	2	mixed
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	HVAC	BMS Controls		Present		1	2	0 to 3
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	Plumbing	Hot water - Site Plant		Present	yes			
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	Plumbing	Hot water - Building plant		Not Present				
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	Plumbing	Hot water - Building distribution		Present		3	2	original
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	Plumbing	Cold water - Site storage and mains			no			
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	Plumbing	Cold water - Building storage tanks		Not Present				
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	Plumbing	Cold water - Building distribution		Present		3	2	original
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	Plumbing	Medical gases and vacuum - Site Plant			no			
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	Plumbing	Medical gases and vacuum distribution		Not Present				
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	Sprinklers	Sprinklers		Present		3	1	original
Hillmorton Hospital	Te Awakura - Stewart - Acute; Med; Inten	Vertical Transport			Not Present				
Hillmorton Hospital	Te Awakura Stewart Acute; Med;Inten	Fabric Internal	G		Present		2	1	original
Hillmorton Hospital	Tupuna Villa	Electrical Power	Building Main Switchboard		Present	yes	4	1	original
Hillmorton Hospital	Tupuna Villa	Electrical Power	Local DBs		Present	yes	4	1	original
Hillmorton Hospital	Tupuna Villa	Electrical Power	Building Generator		Not Present				
Hillmorton Hospital	Tupuna Villa	Electrical Power	Building UPS		Not Present				
Hillmorton Hospital	Tupuna Villa	Electrical Power	Sub-main cabling		Present		2	1	original
Hillmorton Hospital	Tupuna Villa	Electrical Power	Site Generator			yes			
Hillmorton Hospital	Tupuna Villa	Fabric External	Roofing and Decking	Iron/metal	Present		3	1	original
Hillmorton Hospital	Tupuna Villa	Fabric External	Walls and Cladding	Masonry	Present		2	1	original
Hillmorton Hospital	Tupuna Villa	Fabric External	Walls and Cladding	Sheet	Present		3	1	10+
Hillmorton Hospital	Tupuna Villa	Fabric External	Windows and Doors	Wood	Present		3	1	original
Hillmorton Hospital	Tupuna Villa	Fabric Internal	G		Present		2	1	original
Hillmorton Hospital	Tupuna Villa	Fire Alarm	Sprinklers		Present		3	1	original
Hillmorton Hospital	Tupuna Villa	HVAC	Boiler Plant - Site Plant			yes			
Hillmorton Hospital	Tupuna Villa	HVAC	Boiler Plant in building		Not Present				
Hillmorton Hospital	Tupuna Villa	HVAC	Heating Distribution		Present		3	3	original
Hillmorton Hospital	Tupuna Villa	HVAC	Cooling Plant - Site Plant			no			
Hillmorton Hospital	Tupuna Villa	HVAC	Cooling Plant in building		Not Present				
Hillmorton Hospital	Tupuna Villa	HVAC	Cooling Distribution		Not Present				
Hillmorton Hospital	Tupuna Villa	HVAC	Building HVAC - Central plant		Present		5	1	original
Hillmorton Hospital	Tupuna Villa	HVAC	Building HVAC - Local plant		Present		3	2	3 to 10
Hillmorton Hospital	Tupuna Villa	HVAC	BMS Controls		Present		4	1	original

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Hillmorton Hospital	Tupuna Villa	Plumbing	Hot water - Site Plant			yes			
Hillmorton Hospital	Tupuna Villa	Plumbing	Hot water - Building plant		Not Present				
Hillmorton Hospital	Tupuna Villa	Plumbing	Hot water - Building distribution		Present		3	3	original
Hillmorton Hospital	Tupuna Villa	Plumbing	Cold water - Site storage and mains			no			
Hillmorton Hospital	Tupuna Villa	Plumbing	Cold water - Building storage tanks		Not Present				
Hillmorton Hospital	Tupuna Villa	Plumbing	Cold water - Building distribution		Present		3	3	original
Hillmorton Hospital	Tupuna Villa	Plumbing	Medical gases and vacuum - Site Plant			no			
Hillmorton Hospital	Tupuna Villa	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Hillmorton Hospital	Tupuna Villa	Plumbing	Medical gases and vacuum distribution		Not Present				
Hillmorton Hospital	Tupuna Villa	Sprinklers	Sprinklers		Present		3	1	original
Hillmorton Hospital	Tupuna Villa	Vertical Transport			Not Present				

Middlemore Hospital

Counties Manukau DHB

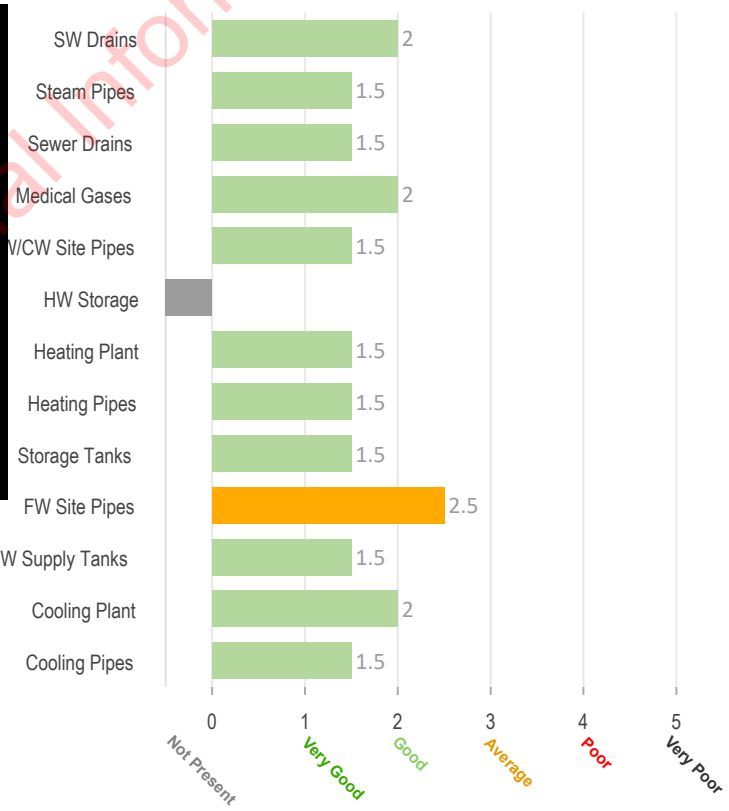
Beca Campus ID: 811
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 28/08/2019

Site Overview

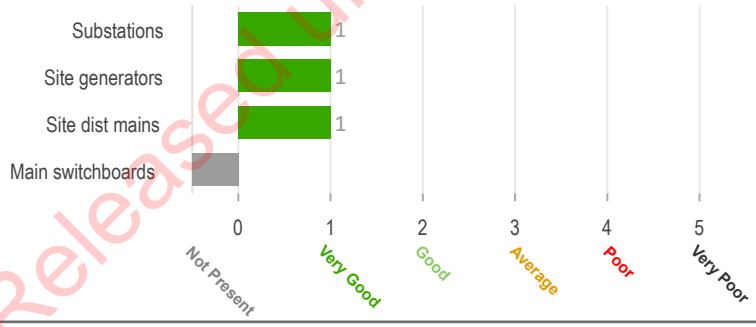
Buildings Surveyed

Out of scope

Site wide Mechanical Infrastructure Condition



Site wide Electrical Infrastructure Condition



Engineering Commentary

Out of scope

Site wide electrical infrastructure appears in good conditio .Out of scope

Infrastructure is mostly interconnected across the site providing resilience end redundanc .Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Services and Fabric - Survey Methodology and scope:

The main uses of this condition review are:

- To inform the MoH on the general condition of the critical buildings within the NZ health estate
- To be a base for future development of building condition
- To assist in making decisions between projects vying for a finite capital spend budget
- To provide for comparison between DHBs and inform long term, high level budget planning (projects >$10M)

Scoring of the assets is on a scale of 1(very good) to 5 (very poor). Building scores have been obtained from a weighted average of elements reflecting their estimated percentage of an overall building replacement cost.

In addition to the condition, the score/rating of each element also accounts for the age and variability (whether the element in the building was of a similar condition throughout the building ie some lifts that are good condition and others that are poor condition/age) of the element assessed.

Each element has been factored, with the weighting criteria applied to each element condition score according to their proportional cost impact on the building (ie HVAC attracts a higher impact than plumbing).

Services plant and equipment have been assessed under the building in which they are housed, unless the plant/equipment also serves other buildings on the site, in which case these have been assessed under site wide infrastructure.

Full details of the survey methodology are contained in the Beca NAMP Asset Condition Survey Data Standard and Methodology Rev.D, dated 25th April 2019.

Services and Fabric - Survey Assumptions and Exclusions:

The survey is to inform high level MoH decision making, not DHB asset management purposes, and has been based around a combination of information provided by DHB site representatives and limited site observation.

Our site inspection and survey comprise a high level visual inspection only. No inspections were undertaken of wall framing, ceiling voids, floor voids or other parts of the asset which were covered, unexposed or inaccessible and we are therefore unable to report that any such part of the property is free from significant defect. The survey should not be construed as a detailed building condition survey for specific asset repair and maintenance budget planning, since service and location specific methodology around replacement is likely to be required.

Our site inspection data has been provided as an 'indicative assessment' generalising the current condition by discipline only. Its purpose is to support general system level commentary to assist in directing master planning decisions. The review does not provide assessment of:

- Performance, reliability or fitness for purpose
- Capacity of plant or systems
- Operational efficiency of specific plant or systems.
- Resilience and redundancy of systems

It is assumed that a building, its services (and any alterations) have been designed and constructed in accordance with the Building Code current at the time of the construction. Infrastructure assessments have been primarily based on advice from site teams with visual observation where accessible and provided.

A number of aspects were not requested to form part of the survey scope and are noted as excluded from this report. These include:

- Clinical Equipment
- Cool Rooms and Refrigeration Equipment
- Information and Communication Technology (data and comm's)
- Carriageways or civil works
- Other General Equipment (e.g. kitchen)
- Other Specialised Equipment (e.g. biosafety and fume cabinets, Lamson Tube system)
- Security, Nurse Call Services & the like
- On site Structural engineering reviews

DHB Assessed *% NBS* Ratings:

The DHB assessed *%NBS* ratings included in this report have been provided by the DHBs via the Ministry of Health and have not been reviewed, checked or validated for accuracy or completeness.

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age

Out of scope

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									

Raw Condition Scores

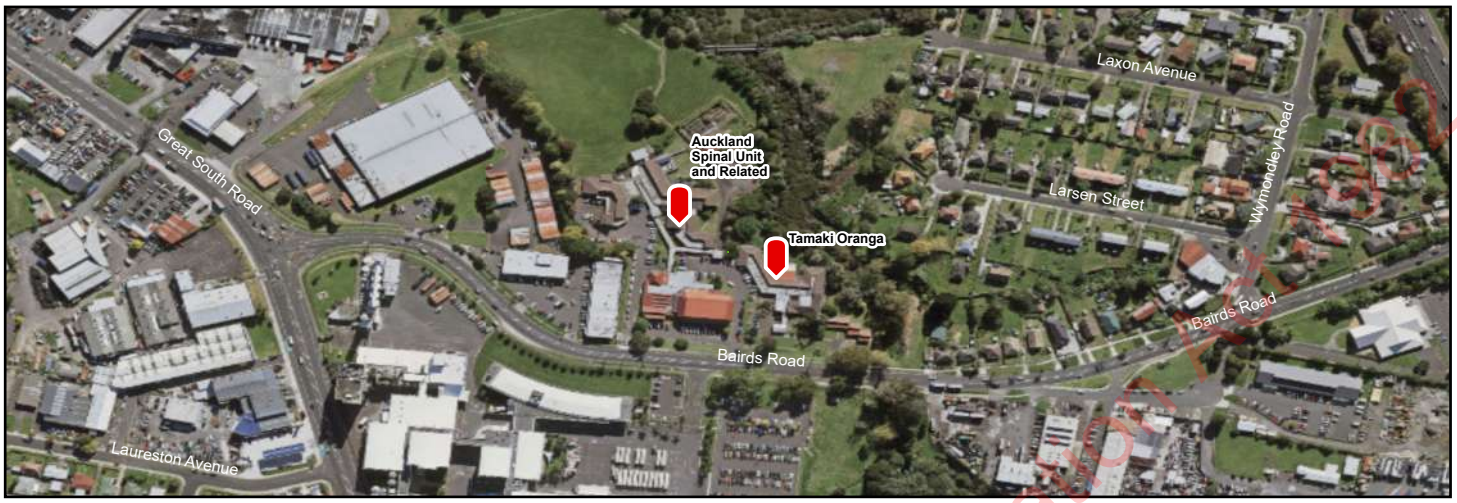
Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									
Middlemore Hospital	Site Wide	Electrical Infrastructure	Substations		Present		1	1	10+
Middlemore Hospital	Site Wide	Electrical Infrastructure	Site distribution mains		Present		1	1	10+
Middlemore Hospital	Site Wide	Electrical Infrastructure	Site generators		Present		1	1	3 to 10
Middlemore Hospital	Site Wide	Electrical Infrastructure	Main switchboards		No information/access				
Middlemore Hospital	Site Wide	Mechanical Infrastructure	Site Heating pipes		Present		2	1	mixed
Middlemore Hospital	Site Wide	Mechanical Infrastructure	Site Cooling pipes		Present		2	1	mixed
Middlemore Hospital	Site Wide	Mechanical Infrastructure	Site Hot and Cold Water site pipes		Present		2	1	mixed
Middlemore Hospital	Site Wide	Mechanical Infrastructure	Site sewer drains		Present		2	1	mixed
Middlemore Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		2	2	mixed
Middlemore Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water storage tanks		Present		2	1	3 to 10
Middlemore Hospital	Site Wide	Mechanical Infrastructure	Site storm water drains		Present		2	2	mixed
Middlemore Hospital	Site Wide	Mechanical Infrastructure	Site Heating Plant		Present		2	1	mixed
Middlemore Hospital	Site Wide	Mechanical Infrastructure	Site Steam pipes		Present		2	1	3 to 10
Middlemore Hospital	Site Wide	Mechanical Infrastructure	Site Cooling plant		Present		2	2	mixed
Middlemore Hospital	Site Wide	Mechanical Infrastructure	Site Hot Water storage		Not Present				
Middlemore Hospital	Site Wide	Mechanical Infrastructure	Site Cold Water supply tanks		Present		2	1	10+
Middlemore Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water site pipes		Present		2	3	mixed

Otara

Counties Manukau DHB

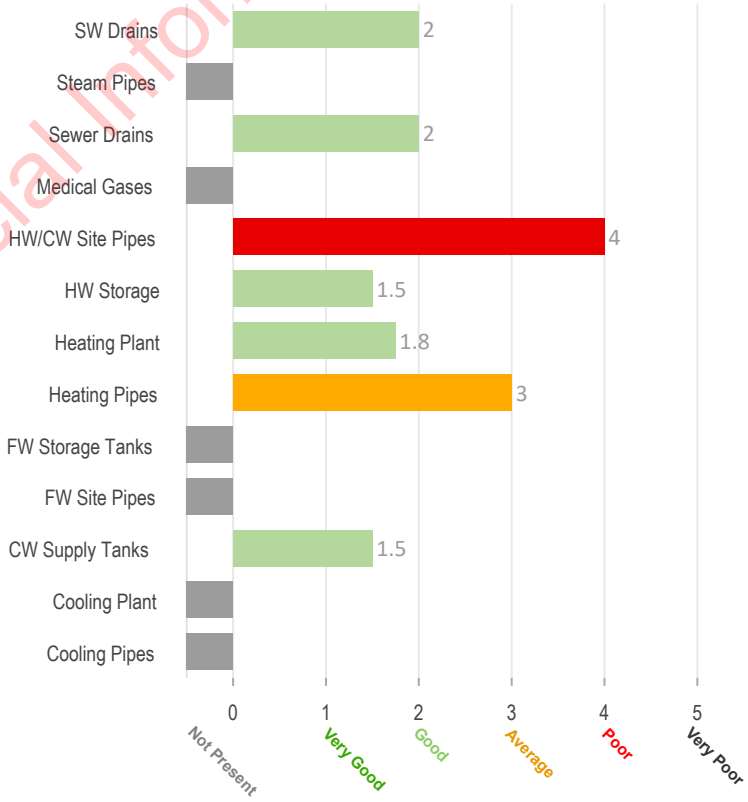
Beca Campus ID: 812
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 28/08/2019

Site Overview

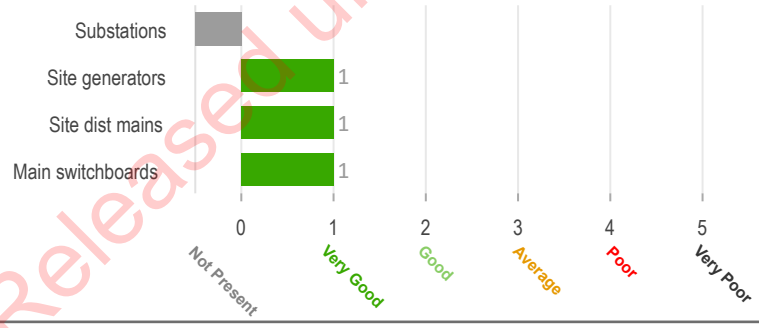


Buildings Surveyed

Site wide Mechanical Infrastructure Condition



Site wide Electrical Infrastructure Condition



Engineering Commentary

Generally buildings inspected were of average condition. Deficiencies noted in both the external and internal fabric, particularly the sheet cladding, roofing and skylights. Known Asbestos issues.

Out of scope amaki Oranga Sub MSBs and Floor DBs are in poor condition and appear to be beyond life expectancy. Asbestos in the tunnel between the central plant and occupied buildings restricts maintenance. Pipework is reticulated through the buildings via minimal roof cavity with no access. Corrosion of pipe at the pipe-clamps is resulting in pipe failure and flooding issues, particularly heating pipework. Council sewer blocks and causes issues on site. There are no central cooling or ventilation systems. Thermostat control of ceiling radiator panels is very poor, often overheating.

Tamaki Oranga

Otara (Counties Manukau DHB)

Beca Building ID: 177
NAMP ID: 10327
DHB Ref: S13
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior

Services & Fabric Score

3.4

DHB Assessed % *NBS* Rating

75% IL3

General Building Information

Approximate Building Age: 1974

Survey date: 5/05/2019

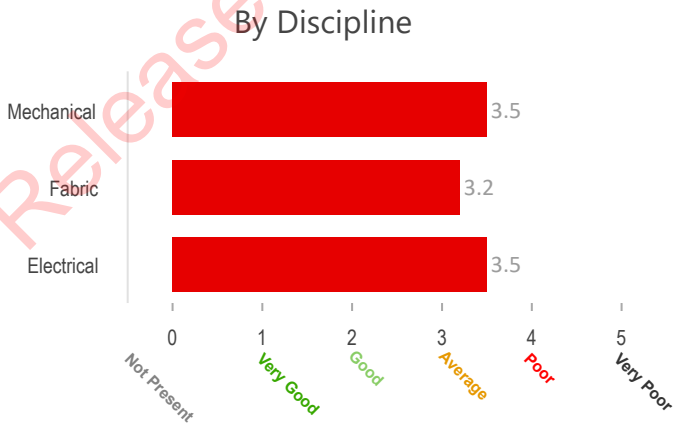
Gross Floor Area (m2): 1759

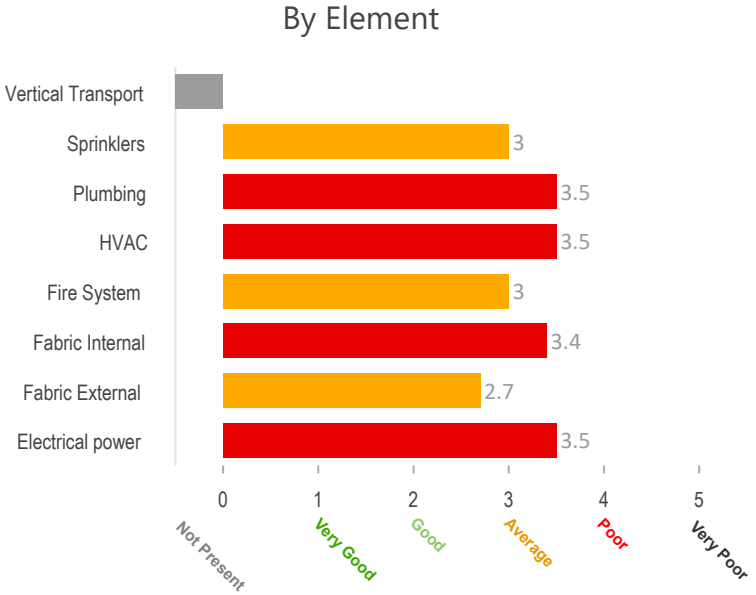
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Significant known issues

Seismic Services Restraint: Not Observed

Summary of building condition



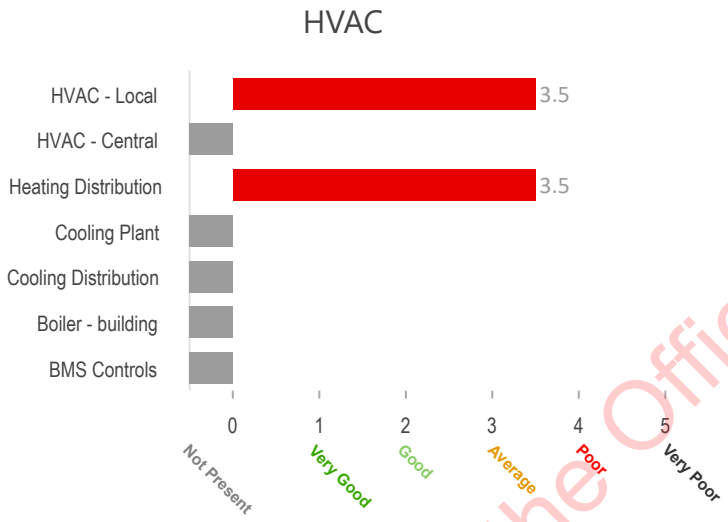


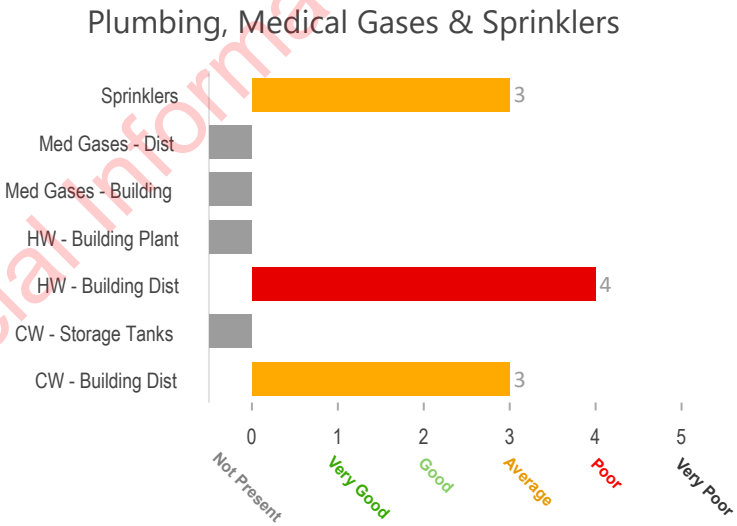
Beca Building ID: 177
NAMP ID: 10327
DHB Ref: S13
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

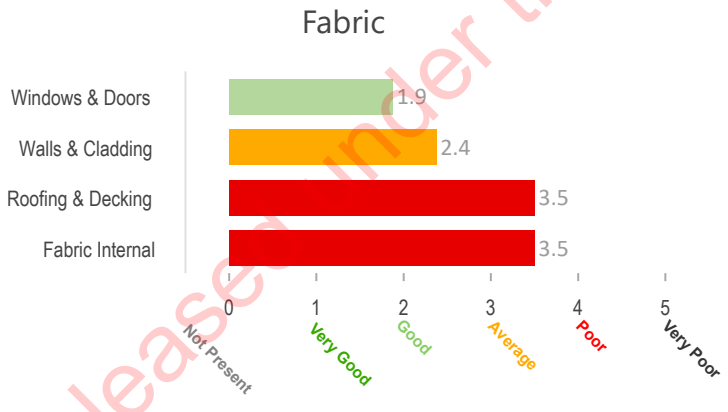
Approximate building location

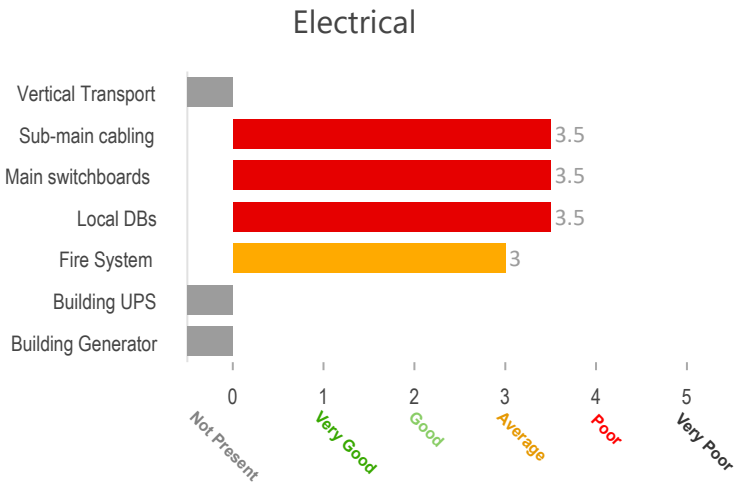
Tamaki Oranga

Summary of building element condition details









Condition Definitions

Rating	Condition	Definition (Services and Fabric)
	Not Present	Assets were not present or inaccessible when site was visited.
1	Very Good	Assets displaying no deterioration or only normal routine maintenance required. New or near new condition. Some wear or discoloration but no evidence of damage. Can include repaired assets where the repair is as good as the original.
2	Good	Assets displaying limited deterioration which does not affect their use, or where limited restoration has been performed. Minor reactive maintenance may be required. Acceptable physical condition, with minor deterioration or damage that may affect performance (includes most repaired assets)
3	Average	Assets which have deteriorated to a degree where maintenance is obviously due, but not to the extent where the function is significantly impaired or very substantial repairs are needed. Failure unlikely in near future but further deterioration is likely
4	Poor	Repair or renewal is required in the short term. Significant deterioration or damage is evident and severely impacting performance. Asset is barely serviceable and failure likely in short term
5	Very Poor	Immediate repair or renewal required. Asset is not in use or unserviceable (i.e. has failed) or failure is imminent. Asset may pose occupational health and safety problems. Requires urgent attention.

