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

[redacted]

Ref: H202004703

[redacted]

Response to your request for official information

Thank you for your request under the Official Information Act 1982 (the Act) on 24 June 2020 for:

> *"Am I able to get access to the reports which fed into the national asset management report, with more detail about specific issues? ...Even if I could just get the documents relating to Hutt Valley, Capital and Coast, Wairarapa, Hawke's Bay and Palmerston North DHBs that would be great."*

Ten documents have been identified within scope of your request. These are itemised in Appendix One of this letter and copies of the documents are enclosed. The documents have been released in full.

I have also included the table below to show which district health boards (DHBs) and campuses the documents relate to.

Table One: Report types for requested areas

Request	Building and Infrastructure Reports (by campus)	CFFFP Reports (by DHB)
Hutt Valley	• Hutt Hospital	• Hutt Valley DHB
Capital and Coast	• Wellington Hospital • Kenepuru Hospital	• Capital and Coast DHB
Wairarapa	• Wairarapa Hospital	Not assessed – no units met assessment criteria
Hawkes Bay	• Hawkes Bay Hospital	• Hawkes Bay DHB
Palmerston North	• Palmerston North Hospital	• Mid-Central DHB

On 10 June 2020, the Ministry of Health (the Ministry) released the National Asset Management Programme report on the Ministry website: https://www.health.govt.nz/publication/national-asset-management-programme-district-health-boards-report-1-current-state-assessment. The report provided a summary of the condition of district health board (DHB) assets such as buildings and infrastructure. The findings mentioned in the report are part of a long-term plan

intended to guide strategic investment choices and provide a consolidated picture of DHBs' asset management plans.

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.

Please note that this response, with your personal details removed, may be published on the Ministry website

Yours sincerely

Michelle Arrowsmith
Deputy Director-General
DHB Performance, Support and Infrastructure

Appendix 1: List of documents for release

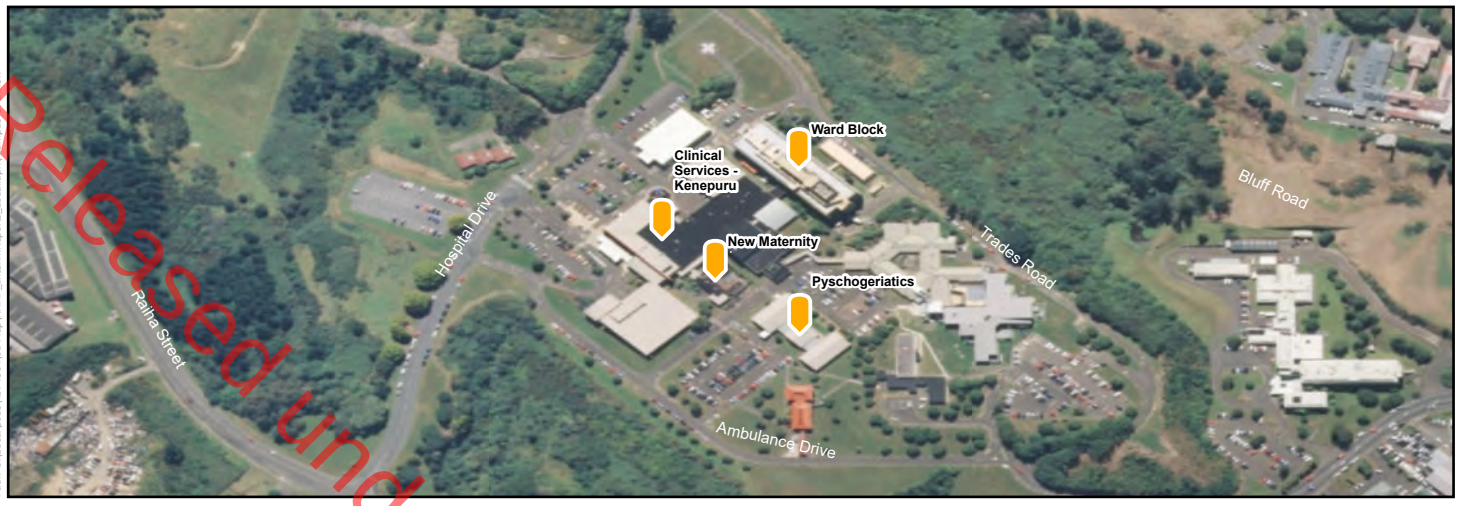
#	Date	Title	Decision on release
1	27 August 2019	Kenepuru Hospital Building and Infrastructure Condition Report	Released in full
2	28 August 2019	Hutt Hospital Building and Infrastructure Condition Report	Released in full
3	29 August 2019	Wairarapa Hospital Building and Infrastructure Condition Report	Released in full
4	30 August 2019	Hawkes Bay Hospital Building and Infrastructure Condition Report	Released in full
5	2 September 2019	Mid-Central District Health Board - Clinical Facility Fitness for Purpose	Released in full
6	2 September 2019	Hawkes Bay District Health Board – Clinical Facility Fitness for Purpose	Released in full
7	3 September 2019	Capital and Coast District Health Board – Clinical Facility Fitness for Purpose	Released in full
8	3 September 2019	Hutt Valley District Health Board – Clinical Facility Fitness for Purpose	Released in full
9	9 September 2019	Palmerston North Hospital Building and Infrastructure Condition Report	Released in full
10	9 September 2019	Wellington Hospital Building and Infrastructure Condition Report	Released in full

Kenepuru - Porirua

Capital and Coast DHB

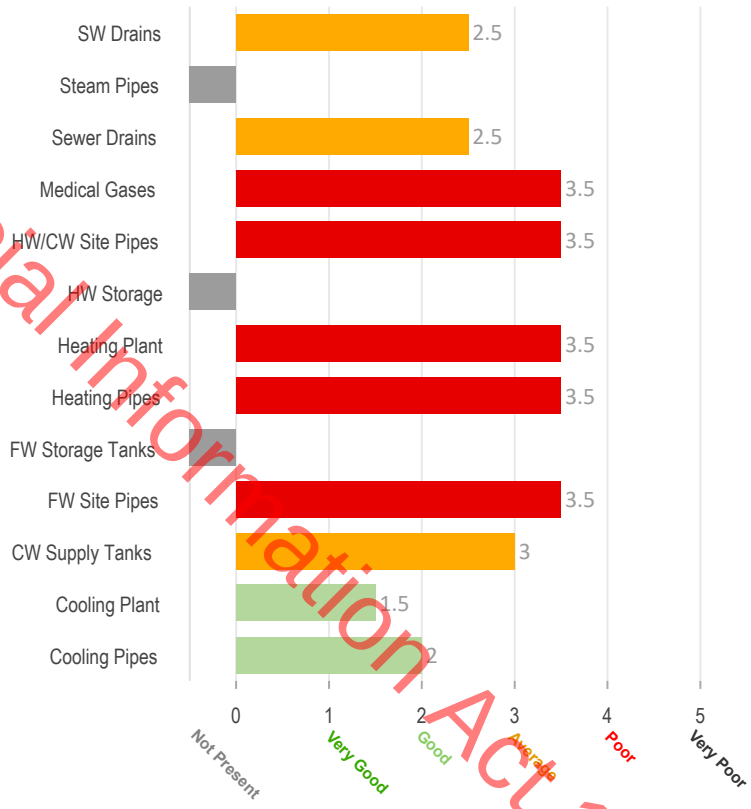
Beca Campus ID: 807
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 27/08/2019

Site Overview

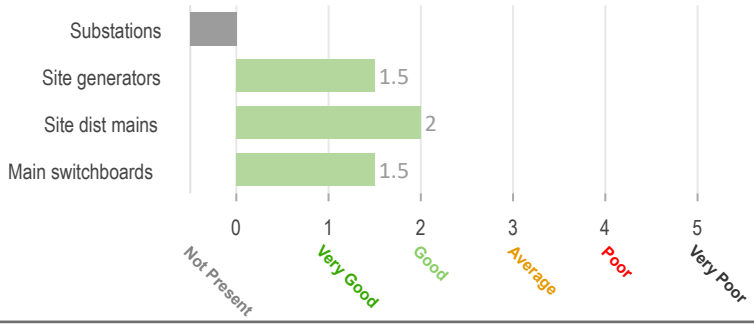


Buildings Surveyed

Site wide Mechanical Infrastructure Condition



Site wide Electrical Infrastructure Condition



Engineering Commentary

The Ward Block building roof and upper metal and timber cladding materials are in poor condition. The New Maternity block is a relocated cafeteria building and is in average condition. The Clinical Services Keneperu (CSK) building has weathertightness issues with roof leaks.

Site Main Switchboards have been replaced within the last 5 years and in good condition. Old submains jointed under floor to new switchboard. Generator has been replaced within last 3 years, has adequate capacity to supply 100% site load and in good condition. Main switchboard for Ward Block is due for replacement.

Mechanical services were generally of good (chiller system) to average (boiler system) condition. Some areas lack ventilation, active cooling and heating. Appeared to be no sitewide fire storage tanks and separate fire ring main.

Ward Block

Kenepuru - Porirua (Capital and Coast DHB)

Beca Building ID: 162
NAMP ID: 10228
DHB Ref: WBL
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior

Services & Fabric Score

2.7

DHB Assessed *% NBS* Rating

74% IL3

General Building Information

Approximate Building Age: 1979

Survey date: 20/05/2019

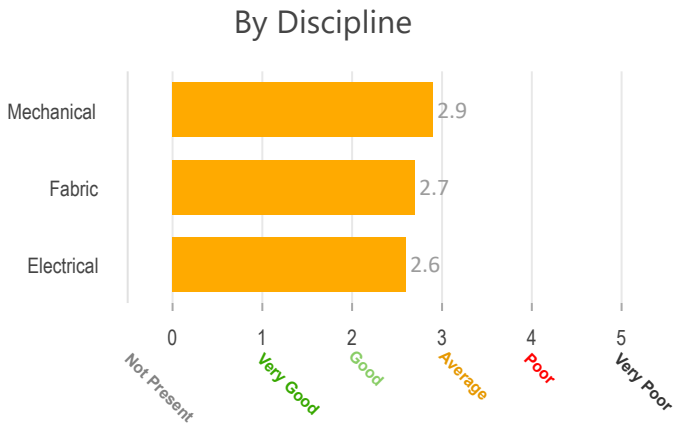
Gross Floor Area (m2): 9704

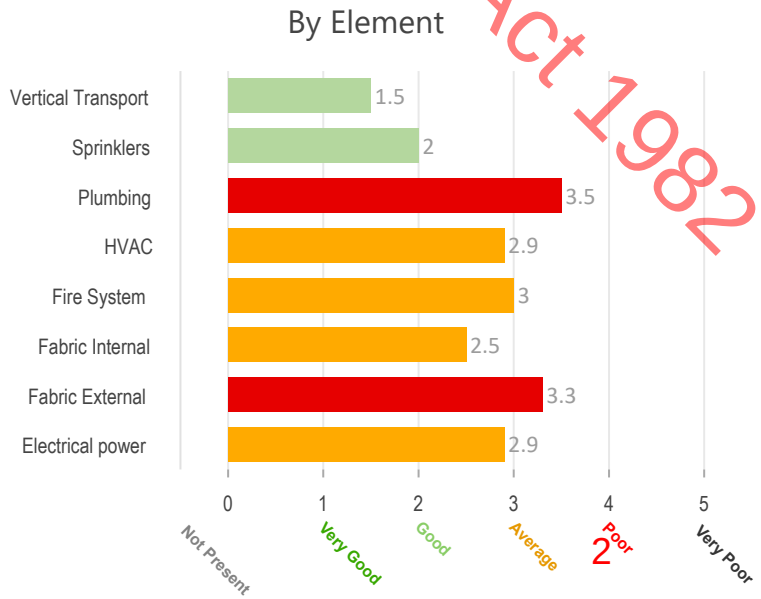
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Limited issues observed/known

Seismic Services Restraint: Moderate

Summary of building condition

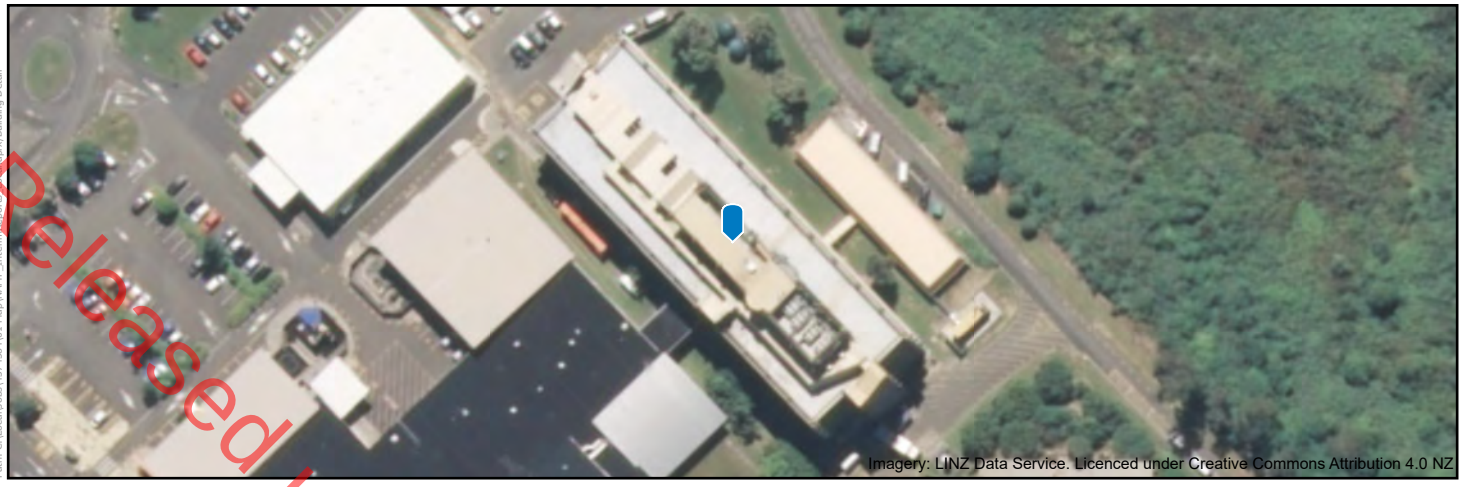




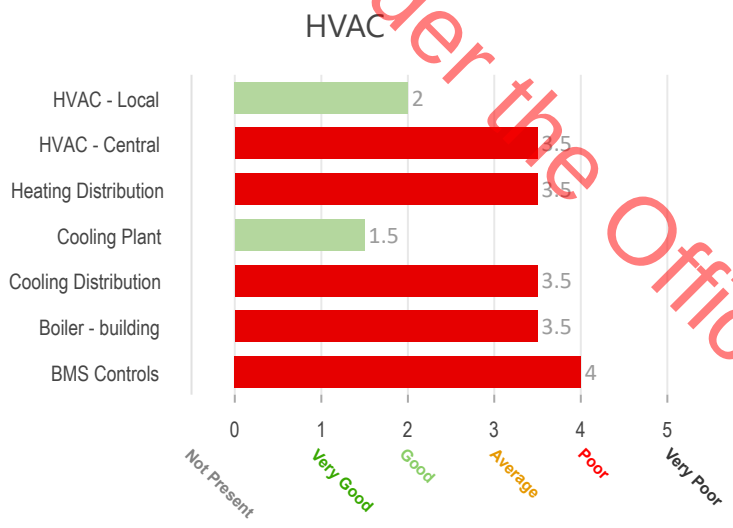
Beca Building ID: 162
NAMP ID: 10228
DHB Ref: WBL
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

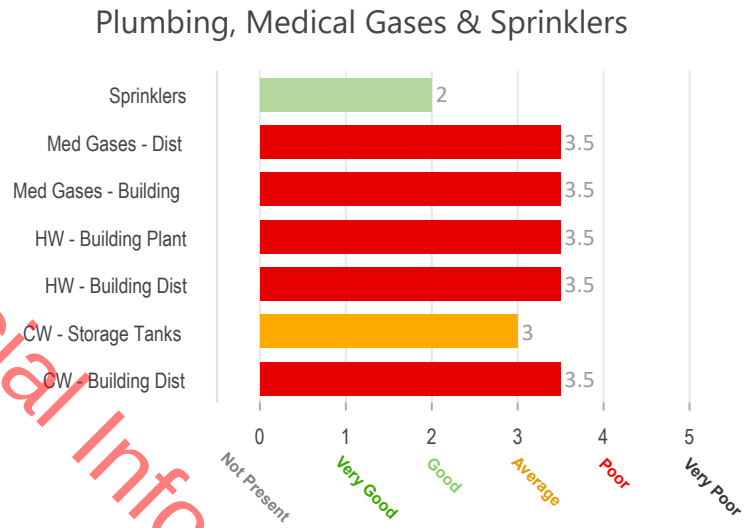
Approximate building location

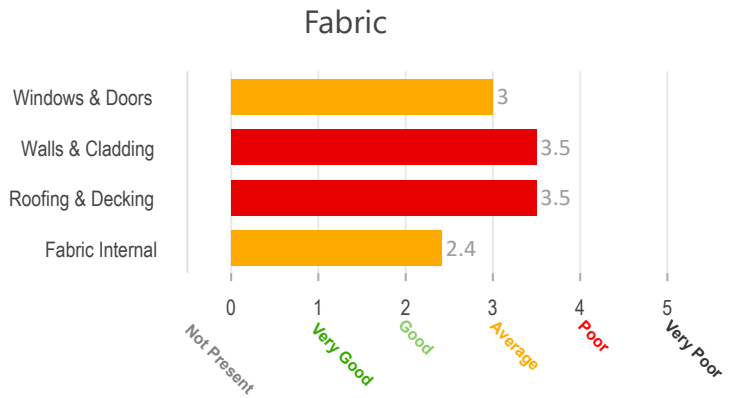
Ward Block

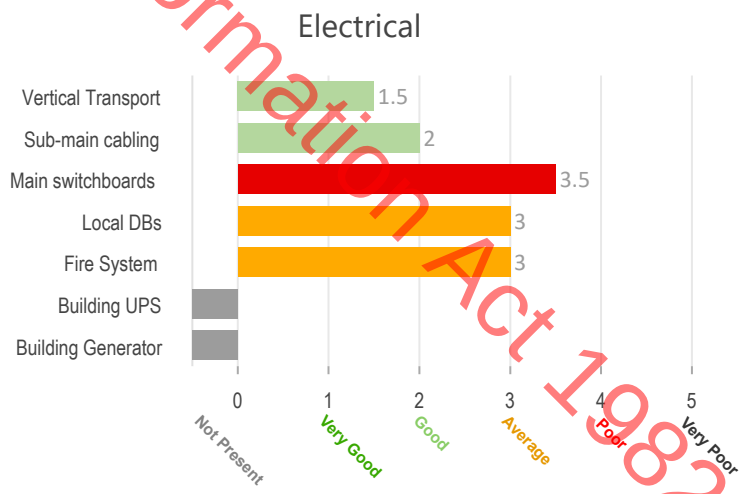


Summary of building element condition details









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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.

Pyschogeriatics

Kenepuru - Porirua (Capital and Coast DHB)

Beca Building ID: 161
NAMP ID: 10225
DHB Ref: PGK
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior

Services & Fabric Score

2.1

DHB Assessed *% NBS* Rating

>100% IL3

General Building Information

Approximate Building Age: 2006

Survey date: 20/05/2019

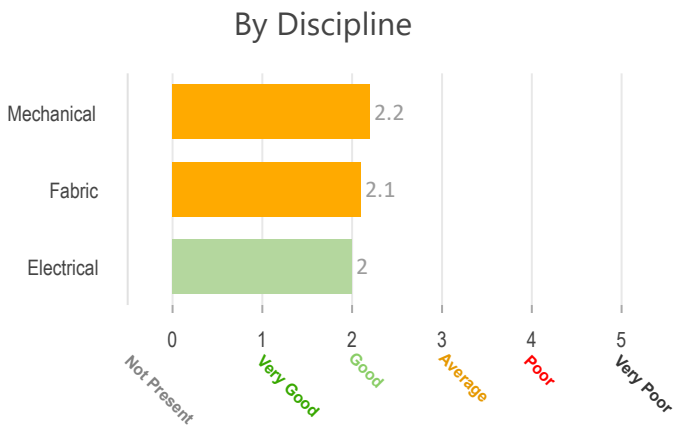
Gross Floor Area (m2): 1131

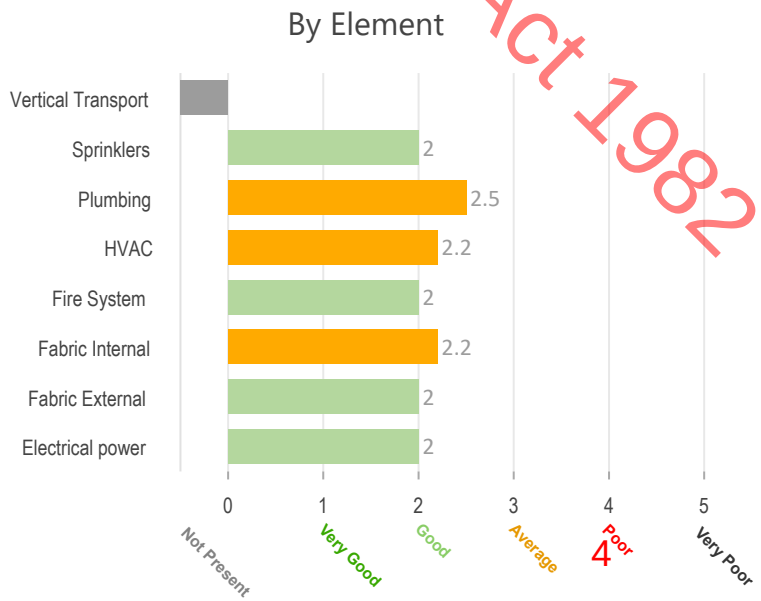
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Low likelihood of issues

Seismic Services Restraint: Poor

Summary of building condition

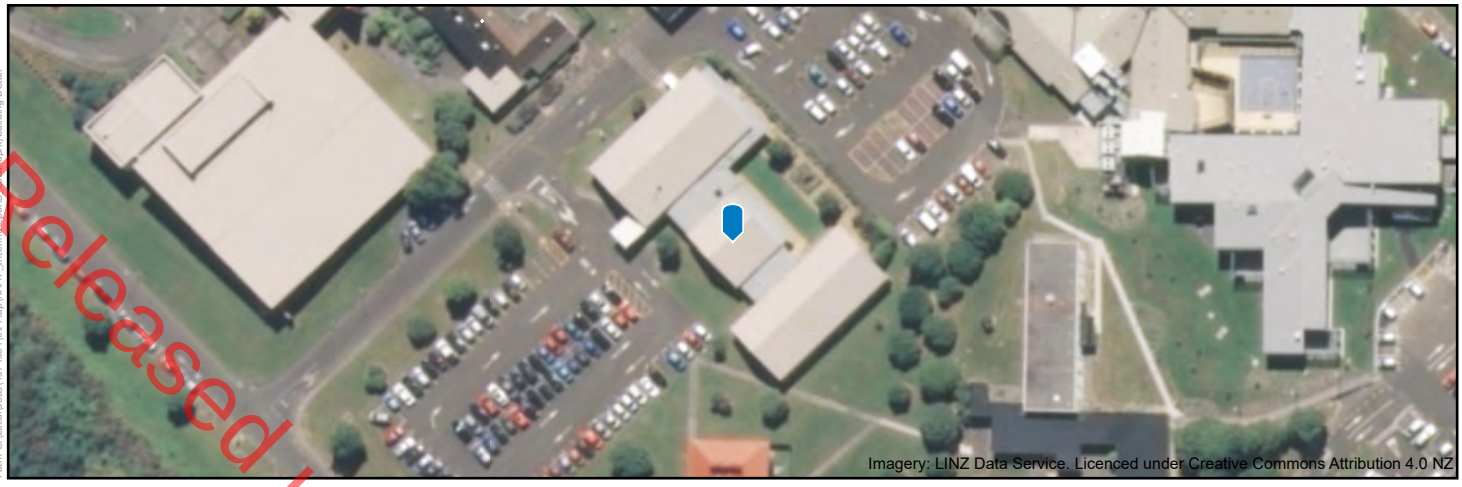




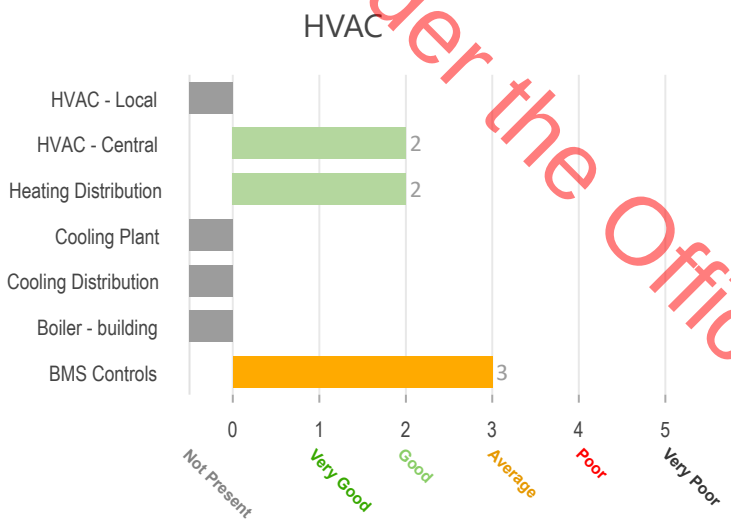
Beca Building ID: 161
NAMP ID: 10225
DHB Ref: PGK
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

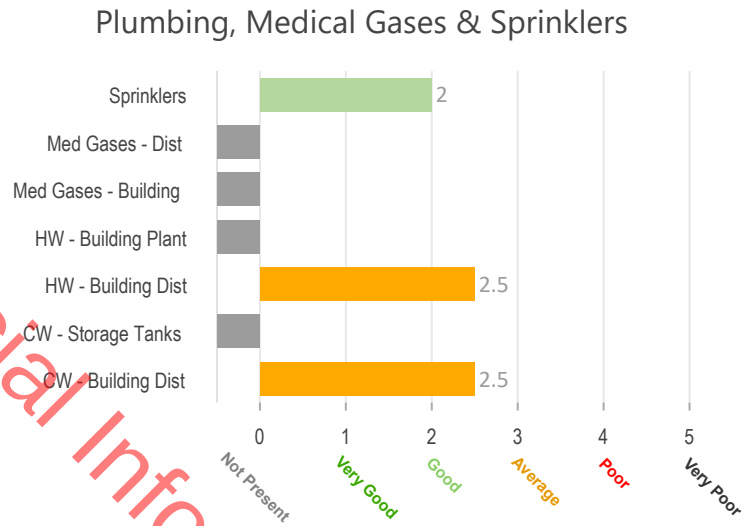
Approximate building location

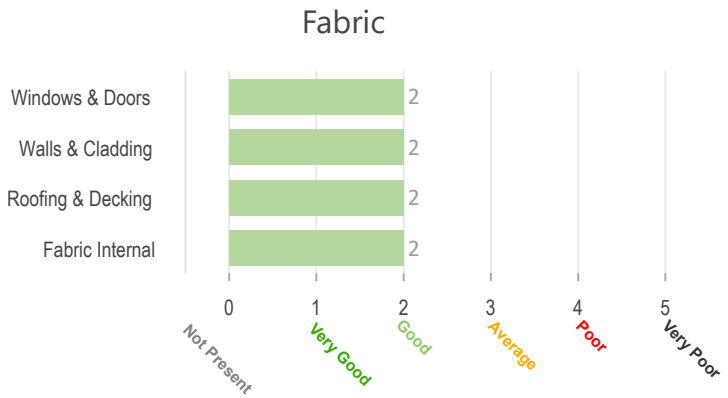
Pyschogeriatics

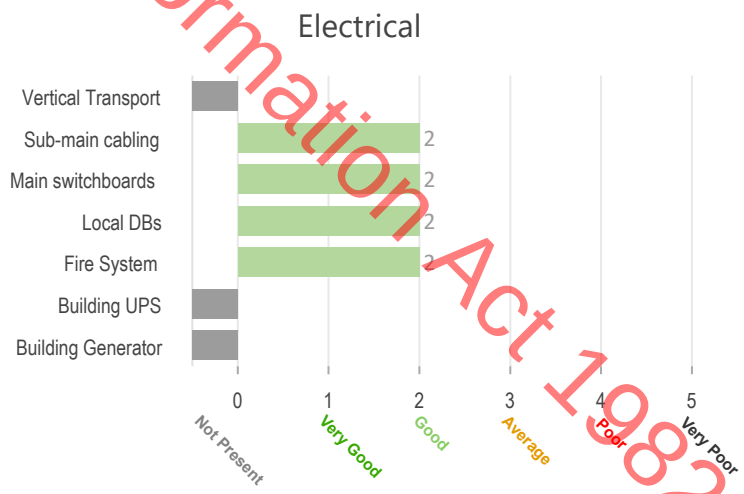


Summary of building element condition details









Condition Definitions

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	Not Present	Assets were not present or inaccessible when site was visited.
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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.

New Maternity

Kenepuru - Porirua (Capital and Coast DHB)

Beca Building ID: 160
NAMP ID: 10224
DHB Ref: BIR
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: 1990

Survey date: 20/05/2019

Gross Floor Area (m2): 355

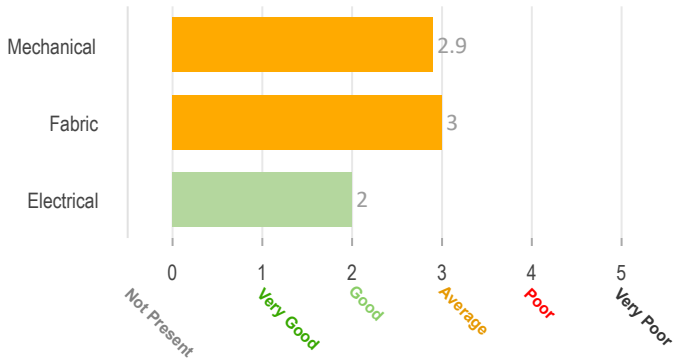
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Low likelihood of issues

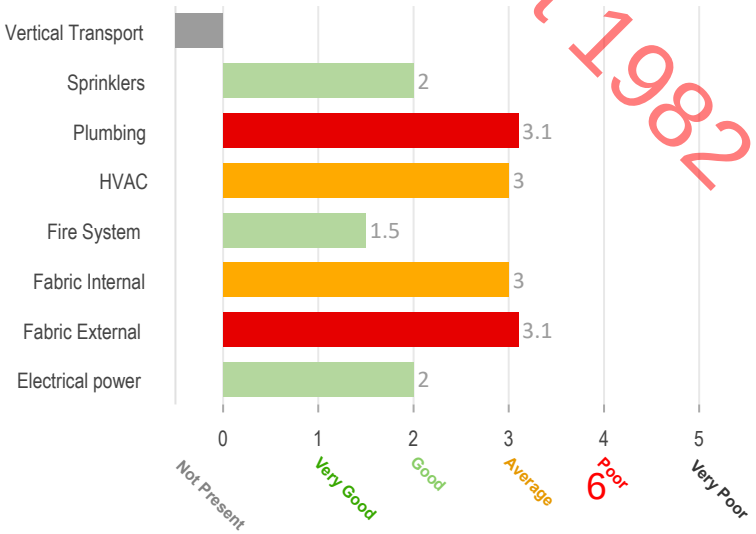
Seismic Services Restraint: Poor

Summary of building condition

By Discipline



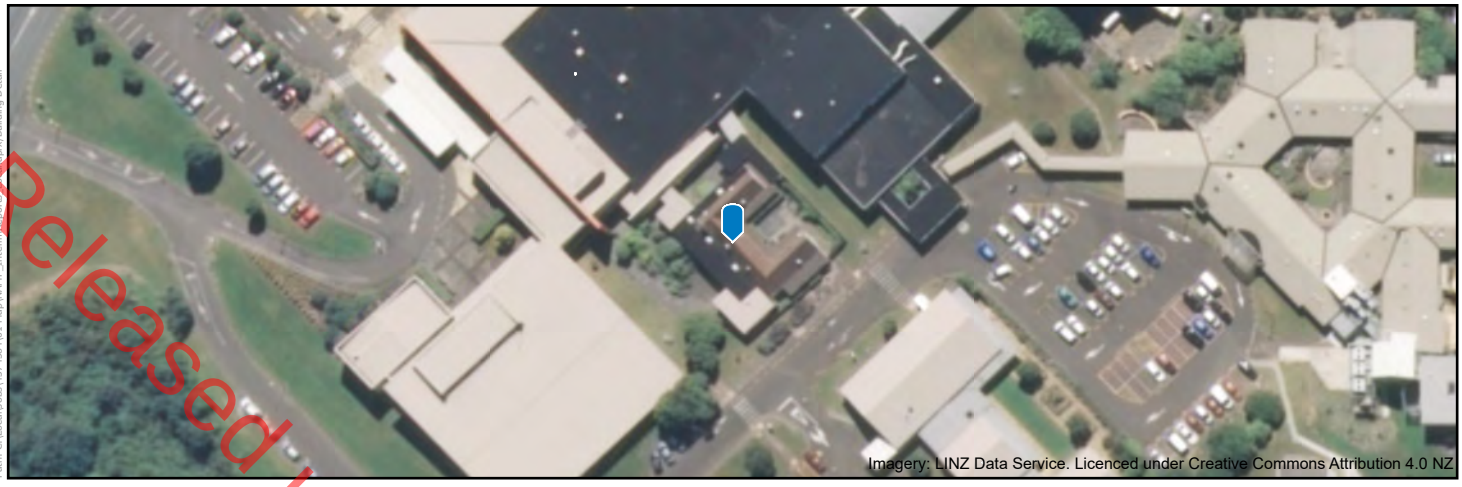
By Element



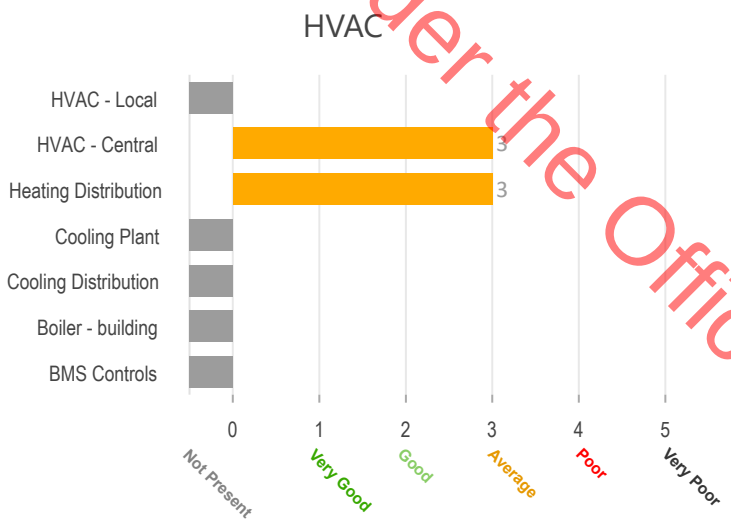
Beca Building ID: 160
NAMP ID: 10224
DHB Ref: BIR
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