Out of scope

Out of scope

Services and Fabric - Survey Methodology and scope:

The main uses of this condition review are:

- To inform the MoH on the general condition of the critical buildings within the NZ health estate
- To be a base for future development of building condition
- To assist in making decisions between projects vying for a finite capital spend budget
- To provide for comparison between DHBs and inform long term, high level budget planning (projects >$10M)

Scoring of the assets is on a scale of 1(very good) to 5 (very poor). Building scores have been obtained from a weighted average of elements reflecting their estimated percentage of an overall building replacement cost.

In addition to the condition, the score/rating of each element also accounts for the age and variability (whether the element in the building was of a similar condition throughout the building ie some lifts that are good condition and others that are poor condition/age) of the element assessed.

Each element has been factored, with the weighting criteria applied to each element condition score according to their proportional cost impact on the building (ie HVAC attracts a higher impact than plumbing).

Services plant and equipment have been assessed under the building in which they are housed, unless the plant/equipment also serves other buildings on the site, in which case these have been assessed under site wide infrastructure.

Full details of the survey methodology are contained in the Beca NAMP Asset Condition Survey Data Standard and Methodology Rev.D, dated 25th April 2019.

Services and Fabric - Survey Assumptions and Exclusions:

The survey is to inform high level MoH decision making, not DHB asset management purposes, and has been based around a combination of information provided by DHB site representatives and limited site observation.

Our site inspection and survey comprise a high level visual inspection only. No inspections were undertaken of wall framing, ceiling voids, floor voids or other parts of the asset which were covered, unexposed or inaccessible and we are therefore unable to report that any such part of the property is free from significant defect. The survey should not be construed as a detailed building condition survey for specific asset repair and maintenance budget planning, since service and location specific methodology around replacement is likely to be required.

Our site inspection data has been provided as an 'indicative assessment' generalising the current condition by discipline only. Its purpose is to support general system level commentary to assist in directing master planning decisions. The review does not provide assessment of:

- Performance, reliability or fitness for purpose
- Capacity of plant or systems
- Operational efficiency of specific plant or systems.
- Resilience and redundancy of systems

It is assumed that a building, its services (and any alterations) have been designed and constructed in accordance with the Building Code current at the time of the construction. Infrastructure assessments have been primarily based on advice from site teams with visual observation where accessible and provided.

A number of aspects were not requested to form part of the survey scope and are noted as excluded from this report. These include:

- Clinical Equipment
- Cool Rooms and Refrigeration Equipment
- Information and Communication Technology (data and comm's)
- Carriageways or civil works
- Other General Equipment (e.g. kitchen)
- Other Specialised Equipment (e.g. biosafety and fume cabinets, Lamson Tube system)
- Security, Nurse Call Services & the like
- On site Structural engineering reviews

DHB Assessed *% NBS* Ratings:

The DHB assessed *%NBS* ratings included in this report have been provided by the DHBs via the Ministry of Health and have not been reviewed, checked or validated for accuracy or completeness.

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									
Otara	Site Wide	Electrical Infrastructure	Site generators		Present		1	1	3 to 10
Otara	Site Wide	Electrical Infrastructure	Substations		No information/access				original
Otara	Site Wide	Electrical Infrastructure	Main switchboards		Present		1	1	10+
Otara	Site Wide	Electrical Infrastructure	Site distribution mains		Present		1	1	10+
Otara	Site Wide	Mechanical Infrastructure	Site Heating Plant		Present		2	2	mixed
Otara	Site Wide	Mechanical Infrastructure	Site Heating pipes		Present		3	2	10+
Otara	Site Wide	Mechanical Infrastructure	Site Steam pipes		Not Present				
Otara	Site Wide	Mechanical Infrastructure	Site Cooling plant		Not Present				
Otara	Site Wide	Mechanical Infrastructure	Site Cooling pipes		Not Present				
Otara	Site Wide	Mechanical Infrastructure	Site Cold Water supply tanks		Present		2	1	3 to 10

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Otara	Site Wide	Mechanical Infrastructure	Site Hot Water storage		Present		2	1	10+
Otara	Site Wide	Mechanical Infrastructure	Site Hot and Cold Water site pipes		Present		3	3	original
Otara	Site Wide	Mechanical Infrastructure	Site Fire Water storage tanks		Not Present				
Otara	Site Wide	Mechanical Infrastructure	Site Fire Water site pipes		Not Present				
Otara	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Not Present				
Otara	Site Wide	Mechanical Infrastructure	Site sewer drains		Present		2	1	original
Otara	Site Wide	Mechanical Infrastructure	Site storm water drains		Present		2	1	original
Otara	Site Wide	Mechanical Infrastructure	Site Heating Plant		Present		2	1	mixed
Otara	Tamaki Oranga	Electrical Power	Building Main Switchboard		Present		4	1	original
Otara	Tamaki Oranga	Electrical Power	Local DBs		Present		4	1	original
Otara	Tamaki Oranga	Electrical Power	Sub-main cabling		Present		4	1	original
Otara	Tamaki Oranga	Electrical Power	Building UPS		Not Present				
Otara	Tamaki Oranga	Electrical Power	Building Generator		Not Present				
Otara	Tamaki Oranga	Electrical Power	Site Generator			yes			
Otara	Tamaki Oranga	Fabric External	Walls and Cladding	Concrete	Present		2	1	original
Otara	Tamaki Oranga	Fabric External	Walls and Cladding	Sheet	Present		3	2	original
Otara	Tamaki Oranga	Fabric External	Windows and Doors	Aluminium	Present		3	1	original
Otara	Tamaki Oranga	Fabric External	Windows and Doors	Aluminium	Present		2	1	10+
Otara	Tamaki Oranga	Fabric External	Roofing and Decking	Tile/Shingle	Present		4	1	original
Otara	Tamaki Oranga	Fabric Internal	G		Present		3	2	original
Otara	Tamaki Oranga	Fire Alarm			Present		3	1	original
Otara	Tamaki Oranga	HVAC	Boiler Plant - Site Plant			yes			
Otara	Tamaki Oranga	HVAC	Boiler Plant in building		Not Present				
Otara	Tamaki Oranga	HVAC	Heating Distribution		Present		4	1	original
Otara	Tamaki Oranga	HVAC	Cooling Plant - Site Plant			no			
Otara	Tamaki Oranga	HVAC	Cooling Plant in building		Not Present				
Otara	Tamaki Oranga	HVAC	Cooling Distribution		Not Present				
Otara	Tamaki Oranga	HVAC	Building HVAC - Central plant		Not Present				
Otara	Tamaki Oranga	HVAC	Building HVAC - Local plant		Present		3	2	mixed
Otara	Tamaki Oranga	HVAC	BMS Controls		Not Present				
Otara	Tamaki Oranga	Plumbing	Hot water - Site Plant			yes			
Otara	Tamaki Oranga	Plumbing	Hot water - Building plant		Not Present				
Otara	Tamaki Oranga	Plumbing	Hot water - Building distribution		Present		3	3	original
Otara	Tamaki Oranga	Plumbing	Cold water - Site storage and mains			yes			
Otara	Tamaki Oranga	Plumbing	Cold water - Building storage tanks		Not Present				
Otara	Tamaki Oranga	Plumbing	Cold water - Building distribution		Present		3	1	original
Otara	Tamaki Oranga	Plumbing	Medical gases and vacuum - Site Plant			no			
Otara	Tamaki Oranga	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Otara	Tamaki Oranga	Plumbing	Medical gases and vacuum distribution		Not Present				
Otara	Tamaki Oranga	Sprinklers	Sprinklers		Present		3	2	mixed
Otara	Tamaki Oranga	Vertical Transport			Not Present				

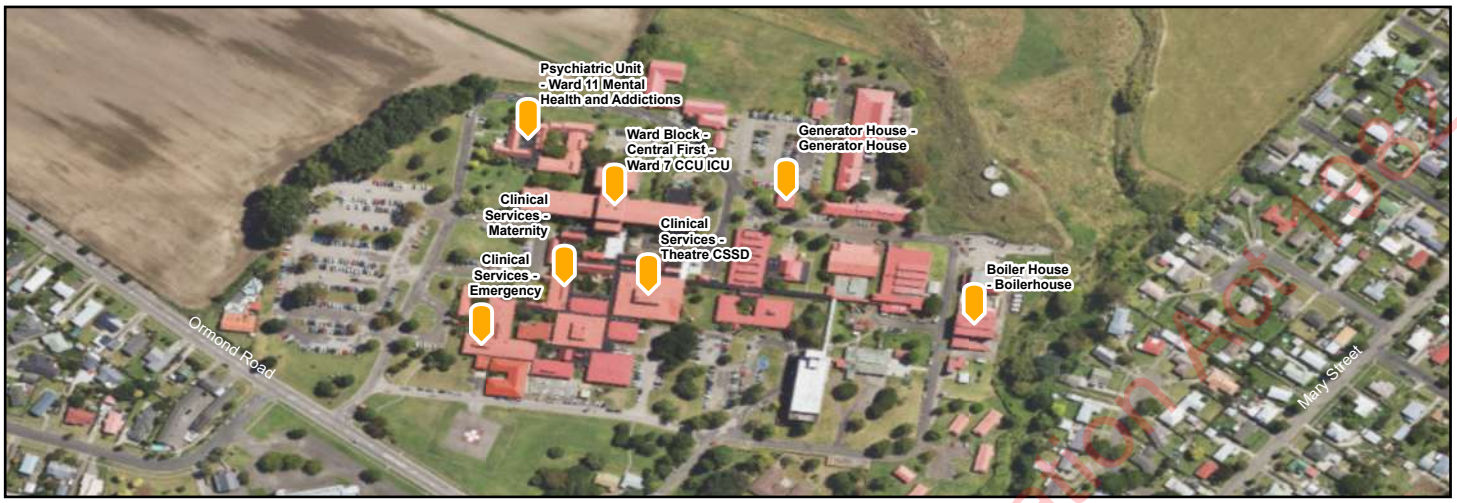
MINISTRY OF HEALTH
MANATŪ HAUORA

Gisborne Hospital

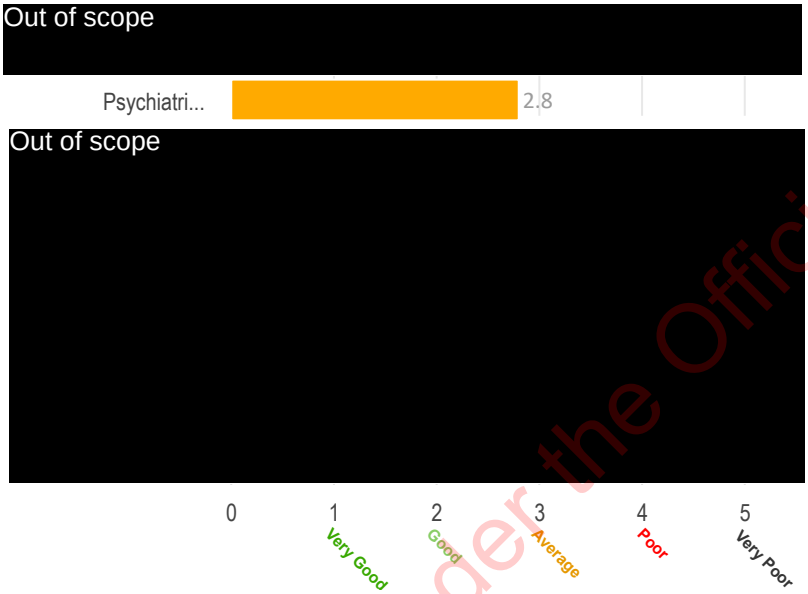
Tairawhiti DHB

Beca Campus ID: 820
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 29/08/2019

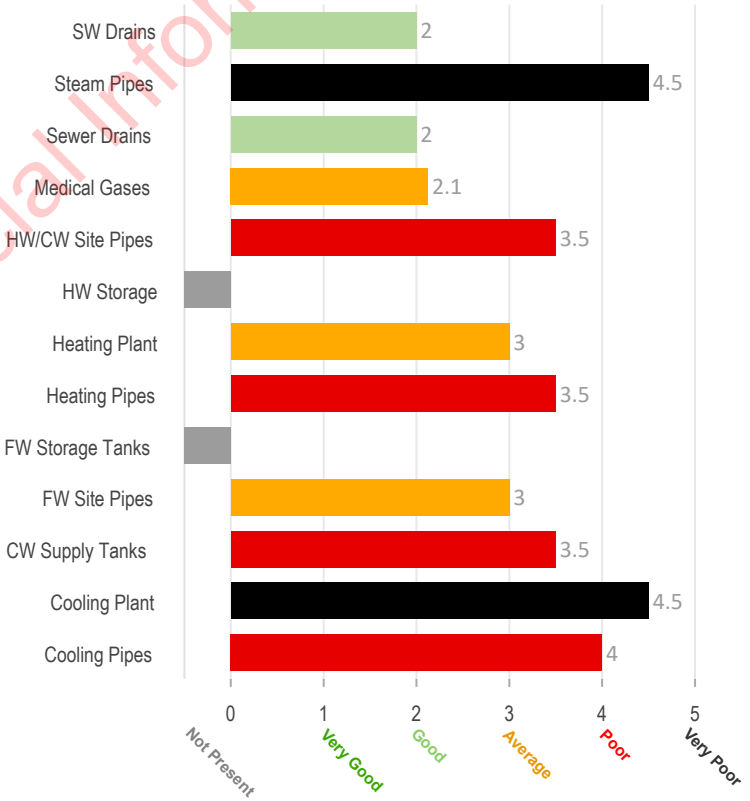
Site Overview



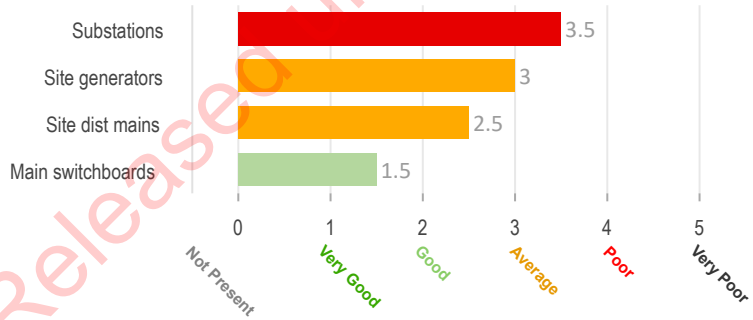
Buildings Surveyed



Site wide Mechanical Infrastructure Condition



Site wide Electrical Infrastructure Condition



Engineering Commentary

Generally buildings inspected were of good to average condition. Leaking roofs generally where flat roofs are present. Out of scope

The electrical infrastructure is overall in average condition. The High Voltage switchgear is part of the original installation with safety notices(to limit the amount of switching) attached from the local supply authority. This switchgear is in need of immediate replacement. In general the local distribution within the buildings are in average condition with a scheduled replacement program currently underway.

The mechanical infrastructure is generally of average to poor condition with major "backbone" infrastructure supporting critical services in immediate need for replacement on both a life cycle replacement and safety basis. There is no cooling in inpatient ward areas which is not considered appropriate in clinical buildings.

Out of scope

Out of scope

Psychiatric Unit - Ward 11 Mental

Gisborne Hospital (Tairawhiti DHB)

Beca Building ID: 123
NAMP ID: 10888
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior

Services & Fabric Score

2.8

DHB Assessed % *NBS* Rating

General Building Information

Approximate Building Age: 1982

Survey date: 27/05/2019

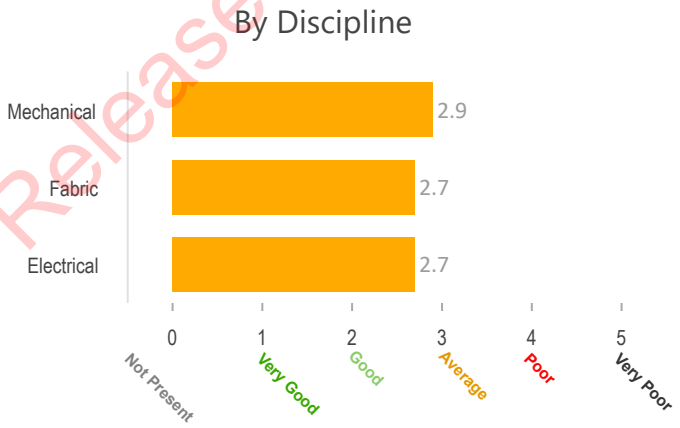
Gross Floor Area (m2): 1556.73

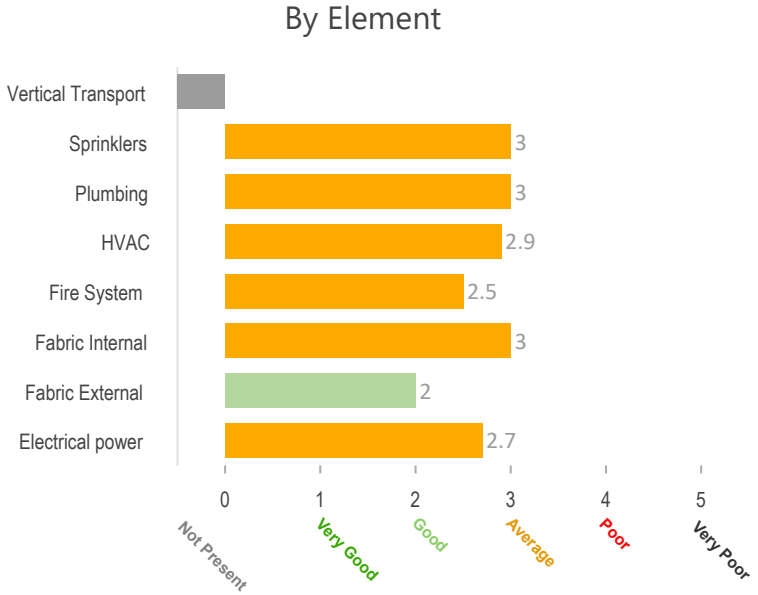
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Low likelihood of issues

Seismic Services Restraint: Poor

Summary of building condition

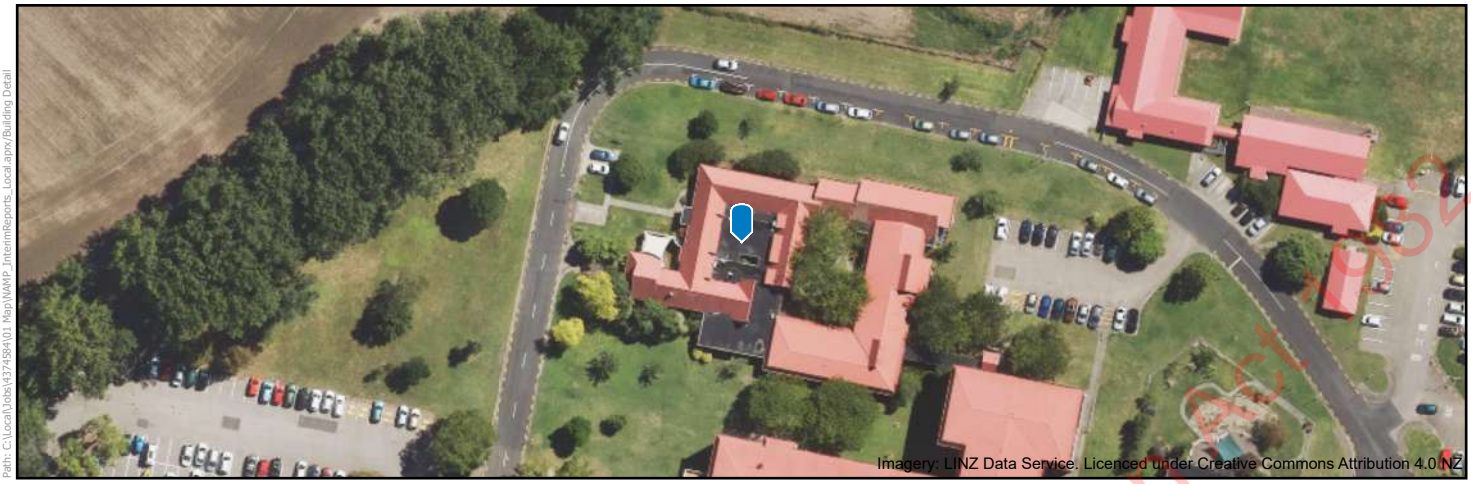




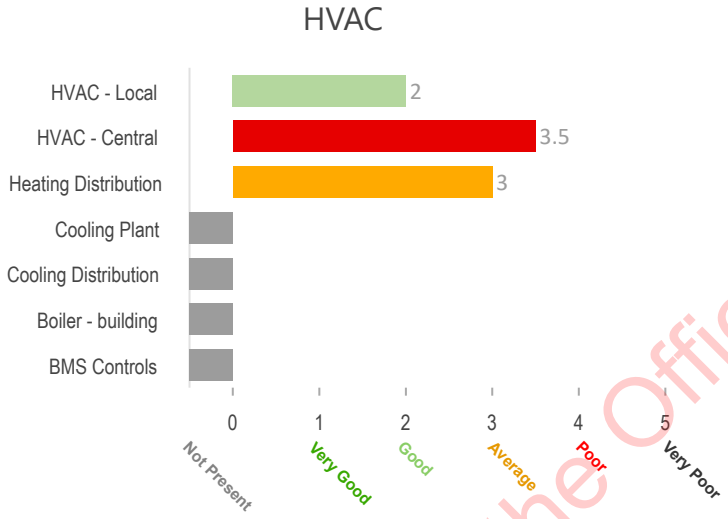
Beca Building ID: 123
NAMP ID: 10888
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

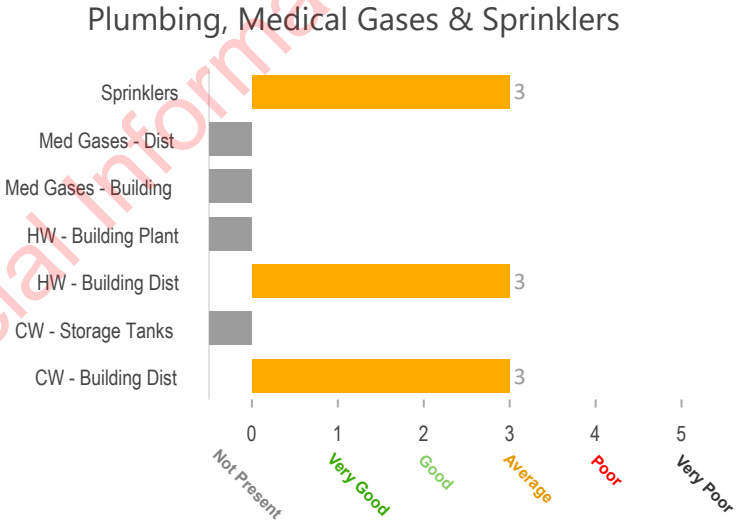
Approximate building location

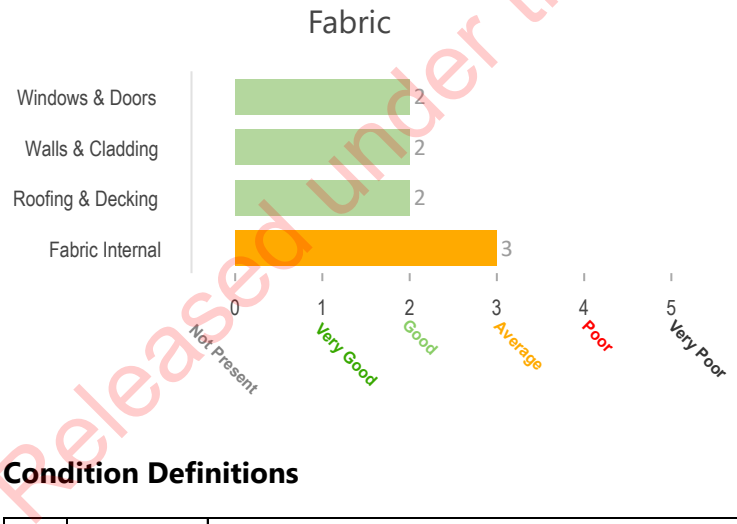
Psychiatric Unit - Ward 11 Mental Health and Addictions

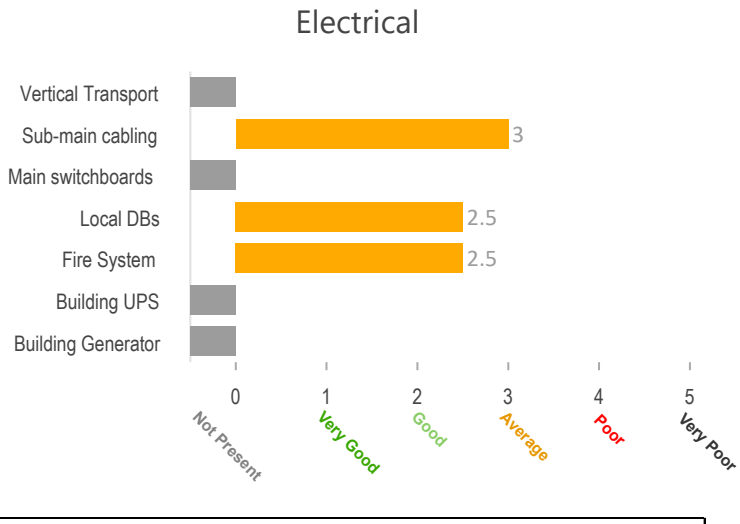


Summary of building element condition details









Condition Definitions

Rating	Condition	Definition (Services and Fabric)
	Not Present	Assets were not present or inaccessible when site was visited.
1	Very Good	Assets displaying no deterioration or only normal routine maintenance required. New or near new condition. Some wear or discoloration but no evidence of damage. Can include repaired assets where the repair is as good as the original.
2	Good	Assets displaying limited deterioration which does not affect their use, or where limited restoration has been performed. Minor reactive maintenance may be required. Acceptable physical condition, with minor deterioration or damage that may affect performance (includes most repaired assets)
3	Average	Assets which have deteriorated to a degree where maintenance is obviously due, but not to the extent where the function is significantly impaired or very substantial repairs are needed. Failure unlikely in near future but further deterioration is likely
4	Poor	Repair or renewal is required in the short term. Significant deterioration or damage is evident and severely impacting performance. Asset is barely serviceable and failure likely in short term
5	Very Poor	Immediate repair or renewal required. Asset is not in use or unserviceable (i.e. has failed) or failure is imminent. Asset may pose occupational health and safety problems. Requires urgent attention.