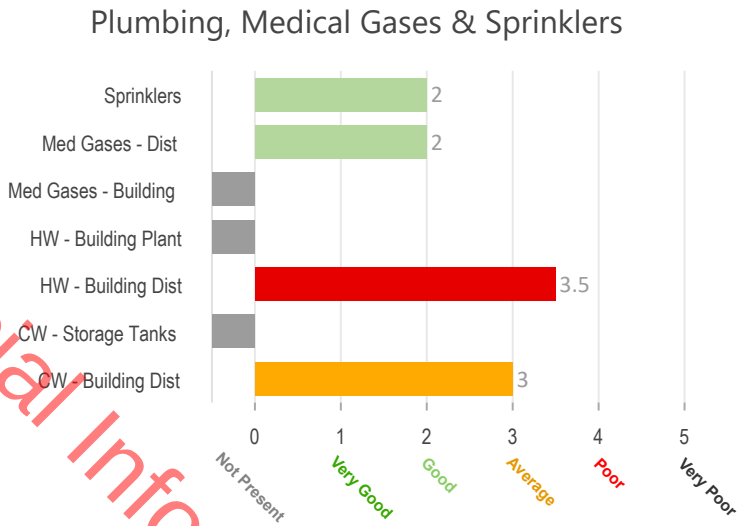
Approximate building location

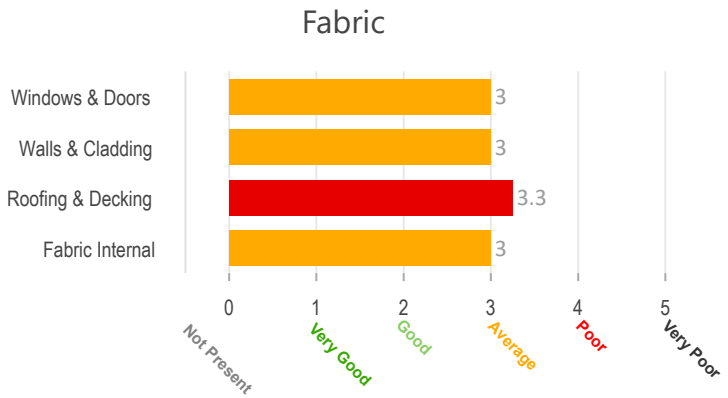
New Maternity

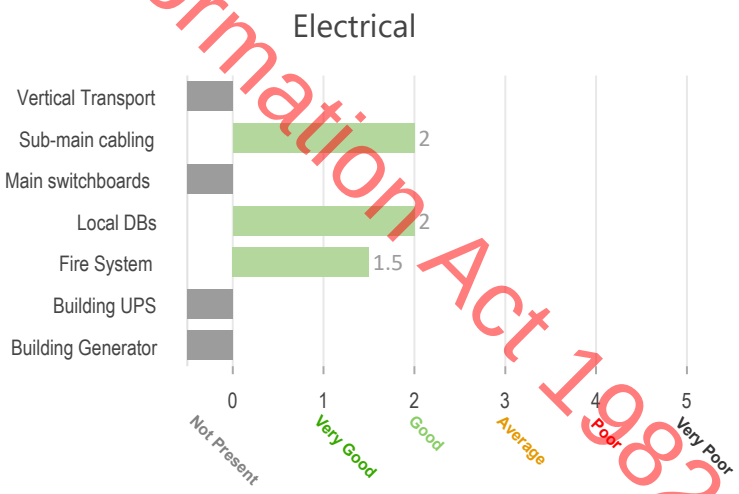


Summary of building element condition details









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Clinical Services - Kenepuru

Kenepuru - Porirua (Capital and Coast DHB)

Beca Building ID: 159
NAMP ID: 10217
DHB Ref: CSK
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 9/09/2019

Photo of Building Exterior

Services & Fabric Score

2.5

DHB Assessed *% NBS* Rating

48% IL3

General Building Information

Approximate Building Age: 1979

Survey date: 20/05/2019

Gross Floor Area (m2): 8987

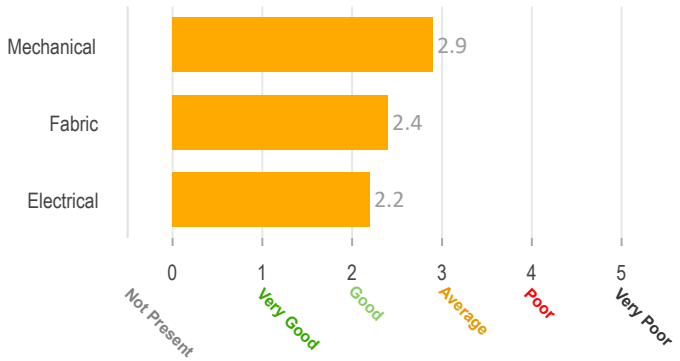
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Limited issues observed/known

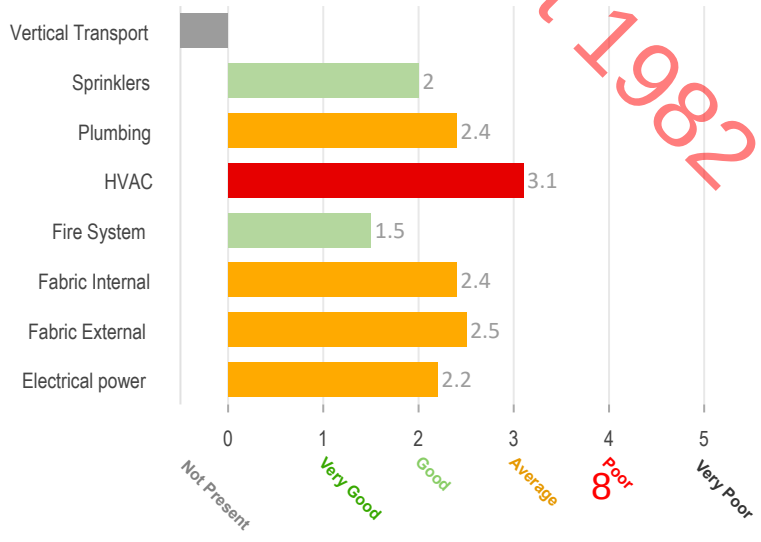
Seismic Services Restraint: Moderate

Summary of building condition

By Discipline



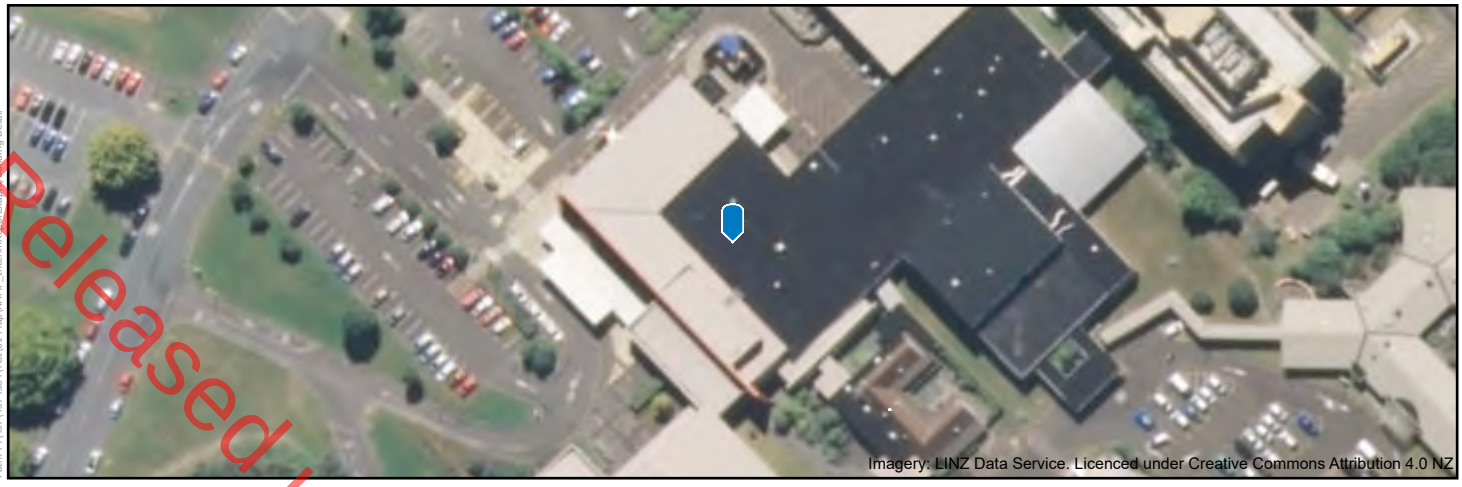
By Element



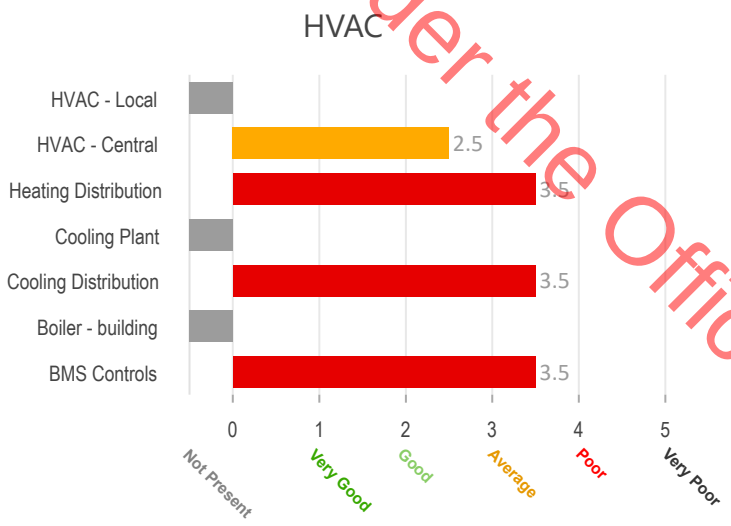
Beca Building ID: 159
NAMP ID: 10217
DHB Ref: CSK
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 9/09/2019

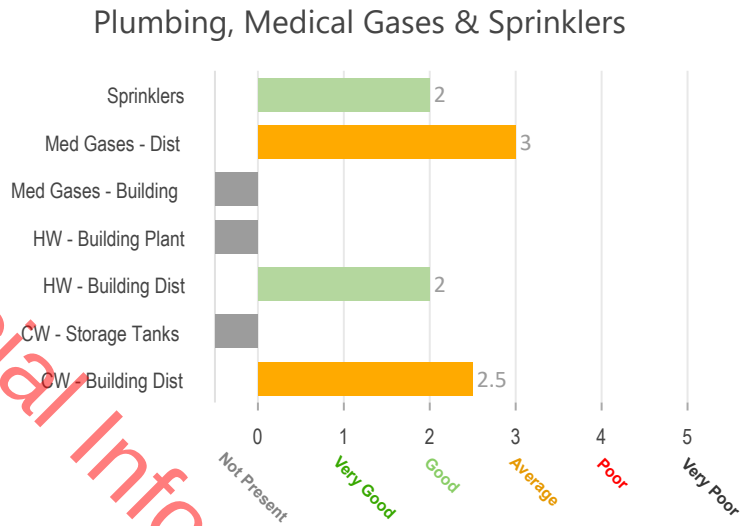
Approximate building location

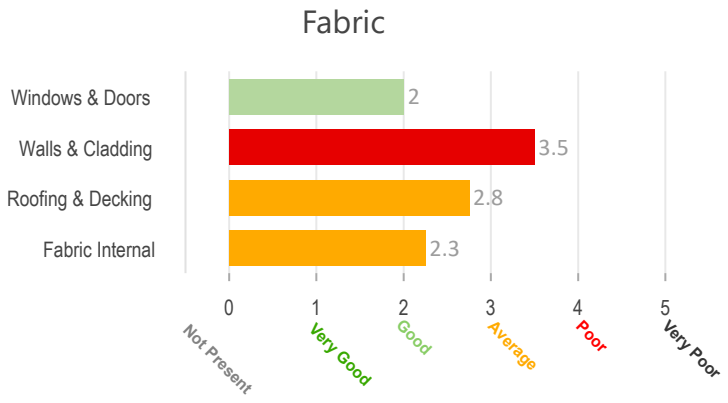
Clinical Services - Kenepuru

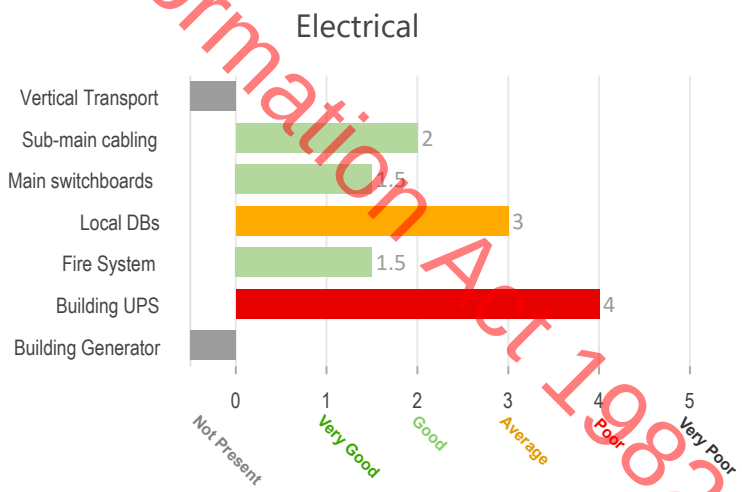


Summary of building element condition details









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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
Kenepuru - Porirua	Clinical Services - Kenepuru	Electrical Power	Building Generator		Not Present				
Kenepuru - Porirua	Clinical Services - Kenepuru	Electrical Power	Building Main Switchboard		Present		2	1	3 to 10
Kenepuru - Porirua	Clinical Services - Kenepuru	Electrical Power	Building UPS		Present		3	3	original
Kenepuru - Porirua	Clinical Services - Kenepuru	Electrical Power	Local DBs		Present		3	2	mixed
Kenepuru - Porirua	Clinical Services - Kenepuru	Electrical Power	Site Generator			yes			
Kenepuru - Porirua	Clinical Services - Kenepuru	Electrical Power	Sub-main cabling		Present		2	2	mixed
Kenepuru - Porirua	Clinical Services - Kenepuru	Fabric External	Roofing and Decking	Rubber Sheet	Present		3	1	10+
Kenepuru - Porirua	Clinical Services - Kenepuru	Fabric External	Roofing and Decking	Iron/metal	Present		3	1	original
Kenepuru - Porirua	Clinical Services - Kenepuru	Fabric External	Walls and Cladding	Sheet	Present		3	2	original
Kenepuru - Porirua	Clinical Services - Kenepuru	Fabric External	Windows and Doors	Aluminium	Present		2	1	original
Kenepuru - Porirua	Clinical Services - Kenepuru	Fabric Internal	1		Present		2	1	original
Kenepuru - Porirua	Clinical Services - Kenepuru	Fabric Internal	G		Present		3	1	10+
Kenepuru - Porirua	Clinical Services - Kenepuru	Fire Alarm			Present		2	1	10+
Kenepuru - Porirua	Clinical Services - Kenepuru	HVAC	BMS Controls		Present		3	2	original
Kenepuru - Porirua	Clinical Services - Kenepuru	HVAC	Boiler Plant - Site Plant			yes			
Kenepuru - Porirua	Clinical Services - Kenepuru	HVAC	Boiler Plant in building		Not Present				
Kenepuru - Porirua	Clinical Services - Kenepuru	HVAC	Building HVAC - Central plant		Present		2	2	original
Kenepuru - Porirua	Clinical Services - Kenepuru	HVAC	Building HVAC - Local plant		Not Present				
Kenepuru - Porirua	Clinical Services - Kenepuru	HVAC	Cooling Distribution		Present		3	2	original
Kenepuru - Porirua	Clinical Services - Kenepuru	HVAC	Cooling Plant - Site Plant			yes			
Kenepuru - Porirua	Clinical Services - Kenepuru	HVAC	Cooling Plant in building		Not Present				
Kenepuru - Porirua	Clinical Services - Kenepuru	HVAC	Heating Distribution		Present	yes	3	2	original
Kenepuru - Porirua	Clinical Services - Kenepuru	Plumbing	Cold water - Building distribution		Present		2	2	original
Kenepuru - Porirua	Clinical Services - Kenepuru	Plumbing	Cold water - Building storage tanks		Not Present				
Kenepuru - Porirua	Clinical Services - Kenepuru	Plumbing	Cold water - Site storage and mains			yes			
Kenepuru - Porirua	Clinical Services - Kenepuru	Plumbing	Hot water - Building distribution		Present		2	1	original
Kenepuru - Porirua	Clinical Services - Kenepuru	Plumbing	Hot water - Building plant		Not Present				
Kenepuru - Porirua	Clinical Services - Kenepuru	Plumbing	Hot water - Site Plant			yes			
Kenepuru - Porirua	Clinical Services - Kenepuru	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Kenepuru - Porirua	Clinical Services - Kenepuru	Plumbing	Medical gases and vacuum - Site Plant			yes			
Kenepuru - Porirua	Clinical Services - Kenepuru	Plumbing	Medical gases and vacuum distribution		Present		3	1	original
Kenepuru - Porirua	Clinical Services - Kenepuru	Sprinklers	Sprinklers		Present		2	1	original
Kenepuru - Porirua	Clinical Services - Kenepuru	Vertical Transport			Not Present				
Kenepuru - Porirua	New Maternity	Electrical Power	Building Generator		Not Present				
Kenepuru - Porirua	New Maternity	Electrical Power	Building Main Switchboard		Not Present				
Kenepuru - Porirua	New Maternity	Electrical Power	Building UPS		Not Present				
Kenepuru - Porirua	New Maternity	Electrical Power	Local DBs		Present		2	1	original
Kenepuru - Porirua	New Maternity	Electrical Power	Site Generator			yes			
Kenepuru - Porirua	New Maternity	Electrical Power	Sub-main cabling		Present		2	1	original
Kenepuru - Porirua	New Maternity	Fabric External	Roofing and Decking	Tile/Shingle	Present		4	1	original
Kenepuru - Porirua	New Maternity	Fabric External	Roofing and Decking	Iron/metal	Present		3	1	original
Kenepuru - Porirua	New Maternity	Fabric External	Roofing and Decking	Rubber Sheet	Present		3	1	original
Kenepuru - Porirua	New Maternity	Fabric External	Walls and Cladding	Sheet	Present		3	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
Kenepuru - Porirua	New Maternity	Fabric External	Windows and Doors	Aluminium	Present		3	1	original
Kenepuru - Porirua	New Maternity	Fabric Internal	G		Present		3	1	original
Kenepuru - Porirua	New Maternity	Fire Alarm			Present		2	1	10+
Kenepuru - Porirua	New Maternity	HVAC	BMS Controls		Not Present				
Kenepuru - Porirua	New Maternity	HVAC	Boiler Plant - Site Plant			yes			
Kenepuru - Porirua	New Maternity	HVAC	Boiler Plant in building		Not Present				
Kenepuru - Porirua	New Maternity	HVAC	Building HVAC - Central plant		Present		3	1	original
Kenepuru - Porirua	New Maternity	HVAC	Building HVAC - Local plant		Not Present				
Kenepuru - Porirua	New Maternity	HVAC	Cooling Distribution		Not Present				
Kenepuru - Porirua	New Maternity	HVAC	Cooling Plant - Site Plant			no			
Kenepuru - Porirua	New Maternity	HVAC	Cooling Plant in building		Not Present				
Kenepuru - Porirua	New Maternity	HVAC	Heating Distribution		Present		3	1	original
Kenepuru - Porirua	New Maternity	Plumbing	Cold water - Building distribution		Present		3	1	original
Kenepuru - Porirua	New Maternity	Plumbing	Cold water - Building storage tanks		Not Present				
Kenepuru - Porirua	New Maternity	Plumbing	Cold water - Site storage and mains			yes			
Kenepuru - Porirua	New Maternity	Plumbing	Hot water - Building distribution		Present		3	2	original
Kenepuru - Porirua	New Maternity	Plumbing	Hot water - Building plant		Not Present				
Kenepuru - Porirua	New Maternity	Plumbing	Hot water - Site Plant			yes			
Kenepuru - Porirua	New Maternity	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Kenepuru - Porirua	New Maternity	Plumbing	Medical gases and vacuum - Site Plant			yes			
Kenepuru - Porirua	New Maternity	Plumbing	Medical gases and vacuum distribution		Present		2	1	original
Kenepuru - Porirua	New Maternity	Sprinklers	Sprinklers		Present		2	1	original
Kenepuru - Porirua	New Maternity	Vertical Transport			Not Present				
Kenepuru - Porirua	Pyschogeriatics	Electrical Power	Building Generator		Not Present				
Kenepuru - Porirua	Pyschogeriatics	Electrical Power	Building Main Switchboard		Present		2	1	original
Kenepuru - Porirua	Pyschogeriatics	Electrical Power	Building UPS		Not Present				
Kenepuru - Porirua	Pyschogeriatics	Electrical Power	Local DBs		Present		2	2	mixed
Kenepuru - Porirua	Pyschogeriatics	Electrical Power	Site Generator			yes			
Kenepuru - Porirua	Pyschogeriatics	Electrical Power	Sub-main cabling		Present		2	1	original
Kenepuru - Porirua	Pyschogeriatics	Fabric External	Roofing and Decking	Iron/metal	Present		2	1	original
Kenepuru - Porirua	Pyschogeriatics	Fabric External	Walls and Cladding	Masonry	Present		2	1	original
Kenepuru - Porirua	Pyschogeriatics	Fabric External	Walls and Cladding	Sheet	Present		2	1	original
Kenepuru - Porirua	Pyschogeriatics	Fabric External	Windows and Doors	Aluminium	Present		2	1	original
Kenepuru - Porirua	Pyschogeriatics	Fabric Internal	1		Present		2	1	original
Kenepuru - Porirua	Pyschogeriatics	Fabric Internal	G		Present		2	1	original
Kenepuru - Porirua	Pyschogeriatics	Fire Alarm			Present		2	1	original
Kenepuru - Porirua	Pyschogeriatics	HVAC	BMS Controls		Present		3	1	original
Kenepuru - Porirua	Pyschogeriatics	HVAC	Boiler Plant - Site Plant			yes			
Kenepuru - Porirua	Pyschogeriatics	HVAC	Boiler Plant in building		Not Present				
Kenepuru - Porirua	Pyschogeriatics	HVAC	Building HVAC - Central plant		Present		2	1	original
Kenepuru - Porirua	Pyschogeriatics	HVAC	Building HVAC - Local plant		Not Present				
Kenepuru - Porirua	Pyschogeriatics	HVAC	Cooling Distribution		Not Present				
Kenepuru - Porirua	Pyschogeriatics	HVAC	Cooling Plant - Site Plant			no			

Raw Condition Scores

RL VERSIONS

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Kenepuru - Porirua	Pyschogeriatics	HVAC	Cooling Plant in building		Not Present				
Kenepuru - Porirua	Pyschogeriatics	HVAC	Heating Distribution		Present		2	1	original
Kenepuru - Porirua	Pyschogeriatics	Plumbing	Cold water - Building distribution		Present		2	2	original
Kenepuru - Porirua	Pyschogeriatics	Plumbing	Cold water - Building storage tanks		Not Present				
Kenepuru - Porirua	Pyschogeriatics	Plumbing	Cold water - Site storage and mains			yes			
Kenepuru - Porirua	Pyschogeriatics	Plumbing	Hot water - Building distribution		Present		2	2	original
Kenepuru - Porirua	Pyschogeriatics	Plumbing	Hot water - Building plant		Not Present				
Kenepuru - Porirua	Pyschogeriatics	Plumbing	Hot water - Site Plant			yes			
Kenepuru - Porirua	Pyschogeriatics	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Kenepuru - Porirua	Pyschogeriatics	Plumbing	Medical gases and vacuum - Site Plant			no			
Kenepuru - Porirua	Pyschogeriatics	Plumbing	Medical gases and vacuum distribution		Not Present				
Kenepuru - Porirua	Pyschogeriatics	Sprinklers	Sprinklers		Present		2	1	original
Kenepuru - Porirua	Pyschogeriatics	Vertical Transport			Not Present				
Kenepuru - Porirua	Site Wide	Mechanical Infrastructure	Site Cold Water supply tanks		Present		3	1	original
Kenepuru - Porirua	Site Wide	Mechanical Infrastructure	Site Cooling pipes		Present		2	2	3 to 10
Kenepuru - Porirua	Site Wide	Mechanical Infrastructure	Site Cooling plant		Present		2	1	3 to 10
Kenepuru - Porirua	Site Wide	Mechanical Infrastructure	Site Fire Water site pipes		Present		3	2	original
Kenepuru - Porirua	Site Wide	Mechanical Infrastructure	Site Fire Water storage tanks		Not Present				
Kenepuru - Porirua	Site Wide	Mechanical Infrastructure	Site Heating pipes		Present		3	2	original
Kenepuru - Porirua	Site Wide	Mechanical Infrastructure	Site Heating Plant		Present		3	2	original
Kenepuru - Porirua	Site Wide	Mechanical Infrastructure	Site Hot and Cold Water site pipes		Present		3	2	original
Kenepuru - Porirua	Site Wide	Mechanical Infrastructure	Site Hot Water storage		Not Present				
Kenepuru - Porirua	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		3	2	original
Kenepuru - Porirua	Site Wide	Mechanical Infrastructure	Site sewer drains		Present		2	2	original
Kenepuru - Porirua	Site Wide	Mechanical Infrastructure	Site Steam pipes		Not Present				
Kenepuru - Porirua	Site Wide	Mechanical Infrastructure	Site storm water drains		Present		2	2	original
Kenepuru - Porirua	Ward Block	Electrical Power	Building Generator		Not Present				
Kenepuru - Porirua	Ward Block	Electrical Power	Building Main Switchboard		Present		4	1	original
Kenepuru - Porirua	Ward Block	Electrical Power	Building UPS		Not Present				
Kenepuru - Porirua	Ward Block	Electrical Power	Local DBs		Present		3	1	original
Kenepuru - Porirua	Ward Block	Electrical Power	Site Generator			yes			
Kenepuru - Porirua	Ward Block	Electrical Power	Sub-main cabling		Present		2	2	mixed
Kenepuru - Porirua	Ward Block	Fabric External	Roofing and Decking	Iron/metal	Present		4	1	original
Kenepuru - Porirua	Ward Block	Fabric External	Roofing and Decking	Rubber Sheet	Present		4	1	original
Kenepuru - Porirua	Ward Block	Fabric External	Walls and Cladding	Concrete	Present		3	2	original
Kenepuru - Porirua	Ward Block	Fabric External	Walls and Cladding	Sheet	Present		4	1	original
Kenepuru - Porirua	Ward Block	Fabric External	Windows and Doors	Aluminium	Present		3	1	original
Kenepuru - Porirua	Ward Block	Fabric Internal	1		Present		2	1	3 to 10
Kenepuru - Porirua	Ward Block	Fabric Internal	2		Present		3	1	10+
Kenepuru - Porirua	Ward Block	Fabric Internal	3		Present		3	2	original
Kenepuru - Porirua	Ward Block	Fabric Internal	4		Present		3	1	original
Kenepuru - Porirua	Ward Block	Fabric Internal	B1		Present		2	1	original
Kenepuru - Porirua	Ward Block	Fabric Internal	G		Present		2	2	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
Kenepuru - Porirua	Ward Block	Fire Alarm			Present		3	2	mixed
Kenepuru - Porirua	Ward Block	HVAC	BMS Controls		Present		4	2	original
Kenepuru - Porirua	Ward Block	HVAC	Boiler Plant - Site Plant			yes			
Kenepuru - Porirua	Ward Block	HVAC	Boiler Plant in building		Present		3	2	original
Kenepuru - Porirua	Ward Block	HVAC	Building HVAC - Central plant		Present		3	2	original
Kenepuru - Porirua	Ward Block	HVAC	Building HVAC - Local plant		Present		2	2	3 to 10
Kenepuru - Porirua	Ward Block	HVAC	Cooling Distribution		Present		3	2	original
Kenepuru - Porirua	Ward Block	HVAC	Cooling Plant - Site Plant			yes			
Kenepuru - Porirua	Ward Block	HVAC	Cooling Plant in building		Present		2	1	3 to 10
Kenepuru - Porirua	Ward Block	HVAC	Heating Distribution		Present		3	2	original
Kenepuru - Porirua	Ward Block	Plumbing	Cold water - Building distribution		Present		3	2	original
Kenepuru - Porirua	Ward Block	Plumbing	Cold water - Building storage tanks		Present		3	1	original
Kenepuru - Porirua	Ward Block	Plumbing	Cold water - Site storage and mains			yes			
Kenepuru - Porirua	Ward Block	Plumbing	Hot water - Building distribution		Present		3	2	original
Kenepuru - Porirua	Ward Block	Plumbing	Hot water - Building plant		Present		3	2	original
Kenepuru - Porirua	Ward Block	Plumbing	Hot water - Site Plant			yes			
Kenepuru - Porirua	Ward Block	Plumbing	Medical gases and vacuum - Building plant		Present		3	2	original
Kenepuru - Porirua	Ward Block	Plumbing	Medical gases and vacuum - Site Plant			yes			
Kenepuru - Porirua	Ward Block	Plumbing	Medical gases and vacuum distribution		Present		3	2	original
Kenepuru - Porirua	Ward Block	Sprinklers	Sprinklers		Present		2	1	original
Kenepuru - Porirua	Ward Block	Vertical Transport	Lifts 1 to 3		Present		2	1	10+
Kenepuru Porirua	Site Wide	Electrical Infrastructure	Main switchboards		Present		2	1	3 to 10
Kenepuru Porirua	Site Wide	Electrical Infrastructure	Site distribution mains		Present		2	2	mixed
Kenepuru Porirua	Site Wide	Electrical Infrastructure	Site generators		Present		2	1	3 to 10
Kenepuru Porirua	Site Wide	Electrical Infrastructure	Substations	No information/access					

Hutt Hospital

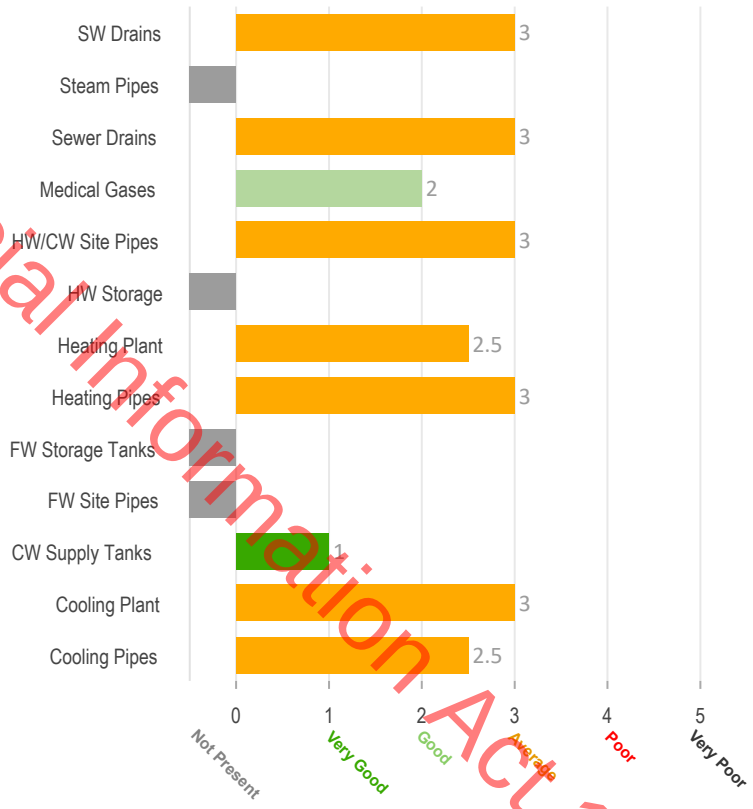
Hutt Valley DHB

Beca Campus ID: 813
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 28/08/2019

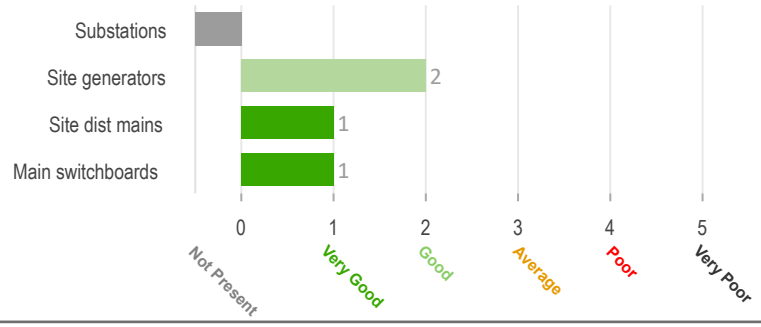
Site Overview

Buildings Surveyed

Site wide Mechanical Infrastructure Condition



Site wide Electrical Infrastructure Condition



Engineering Commentary

The Care Block is in average condition with evidence of moisture entering through stair core walls and five different cladding materials may cause maintenance issues in the future. Te Whare Ahuru (TWA) is in average condition. The residential timber frame construction with monolithic sheet cladding is cracking and likely to be letting moisture into the wall framing. The main client concern is the 3 waters as the condition of 80 year old direct buried pipework is unknown.