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Services and Fabric - Survey Methodology and scope:

The main uses of this condition review are:

- To inform the MoH on the general condition of the critical buildings within the NZ health estate
- To be a base for future development of building condition
- To assist in making decisions between projects vying for a finite capital spend budget
- To provide for comparison between DHBs and inform long term, high level budget planning (projects >$10M)

Scoring of the assets is on a scale of 1(very good) to 5 (very poor). Building scores have been obtained from a weighted average of elements reflecting their estimated percentage of an overall building replacement cost.

In addition to the condition, the score/rating of each element also accounts for the age and variability (whether the element in the building was of a similar condition throughout the building ie some lifts that are good condition and others that are poor condition/age) of the element assessed.

Each element has been factored, with the weighting criteria applied to each element condition score according to their proportional cost impact on the building (ie HVAC attracts a higher impact than plumbing).

Services plant and equipment have been assessed under the building in which they are housed, unless the plant/equipment also serves other buildings on the site, in which case these have been assessed under site wide infrastructure.

Full details of the survey methodology are contained in the Beca NAMP Asset Condition Survey Data Standard and Methodology Rev.D, dated 25th April 2019.

Services and Fabric - Survey Assumptions and Exclusions:

The survey is to inform high level MoH decision making, not DHB asset management purposes, and has been based around a combination of information provided by DHB site representatives and limited site observation.

Our site inspection and survey comprise a high level visual inspection only. No inspections were undertaken of wall framing, ceiling voids, floor voids or other parts of the asset which were covered, unexposed or inaccessible and we are therefore unable to report that any such part of the property is free from significant defect. The survey should not be construed as a detailed building condition survey for specific asset repair and maintenance budget planning, since service and location specific methodology around replacement is likely to be required.

Our site inspection data has been provided as an 'indicative assessment' generalising the current condition by discipline only. Its purpose is to support general system level commentary to assist in directing master planning decisions. The review does not provide assessment of:

- Performance, reliability or fitness for purpose
- Capacity of plant or systems
- Operational efficiency of specific plant or systems.
- Resilience and redundancy of systems

It is assumed that a building, its services (and any alterations) have been designed and constructed in accordance with the Building Code current at the time of the construction. Infrastructure assessments have been primarily based on advice from site teams with visual observation where accessible and provided.

A number of aspects were not requested to form part of the survey scope and are noted as excluded from this report. These include:

- Clinical Equipment
- Cool Rooms and Refrigeration Equipment
- Information and Communication Technology (data and comm's)
- Carriageways or civil works
- Other General Equipment (e.g. kitchen)
- Other Specialised Equipment (e.g. biosafety and fume cabinets, Lamson Tube system)
- Security, Nurse Call Services & the like
- On site Structural engineering reviews

DHB Assessed *% NBS* Ratings:

The DHB assessed *%NBS* ratings included in this report have been provided by the DHBs via the Ministry of Health and have not been reviewed, checked or validated for accuracy or completeness.

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Gisborne Hospital	Boiler House - Boilerhouse	Electrical Power	Building Main Switchboard		Not Present				

Out of scope

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age

Out of scope

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age

Out of scope

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	Electrical Power	Building Main Switchboard		Not Present				
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	Electrical Power	Local DBs		Present		2	2	original
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	Electrical Power	Sub-main cabling		Present		3	1	original
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	Electrical Power	Building UPS		Not Present				
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	Electrical Power	Building Generator		Not Present				
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	Electrical Power	Site Generator			yes			
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	Fabric External	Roofing and Decking	Iron/metal	Present		2	1	original
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	Fabric External	Walls and Cladding	Masonry	Present		2	1	original
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	Fabric External	Walls and Cladding	Other/mixed	Present		2	1	original
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	Fabric External	Windows and Doors	Aluminium	Present		2	1	original
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	Fabric Internal	G		Present		3	2	10+
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	Fire Alarm			Present		3	1	10+
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	HVAC	Boiler Plant - Site Plant			yes			
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	HVAC	Boiler Plant in building		Not Present				
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	HVAC	Heating Distribution		Present		3	1	original
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	HVAC	Cooling Plant - Site Plant			no			
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	HVAC	Cooling Plant in building		Not Present				
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	HVAC	Cooling Distribution		Not Present				
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	HVAC	Building HVAC - Central plant		Present		3	2	original
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	HVAC	Building HVAC - Local plant		Present		2	1	10+
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	HVAC	BMS Controls		Not Present				
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	Plumbing	Hot water - Site Plant			yes			
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	Plumbing	Hot water - Building plant		Not Present				

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	Plumbing	Hot water - Building distribution		Present		3	1	original
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	Plumbing	Cold water - Site storage and mains			yes			
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	Plumbing	Cold water - Building storage tanks		Not Present				
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	Plumbing	Cold water - Building distribution		Present		3	1	original
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	Plumbing	Medical gases and vacuum - Site Plant			no			
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	Plumbing	Medical gases and vacuum distribution		Not Present				
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	Sprinklers	Sprinklers		Present		3	1	original
Gisborne Hospital	Psychiatric Unit - Ward 11 Mental Health and Addictions	Vertical Transport			Not Present				
Gisborne Hospital	Site Wide	Electrical Infrastructure	Substations		Present		4	1	original
Gisborne Hospital	Site Wide	Electrical Infrastructure	Main switchboards		Present		2	1	10+
Gisborne Hospital	Site Wide	Electrical Infrastructure	Site generators		Present		3	1	original
Gisborne Hospital	Site Wide	Electrical Infrastructure	Site distribution mains		Present		3	1	10+
Gisborne Hospital	Site Wide	Electrical Infrastructure	Substations		Present		4	1	original
Gisborne Hospital	Site Wide	Mechanical Infrastructure	Site Heating Plant		Present		3	2	mixed
Gisborne Hospital	Site Wide	Mechanical Infrastructure	Site Heating pipes		Present		4	1	original
Gisborne Hospital	Site Wide	Mechanical Infrastructure	Site Steam pipes		Present		5	2	original
Gisborne Hospital	Site Wide	Mechanical Infrastructure	Site Cooling plant		Present		4	3	original
Gisborne Hospital	Site Wide	Mechanical Infrastructure	Site Cooling pipes		Present		4	2	original
Gisborne Hospital	Site Wide	Mechanical Infrastructure	Site Cold Water supply tanks		Present		3	2	original
Gisborne Hospital	Site Wide	Mechanical Infrastructure	Site Hot Water storage		Not Present				
Gisborne Hospital	Site Wide	Mechanical Infrastructure	Site Hot and Cold Water site pipes		Present		3	2	original
Gisborne Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water storage tanks		Not Present				
Gisborne Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water site pipes		Present		3	1	original
Gisborne Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		2	1	original
Gisborne Hospital	Site Wide	Mechanical Infrastructure	Site sewer drains		Present		2	1	original
Gisborne Hospital	Site Wide	Mechanical Infrastructure	Site storm water drains		Present		2	1	original
Gisborne Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		3	3	mixed
Gisborne Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		2	1	10+
Gisborne Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		2	1	10+

Out of scope

Raw Condition Scores

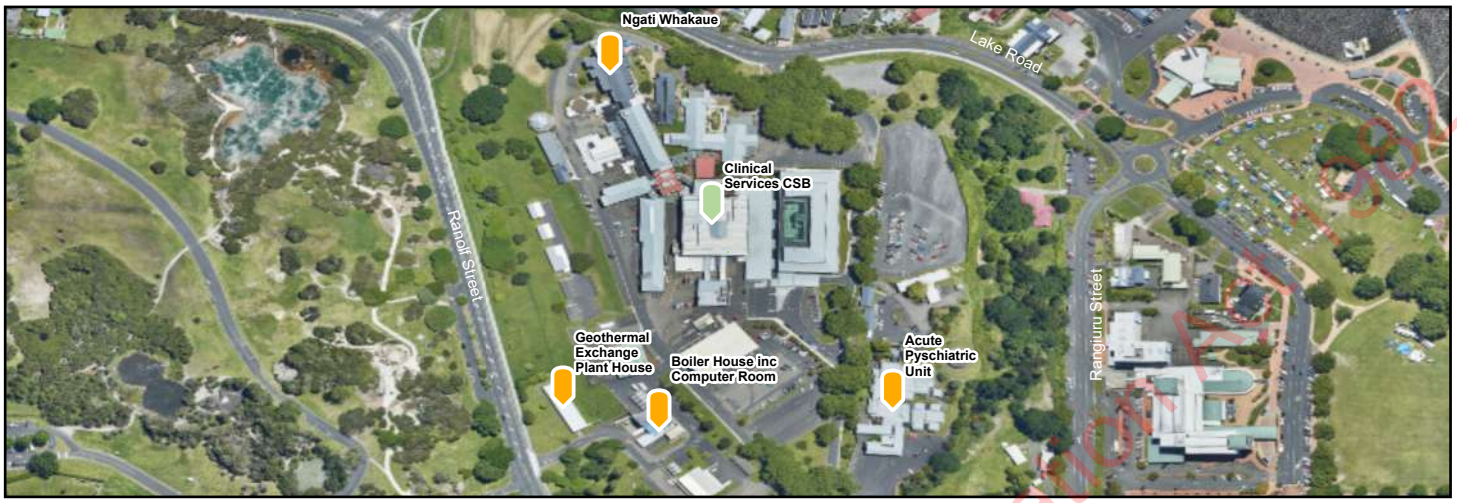
Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									

Rotorua Hospital

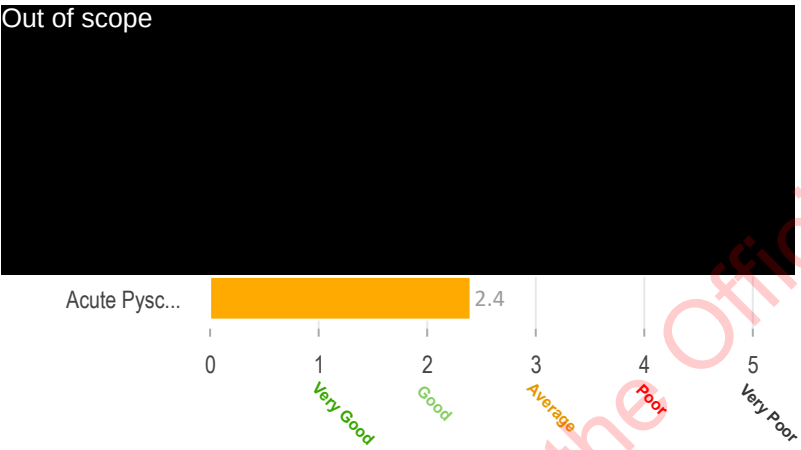
Lakes DHB

Beca Campus ID: 814
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 29/08/2019

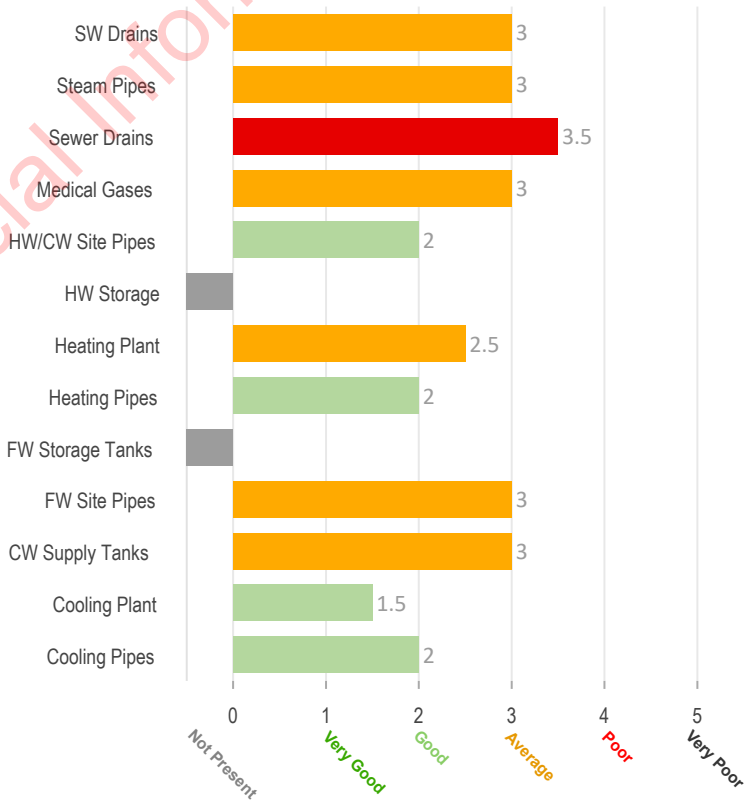
Site Overview



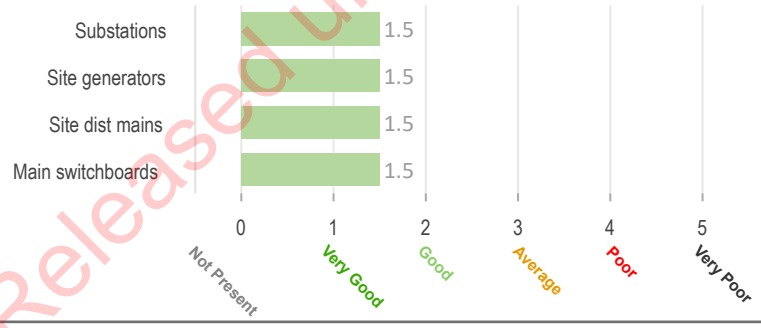
Buildings Surveyed



Site wide Mechanical Infrastructure Condition



Site wide Electrical Infrastructure Condition



Engineering Commentary

Generally aging buildings with a mix of original and refurbished buildings. Acute Psychiatric building has a complex roof with many junctions that are prone to leaking. Out of scope

The electrical infrastructure is generally in good condition with some small variability in some of the older buildings. Out of scope Some original electrical infrastructure is likely to require replacement in the near future.

Major refurbishment undertaken circa 2012 therefore mechanical assets in good condition. Some 'backbone' infrastructure is original and will be beyond its life expectancy. Condition monitoring programme is recommende . Out of scope cute Mental Health mechanical and electrical infrastructure are in poor Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

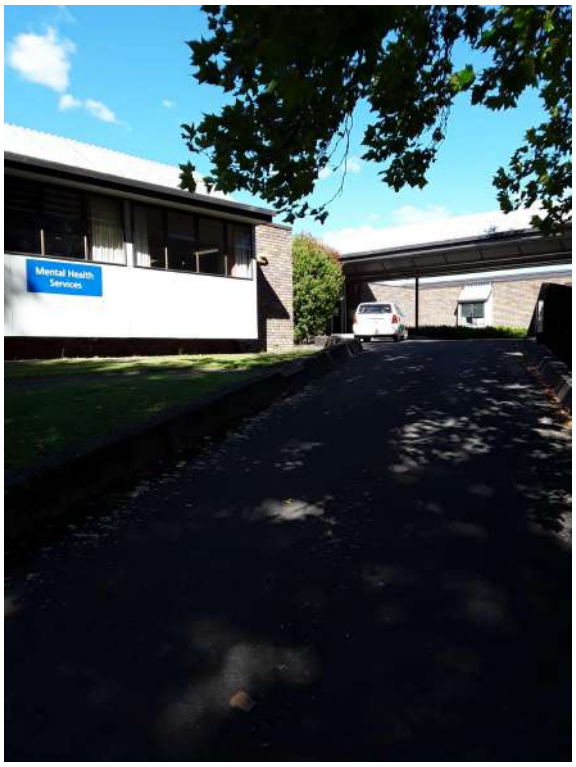
Out of scope

Acute Pyschiatric Unit

Rotorua Hospital (Lakes DHB)

Beca Building ID: 191
NAMP ID: 10432
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior



Services & Fabric Score

2.4

DHB Assessed % *NBS* Rating

67% IL4

General Building Information

Approximate Building Age: 1976

Survey date: 9/04/2019

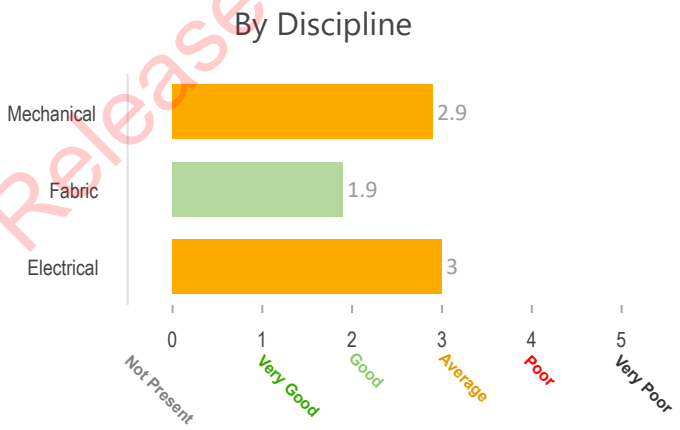
Gross Floor Area (m2): 2000

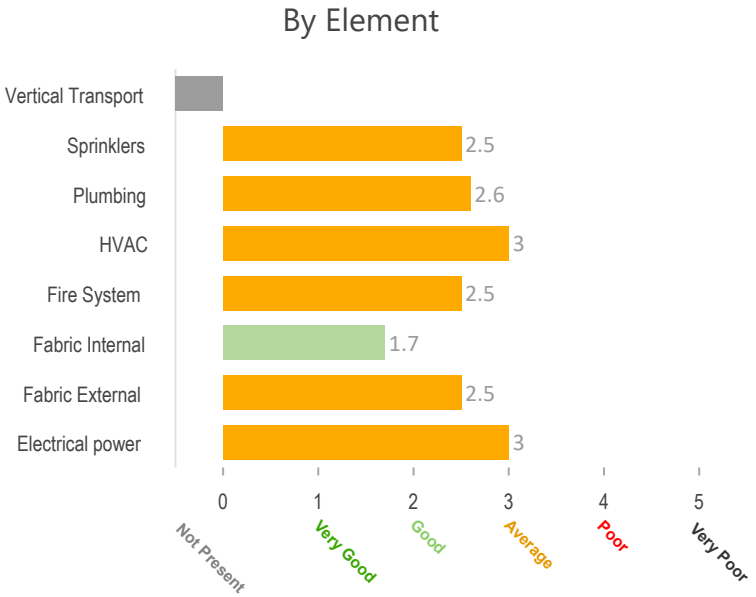
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Limited issues observed/known

Seismic Services Restraint: Very Poor

Summary of building condition

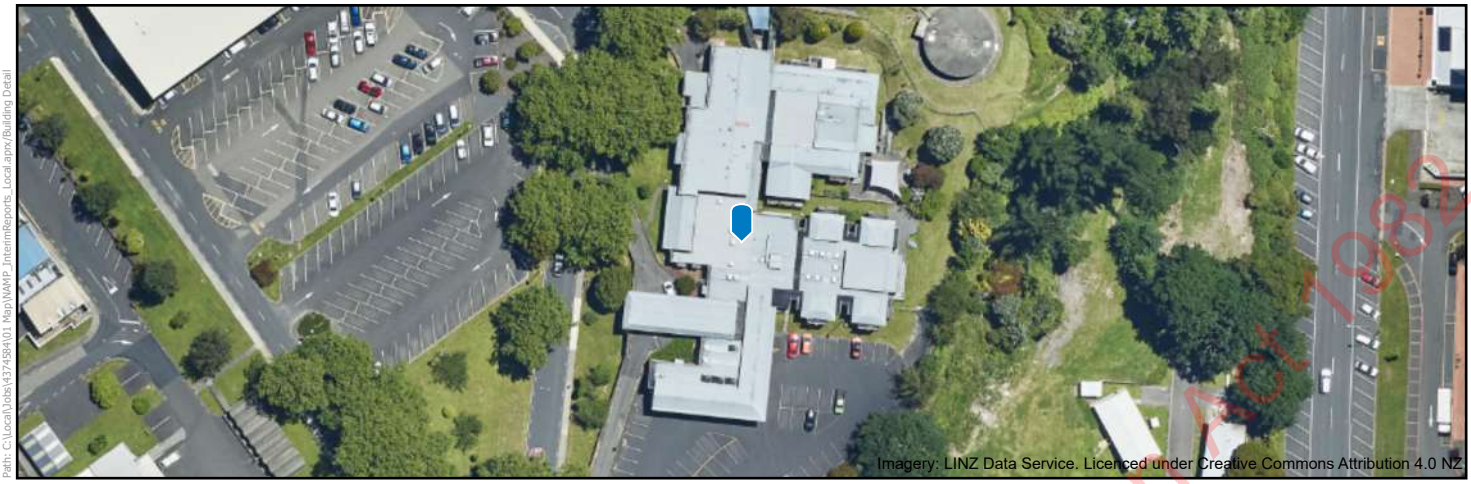




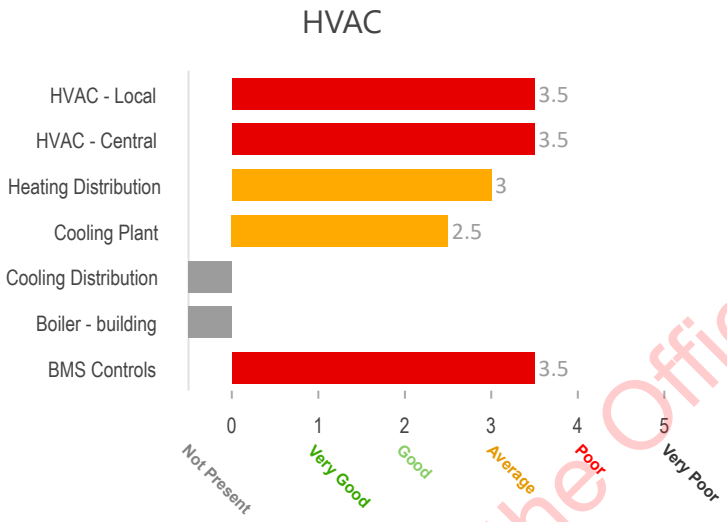
Beca Building ID: 191
NAMP ID: 10432
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

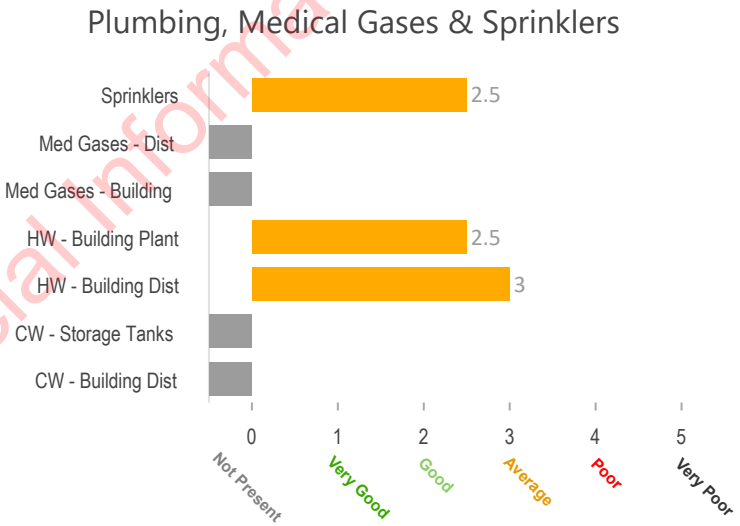
Approximate building location

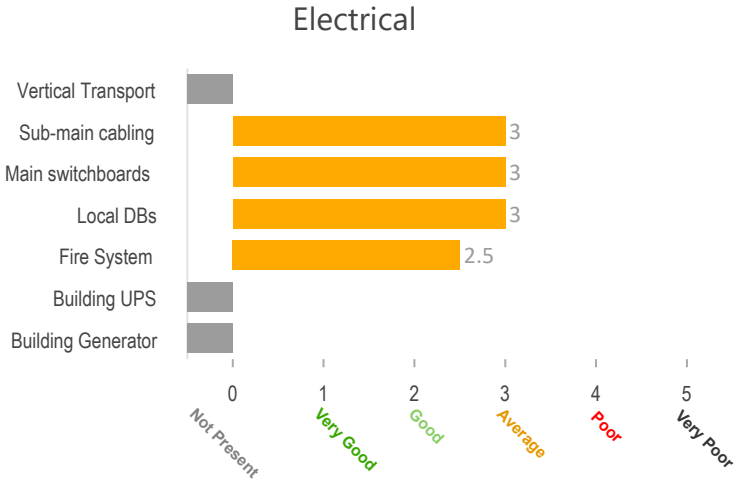
Acute Pyschiatric Unit



Summary of building element condition details







Condition Definitions

Services and Fabric - Survey Methodology and scope:

The main uses of this condition review are:

- To inform the MoH on the general condition of the critical buildings within the NZ health estate
- To be a base for future development of building condition
- To assist in making decisions between projects vying for a finite capital spend budget
- To provide for comparison between DHBs and inform long term, high level budget planning (projects >$10M)

Scoring of the assets is on a scale of 1(very good) to 5 (very poor). Building scores have been obtained from a weighted average of elements reflecting their estimated percentage of an overall building replacement cost.

In addition to the condition, the score/rating of each element also accounts for the age and variability (whether the element in the building was of a similar condition throughout the building ie some lifts that are good condition and others that are poor condition/age) of the element assessed.

Each element has been factored, with the weighting criteria applied to each element condition score according to their proportional cost impact on the building (ie HVAC attracts a higher impact than plumbing).

Services plant and equipment have been assessed under the building in which they are housed, unless the plant/equipment also serves other buildings on the site, in which case these have been assessed under site wide infrastructure.

Full details of the survey methodology are contained in the Beca NAMP Asset Condition Survey Data Standard and Methodology Rev.D, dated 25th April 2019.

Services and Fabric - Survey Assumptions and Exclusions:

The survey is to inform high level MoH decision making, not DHB asset management purposes, and has been based around a combination of information provided by DHB site representatives and limited site observation.

Our site inspection and survey comprise a high level visual inspection only. No inspections were undertaken of wall framing, ceiling voids, floor voids or other parts of the asset which were covered, unexposed or inaccessible and we are therefore unable to report that any such part of the property is free from significant defect. The survey should not be construed as a detailed building condition survey for specific asset repair and maintenance budget planning, since service and location specific methodology around replacement is likely to be required.

Our site inspection data has been provided as an 'indicative assessment' generalising the current condition by discipline only. Its purpose is to support general system level commentary to assist in directing master planning decisions. The review does not provide assessment of:

- Performance, reliability or fitness for purpose
- Capacity of plant or systems
- Operational efficiency of specific plant or systems.
- Resilience and redundancy of systems

It is assumed that a building, its services (and any alterations) have been designed and constructed in accordance with the Building Code current at the time of the construction. Infrastructure assessments have been primarily based on advice from site teams with visual observation where accessible and provided.

A number of aspects were not requested to form part of the survey scope and are noted as excluded from this report. These include:

- Clinical Equipment
- Cool Rooms and Refrigeration Equipment
- Information and Communication Technology (data and comm's)
- Carriageways or civil works
- Other General Equipment (e.g. kitchen)
- Other Specialised Equipment (e.g. biosafety and fume cabinets, Lamson Tube system)
- Security, Nurse Call Services & the like
- On site Structural engineering reviews

DHB Assessed *% NBS* Ratings:

The DHB assessed *%NBS* ratings included in this report have been provided by the DHBs via the Ministry of Health and have not been reviewed, checked or validated for accuracy or completeness.

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Rotorua Hospital	Acute Pyschiatric Unit	Electrical Power	Building Main Switchboard		Present		3	1	original
Rotorua Hospital	Acute Pyschiatric Unit	Electrical Power	Local DBs		Present		3	1	original
Rotorua Hospital	Acute Pyschiatric Unit	Electrical Power	Sub-main cabling		Present		3	1	original
Rotorua Hospital	Acute Pyschiatric Unit	Electrical Power	Building UPS		Not Present				
Rotorua Hospital	Acute Pyschiatric Unit	Electrical Power	Building Generator		Not Present				
Rotorua Hospital	Acute Pyschiatric Unit	Electrical Power	Site Generator			yes			
Rotorua Hospital	Acute Pyschiatric Unit	Fabric External	Walls and Cladding	Sheet	Present		2	1	original
Rotorua Hospital	Acute Pyschiatric Unit	Fabric External	Walls and Cladding	Masonry	Present		2	1	original
Rotorua Hospital	Acute Pyschiatric Unit	Fabric External	Windows and Doors	Aluminium	Present		2	1	original
Rotorua Hospital	Acute Pyschiatric Unit	Fabric External	Roofing and Decking	Iron/metal	Present		3	1	original
Rotorua Hospital	Acute Pyschiatric Unit	Fabric Internal	G		Present		2	1	10+
Rotorua Hospital	Acute Pyschiatric Unit	Fire Alarm	Fire finder		Present		3	1	10+
Rotorua Hospital	Acute Pyschiatric Unit	Fire Alarm	Vesda		Present		3	1	10+
Rotorua Hospital	Acute Pyschiatric Unit	HVAC	Boiler Plant - Site Plant			yes			
Rotorua Hospital	Acute Pyschiatric Unit	HVAC	Boiler Plant in building		Not Present				
Rotorua Hospital	Acute Pyschiatric Unit	HVAC	Heating Distribution		Present		3	2	10+
Rotorua Hospital	Acute Pyschiatric Unit	HVAC	Cooling Plant - Site Plant			no			
Rotorua Hospital	Acute Pyschiatric Unit	HVAC	Cooling Plant in building		Present		3	1	10+
Rotorua Hospital	Acute Pyschiatric Unit	HVAC	Cooling Distribution	No information/access					
Rotorua Hospital	Acute Pyschiatric Unit	HVAC	Building HVAC - Central plant		Present		4	2	10+
Rotorua Hospital	Acute Pyschiatric Unit	HVAC	Building HVAC - Local plant		Present		3	2	10+
Rotorua Hospital	Acute Pyschiatric Unit	HVAC	BMS Controls		Present		4	1	10+
Rotorua Hospital	Acute Pyschiatric Unit	Plumbing	Hot water - Site Plant			yes			
Rotorua Hospital	Acute Pyschiatric Unit	Plumbing	Hot water - Building plant		Present		3	1	10+
Rotorua Hospital	Acute Pyschiatric Unit	Plumbing	Hot water - Building distribution		Present		3	2	10+
Rotorua Hospital	Acute Pyschiatric Unit	Plumbing	Cold water - Site storage and mains			yes			
Rotorua Hospital	Acute Pyschiatric Unit	Plumbing	Cold water - Building storage tanks		Not Present				
Rotorua Hospital	Acute Pyschiatric Unit	Plumbing	Cold water - Building distribution	No information/access					
Rotorua Hospital	Acute Pyschiatric Unit	Plumbing	Medical gases and vacuum - Site Plant			no			
Rotorua Hospital	Acute Pyschiatric Unit	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Rotorua Hospital	Acute Pyschiatric Unit	Plumbing	Medical gases and vacuum distribution		Not Present				
Rotorua Hospital	Acute Pyschiatric Unit	Sprinklers	Sprinklers		Present		3	1	10+
Rotorua Hospital	Acute Pyschiatric Unit	Vertical Transport			Not Present				

Out of scope

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age

Out of scope

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									
Rotorua Hospital	Site Wide	Electrical Infrastructure	Substations		Present		2	1	3 to 10
Rotorua Hospital	Site Wide	Electrical Infrastructure	Main switchboards		Present		2	1	3 to 10
Rotorua Hospital	Site Wide	Electrical Infrastructure	Site generators		Present		2	1	3 to 10
Rotorua Hospital	Site Wide	Electrical Infrastructure	Site distribution mains		Present		2	1	3 to 10
Rotorua Hospital	Site Wide	Mechanical Infrastructure	Site Heating Plant		Present		3	1	mixed
Rotorua Hospital	Site Wide	Mechanical Infrastructure	Site Heating pipes		Present		2	2	mixed
Rotorua Hospital	Site Wide	Mechanical Infrastructure	Site Steam pipes		Present		3	1	original
Rotorua Hospital	Site Wide	Mechanical Infrastructure	Site Cooling plant		Present		2	1	3 to 10
Rotorua Hospital	Site Wide	Mechanical Infrastructure	Site Cooling pipes		Present		2	2	mixed
Rotorua Hospital	Site Wide	Mechanical Infrastructure	Site Cold Water supply tanks		Present		3	1	original
Rotorua Hospital	Site Wide	Mechanical Infrastructure	Site Hot Water storage		Not Present				
Rotorua Hospital	Site Wide	Mechanical Infrastructure	Site Hot and Cold Water site pipes		Present		2	2	mixed

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Rotorua Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water storage tanks		Not Present				
Rotorua Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water site pipes		Present		3	2	mixed
Rotorua Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		3	2	10+
Rotorua Hospital	Site Wide	Mechanical Infrastructure	Site sewer drains		Present		3	2	original
Rotorua Hospital	Site Wide	Mechanical Infrastructure	Site storm water drains		Present		3	2	mixed

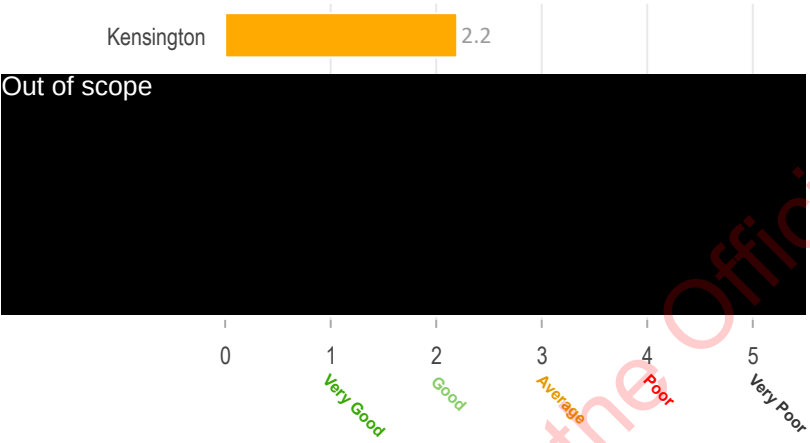
Timaru Hospital

South Canterbury DHB

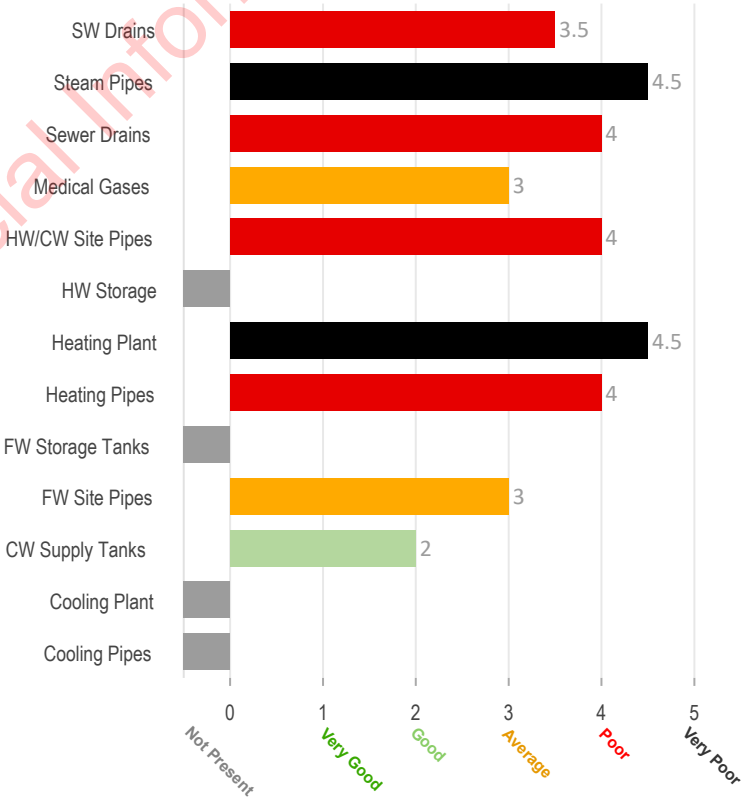
Beca Campus ID: 817
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 28/08/2019

Site Overview

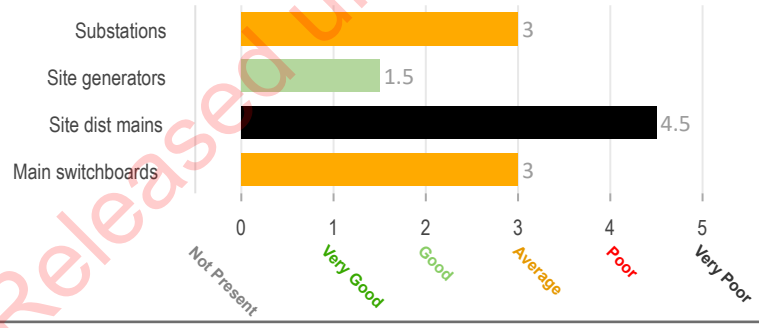
Buildings Surveyed



Site wide Mechanical Infrastructure Condition



Site wide Electrical Infrastructure Condition



Engineering Commentary

Out of scope

There are asbestos reports for Kensington, Out of scope Simon advised the asbestos issues are minor (lagging issues in the service tunnels) with majority of the risk in the Out of scope Buildings are generally in average condition Out of scope

The electrical infrastructure generally is beyond its life expectancy. Out of scope ift submains appear to be aging, in poor condition and high risk of failing. Out of scope

Mechanical services are generally in poor condition with patchwork replacement, aging equipment and infrastructure nearing the end of its life expectancy. The cooling system serving the theatres requires immediate replacement and the existing coal boilers will require replacement in the near future.

Kensington

Timaru Hospital (South Canterbury DHB)

Beca Building ID: 231
NAMP ID: 10769
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior

Services & Fabric Score

2.2

DHB Assessed % *NBS* Rating

No Data

General Building Information

Approximate Building Age: 1986

Survey date: 7/04/2019

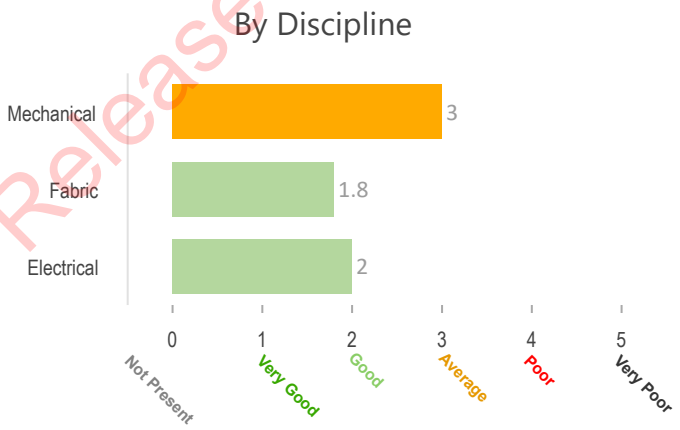
Gross Floor Area (m2): 1647

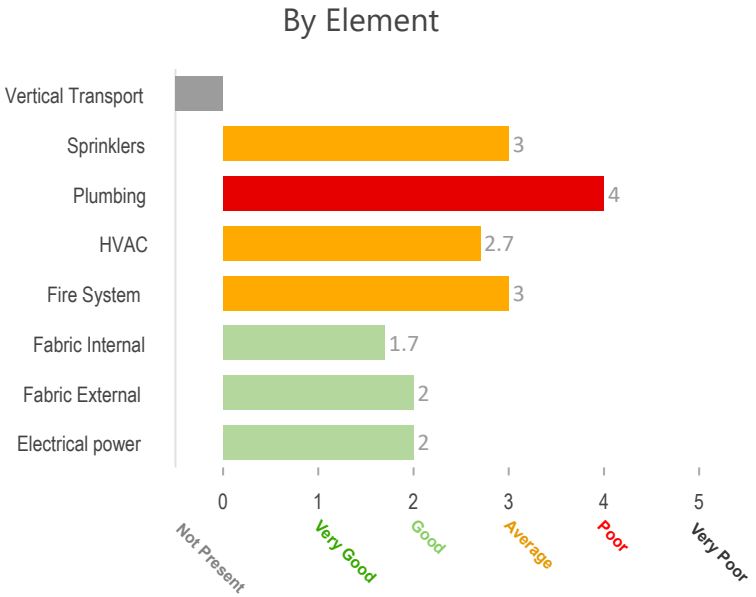
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Low likelihood of issues

Seismic Services Restraint: Very Poor

Summary of building condition

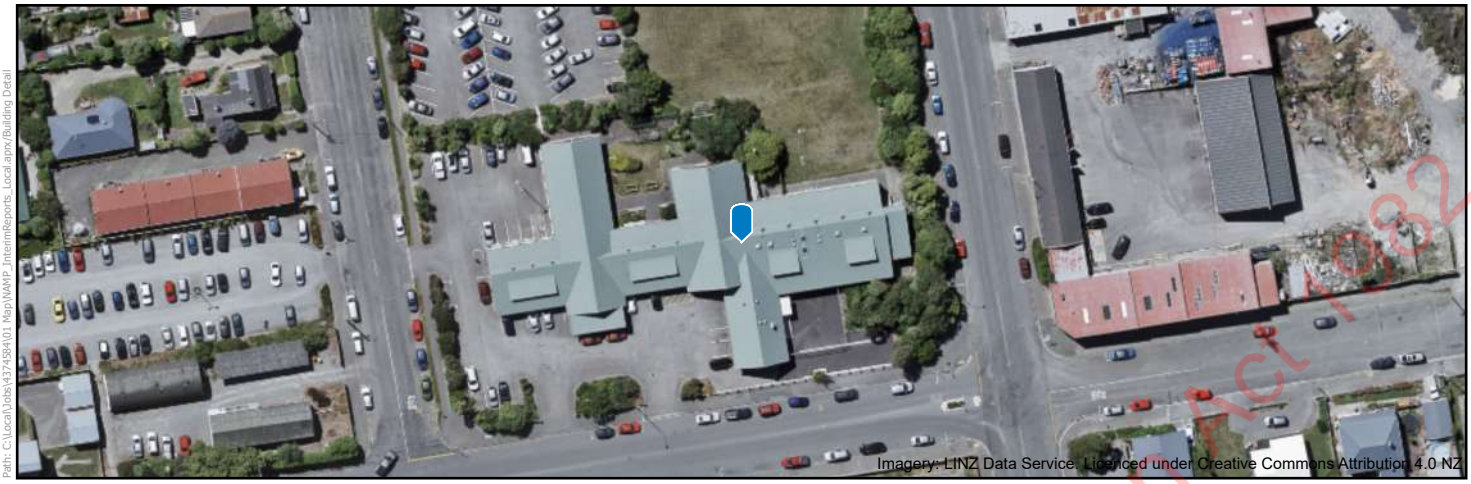




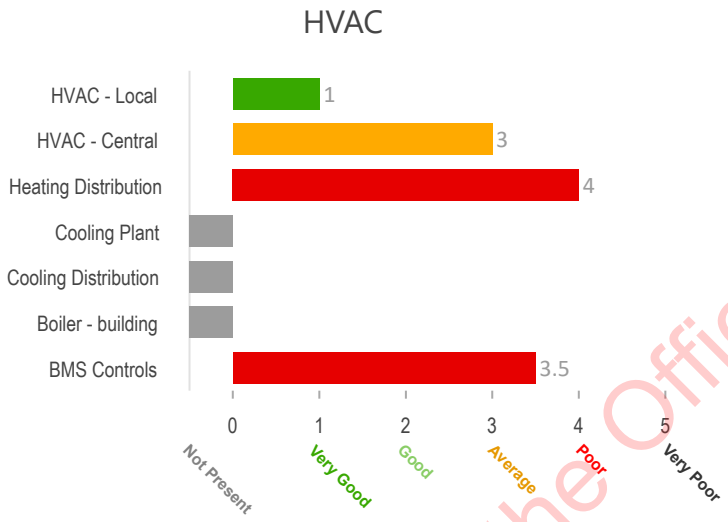
Beca Building ID: 231
NAMP ID: 10769
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

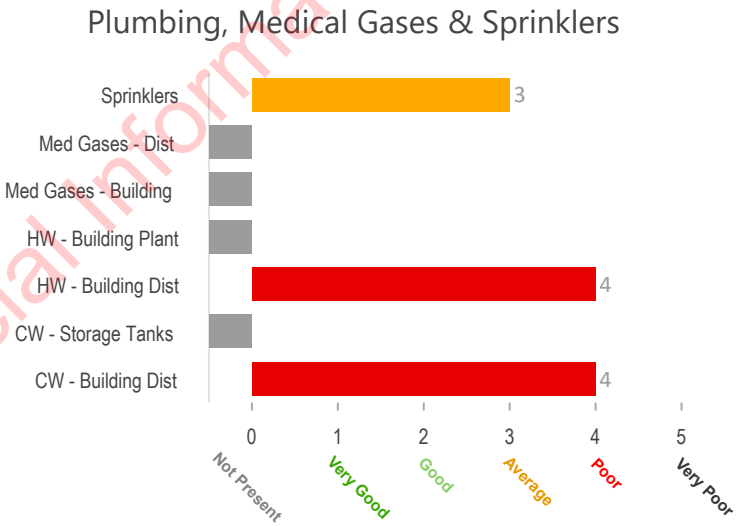
Approximate building location

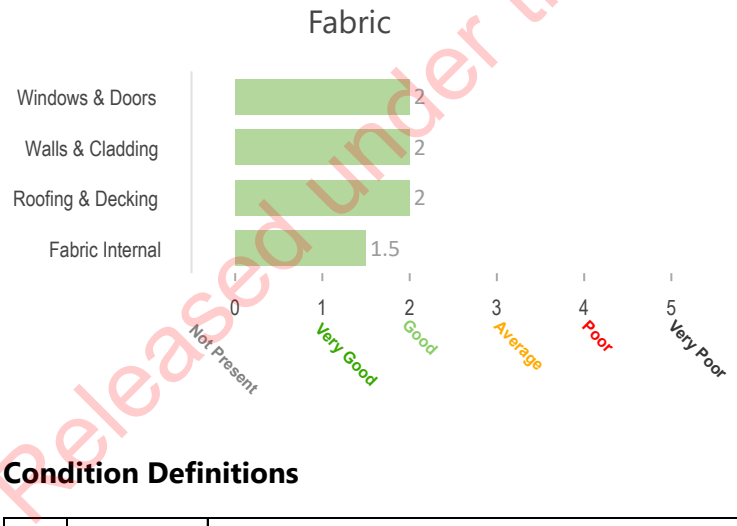
Kensington

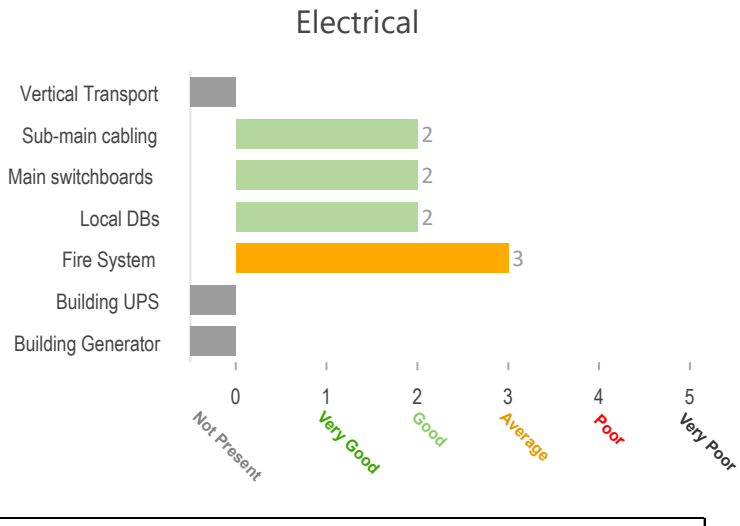


Summary of building element condition details









Condition Definitions

Rating	Condition	Definition (Services and Fabric)
	Not Present	Assets were not present or inaccessible when site was visited.
1	Very Good	Assets displaying no deterioration or only normal routine maintenance required. New or near new condition. Some wear or discoloration but no evidence of damage. Can include repaired assets where the repair is as good as the original.
2	Good	Assets displaying limited deterioration which does not affect their use, or where limited restoration has been performed. Minor reactive maintenance may be required. Acceptable physical condition, with minor deterioration or damage that may affect performance (includes most repaired assets)
3	Average	Assets which have deteriorated to a degree where maintenance is obviously due, but not to the extent where the function is significantly impaired or very substantial repairs are needed. Failure unlikely in near future but further deterioration is likely
4	Poor	Repair or renewal is required in the short term. Significant deterioration or damage is evident and severely impacting performance. Asset is barely serviceable and failure likely in short term
5	Very Poor	Immediate repair or renewal required. Asset is not in use or unserviceable (i.e. has failed) or failure is imminent. Asset may pose occupational health and safety problems. Requires urgent attention.