Electrical infrastructure is generally in good condition. The generator has recently been replaced as part of the theatre upgrade project including new controls systems. Limited variability and good distribution condition.

Mechanical infrastructure is generally in good condition with little variability. There is no cooling in inpatient ward areas which is not considered appropriate in clinical buildings. This is particularly evident in the Maternity and Ward (Heretaunga) building.

Te Whare Ahuru Building - TWA

Hutt Hospital (Hutt Valley DHB)

Beca Building ID: 158
NAMP ID: 10429
DHB Ref: 222
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

100% IL3

General Building Information

Approximate Building Age: 1997

Survey date: 6/05/2019

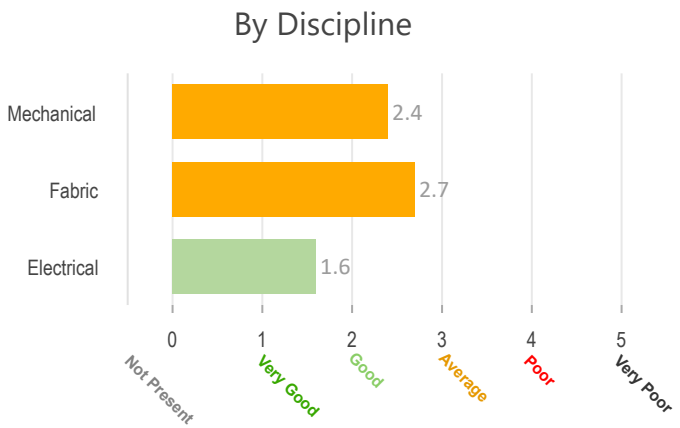
Gross Floor Area (m2): 2026

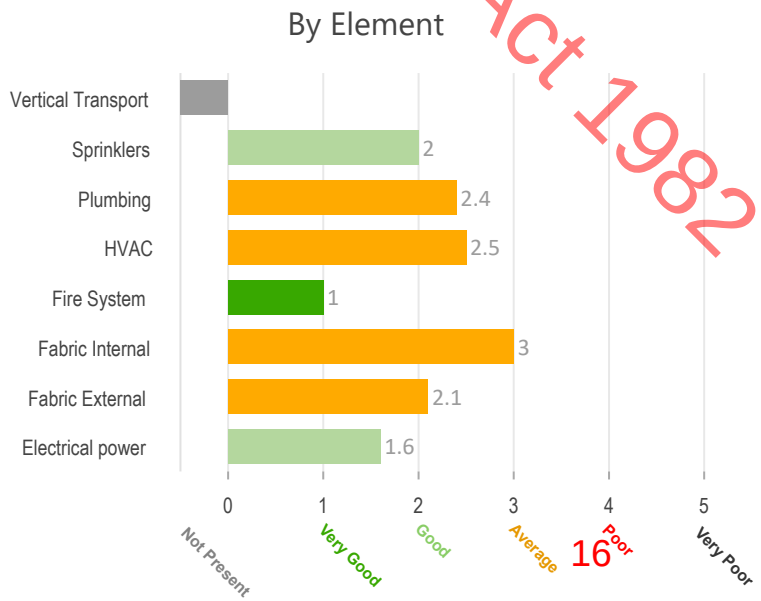
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Low likelihood of issues

Seismic Services Restraint: Poor

Summary of building condition



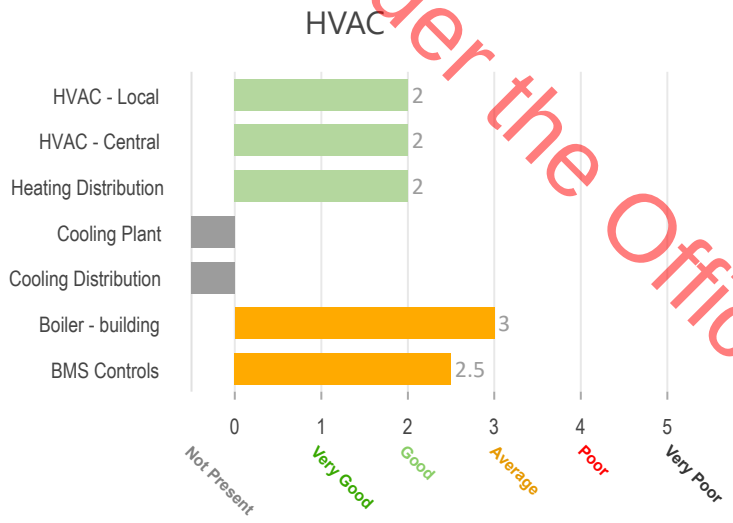


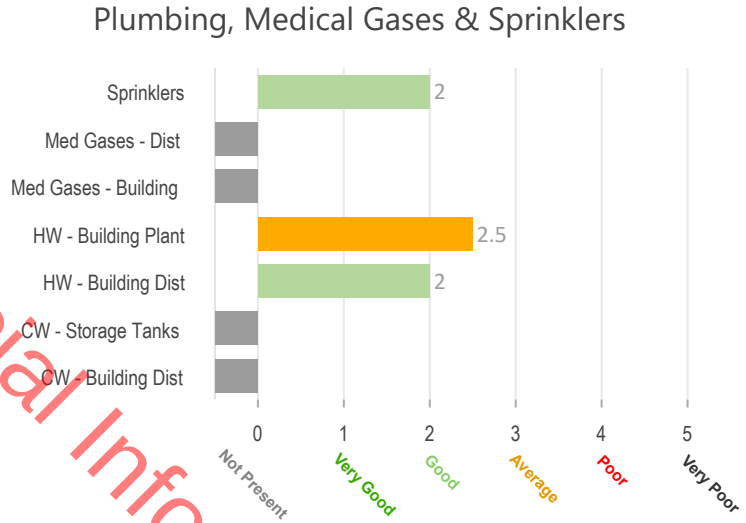
Beca Building ID: 158
NAMP ID: 10429
DHB Ref: 222
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

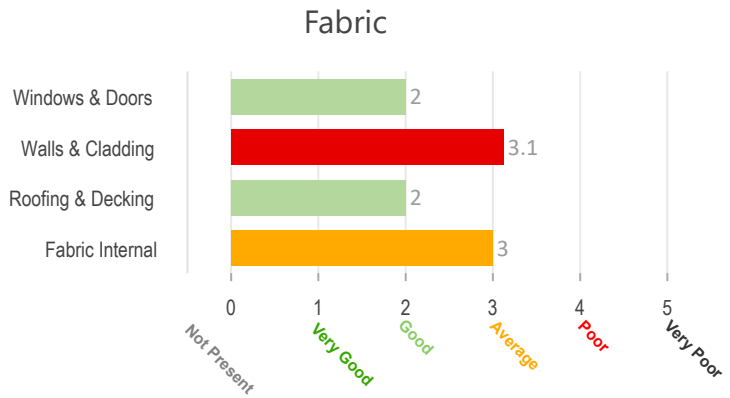
Approximate building location

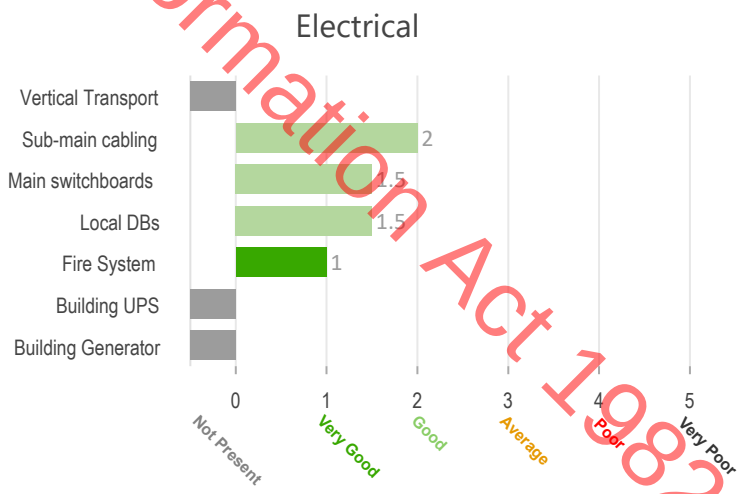
Te Whare Ahuru Building - TWA

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.

Old EDT

Hutt Hospital (Hutt Valley DHB)

Beca Building ID: 157
NAMP ID: 10427
DHB Ref: 221
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior

Services & Fabric Score

1.7

DHB Assessed *% NBS* Rating

100% IL4

General Building Information

Approximate Building Age: 1997

Survey date: 6/05/2019

Gross Floor Area (m2): 3214

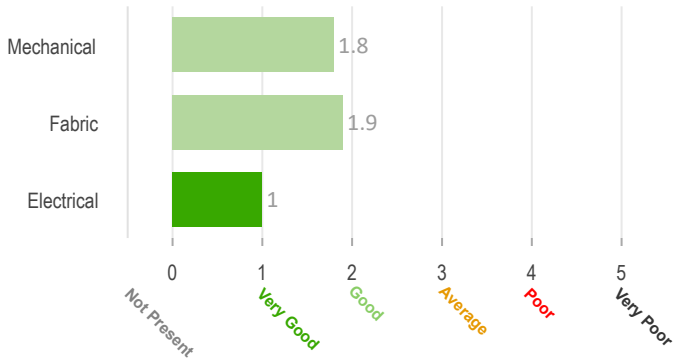
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Low likelihood of issues

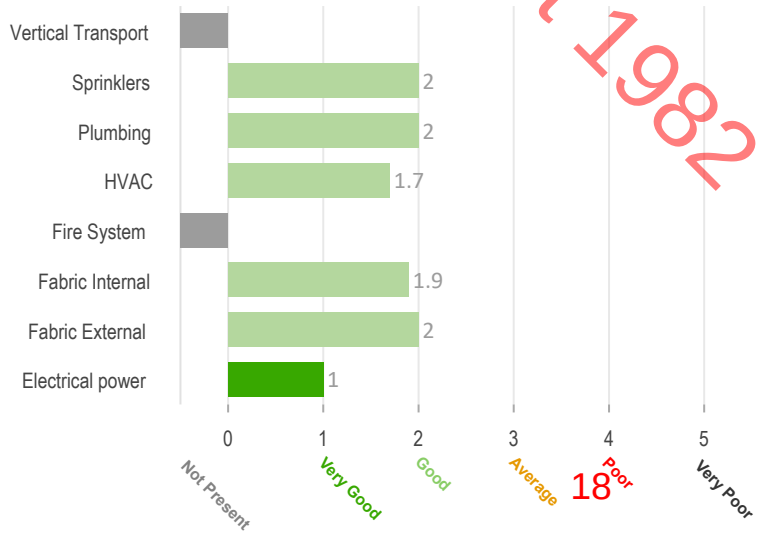
Seismic Services Restraint: Good

Summary of building condition

By Discipline



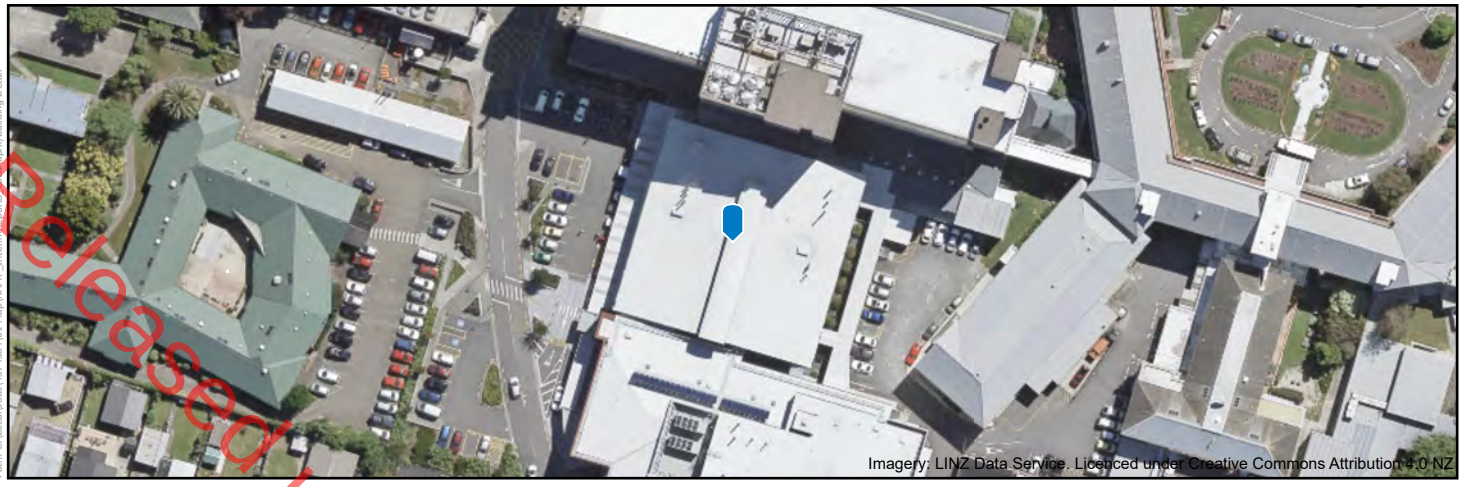
By Element



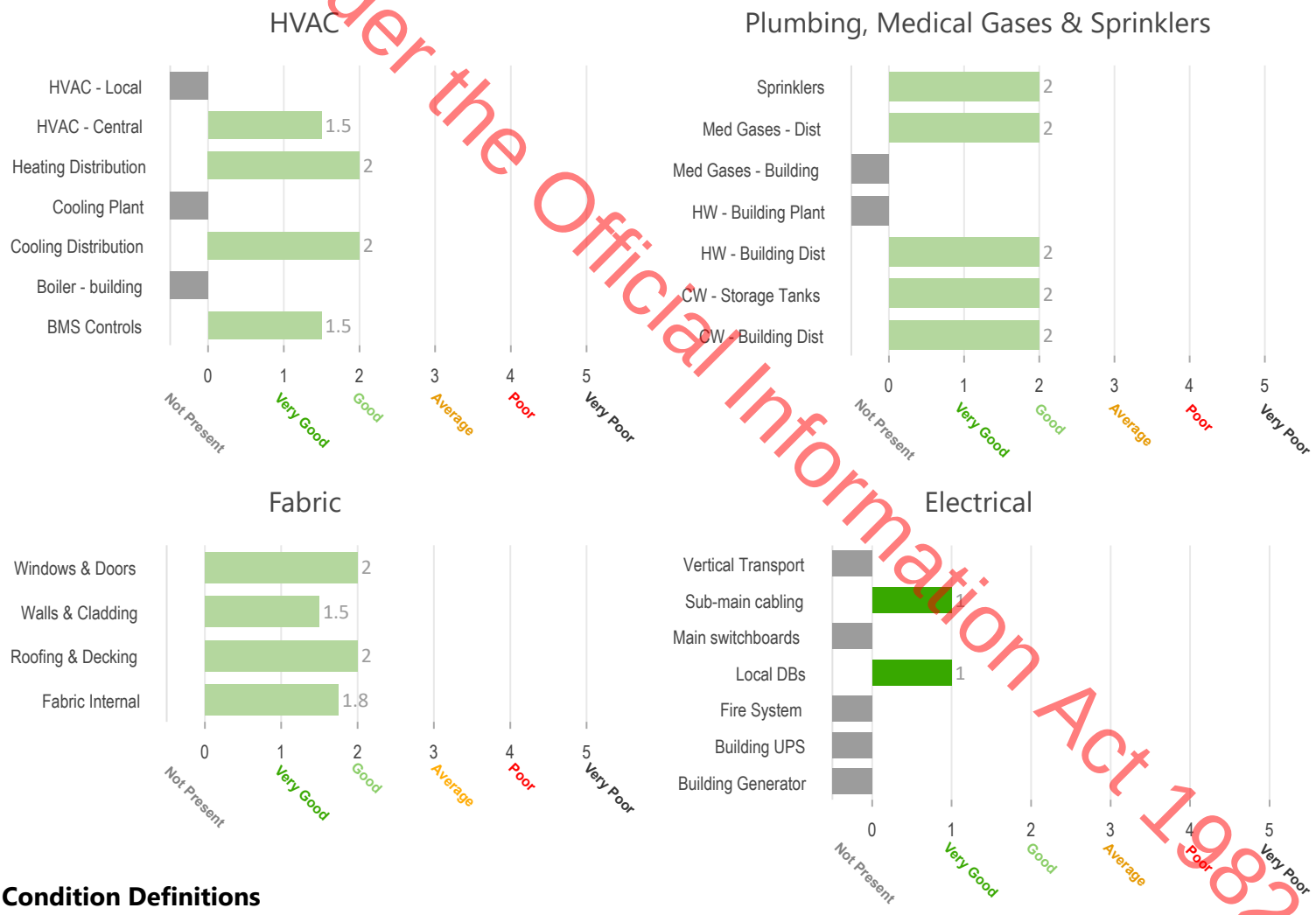
Beca Building ID: 157
NAMP ID: 10427
DHB Ref: 221
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Approximate building location

Old EDT



Summary of building element condition details



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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.