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Services and Fabric - Survey Methodology and scope:

The main uses of this condition review are:

- To inform the MoH on the general condition of the critical buildings within the NZ health estate
- To be a base for future development of building condition
- To assist in making decisions between projects vying for a finite capital spend budget
- To provide for comparison between DHBs and inform long term, high level budget planning (projects >$10M)

Scoring of the assets is on a scale of 1(very good) to 5 (very poor). Building scores have been obtained from a weighted average of elements reflecting their estimated percentage of an overall building replacement cost.

In addition to the condition, the score/rating of each element also accounts for the age and variability (whether the element in the building was of a similar condition throughout the building ie some lifts that are good condition and others that are poor condition/age) of the element assessed.

Each element has been factored, with the weighting criteria applied to each element condition score according to their proportional cost impact on the building (ie HVAC attracts a higher impact than plumbing).

Services plant and equipment have been assessed under the building in which they are housed, unless the plant/equipment also serves other buildings on the site, in which case these have been assessed under site wide infrastructure.

Full details of the survey methodology are contained in the Beca NAMP Asset Condition Survey Data Standard and Methodology Rev.D, dated 25th April 2019.

Services and Fabric - Survey Assumptions and Exclusions:

The survey is to inform high level MoH decision making, not DHB asset management purposes, and has been based around a combination of information provided by DHB site representatives and limited site observation.

Our site inspection and survey comprise a high level visual inspection only. No inspections were undertaken of wall framing, ceiling voids, floor voids or other parts of the asset which were covered, unexposed or inaccessible and we are therefore unable to report that any such part of the property is free from significant defect. The survey should not be construed as a detailed building condition survey for specific asset repair and maintenance budget planning, since service and location specific methodology around replacement is likely to be required.

Our site inspection data has been provided as an 'indicative assessment' generalising the current condition by discipline only. Its purpose is to support general system level commentary to assist in directing master planning decisions. The review does not provide assessment of:

- Performance, reliability or fitness for purpose
- Capacity of plant or systems
- Operational efficiency of specific plant or systems.
- Resilience and redundancy of systems

It is assumed that a building, its services (and any alterations) have been designed and constructed in accordance with the Building Code current at the time of the construction. Infrastructure assessments have been primarily based on advice from site teams with visual observation where accessible and provided.

A number of aspects were not requested to form part of the survey scope and are noted as excluded from this report. These include:

- Clinical Equipment
- Cool Rooms and Refrigeration Equipment
- Information and Communication Technology (data and comm's)
- Carriageways or civil works
- Other General Equipment (e.g. kitchen)
- Other Specialised Equipment (e.g. biosafety and fume cabinets, Lamson Tube system)
- Security, Nurse Call Services & the like
- On site Structural engineering reviews

DHB Assessed *% NBS* Ratings:

The DHB assessed *%NBS* ratings included in this report have been provided by the DHBs via the Ministry of Health and have not been reviewed, checked or validated for accuracy or completeness.

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Timaru Hospital	Kensington	Electrical Power	Local DBs		Present		2	1	original
Timaru Hospital	Kensington	Electrical Power	Building Generator		Not Present				
Timaru Hospital	Kensington	Electrical Power	Building UPS		Not Present				
Timaru Hospital	Kensington	Electrical Power	Sub-main cabling		Present		2	1	original
Timaru Hospital	Kensington	Electrical Power	Building Main Switchboard		Present		2	1	original
Timaru Hospital	Kensington	Electrical Power	Site Generator			yes			
Timaru Hospital	Kensington	Fabric External	Walls and Cladding	Masonry	Present		2	1	original
Timaru Hospital	Kensington	Fabric External	Walls and Cladding	Sheet	Present		2	1	original
Timaru Hospital	Kensington	Fabric External	Roofing and Decking	Iron/metal	Present		2	1	original
Timaru Hospital	Kensington	Fabric External	Windows and Doors	Aluminium	Present		2	1	original
Timaru Hospital	Kensington	Fabric Internal	G		Present		2	1	3 to 10
Timaru Hospital	Kensington	Fire Alarm	Sprinklers		Present		3	1	original
Timaru Hospital	Kensington	HVAC	Boiler Plant - Site Plant			yes			
Timaru Hospital	Kensington	HVAC	Boiler Plant in building		Not Present				
Timaru Hospital	Kensington	HVAC	Heating Distribution		Present		3	3	original
Timaru Hospital	Kensington	HVAC	Cooling Plant - Site Plant			no			
Timaru Hospital	Kensington	HVAC	Cooling Plant in building		Not Present				
Timaru Hospital	Kensington	HVAC	Cooling Distribution		Not Present				
Timaru Hospital	Kensington	HVAC	Building HVAC - Central plant		Present		3	1	original
Timaru Hospital	Kensington	HVAC	Building HVAC - Local plant		Present		1	2	0 to 3
Timaru Hospital	Kensington	HVAC	BMS Controls		Present		3	2	original
Timaru Hospital	Kensington	Plumbing	Hot water - Site Plant			yes			
Timaru Hospital	Kensington	Plumbing	Hot water - Building plant		Not Present				
Timaru Hospital	Kensington	Plumbing	Hot water - Building distribution		Present		3	3	original
Timaru Hospital	Kensington	Plumbing	Cold water - Site storage and mains			no			
Timaru Hospital	Kensington	Plumbing	Cold water - Building storage tanks		Not Present				
Timaru Hospital	Kensington	Plumbing	Cold water - Building distribution		Present		3	3	original
Timaru Hospital	Kensington	Plumbing	Medical gases and vacuum - Site Plant			no			
Timaru Hospital	Kensington	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Timaru Hospital	Kensington	Plumbing	Medical gases and vacuum distribution		Not Present				
Timaru Hospital	Kensington	Sprinklers	Sprinklers		Present		3	1	original
Timaru Hospital	Kensington	Vertical Transport			Not Present				
Timaru Hospital	Site Wide	Electrical Infrastructure	Main switchboards		Present		3	1	original
Timaru Hospital	Site Wide	Electrical Infrastructure	Site generators		Present		2	1	10+
Timaru Hospital	Site Wide	Electrical Infrastructure	Site distribution mains		Present		4	3	original
Timaru Hospital	Site Wide	Electrical Infrastructure	Substations		Present		3	1	original
Timaru Hospital	Site Wide	Mechanical Infrastructure	Site Heating Plant		Present		4	3	original
Timaru Hospital	Site Wide	Mechanical Infrastructure	Site Cold Water supply tanks		Present		2	2	3 to 10
Timaru Hospital	Site Wide	Mechanical Infrastructure	Site Hot Water storage		Not Present				
Timaru Hospital	Site Wide	Mechanical Infrastructure	Site Hot and Cold Water site pipes		Present		3	3	original
Timaru Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water storage tanks		Not Present				
Timaru Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water site pipes		Present		3	1	original
Timaru Hospital	Site Wide	Mechanical Infrastructure	Site Cooling plant		Not Present				
Timaru Hospital	Site Wide	Mechanical Infrastructure	Site Cooling pipes		Not Present				
Timaru Hospital	Site Wide	Mechanical Infrastructure	Site sewer drains		Present		4	3	mixed

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Timaru Hospital	Site Wide	Mechanical Infrastructure	Site storm water drains		Present		3	2	original
Timaru Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		3	2	10+
Timaru Hospital	Site Wide	Mechanical Infrastructure	Site Heating pipes		Present		3	3	original
Timaru Hospital	Site Wide	Mechanical Infrastructure	Site Steam pipes		Present		4	3	original

Out of scope

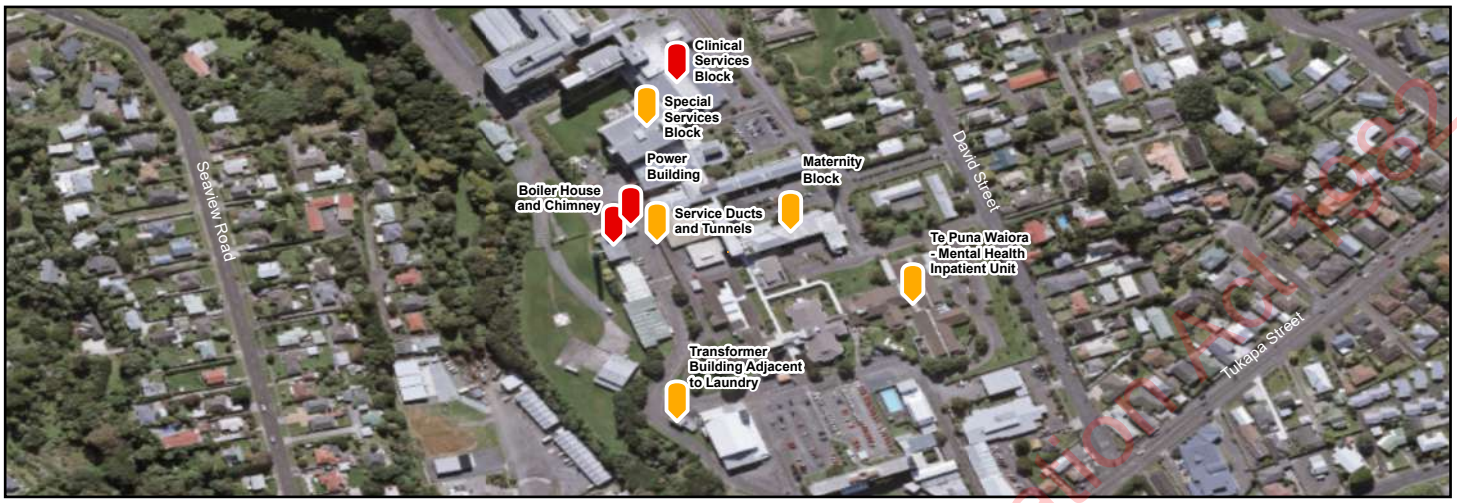
MINISTRY OF HEALTH
MANATŪ HAUORA

Taranaki Base Hospital

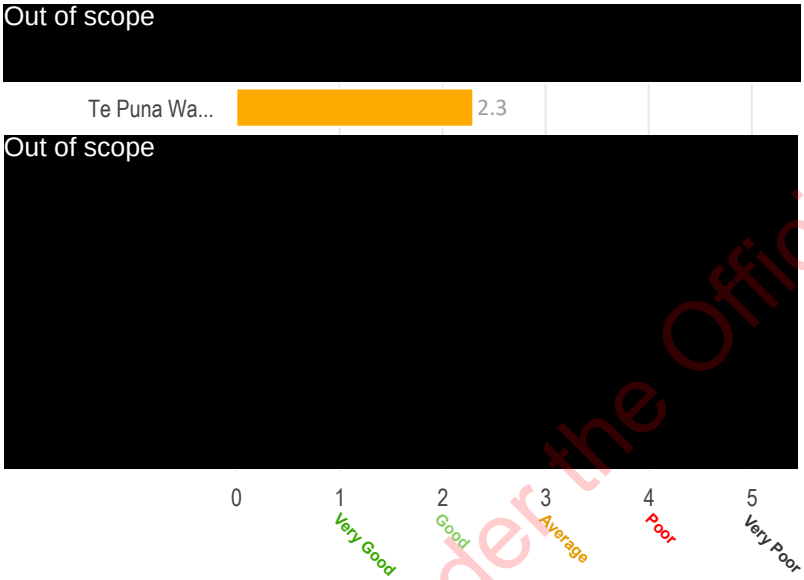
Taranaki DHB

Beca Campus ID: 821
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 29/08/2019

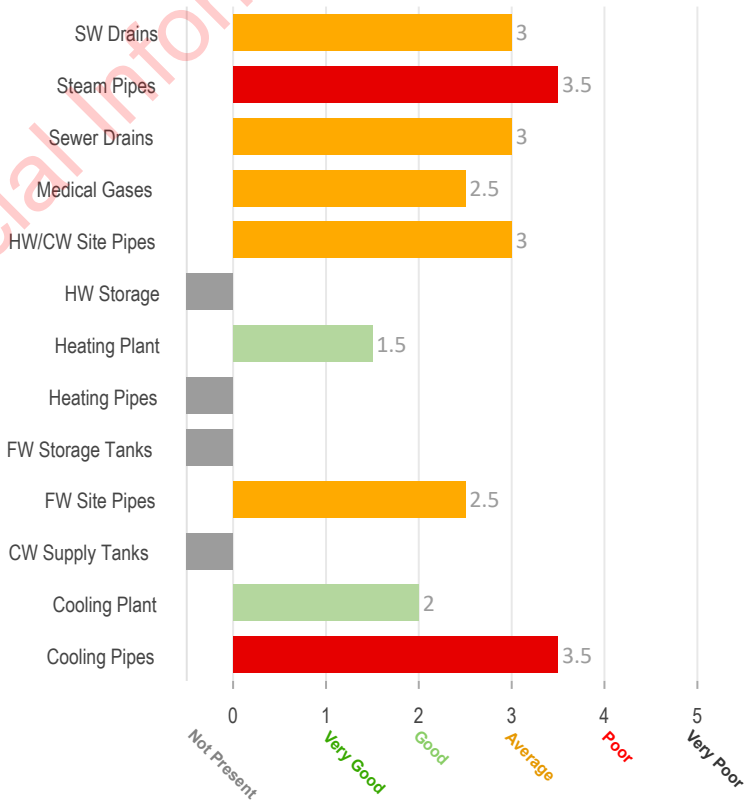
Site Overview



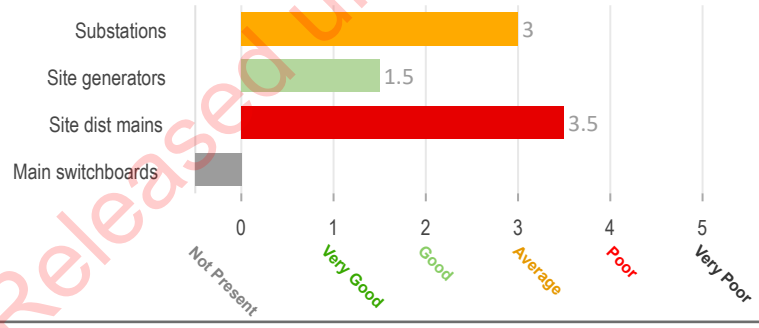
Buildings Surveyed



Site wide Mechanical Infrastructure Condition



Site wide Electrical Infrastructure Condition



Engineering Commentary

Generally buildings inspected were of average condition with aging electrical infrastructure nearing the end of its life expectancy.

Out of scope

No investigation of passive fire protection has been undertaken on the site.

Out of scope

Out of scope

Out of scope

Te Puna Waiora - Mental Health

Taranaki Base Hospital (Taranaki DHB)

Beca Building ID: 213
NAMP ID: 10975
DHB Ref: 123
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior

Services & Fabric Score

2.3

DHB Assessed % *NBS* Rating

89% IL4

General Building Information

Approximate Building Age: 1987

Survey date: 1/05/2019

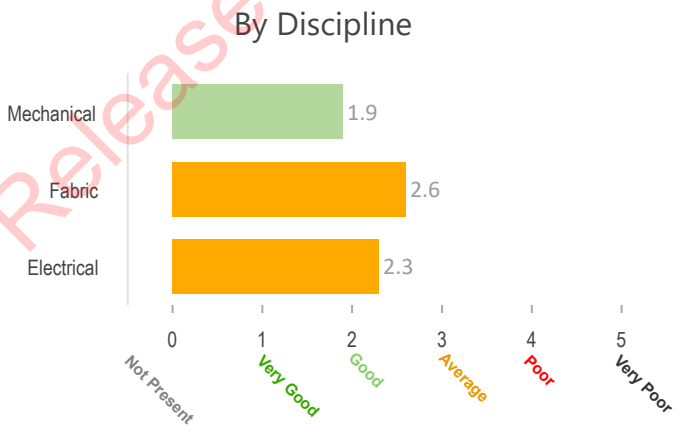
Gross Floor Area (m2): 2360

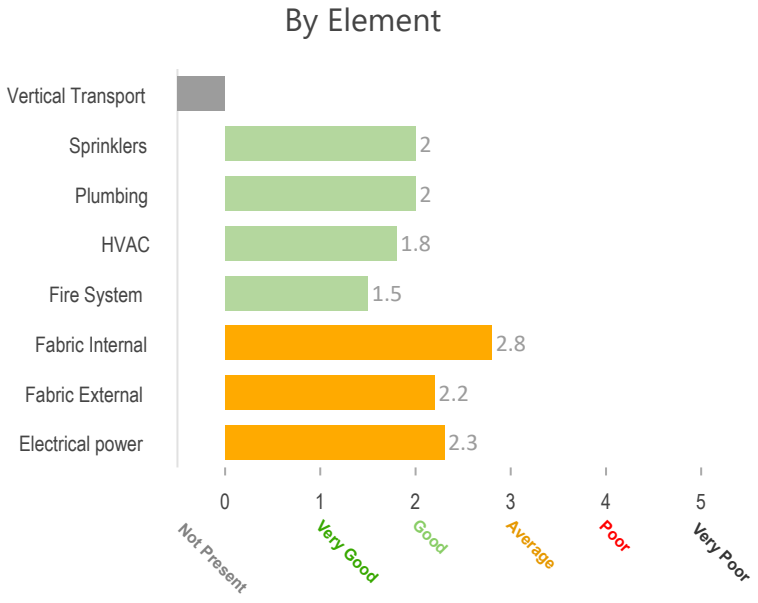
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Low likelihood of issues

Seismic Services Restraint: Poor

Summary of building condition



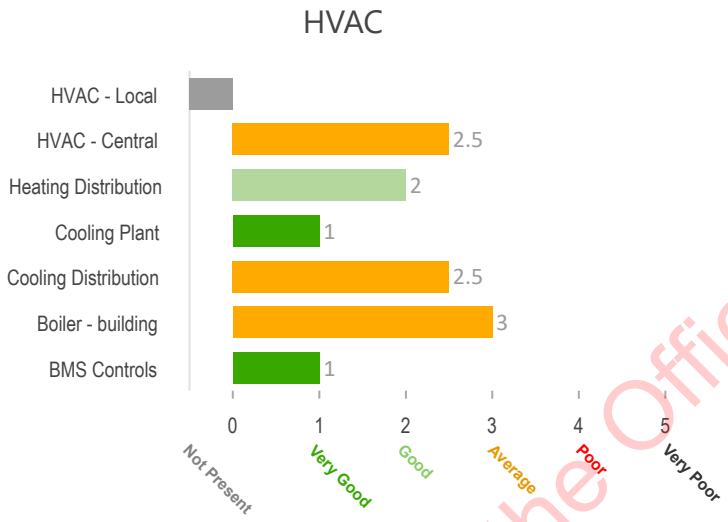


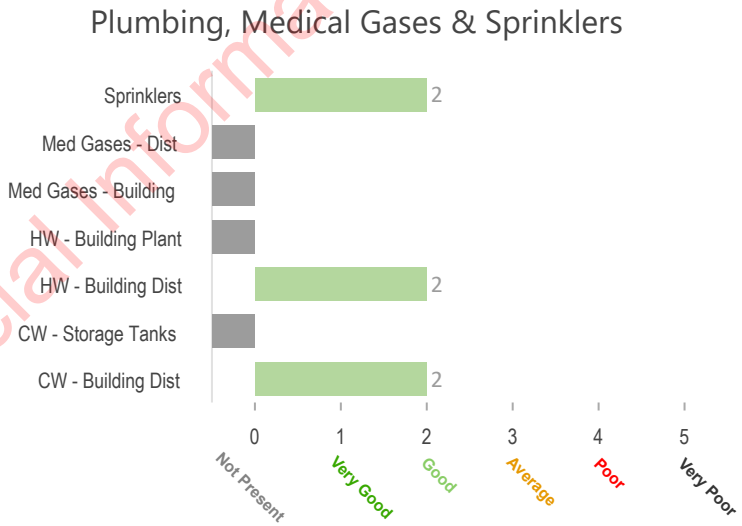
Beca Building ID: 213
NAMP ID: 10975
DHB Ref: 123
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

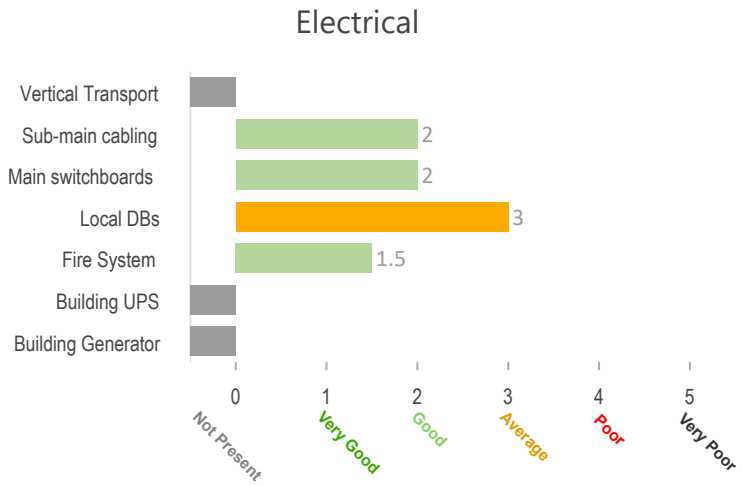
Approximate building location

Te Puna Waiora - Mental Health Inpatient Unit

Summary of building element condition details







Condition Definitions

Rating	Condition	Definition (Services and Fabric)
	Not Present	Assets were not present or inaccessible when site was visited.
1	Very Good	Assets displaying no deterioration or only normal routine maintenance required. New or near new condition. Some wear or discoloration but no evidence of damage. Can include repaired assets where the repair is as good as the original.
2	Good	Assets displaying limited deterioration which does not affect their use, or where limited restoration has been performed. Minor reactive maintenance may be required. Acceptable physical condition, with minor deterioration or damage that may affect performance (includes most repaired assets)
3	Average	Assets which have deteriorated to a degree where maintenance is obviously due, but not to the extent where the function is significantly impaired or very substantial repairs are needed. Failure unlikely in near future but further deterioration is likely
4	Poor	Repair or renewal is required in the short term. Significant deterioration or damage is evident and severely impacting performance. Asset is barely serviceable and failure likely in short term
5	Very Poor	Immediate repair or renewal required. Asset is not in use or unserviceable (i.e. has failed) or failure is imminent. Asset may pose occupational health and safety problems. Requires urgent attention.

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Services and Fabric - Survey Methodology and scope:

The main uses of this condition review are:

- To inform the MoH on the general condition of the critical buildings within the NZ health estate
- To be a base for future development of building condition
- To assist in making decisions between projects vying for a finite capital spend budget
- To provide for comparison between DHBs and inform long term, high level budget planning (projects >$10M)

Scoring of the assets is on a scale of 1(very good) to 5 (very poor). Building scores have been obtained from a weighted average of elements reflecting their estimated percentage of an overall building replacement cost.

In addition to the condition, the score/rating of each element also accounts for the age and variability (whether the element in the building was of a similar condition throughout the building ie some lifts that are good condition and others that are poor condition/age) of the element assessed.

Each element has been factored, with the weighting criteria applied to each element condition score according to their proportional cost impact on the building (ie HVAC attracts a higher impact than plumbing).

Services plant and equipment have been assessed under the building in which they are housed, unless the plant/equipment also serves other buildings on the site, in which case these have been assessed under site wide infrastructure.

Full details of the survey methodology are contained in the Beca NAMP Asset Condition Survey Data Standard and Methodology Rev.D, dated 25th April 2019.

Services and Fabric - Survey Assumptions and Exclusions:

The survey is to inform high level MoH decision making, not DHB asset management purposes, and has been based around a combination of information provided by DHB site representatives and limited site observation.

Our site inspection and survey comprise a high level visual inspection only. No inspections were undertaken of wall framing, ceiling voids, floor voids or other parts of the asset which were covered, unexposed or inaccessible and we are therefore unable to report that any such part of the property is free from significant defect. The survey should not be construed as a detailed building condition survey for specific asset repair and maintenance budget planning, since service and location specific methodology around replacement is likely to be required.

Our site inspection data has been provided as an 'indicative assessment' generalising the current condition by discipline only. Its purpose is to support general system level commentary to assist in directing master planning decisions. The review does not provide assessment of:

- Performance, reliability or fitness for purpose
- Capacity of plant or systems
- Operational efficiency of specific plant or systems.
- Resilience and redundancy of systems

It is assumed that a building, its services (and any alterations) have been designed and constructed in accordance with the Building Code current at the time of the construction. Infrastructure assessments have been primarily based on advice from site teams with visual observation where accessible and provided.

A number of aspects were not requested to form part of the survey scope and are noted as excluded from this report. These include:

- Clinical Equipment
- Cool Rooms and Refrigeration Equipment
- Information and Communication Technology (data and comm's)
- Carriageways or civil works
- Other General Equipment (e.g. kitchen)
- Other Specialised Equipment (e.g. biosafety and fume cabinets, Lamson Tube system)
- Security, Nurse Call Services & the like
- On site Structural engineering reviews

DHB Assessed *% NBS* Ratings:

The DHB assessed *%NBS* ratings included in this report have been provided by the DHBs via the Ministry of Health and have not been reviewed, checked or validated for accuracy or completeness.

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age

Out of scope

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age

Out of scope

[redacted]

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age

Out of scope

[redacted]

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									
Taranaki Base Hospital	Site Wide	Electrical Infrastructure	Site distribution mains		Present		3	3	mixed
Taranaki Base Hospital	Site Wide	Electrical Infrastructure	Site generators		Present		2	1	3 to 10
Taranaki Base Hospital	Site Wide	Electrical Infrastructure	Substations		Present		3	2	mixed
Taranaki Base Hospital	Site Wide	Mechanical Infrastructure	Site Cold Water supply tanks		Not Present				
Taranaki Base Hospital	Site Wide	Mechanical Infrastructure	Site Cooling pipes		Present		4	3	original
Taranaki Base Hospital	Site Wide	Mechanical Infrastructure	Site Cooling plant		Present		2	2	mixed
Taranaki Base Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water site pipes		Present		3	1	10+
Taranaki Base Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water storage tanks		Not Present				
Taranaki Base Hospital	Site Wide	Mechanical Infrastructure	Site Heating pipes		Not Present				
Taranaki Base Hospital	Site Wide	Mechanical Infrastructure	Site Heating Plant		Present		2	1	10+
Taranaki Base Hospital	Site Wide	Mechanical Infrastructure	Site Hot and Cold Water site pipes		Present		3	1	original
Taranaki Base Hospital	Site Wide	Mechanical Infrastructure	Site Hot Water storage		Not Present				
Taranaki Base Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		3	1	10+
Taranaki Base Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		2	1	10+
Taranaki Base Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		3	1	10+
Taranaki Base Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		3	2	original
Taranaki Base Hospital	Site Wide	Mechanical Infrastructure	Site sewer drains		Present		3	1	original
Taranaki Base Hospital	Site Wide	Mechanical Infrastructure	Site Steam pipes		Present		4	1	original
Taranaki Base Hospital	Site Wide	Mechanical Infrastructure	Site storm water drains		Present		3	1	original
Out of scope									

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	Electrical Power	Building Generator		Not Present				
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	Electrical Power	Building Main Switchboard		Present		2	1	original
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	Electrical Power	Building UPS		Not Present				
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	Electrical Power	Local DBs		Present		3	1	original
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	Electrical Power	Site Generator			yes			
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	Electrical Power	Sub-main cabling		Present		2	1	original
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	Fabric External	Roofing and Decking	Tile/Shingle	Present		2	1	original
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	Fabric External	Roofing and Decking	Rubber Sheet	Present		4	1	original
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	Fabric External	Walls and Cladding	Masonry	Present		2	1	original
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	Fabric External	Walls and Cladding	Sheet	Present		3	1	original
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	Fabric External	Windows and Doors	Aluminium	Present		2	1	original
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	Fabric Internal	1		Present		3	1	original
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	Fabric Internal	2		Present		3	1	10+
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	Fire Alarm	Addressible		Present		2	1	10+
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	HVAC	BMS Controls		Present		1	1	0 to 3
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	HVAC	Boiler Plant - Site Plant			no			
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	HVAC	Boiler Plant in building		Present		3	1	original
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	HVAC	Building HVAC - Central plant		Present		3	1	10+

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	HVAC	Building HVAC - Local plant		Not Present				
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	HVAC	Cooling Distribution		Present		3	1	10+
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	HVAC	Cooling Plant - Site Plant			no			
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	HVAC	Cooling Plant in building		Present		1	1	0 to 3
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	HVAC	Heating Distribution		Present		2	1	original
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	Plumbing	Cold water - Building distribution		Present		2	1	original
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	Plumbing	Cold water - Building storage tanks		Not Present				
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	Plumbing	Cold water - Site storage and mains			no			
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	Plumbing	Hot water - Building distribution		Present		2	1	original
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	Plumbing	Hot water - Building plant		Not Present				
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	Plumbing	Hot water - Site Plant			no			
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	Plumbing	Medical gases and vacuum - Site Plant			no			
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	Plumbing	Medical gases and vacuum distribution		Not Present				
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	Sprinklers	Sprinklers		Present		2	1	original
Taranaki Base Hospital	Te Puna Waiora - Mental Health Inpatient Unit	Vertical Transport			Not Present				

Out of scope

[redacted]

Raw Condition Scores

RL VERSIONS

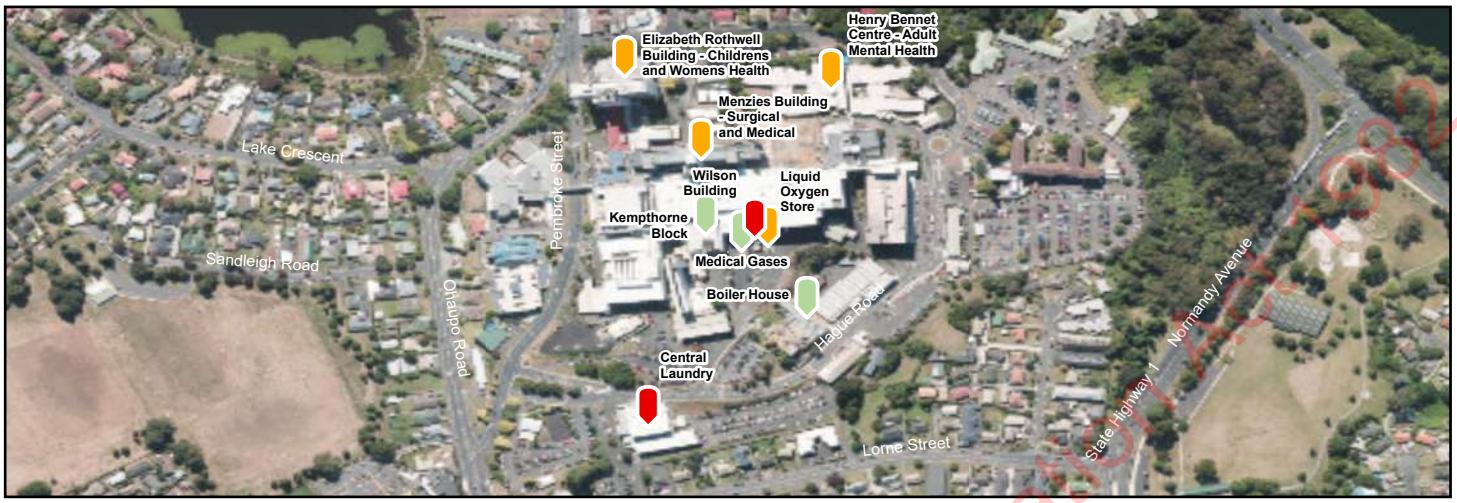
Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									

Hamilton Hospital

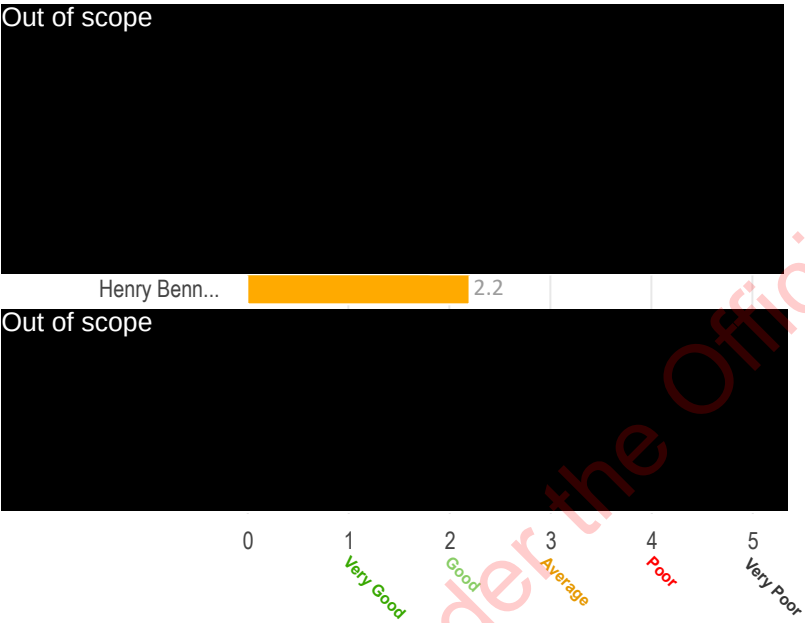
Waikato DHB

Beca Campus ID: 822
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 29/08/2019

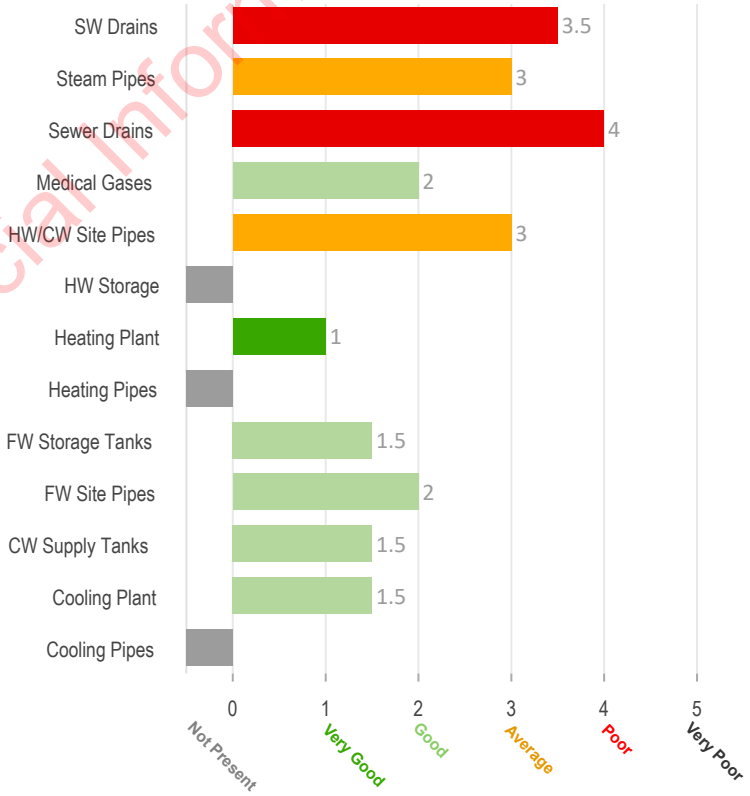
Site Overview



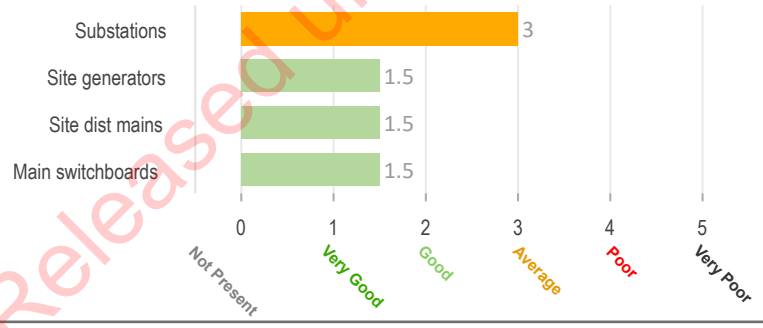
Buildings Surveyed



Site wide Mechanical Infrastructure Condition



Site wide Electrical Infrastructure Condition



Engineering Commentary

Generally buildings inspected were of good condition Out of scope
The condition of the electrical infrastructure is in an good condition with a high level of variability between buildings surveyed. The standby generator plant is in good condition. Most of the electrical HV cabling and switchgear have been replaced as part of the Meade building construction project.

Out of scope Generally services in older buildings are aging and nearing the end of life expectancy, replacement or major refurbishment is required. Some "backbone" infrastructure is original and condition monitoring is recommended. There is no cooling in inpatient ward areas which is not considered appropriate in clinical buildings.

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Henry Bennet Centre - Adult Mental

Hamilton Hospital (Waikato DHB)

Beca Building ID: 144
NAMP ID: 10995
DHB Ref: 16
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior

Services & Fabric Score

2.2

DHB Assessed % *NBS* Rating

No Data

General Building Information

Approximate Building Age: 1990

Survey date: 20/05/2019

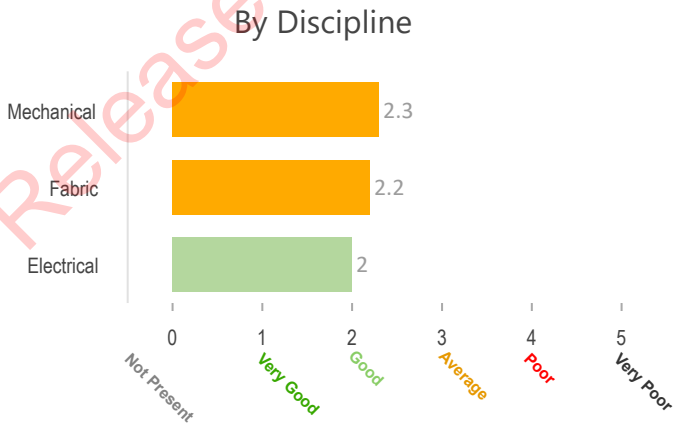
Gross Floor Area (m2): 8070

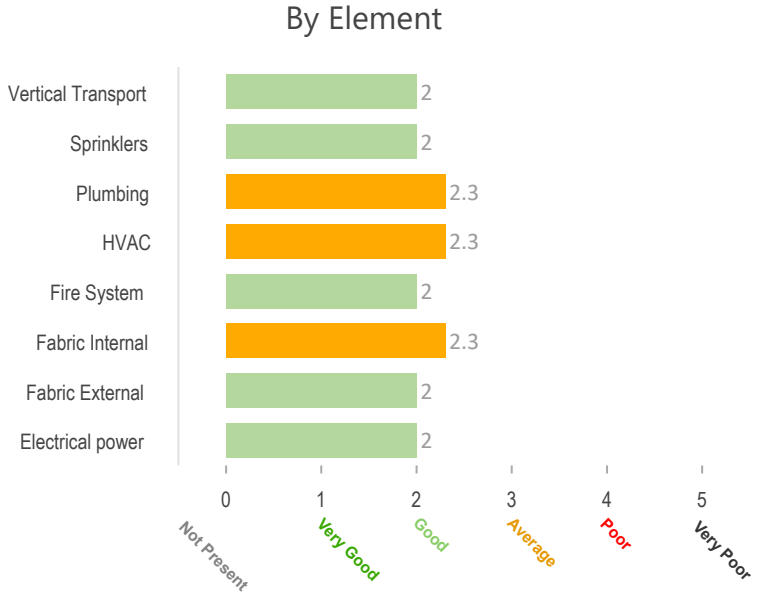
Fire Separation Issues: Significant known issues

Asbestos Issues: Low likelihood of issues

Seismic Services Restraint: Poor

Summary of building condition

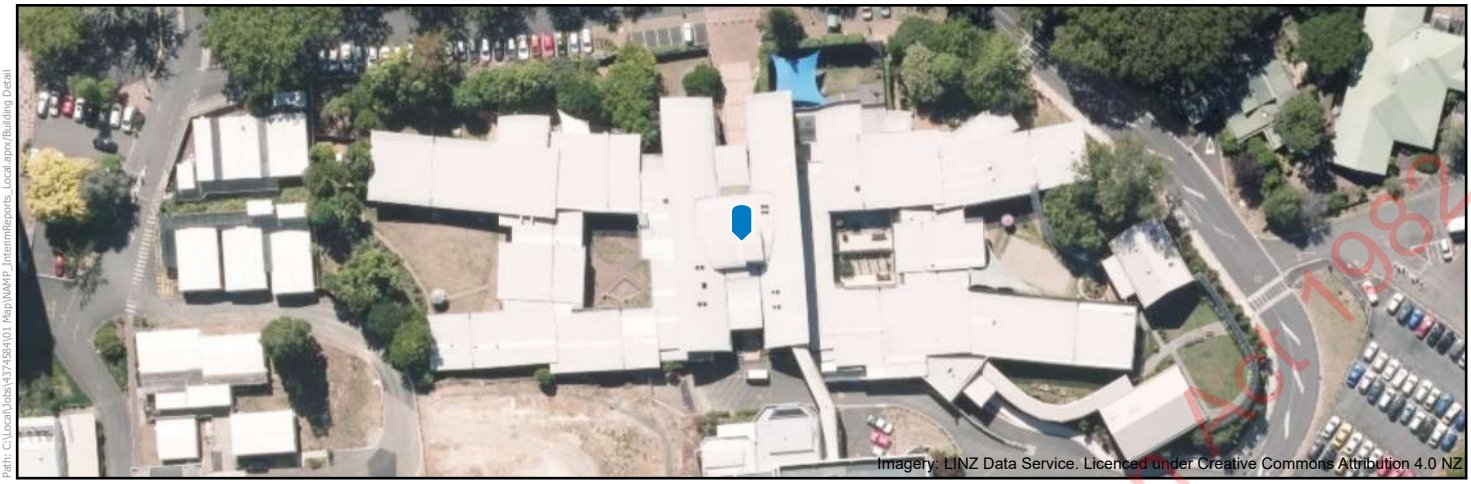




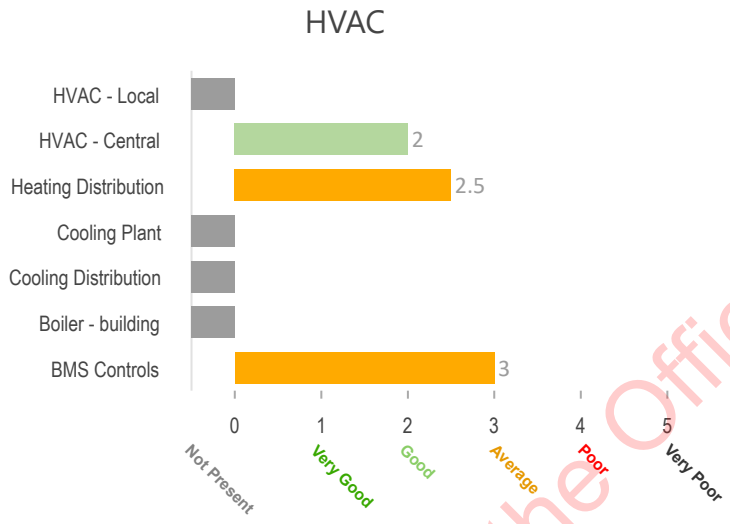
Beca Building ID: 144
NAMP ID: 10995
DHB Ref: 16
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

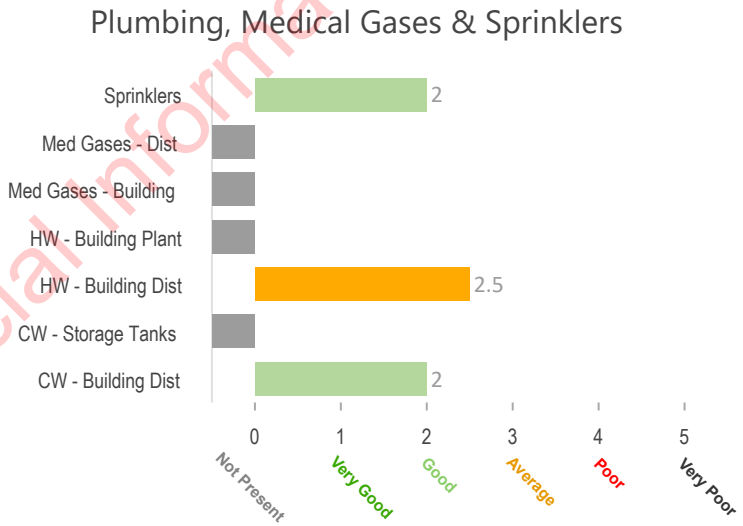
Approximate building location

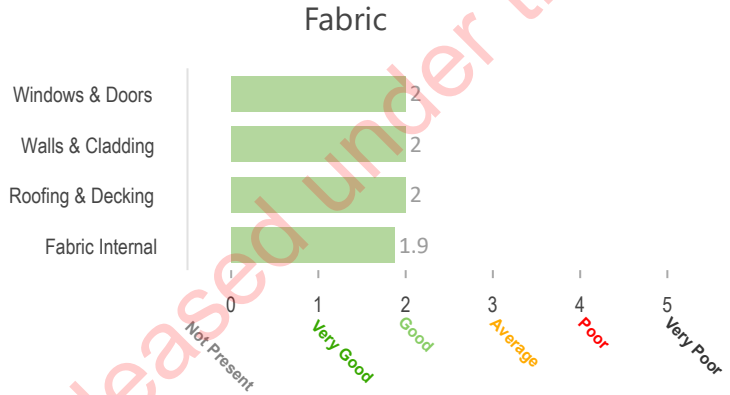
Henry Bennet Centre - Adult Mental Health

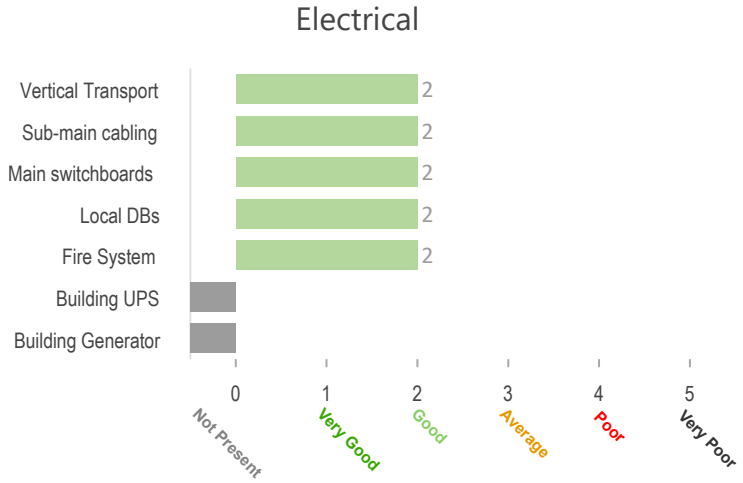


Summary of building element condition details









Condition Definitions

Rating	Condition	Definition (Services and Fabric)
	Not Present	Assets were not present or inaccessible when site was visited.
1	Very Good	Assets displaying no deterioration or only normal routine maintenance required. New or near new condition. Some wear or discoloration but no evidence of damage. Can include repaired assets where the repair is as good as the original.
2	Good	Assets displaying limited deterioration which does not affect their use, or where limited restoration has been performed. Minor reactive maintenance may be required. Acceptable physical condition, with minor deterioration or damage that may affect performance (includes most repaired assets)
3	Average	Assets which have deteriorated to a degree where maintenance is obviously due, but not to the extent where the function is significantly impaired or very substantial repairs are needed. Failure unlikely in near future but further deterioration is likely
4	Poor	Repair or renewal is required in the short term. Significant deterioration or damage is evident and severely impacting performance. Asset is barely serviceable and failure likely in short term
5	Very Poor	Immediate repair or renewal required. Asset is not in use or unserviceable (i.e. has failed) or failure is imminent. Asset may pose occupational health and safety problems. Requires urgent attention.

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Out of scope

Services and Fabric - Survey Methodology and scope:

The main uses of this condition review are:

- To inform the MoH on the general condition of the critical buildings within the NZ health estate
- To be a base for future development of building condition
- To assist in making decisions between projects vying for a finite capital spend budget
- To provide for comparison between DHBs and inform long term, high level budget planning (projects >$10M)

Scoring of the assets is on a scale of 1(very good) to 5 (very poor). Building scores have been obtained from a weighted average of elements reflecting their estimated percentage of an overall building replacement cost.

In addition to the condition, the score/rating of each element also accounts for the age and variability (whether the element in the building was of a similar condition throughout the building ie some lifts that are good condition and others that are poor condition/age) of the element assessed.

Each element has been factored, with the weighting criteria applied to each element condition score according to their proportional cost impact on the building (ie HVAC attracts a higher impact than plumbing).

Services plant and equipment have been assessed under the building in which they are housed, unless the plant/equipment also serves other buildings on the site, in which case these have been assessed under site wide infrastructure.

Full details of the survey methodology are contained in the Beca NAMP Asset Condition Survey Data Standard and Methodology Rev.D, dated 25th April 2019.

Services and Fabric - Survey Assumptions and Exclusions:

The survey is to inform high level MoH decision making, not DHB asset management purposes, and has been based around a combination of information provided by DHB site representatives and limited site observation.