Heretaunga Block

Hutt Hospital (Hutt Valley DHB)

Beca Building ID: 156
NAMP ID: 10423
DHB Ref: 201
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

43% IL3

General Building Information

Approximate Building Age: 1974

Survey date: 6/05/2019

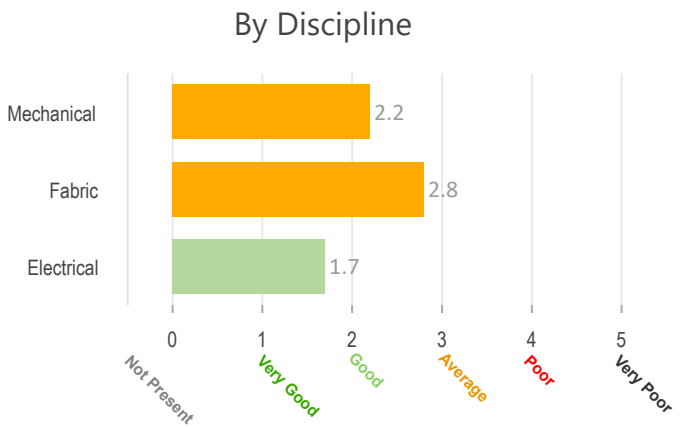
Gross Floor Area (m2): 18630

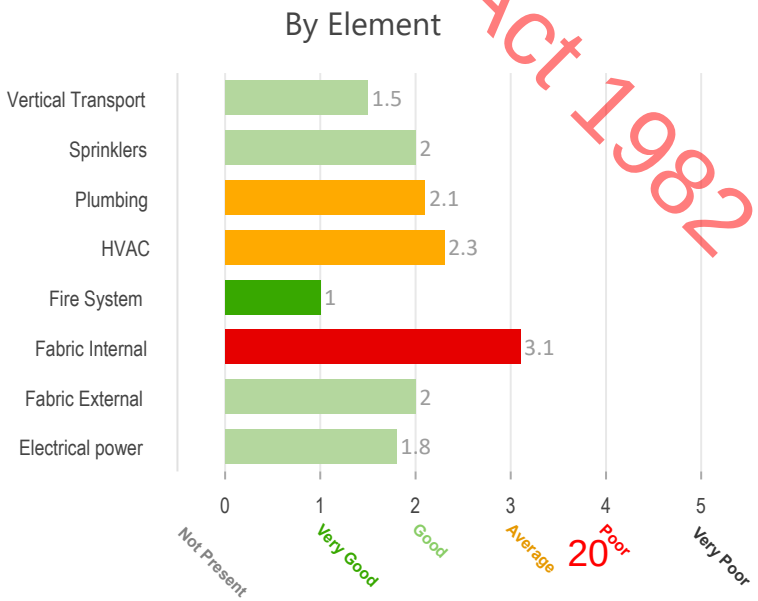
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Limited issues observed/known

Seismic Services Restraint: Poor

Summary of building condition

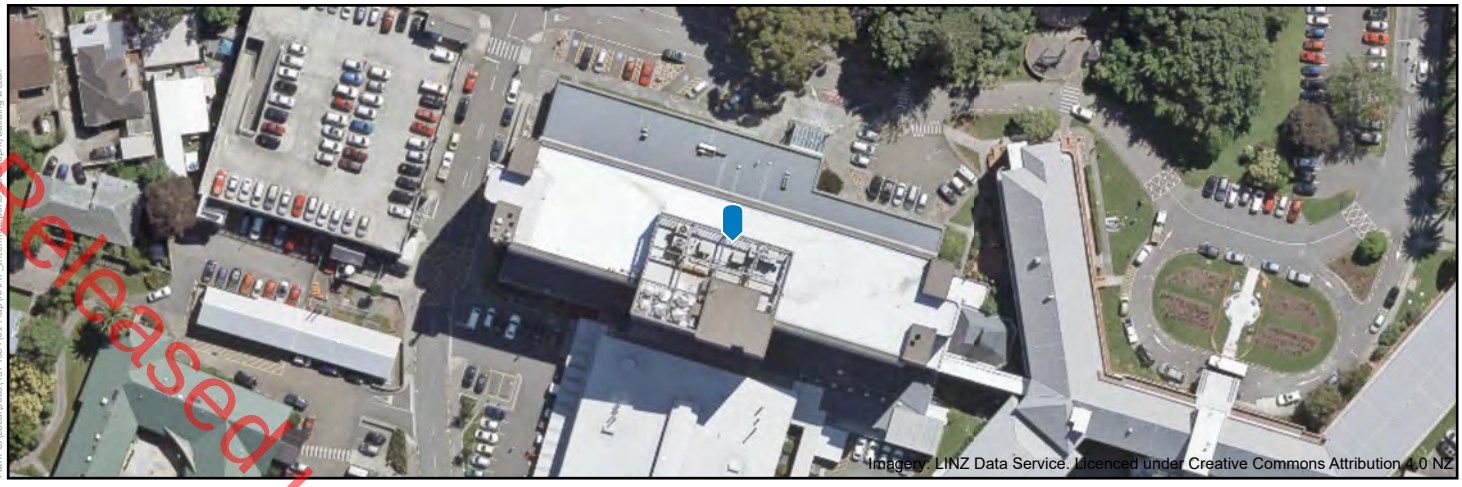




Beca Building ID: 156
NAMP ID: 10423
DHB Ref: 201
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Approximate building location

Heretaunga Block



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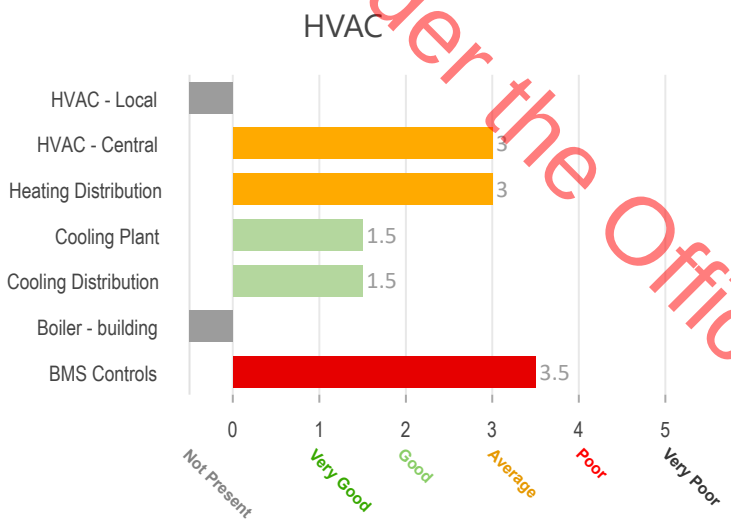
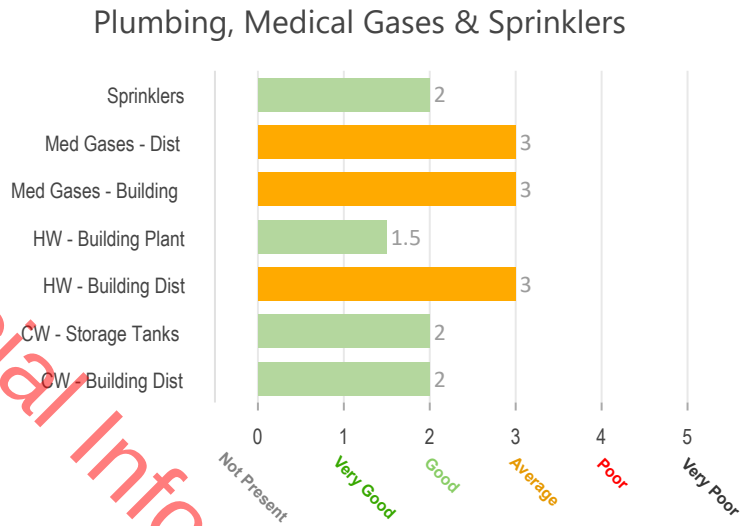
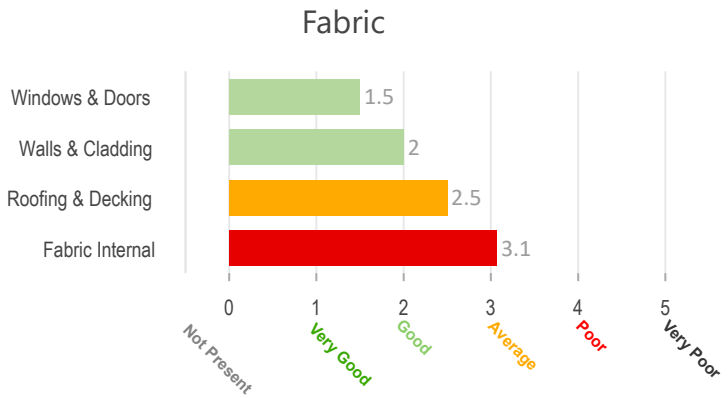
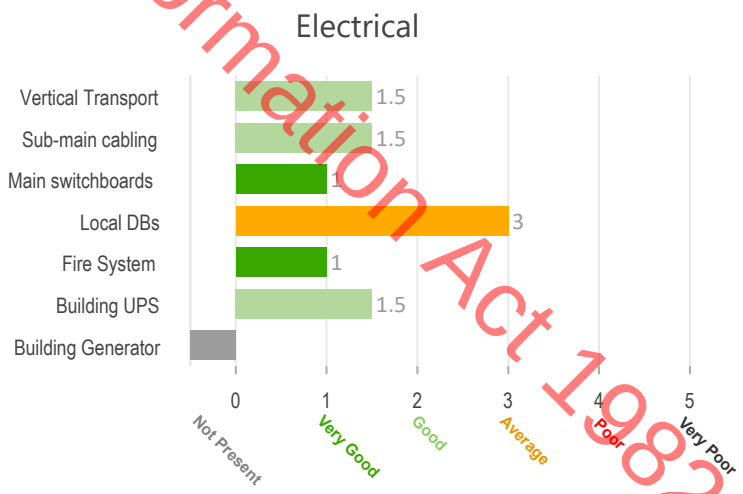
Summary of building element condition details









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.

Document 2

Garages

Hutt Hospital (Hutt Valley DHB)

Beca Building ID: 155
NAMP ID: 10422
DHB Ref: 219
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

100% IL3

General Building Information

Approximate Building Age: 1940's

Survey date: 6/05/2019

Gross Floor Area (m2): 308

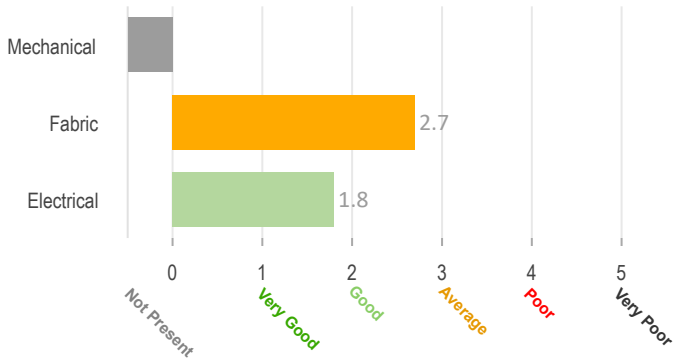
Fire Separation Issues: Low likelihood of issues

Asbestos Issues: Low likelihood of issues

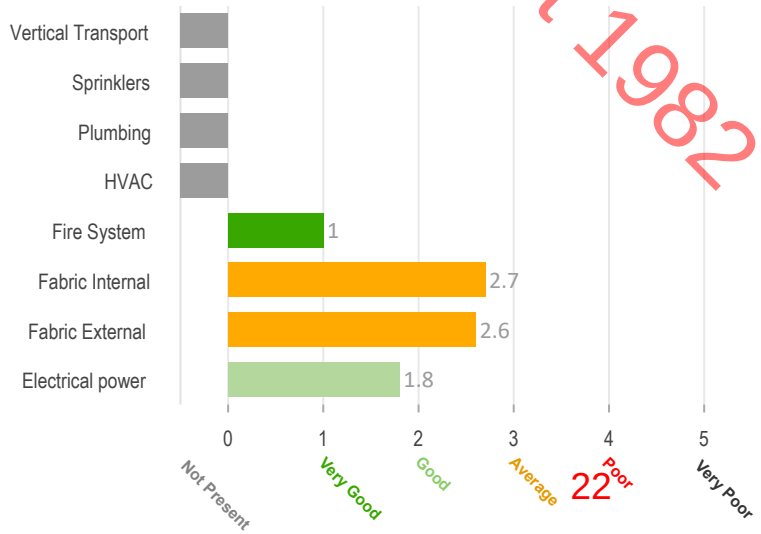
Seismic Services Restraint: Not Observed

Summary of building condition

By Discipline



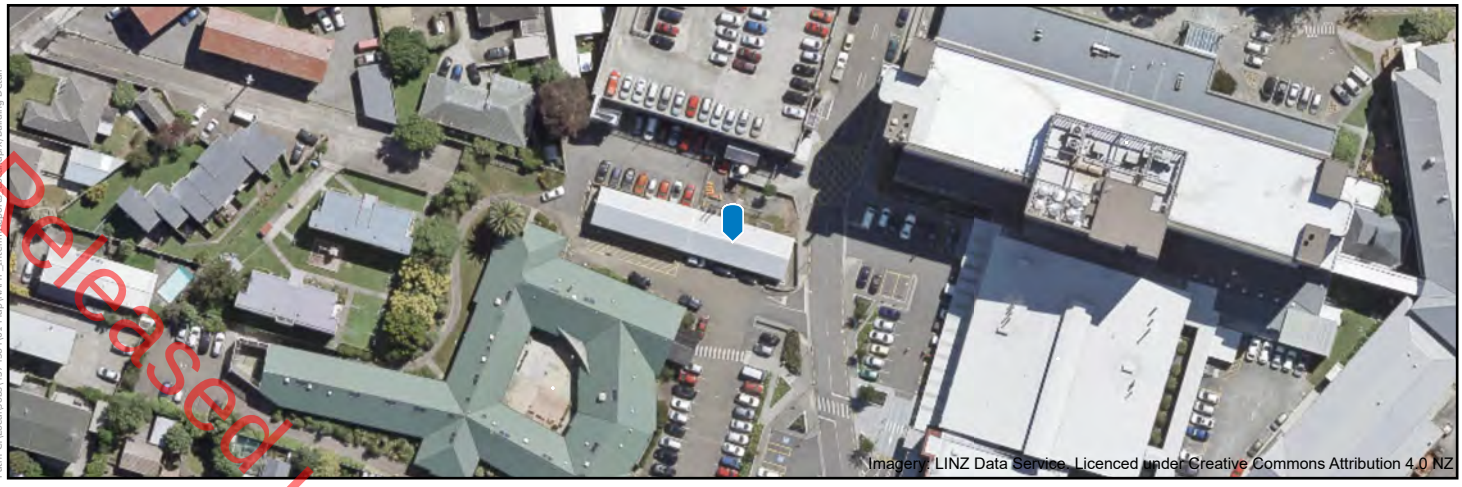
By Element



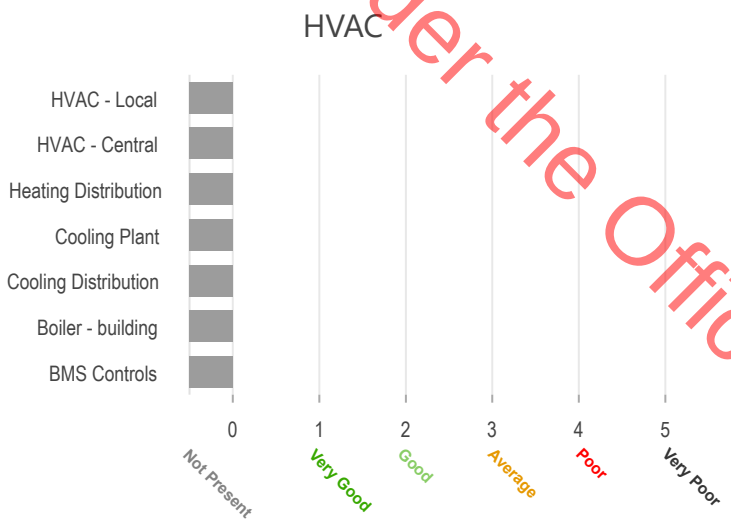
Beca Building ID: 155
NAMP ID: 10422
DHB Ref: 219
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