Our site inspection and survey comprise a high level visual inspection only. No inspections were undertaken of wall framing, ceiling voids, floor voids or other parts of the asset which were covered, unexposed or inaccessible and we are therefore unable to report that any such part of the property is free from significant defect. The survey should not be construed as a detailed building condition survey for specific asset repair and maintenance budget planning, since service and location specific methodology around replacement is likely to be required.

Our site inspection data has been provided as an 'indicative assessment' generalising the current condition by discipline only. Its purpose is to support general system level commentary to assist in directing master planning decisions. The review does not provide assessment of:

- Performance, reliability or fitness for purpose
- Capacity of plant or systems
- Operational efficiency of specific plant or systems.
- Resilience and redundancy of systems

It is assumed that a building, its services (and any alterations) have been designed and constructed in accordance with the Building Code current at the time of the construction. Infrastructure assessments have been primarily based on advice from site teams with visual observation where accessible and provided.

A number of aspects were not requested to form part of the survey scope and are noted as excluded from this report. These include:

- Clinical Equipment
- Cool Rooms and Refrigeration Equipment
- Information and Communication Technology (data and comm's)
- Carriageways or civil works
- Other General Equipment (e.g. kitchen)
- Other Specialised Equipment (e.g. biosafety and fume cabinets, Lamson Tube system)
- Security, Nurse Call Services & the like
- On site Structural engineering reviews

DHB Assessed *% NBS* Ratings:

The DHB assessed *%NBS* ratings included in this report have been provided by the DHBs via the Ministry of Health and have not been reviewed, checked or validated for accuracy or completeness.

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age

Out of scope

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age

Out of scope

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age

Out of scope

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Electrical Power	Building Main Switchboard		Present		2	1	original
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Electrical Power	Local DBs		Present		2	1	original
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Electrical Power	Sub-main cabling		Present		2	1	original
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Electrical Power	Building UPS		Not Present				
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Electrical Power	Building Generator		Not Present				
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Electrical Power	Site Generator			yes			
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Fabric External	Roofing and Decking	Iron/metal	Present		2	1	original
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Fabric External	Walls and Cladding	Masonry	Present		2	1	original
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Fabric External	Windows and Doors	Aluminium	Present		2	1	original
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Fabric Internal	G		Present		2	1	original
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Fabric Internal	1		Present		2	1	original
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Fabric Internal	2		Present		2	1	original
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Fabric Internal	3		Present		2	1	10+
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Fire Alarm	Pertronic		Present		2	1	original
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	HVAC	Boiler Plant - Site Plant			yes			
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	HVAC	Boiler Plant in building		Not Present				
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	HVAC	Heating Distribution		Present		2	2	original
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	HVAC	Cooling Plant - Site Plant			no			
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	HVAC	Cooling Plant in building		Not Present				
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	HVAC	Cooling Distribution		Not Present				
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	HVAC	Building HVAC - Central plant		Present		2	1	original
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	HVAC	Building HVAC - Local plant		Not Present				
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	HVAC	BMS Controls		Present		3	1	original
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Plumbing	Hot water - Site Plant			yes			
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Plumbing	Hot water - Building plant		Not Present				
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Plumbing	Hot water - Building distribution		Present		2	2	original
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Plumbing	Cold water - Site storage and mains			yes			
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Plumbing	Cold water - Building storage tanks		Not Present				
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Plumbing	Cold water - Building distribution		Present		2	1	original
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Plumbing	Medical gases and vacuum - Site Plant			no			
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Plumbing	Medical gases and vacuum - Site Plant			no			
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Plumbing	Medical gases and vacuum distribution		Not Present				
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Sprinklers	Sprinklers		Present		2	1	original
Hamilton Hospital	Henry Bennet Centre - Adult Mental Health	Vertical Transport	2 lifts		Present		2	1	original
Out of scope									

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age

Out of scope

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age

Out of scope

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									
Hamilton Hospital	Site Wide	Electrical Infrastructure	Substations		Present		3	2	mixed
Hamilton Hospital	Site Wide	Electrical Infrastructure	Main switchboards		Present		1	1	original
Hamilton Hospital	Site Wide	Electrical Infrastructure	Site generators		Present		1	1	original
Hamilton Hospital	Site Wide	Electrical Infrastructure	Site distribution mains		Present		1	1	original
Hamilton Hospital	Site Wide	Mechanical Infrastructure	Site Heating pipes		Not Present				
Hamilton Hospital	Site Wide	Mechanical Infrastructure	Site Steam pipes		Present		3	2	mixed
Hamilton Hospital	Site Wide	Mechanical Infrastructure	Site Cooling plant		Present		2	1	3 to 10
Hamilton Hospital	Site Wide	Mechanical Infrastructure	Site Cooling pipes		Not Present				
Hamilton Hospital	Site Wide	Mechanical Infrastructure	Site Cold Water supply tanks		Present		2	1	3 to 10
Hamilton Hospital	Site Wide	Mechanical Infrastructure	Site Hot Water storage		Not Present				
Hamilton Hospital	Site Wide	Mechanical Infrastructure	Site Hot and Cold Water site pipes		Present		3	2	mixed
Hamilton Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water storage tanks		Present		2	1	10+
Hamilton Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water site pipes		Present		2	2	mixed
Hamilton Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		3	2	mixed
Hamilton Hospital	Site Wide	Mechanical Infrastructure	Site sewer drains		Present		3	3	original
Hamilton Hospital	Site Wide	Mechanical Infrastructure	Site storm water drains		Present		3	3	mixed
Hamilton Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		2	2	mixed
Hamilton Hospital	Site Wide	Mechanical Infrastructure	Site Heating Plant		Present		1	1	3 to 10
Hamilton Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		2	1	10+
Hamilton Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		2	1	10+
Out of scope									

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									

MINISTRY OF HEALTH
MANATŪ HAUORA

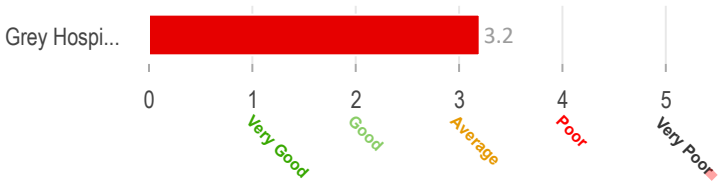
Grey Hospital

West Coast DHB

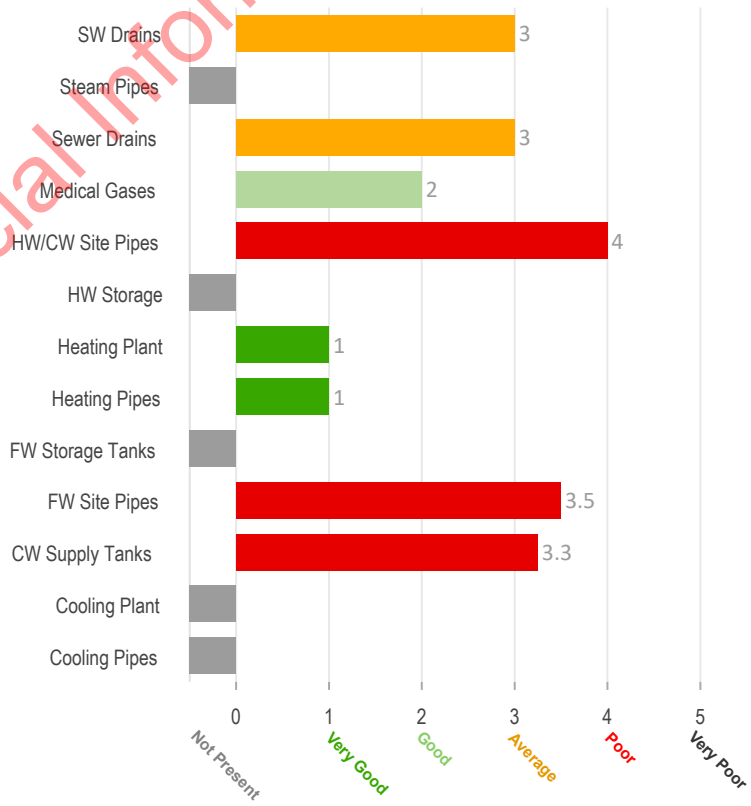
Beca Campus ID: 825
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 29/08/2019

Site Overview

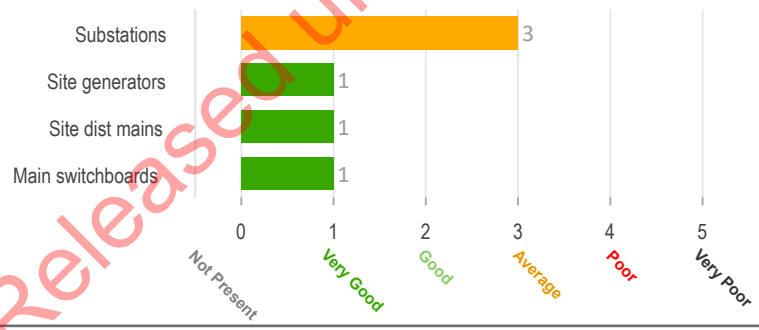
Buildings Surveyed



Site wide Mechanical Infrastructure Condition



Site wide Electrical Infrastructure Condition



Engineering Commentary

The external building fabric for the Mental Health unit is in reasonable condition, however the roof has had patched repair and is nearing end of life. Internally, a large proportion of the upper floor has been recently refurbished, however the ground floor fitout is largely original.
The electrical infrastructure appeared to be in good condition for its age, with new submains from recently replaced main switchgear. The main site switchboard is located external to the buildings within a container. Whilst not an idea location, it appeared to be in good condition.
HVAC plant serving the building are in poor condition. Hot water services are being decentralised at present. Cold water services showing signs of age. New central boiler plant (not reviewed) is currently being commissioned.

Grey Hospital Mental Health Unit

Grey Hospital (West Coast DHB)

Beca Building ID: 248
NAMP ID: 11198
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior

Services & Fabric Score

3.2

DHB Assessed % *NBS* Rating

12% IL3

General Building Information

Approximate Building Age: No data

Survey date: 22/04/2019

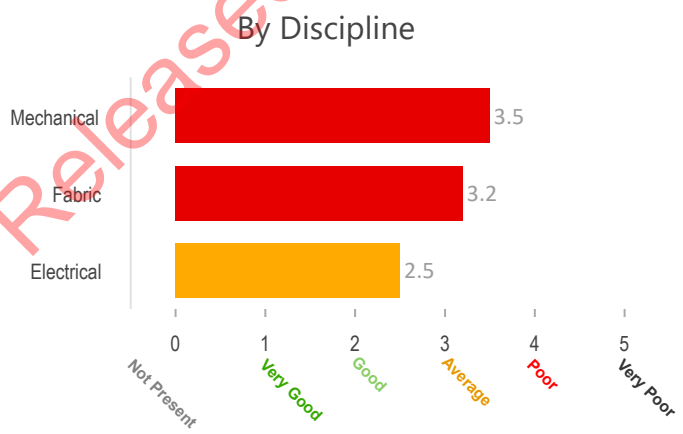
Gross Floor Area (m2): 15000

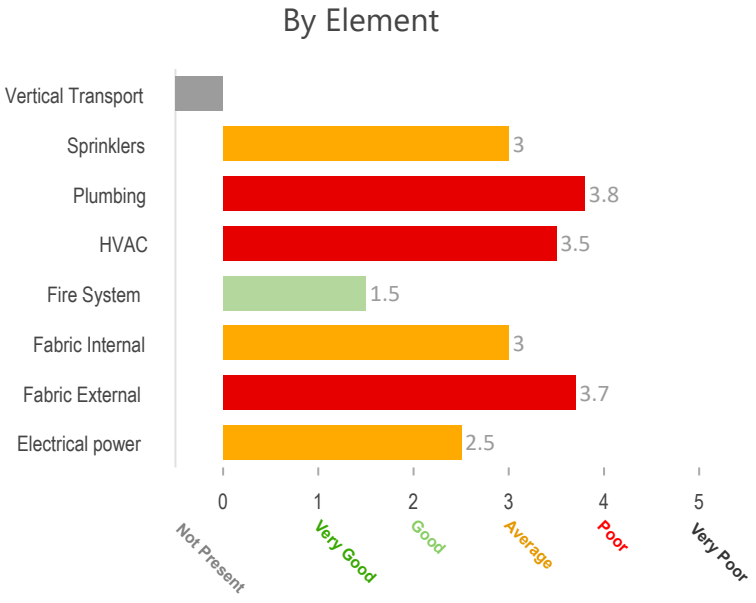
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Significant known issues

Seismic Services Restraint: Poor

Summary of building condition



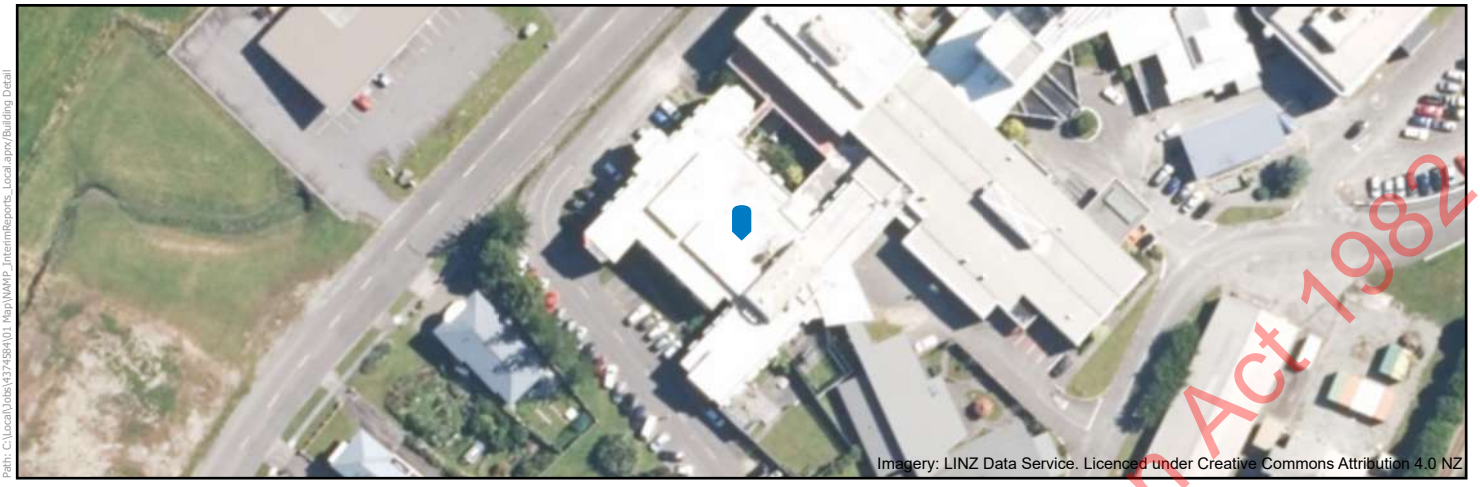


Document 31

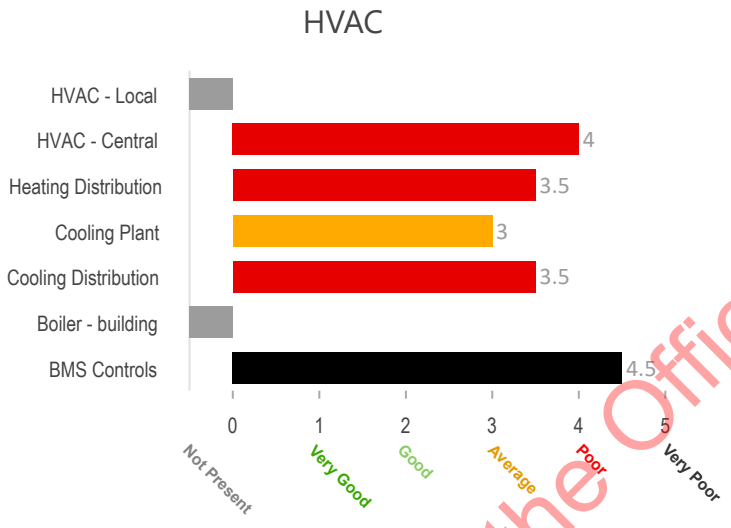
Beca Building ID: 248
NAMP ID: 11198
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

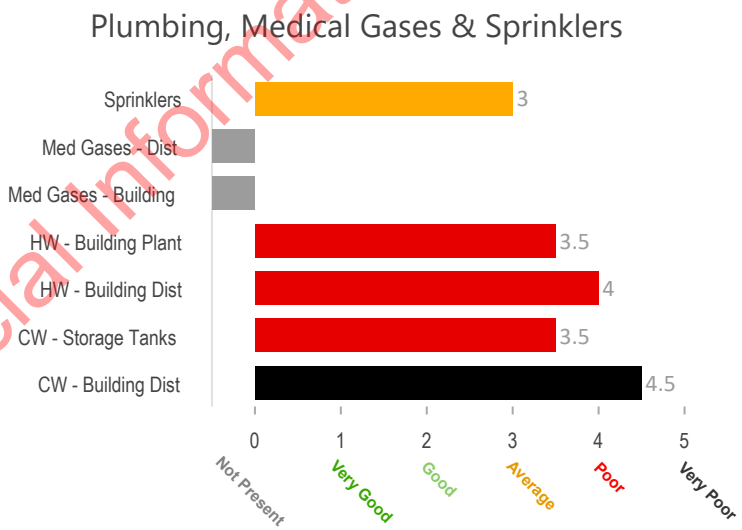
Approximate building location

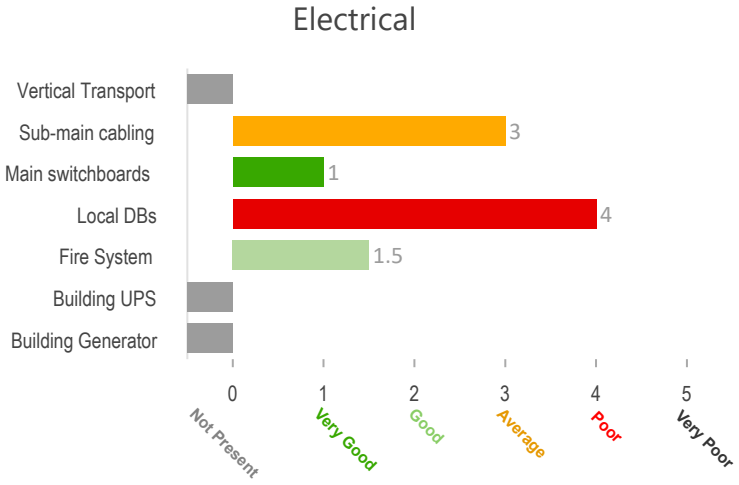
Grey Hospital Mental Health Unit



Summary of building element condition details







Condition Definitions

Rating	Condition	Definition (Services and Fabric)
	Not Present	Assets were not present or inaccessible when site was visited.
1	Very Good	Assets displaying no deterioration or only normal routine maintenance required. New or near new condition. Some wear or discoloration but no evidence of damage. Can include repaired assets where the repair is as good as the original.
2	Good	Assets displaying limited deterioration which does not affect their use, or where limited restoration has been performed. Minor reactive maintenance may be required. Acceptable physical condition, with minor deterioration or damage that may affect performance (includes most repaired assets)
3	Average	Assets which have deteriorated to a degree where maintenance is obviously due, but not to the extent where the function is significantly impaired or very substantial repairs are needed. Failure unlikely in near future but further deterioration is likely
4	Poor	Repair or renewal is required in the short term. Significant deterioration or damage is evident and severely impacting performance. Asset is barely serviceable and failure likely in short term
5	Very Poor	Immediate repair or renewal required. Asset is not in use or unserviceable (i.e. has failed) or failure is imminent. Asset may pose occupational health and safety problems. Requires urgent attention.

Services and Fabric - Survey Methodology and scope:

The main uses of this condition review are:

- To inform the MoH on the general condition of the critical buildings within the NZ health estate
- To be a base for future development of building condition
- To assist in making decisions between projects vying for a finite capital spend budget
- To provide for comparison between DHBs and inform long term, high level budget planning (projects >$10M)

Scoring of the assets is on a scale of 1(very good) to 5 (very poor). Building scores have been obtained from a weighted average of elements reflecting their estimated percentage of an overall building replacement cost.

In addition to the condition, the score/rating of each element also accounts for the age and variability (whether the element in the building was of a similar condition throughout the building ie some lifts that are good condition and others that are poor condition/age) of the element assessed.

Each element has been factored, with the weighting criteria applied to each element condition score according to their proportional cost impact on the building (ie HVAC attracts a higher impact than plumbing).

Services plant and equipment have been assessed under the building in which they are housed, unless the plant/equipment also serves other buildings on the site, in which case these have been assessed under site wide infrastructure.

Full details of the survey methodology are contained in the Beca NAMP Asset Condition Survey Data Standard and Methodology Rev.D, dated 25th April 2019.

Services and Fabric - Survey Assumptions and Exclusions:

The survey is to inform high level MoH decision making, not DHB asset management purposes, and has been based around a combination of information provided by DHB site representatives and limited site observation.

Our site inspection and survey comprise a high level visual inspection only. No inspections were undertaken of wall framing, ceiling voids, floor voids or other parts of the asset which were covered, unexposed or inaccessible and we are therefore unable to report that any such part of the property is free from significant defect. The survey should not be construed as a detailed building condition survey for specific asset repair and maintenance budget planning, since service and location specific methodology around replacement is likely to be required.

Our site inspection data has been provided as an 'indicative assessment' generalising the current condition by discipline only. Its purpose is to support general system level commentary to assist in directing master planning decisions. The review does not provide assessment of:

- Performance, reliability or fitness for purpose
- Capacity of plant or systems
- Operational efficiency of specific plant or systems.
- Resilience and redundancy of systems

It is assumed that a building, its services (and any alterations) have been designed and constructed in accordance with the Building Code current at the time of the construction. Infrastructure assessments have been primarily based on advice from site teams with visual observation where accessible and provided.

A number of aspects were not requested to form part of the survey scope and are noted as excluded from this report. These include:

- Clinical Equipment
- Cool Rooms and Refrigeration Equipment
- Information and Communication Technology (data and comm's)
- Carriageways or civil works
- Other General Equipment (e.g. kitchen)
- Other Specialised Equipment (e.g. biosafety and fume cabinets, Lamson Tube system)
- Security, Nurse Call Services & the like
- On site Structural engineering reviews

DHB Assessed *% NBS* Ratings:

The DHB assessed *%NBS* ratings included in this report have been provided by the DHBs via the Ministry of Health and have not been reviewed, checked or validated for accuracy or completeness.