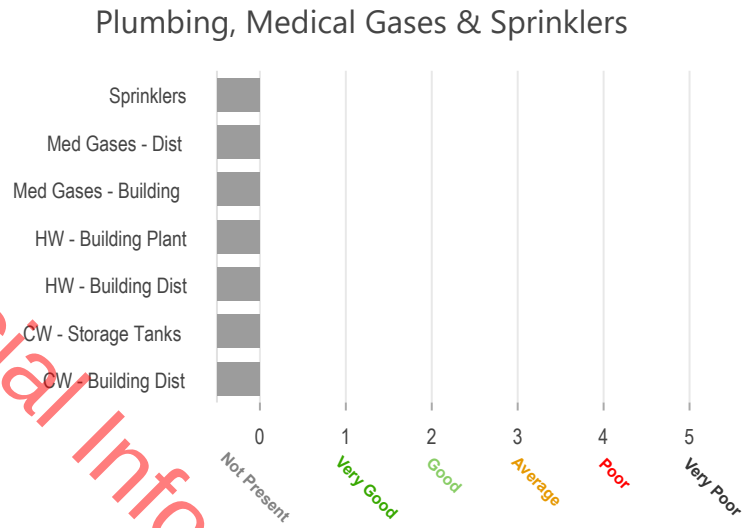
Approximate building location

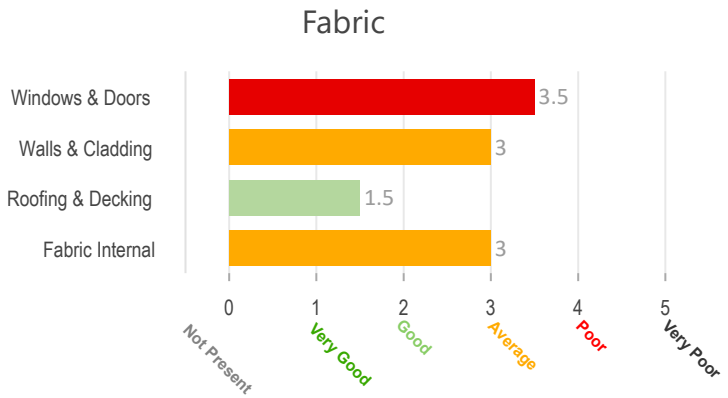
Garages

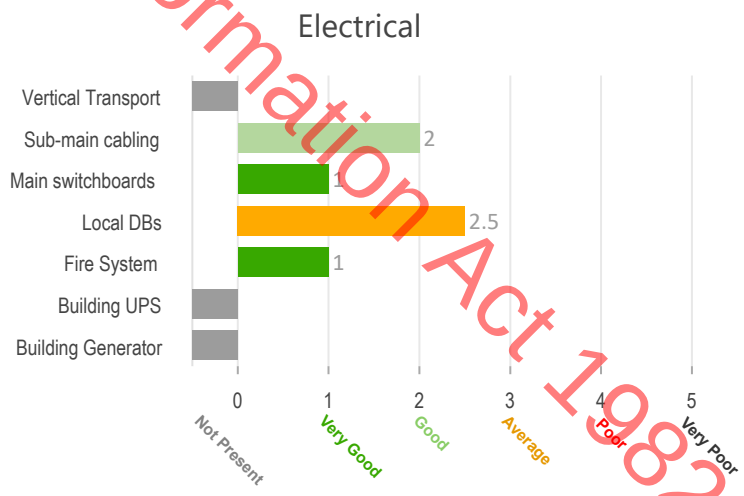


Summary of building element condition details









Condition Definitions

Rating	Condition	Definition (Services and Fabric)
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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.

Document 2

Care Block

Hutt Hospital (Hutt Valley DHB)

Beca Building ID: 154
NAMP ID: 10417
DHB Ref: 218
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior

Services & Fabric Score

2.7

DHB Assessed *% NBS* Rating

35% IL3

General Building Information

Approximate Building Age: 1984

Survey date: 6/05/2019

Gross Floor Area (m2): 3638

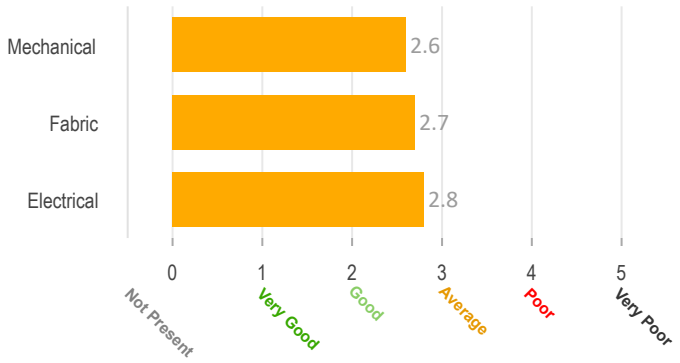
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Low likelihood of issues

Seismic Services Restraint: Very Poor

Summary of building condition

By Discipline



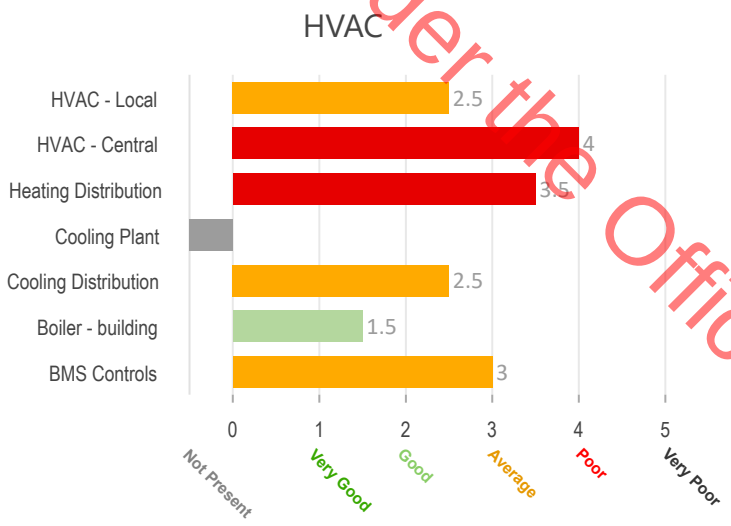
By Element

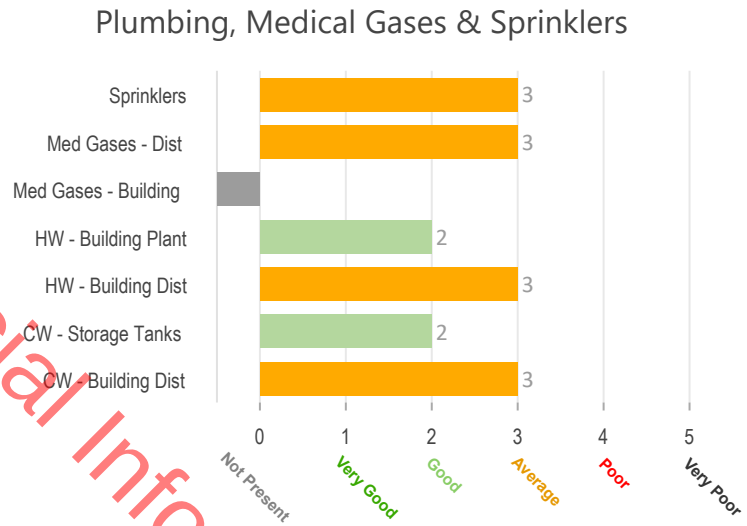
Beca Building ID: 154
NAMP ID: 10417
DHB Ref: 218
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

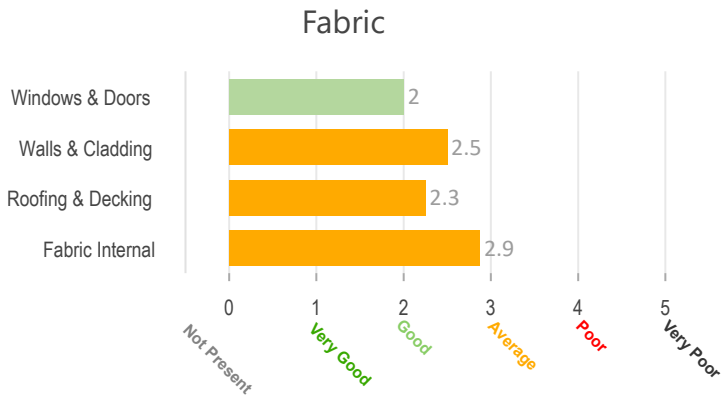
Approximate building location

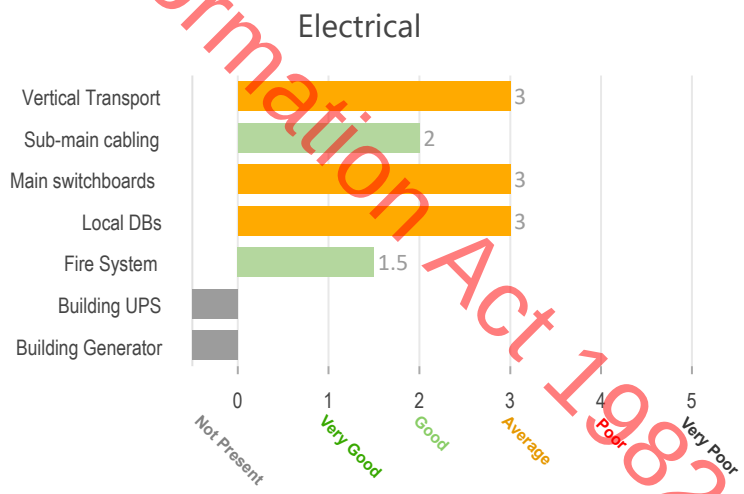
Care Block

Summary of building element condition details









Condition Definitions

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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
Hutt Hospital	Care Block	Electrical Power	Building Main Switchboard		Present		3	1	original
Hutt Hospital	Care Block	Electrical Power	Local DBs		Present		3	1	original
Hutt Hospital	Care Block	Electrical Power	Sub-main cabling		Present		2	1	original
Hutt Hospital	Care Block	Electrical Power	Building UPS		Not Present				
Hutt Hospital	Care Block	Electrical Power	Building Generator		Not Present				
Hutt Hospital	Care Block	Electrical Power	Site Generator			yes			
Hutt Hospital	Care Block	Fabric External	Windows and Doors	Aluminium	Present		2	1	original
Hutt Hospital	Care Block	Fabric External	Roofing and Decking	Iron/metal	Present		2	1	original
Hutt Hospital	Care Block	Fabric External	Roofing and Decking	Rubber Sheet	Present		3	1	original
Hutt Hospital	Care Block	Fabric External	Walls and Cladding	Concrete	Present		2	1	original
Hutt Hospital	Care Block	Fabric External	Walls and Cladding	Sheet	Present		3	1	original
Hutt Hospital	Care Block	Fabric External	Walls and Cladding	Masonry	Present		2	1	original
Hutt Hospital	Care Block	Fabric Internal	B1		Present		3	1	original
Hutt Hospital	Care Block	Fabric Internal	G		Present		3	1	original
Hutt Hospital	Care Block	Fabric Internal	1		Present		4	1	original
Hutt Hospital	Care Block	Fabric Internal	2		Present		2	1	original
Hutt Hospital	Care Block	Fire Alarm	Pertronic		Present		2	1	10+
Hutt Hospital	Care Block	HVAC	Boiler Plant in building		Present		2	1	10+
Hutt Hospital	Care Block	HVAC	Heating Distribution		Present		3	2	original
Hutt Hospital	Care Block	HVAC	Cooling Plant - Site Plant			yes			
Hutt Hospital	Care Block	HVAC	Cooling Plant in building		Not Present				
Hutt Hospital	Care Block	HVAC	Cooling Distribution		Present		3	1	10+
Hutt Hospital	Care Block	HVAC	Building HVAC - Central plant		Present		3	3	original
Hutt Hospital	Care Block	HVAC	Building HVAC - Local plant		Present		2	2	mixed
Hutt Hospital	Care Block	HVAC	BMS Controls		Present		3	1	10+
Hutt Hospital	Care Block	HVAC	Boiler Plant - Site Plant			no			
Hutt Hospital	Care Block	Plumbing	Hot water - Site Plant			no			
Hutt Hospital	Care Block	Plumbing	Hot water - Building plant		Present		2	1	original
Hutt Hospital	Care Block	Plumbing	Hot water - Building distribution		Present		3	1	original
Hutt Hospital	Care Block	Plumbing	Cold water - Site storage and mains			no			
Hutt Hospital	Care Block	Plumbing	Cold water - Building storage tanks		Present		2	1	original
Hutt Hospital	Care Block	Plumbing	Cold water - Building distribution		Present		3	1	original
Hutt Hospital	Care Block	Plumbing	Medical gases and vacuum - Site Plant			yes			
Hutt Hospital	Care Block	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Hutt Hospital	Care Block	Plumbing	Medical gases and vacuum distribution		Present		3	1	original
Hutt Hospital	Care Block	Sprinklers	Sprinklers		Present		3	1	original
Hutt Hospital	Care Block	Vertical Transport	Hydraulic lifts (2no.)		Present		3	1	original
Hutt Hospital	Garages	Electrical Power	Building Main Switchboard		Present		1	1	3 to 10
Hutt Hospital	Garages	Electrical Power	Local DBs		Present		3	1	10+
Hutt Hospital	Garages	Electrical Power	Sub-main cabling		Present		2	1	original
Hutt Hospital	Garages	Electrical Power	Building UPS		Not Present				
Hutt Hospital	Garages	Electrical Power	Building Generator		Not Present				
Hutt Hospital	Garages	Electrical Power	Site Generator			yes			
Hutt Hospital	Garages	Fabric External	Roofing and Decking	Iron/metal	Present		2	1	10+
Hutt Hospital	Garages	Fabric External	Walls and Cladding	Concrete	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
Hutt Hospital	Garages	Fabric External	Windows and Doors	Wood	Present		4	1	original
Hutt Hospital	Garages	Fabric Internal	G		Present		3	1	original
Hutt Hospital	Garages	Fire Alarm	Pertronic		Present		1	1	3 to 10
Hutt Hospital	Garages	HVAC	Boiler Plant - Site Plant			no			
Hutt Hospital	Garages	HVAC	Boiler Plant in building		Not Present				
Hutt Hospital	Garages	HVAC	Heating Distribution		Not Present				
Hutt Hospital	Garages	HVAC	Cooling Plant - Site Plant			no			
Hutt Hospital	Garages	HVAC	Cooling Plant in building		Not Present				
Hutt Hospital	Garages	HVAC	Cooling Distribution		Not Present				
Hutt Hospital	Garages	HVAC	Building HVAC - Central plant		Not Present				
Hutt Hospital	Garages	HVAC	Building HVAC - Local plant		Not Present				
Hutt Hospital	Garages	HVAC	BMS Controls		Not Present				
Hutt Hospital	Garages	Plumbing	Hot water - Site Plant			no			
Hutt Hospital	Garages	Plumbing	Hot water - Building plant		Not Present				
Hutt Hospital	Garages	Plumbing	Hot water - Building distribution		Not Present				
Hutt Hospital	Garages	Plumbing	Cold water - Site storage and mains			no			
Hutt Hospital	Garages	Plumbing	Cold water - Building storage tanks		Not Present				
Hutt Hospital	Garages	Plumbing	Cold water - Building distribution		Not Present				
Hutt Hospital	Garages	Plumbing	Medical gases and vacuum - Site Plant			no			
Hutt Hospital	Garages	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Hutt Hospital	Garages	Plumbing	Medical gases and vacuum distribution		Not Present				
Hutt Hospital	Garages	Sprinklers	Sprinklers		Not Present				
Hutt Hospital	Garages	Vertical Transport			Not Present				
Hutt Hospital	Heretaunga Block	Electrical Power	Building Main Switchboard		Present		1	1	3 to 10
Hutt Hospital	Heretaunga Block	Electrical Power	Local DBs		Present		3	1	original
Hutt Hospital	Heretaunga Block	Electrical Power	Sub-main cabling		Present		1	1	original
Hutt Hospital	Heretaunga Block	Electrical Power	Building UPS		Present		2	1	3 to 10
Hutt Hospital	Heretaunga Block	Electrical Power	Building Generator		Not Present				
Hutt Hospital	Heretaunga Block	Electrical Power	Site Generator			yes			
Hutt Hospital	Heretaunga Block	Fabric External	Roofing and Decking	Liquid Applied	Present		3	1	3 to 10
Hutt Hospital	Heretaunga Block	Fabric External	Walls and Cladding	Concrete	Present		2	1	original
Hutt Hospital	Heretaunga Block	Fabric External	Windows and Doors	Aluminium	Present		2	1	10+
Hutt Hospital	Heretaunga Block	Fabric Internal	7		Present		3	1	original
Hutt Hospital	Heretaunga Block	Fabric Internal	6		Present				
Hutt Hospital	Heretaunga Block	Fabric Internal	5		Present		3	2	3 to 10
Hutt Hospital	Heretaunga Block	Fabric Internal	4		Present		3	2	3 to 10
Hutt Hospital	Heretaunga Block	Fabric Internal	3		Present		3	2	10+
Hutt Hospital	Heretaunga Block	Fabric Internal	2		Present				
Hutt Hospital	Heretaunga Block	Fabric Internal	1		Present		3	2	original
Hutt Hospital	Heretaunga Block	Fabric Internal	B1		Present		4	1	original
Hutt Hospital	Heretaunga Block	Fabric Internal	G		Present		3	1	10+
Hutt Hospital	Heretaunga Block	Fire Alarm	Pertronic		Present		1	1	10+
Hutt Hospital	Heretaunga Block	HVAC	Boiler Plant - Site Plant			yes			
Hutt Hospital	Heretaunga Block	HVAC	Boiler Plant in building		Not Present				
Hutt Hospital	Heretaunga Block	HVAC	Heating Distribution		Present		3	2	mixed