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Grey Hospital	Grey Hospital	Fabric Internal	G		Present		3	2	10+
Grey Hospital	Grey Hospital	Fabric Internal	B1		Present		3	1	original
Grey Hospital	Grey Hospital Mental Health Unit	Electrical Power	Building Main Switchboard		Present		1	1	3 to 10
Grey Hospital	Grey Hospital Mental Health Unit	Electrical Power	Local DBs		Present		4	2	original
Grey Hospital	Grey Hospital Mental Health Unit	Electrical Power	Sub-main cabling		Present		3	1	original
Grey Hospital	Grey Hospital Mental Health Unit	Electrical Power	Building UPS		Not Present				
Grey Hospital	Grey Hospital Mental Health Unit	Electrical Power	Building Generator		Not Present				
Grey Hospital	Grey Hospital Mental Health Unit	Electrical Power	Site Generator			yes			
Grey Hospital	Grey Hospital Mental Health Unit	Fabric External	Roofing and Decking	Rubber Sheet	Present		4	3	original
Grey Hospital	Grey Hospital Mental Health Unit	Fabric External	Walls and Cladding	Masonry	Present		3	1	original
Grey Hospital	Grey Hospital Mental Health Unit	Fabric External	Windows and Doors	Metal	Present		3	2	10+
Grey Hospital	Grey Hospital Mental Health Unit	Fire Alarm	Building with link to site wide monitoring		Present		2	1	3 to 10
Grey Hospital	Grey Hospital Mental Health Unit	HVAC	Boiler Plant - Site Plant			yes			
Grey Hospital	Grey Hospital Mental Health Unit	HVAC	Boiler Plant in building		Not Present				
Grey Hospital	Grey Hospital Mental Health Unit	HVAC	Heating Distribution		Present		3	2	original
Grey Hospital	Grey Hospital Mental Health Unit	HVAC	BMS Controls		Present		5	2	original
Grey Hospital	Grey Hospital Mental Health Unit	HVAC	Cooling Plant - Site Plant			no			
Grey Hospital	Grey Hospital Mental Health Unit	HVAC	Cooling Plant in building		Present		3	2	3 to 10
Grey Hospital	Grey Hospital Mental Health Unit	HVAC	Cooling Distribution		Present	no	3	2	original
Grey Hospital	Grey Hospital Mental Health Unit	HVAC	Building HVAC - Central plant		Present		5	1	original
Grey Hospital	Grey Hospital Mental Health Unit	HVAC	Building HVAC - Local plant		Not Present				
Grey Hospital	Grey Hospital Mental Health Unit	Plumbing	Cold water - Site storage and mains			yes			
Grey Hospital	Grey Hospital Mental Health Unit	Plumbing	Cold water - Building storage tanks		Present		4	1	original
Grey Hospital	Grey Hospital Mental Health Unit	Plumbing	Cold water - Building distribution		Present		4	3	original
Grey Hospital	Grey Hospital Mental Health Unit	Plumbing	Hot water - Site Plant			no			
Grey Hospital	Grey Hospital Mental Health Unit	Plumbing	Hot water - Building plant		Present		3	2	original
Grey Hospital	Grey Hospital Mental Health Unit	Plumbing	Hot water - Building distribution		Present		3	3	original
Grey Hospital	Grey Hospital Mental Health Unit	Plumbing	Medical gases and vacuum - Site Plant			no			
Grey Hospital	Grey Hospital Mental Health Unit	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Grey Hospital	Grey Hospital Mental Health Unit	Plumbing	Medical gases and vacuum distribution		Not Present				
Grey Hospital	Grey Hospital Mental Health Unit	Sprinklers	Sprinklers		Present		3	1	original
Grey Hospital	Grey Hospital Mental Health Unit	Vertical Transport			Not Present				
Grey Hospital	Site Wide	Electrical Infrastructure	Main switchboards		Present		1	1	3 to 10
Grey Hospital	Site Wide	Electrical Infrastructure	Substations		Present		3	1	original
Grey Hospital	Site Wide	Electrical Infrastructure	Site generators		Present		1	1	mixed
Grey Hospital	Site Wide	Electrical Infrastructure	Site distribution mains		Present		1	1	3 to 10
Grey Hospital	Site Wide	Mechanical Infrastructure	Site Heating Plant		Present		1	1	0 to 3
Grey Hospital	Site Wide	Mechanical Infrastructure	Site Heating pipes		Present		1	1	0 to 3
Grey Hospital	Site Wide	Mechanical Infrastructure	Site Steam pipes		Not Present				
Grey Hospital	Site Wide	Mechanical Infrastructure	Site Cooling plant		Not Present				
Grey Hospital	Site Wide	Mechanical Infrastructure	Site Cooling pipes		Not Present				
Grey Hospital	Site Wide	Mechanical Infrastructure	Site Cold Water supply tanks		Present		3	2	original
Grey Hospital	Site Wide	Mechanical Infrastructure	Site Hot Water storage		Not Present				
Grey Hospital	Site Wide	Mechanical Infrastructure	Site Hot and Cold Water site pipes		Present		3	3	original
Grey Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water storage tanks		Not Present				

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Grey Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water site pipes		Present		3	2	original
Grey Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		2	2	3 to 10
Grey Hospital	Site Wide	Mechanical Infrastructure	Site sewer drains		Present		3	1	original
Grey Hospital	Site Wide	Mechanical Infrastructure	Site storm water drains		Present		3	1	original
Grey Hospital	Site Wide	Mechanical Infrastructure	Site Cold Water supply tanks		Present		3	1	original

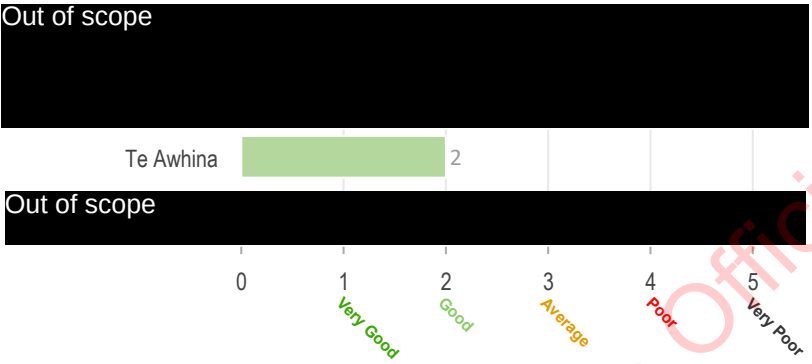
Whanganui Hospital

Whanganui DHB

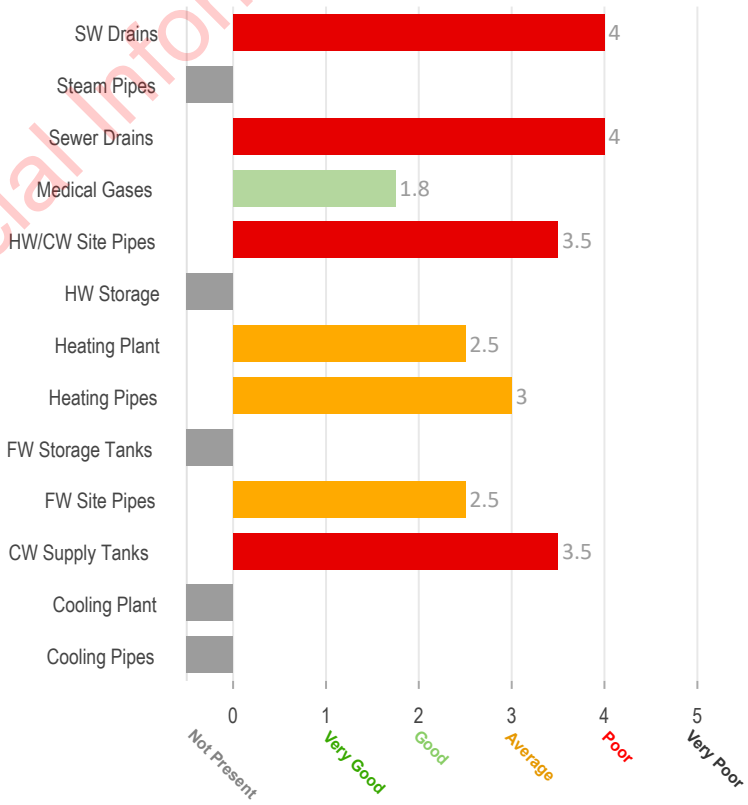
Beca Campus ID: 826
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 29/08/2019

Site Overview

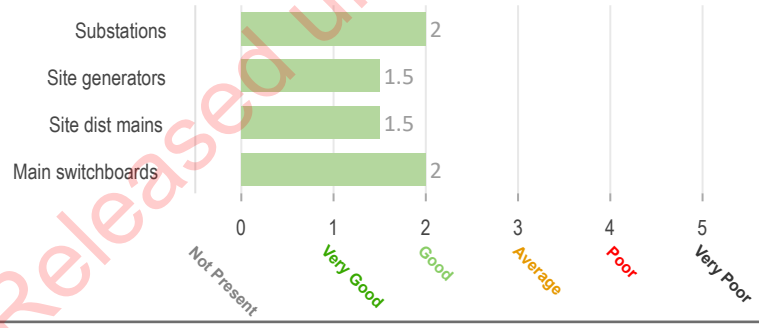
Buildings Surveyed



Site wide Mechanical Infrastructure Condition



Site wide Electrical Infrastructure Condition



Engineering Commentary

Out of scope

Site infrastructure is original and generally of good condition with very little variability. The site generators appear to be well maintained and are regularly tested. Some of the High Voltage switchgear and equipment is in original but good condition.

Mechanical sitewide infrastructure is predominantly original and in average condition with some Out of scope Monitoring of pipework is recommended due to reported failures.

Out of scope

Out of scope

Out of scope

Out of scope

Te Awhina

Whanganui Hospital (Whanganui DHB)

Beca Building ID: 242
NAMP ID: 11216
DHB Ref: TE Awhina
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior

Services & Fabric Score

2

DHB Assessed % *NBS* Rating

100% IL2

General Building Information

Approximate Building Age: 1981

Survey date: 13/05/2019

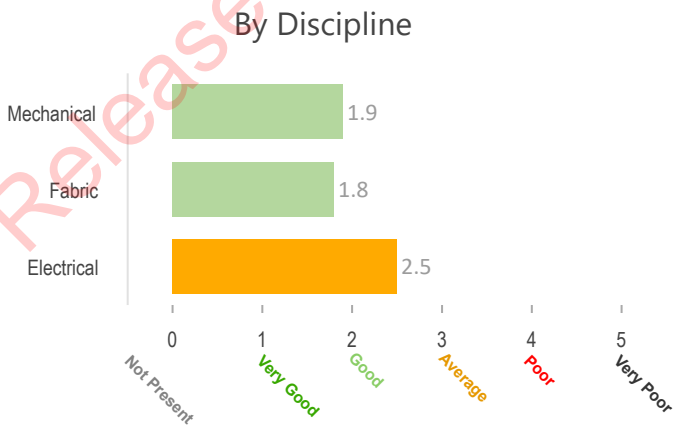
Gross Floor Area (m2): 1791

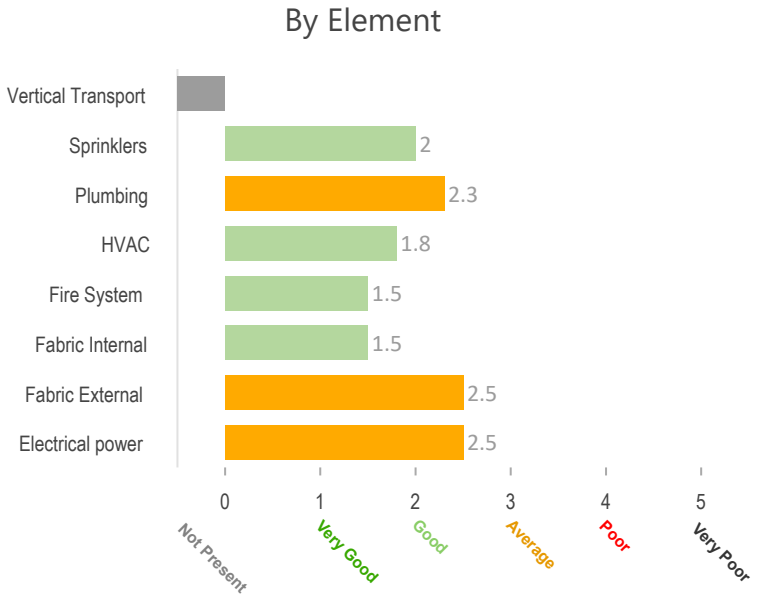
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Low likelihood of issues

Seismic Services Restraint: Poor

Summary of building condition

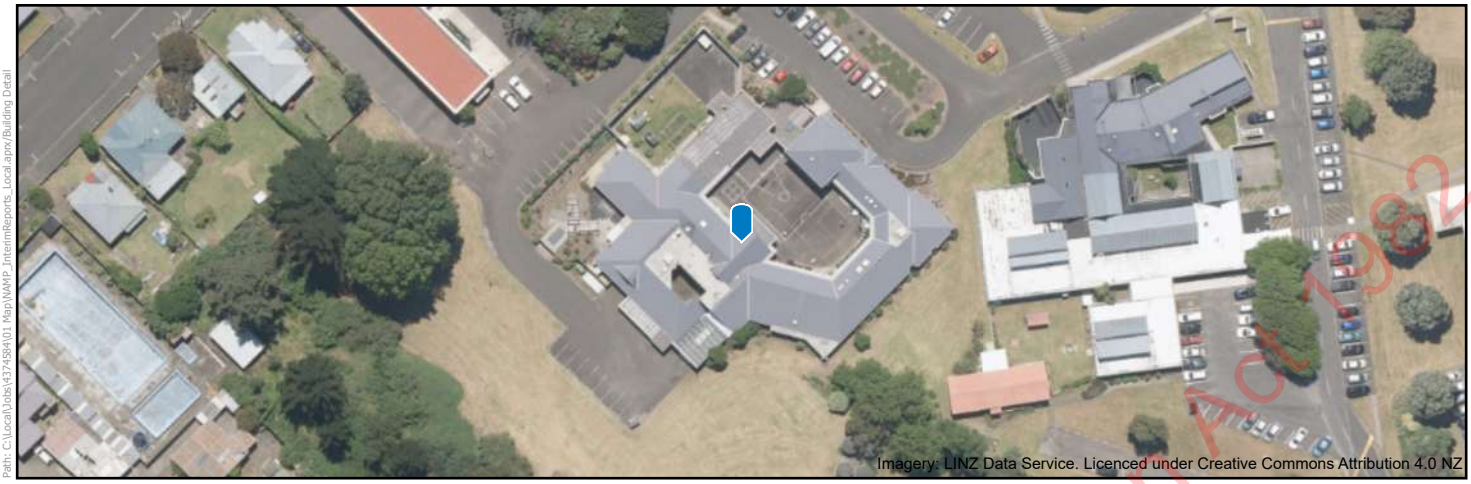




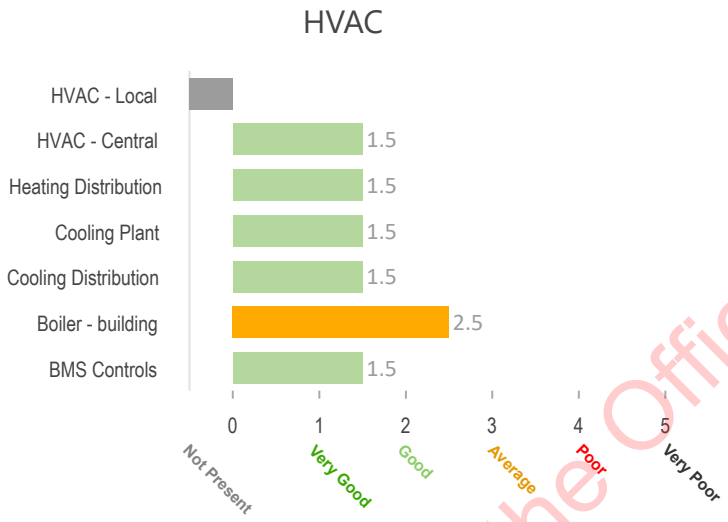
Beca Building ID: 242
NAMP ID: 11216
DHB Ref: TE Awhina
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

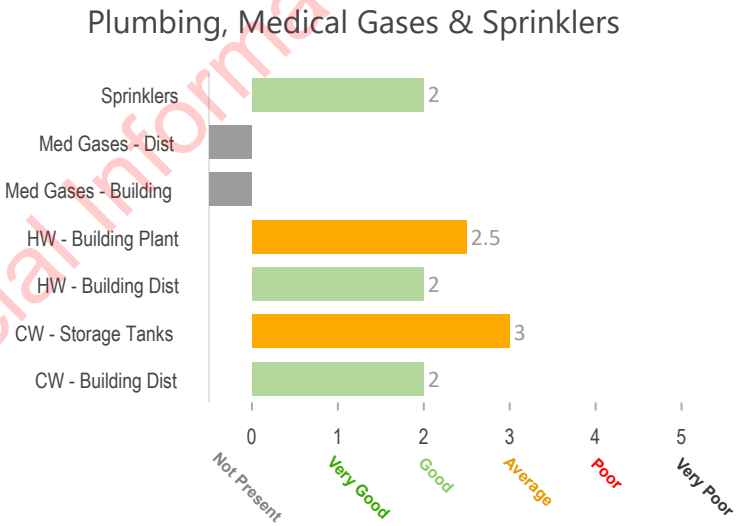
Approximate building location

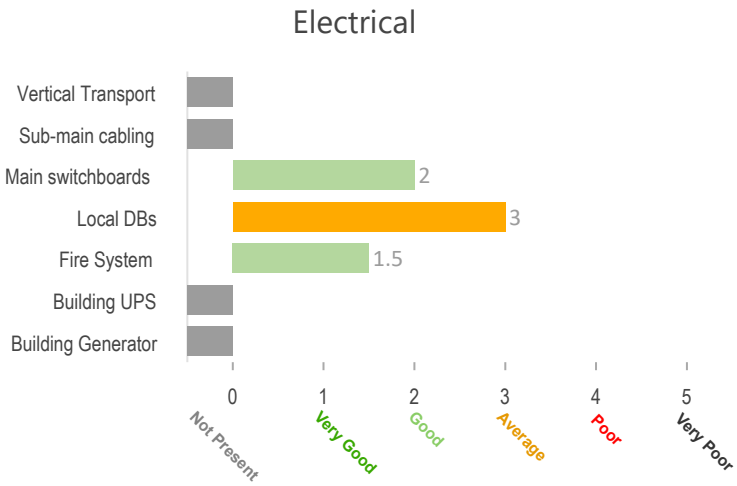
Te Awhina



Summary of building element condition details







Condition Definitions

Rating	Condition	Definition (Services and Fabric)
	Not Present	Assets were not present or inaccessible when site was visited.
1	Very Good	Assets displaying no deterioration or only normal routine maintenance required. New or near new condition. Some wear or discoloration but no evidence of damage. Can include repaired assets where the repair is as good as the original.
2	Good	Assets displaying limited deterioration which does not affect their use, or where limited restoration has been performed. Minor reactive maintenance may be required. Acceptable physical condition, with minor deterioration or damage that may affect performance (includes most repaired assets)
3	Average	Assets which have deteriorated to a degree where maintenance is obviously due, but not to the extent where the function is significantly impaired or very substantial repairs are needed. Failure unlikely in near future but further deterioration is likely
4	Poor	Repair or renewal is required in the short term. Significant deterioration or damage is evident and severely impacting performance. Asset is barely serviceable and failure likely in short term
5	Very Poor	Immediate repair or renewal required. Asset is not in use or unserviceable (i.e. has failed) or failure is imminent. Asset may pose occupational health and safety problems. Requires urgent attention.

Out of scope

Out of scope

Services and Fabric - Survey Methodology and scope:

The main uses of this condition review are:

- To inform the MoH on the general condition of the critical buildings within the NZ health estate
- To be a base for future development of building condition
- To assist in making decisions between projects vying for a finite capital spend budget
- To provide for comparison between DHBs and inform long term, high level budget planning (projects >$10M)

Scoring of the assets is on a scale of 1(very good) to 5 (very poor). Building scores have been obtained from a weighted average of elements reflecting their estimated percentage of an overall building replacement cost.

In addition to the condition, the score/rating of each element also accounts for the age and variability (whether the element in the building was of a similar condition throughout the building ie some lifts that are good condition and others that are poor condition/age) of the element assessed.

Each element has been factored, with the weighting criteria applied to each element condition score according to their proportional cost impact on the building (ie HVAC attracts a higher impact than plumbing).

Services plant and equipment have been assessed under the building in which they are housed, unless the plant/equipment also serves other buildings on the site, in which case these have been assessed under site wide infrastructure.

Full details of the survey methodology are contained in the Beca NAMP Asset Condition Survey Data Standard and Methodology Rev.D, dated 25th April 2019.

Services and Fabric - Survey Assumptions and Exclusions:

The survey is to inform high level MoH decision making, not DHB asset management purposes, and has been based around a combination of information provided by DHB site representatives and limited site observation.

Our site inspection and survey comprise a high level visual inspection only. No inspections were undertaken of wall framing, ceiling voids, floor voids or other parts of the asset which were covered, unexposed or inaccessible and we are therefore unable to report that any such part of the property is free from significant defect. The survey should not be construed as a detailed building condition survey for specific asset repair and maintenance budget planning, since service and location specific methodology around replacement is likely to be required.

Our site inspection data has been provided as an 'indicative assessment' generalising the current condition by discipline only. Its purpose is to support general system level commentary to assist in directing master planning decisions. The review does not provide assessment of:

- Performance, reliability or fitness for purpose
- Capacity of plant or systems
- Operational efficiency of specific plant or systems.
- Resilience and redundancy of systems

It is assumed that a building, its services (and any alterations) have been designed and constructed in accordance with the Building Code current at the time of the construction. Infrastructure assessments have been primarily based on advice from site teams with visual observation where accessible and provided.

A number of aspects were not requested to form part of the survey scope and are noted as excluded from this report. These include:

- Clinical Equipment
- Cool Rooms and Refrigeration Equipment
- Information and Communication Technology (data and comm's)
- Carriageways or civil works
- Other General Equipment (e.g. kitchen)
- Other Specialised Equipment (e.g. biosafety and fume cabinets, Lamson Tube system)
- Security, Nurse Call Services & the like
- On site Structural engineering reviews

DHB Assessed *% NBS* Ratings:

The DHB assessed *%NBS* ratings included in this report have been provided by the DHBs via the Ministry of Health and have not been reviewed, checked or validated for accuracy or completeness.

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									
Whanganui Hospital	Site Wide	Electrical Infrastructure	Main switchboards		Present		2	1	original
Whanganui Hospital	Site Wide	Electrical Infrastructure	Site distribution mains		Present		1	1	original
Whanganui Hospital	Site Wide	Electrical Infrastructure	Site generators		Present		1	1	original
Whanganui Hospital	Site Wide	Electrical Infrastructure	Substations		Present		2	1	original
Whanganui Hospital	Site Wide	Mechanical Infrastructure	Site Cold Water supply tanks		Present		3	2	original
Whanganui Hospital	Site Wide	Mechanical Infrastructure	Site Cooling pipes		Not Present				
Whanganui Hospital	Site Wide	Mechanical Infrastructure	Site Cooling plant		Not Present				
Whanganui Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water site pipes		Present		3	1	10+
Whanganui Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water storage tanks		Not Present				
Whanganui Hospital	Site Wide	Mechanical Infrastructure	Site Heating pipes		Present		3	1	original
Whanganui Hospital	Site Wide	Mechanical Infrastructure	Site Heating Plant		Present		3	1	10+
Whanganui Hospital	Site Wide	Mechanical Infrastructure	Site Hot and Cold Water site pipes		Present		3	2	original

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Whanganui Hospital	Site Wide	Mechanical Infrastructure	Site Hot Water storage		Not Present				
Whanganui Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		2	1	3 to 10
Whanganui Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		2	2	mixed
Whanganui Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		2	1	0 to 3
Whanganui Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		3	2	mixed
Whanganui Hospital	Site Wide	Mechanical Infrastructure	Site sewer drains		Present		3	3	original
Whanganui Hospital	Site Wide	Mechanical Infrastructure	Site Steam pipes		Not Present				
Whanganui Hospital	Site Wide	Mechanical Infrastructure	Site storm water drains		Present		3	3	original
Whanganui Hospital	Te Awhina	Electrical Power	Building Generator		Not Present				
Whanganui Hospital	Te Awhina	Electrical Power	Building Main Switchboard		Present		2	1	original
Whanganui Hospital	Te Awhina	Electrical Power	Building UPS		Not Present				
Whanganui Hospital	Te Awhina	Electrical Power	Local DBs		Present		3	1	original
Whanganui Hospital	Te Awhina	Electrical Power	Site Generator			yes			
Whanganui Hospital	Te Awhina	Electrical Power	Sub-main cabling		Not Present				
Whanganui Hospital	Te Awhina	Fabric External	Roofing and Decking	Rubber Sheet	Present		3	2	10+
Whanganui Hospital	Te Awhina	Fabric External	Roofing and Decking	Iron/metal	Present		3	1	original
Whanganui Hospital	Te Awhina	Fabric External	Walls and Cladding	Sheet	Present		2	2	10+
Whanganui Hospital	Te Awhina	Fabric External	Walls and Cladding	Concrete	Present		2	1	original
Whanganui Hospital	Te Awhina	Fabric External	Windows and Doors	Wood	Present		4	1	original
Whanganui Hospital	Te Awhina	Fabric External	Windows and Doors	Aluminium	Present		2	1	10+
Whanganui Hospital	Te Awhina	Fabric Internal	1		Present		2	1	original
Whanganui Hospital	Te Awhina	Fabric Internal	G		Present		2	1	0 to 3
Whanganui Hospital	Te Awhina	Fire Alarm	Pertronic		Present		2	1	3 to 10
Whanganui Hospital	Te Awhina	HVAC	BMS Controls		Present		2	1	3 to 10
Whanganui Hospital	Te Awhina	HVAC	Boiler Plant - Site Plant			no			
Whanganui Hospital	Te Awhina	HVAC	Boiler Plant in building		Present		3	1	10+
Whanganui Hospital	Te Awhina	HVAC	Building HVAC - Central plant		Present		2	1	3 to 10
Whanganui Hospital	Te Awhina	HVAC	Building HVAC - Local plant		Not Present				
Whanganui Hospital	Te Awhina	HVAC	Cooling Distribution		Present		2	1	3 to 10
Whanganui Hospital	Te Awhina	HVAC	Cooling Plant - Site Plant			no			
Whanganui Hospital	Te Awhina	HVAC	Cooling Plant in building		Present		2	1	3 to 10
Whanganui Hospital	Te Awhina	HVAC	Heating Distribution		Present		2	1	3 to 10
Whanganui Hospital	Te Awhina	Plumbing	Cold water - Building distribution		Present		2	1	original
Whanganui Hospital	Te Awhina	Plumbing	Cold water - Building storage tanks		Present		3	1	original
Whanganui Hospital	Te Awhina	Plumbing	Cold water - Site storage and mains			no			
Whanganui Hospital	Te Awhina	Plumbing	Hot water - Building distribution		Present		2	1	original
Whanganui Hospital	Te Awhina	Plumbing	Hot water - Building plant		Present		3	1	10+
Whanganui Hospital	Te Awhina	Plumbing	Hot water - Site Plant			no			
Whanganui Hospital	Te Awhina	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Whanganui Hospital	Te Awhina	Plumbing	Medical gases and vacuum - Site Plant			no			
Whanganui Hospital	Te Awhina	Plumbing	Medical gases and vacuum distribution		Not Present				
Whanganui Hospital	Te Awhina	Sprinklers	Sprinklers		Present		2	1	original
Whanganui Hospital	Te Awhina	Vertical Transport			Not Present				

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age

Out of scope

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Out of scope									