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Hutt Hospital	Heretaunga Block	HVAC	Cooling Plant - Site Plant			yes			
Hutt Hospital	Heretaunga Block	HVAC	Cooling Plant in building		Present		2	1	3 to 10
Hutt Hospital	Heretaunga Block	HVAC	Cooling Distribution		Present		2	1	10+
Hutt Hospital	Heretaunga Block	HVAC	Building HVAC - Central plant		Present		3	1	original
Hutt Hospital	Heretaunga Block	HVAC	Building HVAC - Local plant		Not Present				
Hutt Hospital	Heretaunga Block	HVAC	BMS Controls		Present		3	2	mixed
Hutt Hospital	Heretaunga Block	Plumbing	Hot water - Site Plant			no			
Hutt Hospital	Heretaunga Block	Plumbing	Hot water - Building plant		Present		2	1	10+
Hutt Hospital	Heretaunga Block	Plumbing	Hot water - Building distribution		Present		3	1	original
Hutt Hospital	Heretaunga Block	Plumbing	Cold water - Site storage and mains			yes			
Hutt Hospital	Heretaunga Block	Plumbing	Cold water - Building storage tanks		Present		2	1	original
Hutt Hospital	Heretaunga Block	Plumbing	Cold water - Building distribution		Present		2	1	original
Hutt Hospital	Heretaunga Block	Plumbing	Medical gases and vacuum - Site Plant			yes			
Hutt Hospital	Heretaunga Block	Plumbing	Medical gases and vacuum - Building plant		Present		3	2	10+
Hutt Hospital	Heretaunga Block	Plumbing	Medical gases and vacuum distribution		Present		3	1	original
Hutt Hospital	Heretaunga Block	Sprinklers	Sprinklers		Present		2	2	mixed
Hutt Hospital	Heretaunga Block	Vertical Transport	6 car		Present		2	1	3 to 10
Hutt Hospital	Old EDT	Electrical Power	Building Main Switchboard		Not Present				
Hutt Hospital	Old EDT	Electrical Power	Local DBs		Present		1	1	3 to 10
Hutt Hospital	Old EDT	Electrical Power	Sub-main cabling		Present		1	1	3 to 10
Hutt Hospital	Old EDT	Electrical Power	Building UPS		Not Present				
Hutt Hospital	Old EDT	Electrical Power	Building Generator		Not Present				
Hutt Hospital	Old EDT	Electrical Power	Site Generator			yes			
Hutt Hospital	Old EDT	Fabric External	Roofing and Decking	Iron/metal	Present		2	1	original
Hutt Hospital	Old EDT	Fabric External	Walls and Cladding	Sheet	Present		2	1	3 to 10
Hutt Hospital	Old EDT	Fabric External	Windows and Doors	Aluminium	Present		2	1	original
Hutt Hospital	Old EDT	Fabric Internal	B1		Present		2	1	original
Hutt Hospital	Old EDT	Fabric Internal	G		Present		2	2	3 to 10
Hutt Hospital	Old EDT	Fabric Internal	1		Present		2	1	3 to 10
Hutt Hospital	Old EDT	Fabric Internal	2		Present		2	1	3 to 10
Hutt Hospital	Old EDT	Fire Alarm			Not Present				
Hutt Hospital	Old EDT	HVAC	Boiler Plant - Site Plant			yes			
Hutt Hospital	Old EDT	HVAC	Boiler Plant in building		Not Present				
Hutt Hospital	Old EDT	HVAC	Heating Distribution		Present		2	1	original
Hutt Hospital	Old EDT	HVAC	Cooling Plant - Site Plant			yes			
Hutt Hospital	Old EDT	HVAC	Cooling Plant in building		Not Present				
Hutt Hospital	Old EDT	HVAC	Cooling Distribution		Present		2	1	original
Hutt Hospital	Old EDT	HVAC	Building HVAC - Central plant		Present		2	1	3 to 10
Hutt Hospital	Old EDT	HVAC	Building HVAC - Local plant		Not Present				
Hutt Hospital	Old EDT	HVAC	BMS Controls		Present		2	1	3 to 10
Hutt Hospital	Old EDT	Plumbing	Hot water - Site Plant			yes			
Hutt Hospital	Old EDT	Plumbing	Hot water - Building plant		Not Present				
Hutt Hospital	Old EDT	Plumbing	Cold water - Site storage and mains			yes			
Hutt Hospital	Old EDT	Plumbing	Cold water - Building storage tanks		Present		2	1	original
Hutt Hospital	Old EDT	Plumbing	Cold water - Building distribution		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
Hutt Hospital	Old EDT	Plumbing	Medical gases and vacuum - Site Plant			yes			
Hutt Hospital	Old EDT	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Hutt Hospital	Old EDT	Plumbing	Hot water - Building distribution		Present		2	1	original
Hutt Hospital	Old EDT	Plumbing	Medical gases and vacuum distribution		Present		2	1	original
Hutt Hospital	Old EDT	Sprinklers	Sprinklers		Present		2	1	original
Hutt Hospital	Old EDT	Vertical Transport			Not Present				
Hutt Hospital	Site Wide	Electrical Infrastructure	Substations		No information/access				
Hutt Hospital	Site Wide	Electrical Infrastructure	Main switchboards		Present		1	1	0 to 3
Hutt Hospital	Site Wide	Electrical Infrastructure	Site generators		Present		2	1	original
Hutt Hospital	Site Wide	Electrical Infrastructure	Site distribution mains		Present		1	1	0 to 3
Hutt Hospital	Site Wide	Mechanical Infrastructure	Site Heating Plant		Present		3	1	10+
Hutt Hospital	Site Wide	Mechanical Infrastructure	Site Heating pipes		Present		3	2	mixed
Hutt Hospital	Site Wide	Mechanical Infrastructure	Site Steam pipes		Not Present				
Hutt Hospital	Site Wide	Mechanical Infrastructure	Site Cooling plant		Present		3	2	10+
Hutt Hospital	Site Wide	Mechanical Infrastructure	Site Cooling pipes		Present		3	1	10+
Hutt Hospital	Site Wide	Mechanical Infrastructure	Site Cold Water supply tanks		Present		1	1	0 to 3
Hutt Hospital	Site Wide	Mechanical Infrastructure	Site Hot Water storage		Not Present				
Hutt Hospital	Site Wide	Mechanical Infrastructure	Site Hot and Cold Water site pipes		Present		3	1	original
Hutt Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water storage tanks		Not Present				
Hutt Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water site pipes		Not Present				
Hutt Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		2	1	mixed
Hutt Hospital	Site Wide	Mechanical Infrastructure	Site sewer drains		Present		3	1	original
Hutt Hospital	Site Wide	Mechanical Infrastructure	Site storm water drains		Present		3	1	original
Hutt Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		3	1	10+
Hutt Hospital	Te Whare Ahuru Building - TWA	Electrical Power	Building Main Switchboard		Present		1	1	original
Hutt Hospital	Te Whare Ahuru Building - TWA	Electrical Power	Local DBs		Present		1	1	original
Hutt Hospital	Te Whare Ahuru Building - TWA	Electrical Power	Sub-main cabling		Present		2	1	original
Hutt Hospital	Te Whare Ahuru Building - TWA	Electrical Power	Building UPS		Not Present				
Hutt Hospital	Te Whare Ahuru Building - TWA	Electrical Power	Building Generator		Not Present				
Hutt Hospital	Te Whare Ahuru Building - TWA	Electrical Power	Site Generator			yes			
Hutt Hospital	Te Whare Ahuru Building - TWA	Fabric External	Roofing and Decking	Iron/metal	Present		2	1	original
Hutt Hospital	Te Whare Ahuru Building - TWA	Fabric External	Walls and Cladding	Sheet	Present		4	1	original
Hutt Hospital	Te Whare Ahuru Building - TWA	Fabric External	Windows and Doors	Aluminium	Present		2	1	original
Hutt Hospital	Te Whare Ahuru Building - TWA	Fabric External	Walls and Cladding	Masonry	Present		2	1	original
Hutt Hospital	Te Whare Ahuru Building - TWA	Fabric Internal	G		Present		3	1	original
Hutt Hospital	Te Whare Ahuru Building - TWA	Fire Alarm	Pertronic		Present		1	1	3 to 10
Hutt Hospital	Te Whare Ahuru Building - TWA	HVAC	Boiler Plant - Site Plant			no			
Hutt Hospital	Te Whare Ahuru Building - TWA	HVAC	Boiler Plant in building		Present		3	1	original
Hutt Hospital	Te Whare Ahuru Building - TWA	HVAC	Heating Distribution		Present		2	1	original
Hutt Hospital	Te Whare Ahuru Building - TWA	HVAC	Cooling Plant - Site Plant			no			
Hutt Hospital	Te Whare Ahuru Building - TWA	HVAC	Cooling Plant in building		Not Present				
Hutt Hospital	Te Whare Ahuru Building - TWA	HVAC	Cooling Distribution		Not Present				
Hutt Hospital	Te Whare Ahuru Building - TWA	HVAC	Building HVAC - Central plant		Present		2	1	original
Hutt Hospital	Te Whare Ahuru Building - TWA	HVAC	Building HVAC - Local plant		Present		2	1	original
Hutt Hospital	Te Whare Ahuru Building - TWA	HVAC	BMS Controls		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
Hutt Hospital	Te Whare Ahuru Building - TWA	Plumbing	Hot water - Site Plant			no			
Hutt Hospital	Te Whare Ahuru Building - TWA	Plumbing	Hot water - Building plant		Present		2	2	original
Hutt Hospital	Te Whare Ahuru Building - TWA	Plumbing	Hot water - Building distribution		Present		2	1	original
Hutt Hospital	Te Whare Ahuru Building - TWA	Plumbing	Cold water - Site storage and mains			no			
Hutt Hospital	Te Whare Ahuru Building - TWA	Plumbing	Cold water - Building storage tanks		Not Present				
Hutt Hospital	Te Whare Ahuru Building - TWA	Plumbing	Medical gases and vacuum - Site Plant			no			
Hutt Hospital	Te Whare Ahuru Building - TWA	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Hutt Hospital	Te Whare Ahuru Building - TWA	Plumbing	Medical gases and vacuum distribution		Not Present				
Hutt Hospital	Te Whare Ahuru Building - TWA	Sprinklers	Sprinklers		Present		2	1	original
Hutt Hospital	Te Whare Ahuru Building - TWA	Vertical Transport			Not Present				

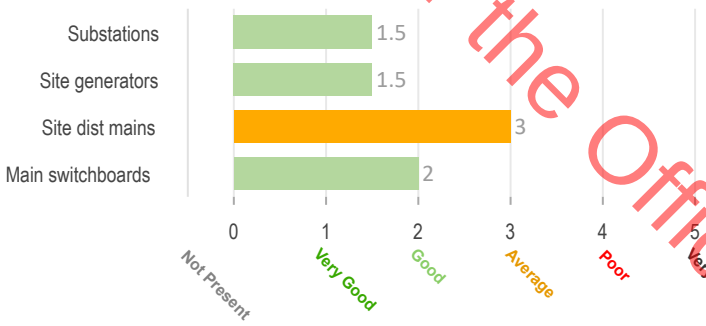
Wairarapa Hospital

Wairarapa DHB

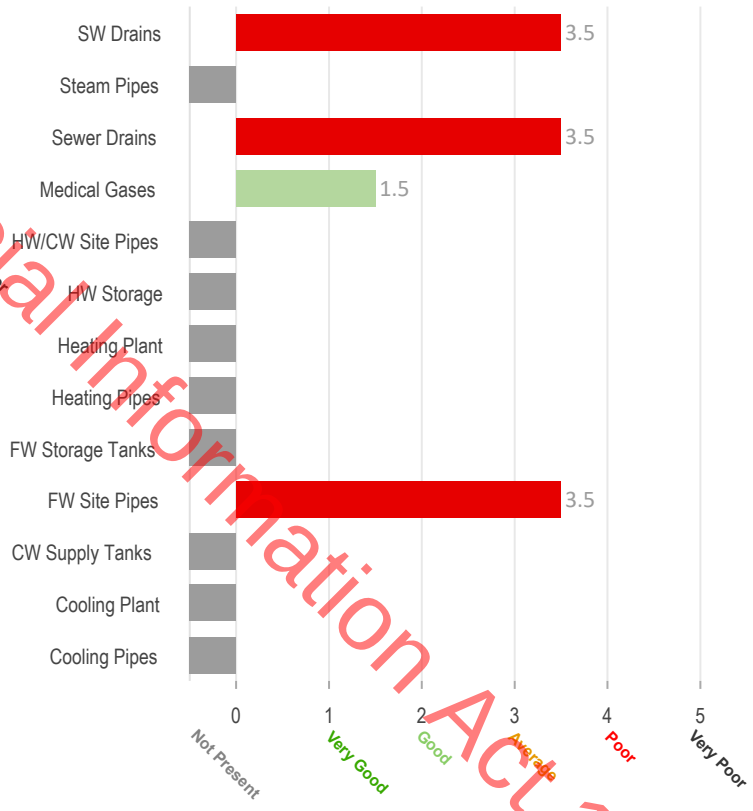
Beca Campus ID: 831
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 29/08/2019

Site Overview

Site wide Electrical Infrastructure Condition



Site wide Mechanical Infrastructure Condition



Engineering Commentary

Only the sitewide infrastructure has been assessed. Wairarapa DHB buildings were not selected for professional assessment due to the recent construction of the main hospital building. The DHB does not have a mental health inpatient unit. Site wide reticulated infrastructure was inspected by a Ministry official and has not been verified by Beca. Main reticulated infrastructure had been upgraded when the main hospital building was built a little over a decade ago. The older facilities are on older infrastructure, which is not currently causing concern. There were some operational issues related to design, waste water and storm water reticulation to the new hospital building but these have been managed.

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
Wairarapa Hospital	Site Wide	Electrical Infrastructure	Site distribution mains		Present		3	2	10+
Wairarapa Hospital	Site Wide	Electrical Infrastructure	Main switchboards		Present		2	2	10+
Wairarapa Hospital	Site Wide	Electrical Infrastructure	Substations		Present		2	1	10+
Wairarapa Hospital	Site Wide	Electrical Infrastructure	Site generators		Present		2	1	10+
Wairarapa Hospital	Site Wide	Mechanical Infrastructure	Site storm water drains		Present		3	2	original
Wairarapa Hospital	Site Wide	Mechanical Infrastructure	Site sewer drains		Present		3	2	original
Wairarapa Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		2	1	10+
Wairarapa Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water site pipes		Present		3	2	original
Wairarapa Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water storage tanks		Not Present				
Wairarapa Hospital	Site Wide	Mechanical Infrastructure	Site Hot and Cold Water site pipes		Not Present				
Wairarapa Hospital	Site Wide	Mechanical Infrastructure	Site Hot Water storage		Not Present				
Wairarapa Hospital	Site Wide	Mechanical Infrastructure	Site Cold Water supply tanks		Not Present				
Wairarapa Hospital	Site Wide	Mechanical Infrastructure	Site Cooling pipes		Not Present				
Wairarapa Hospital	Site Wide	Mechanical Infrastructure	Site Cooling plant		Not Present				
Wairarapa Hospital	Site Wide	Mechanical Infrastructure	Site Steam pipes		Not Present				
Wairarapa Hospital	Site Wide	Mechanical Infrastructure	Site Heating pipes		Not Present				
Wairarapa Hospital	Site Wide	Mechanical Infrastructure	Site Heating Plant		Not Present				

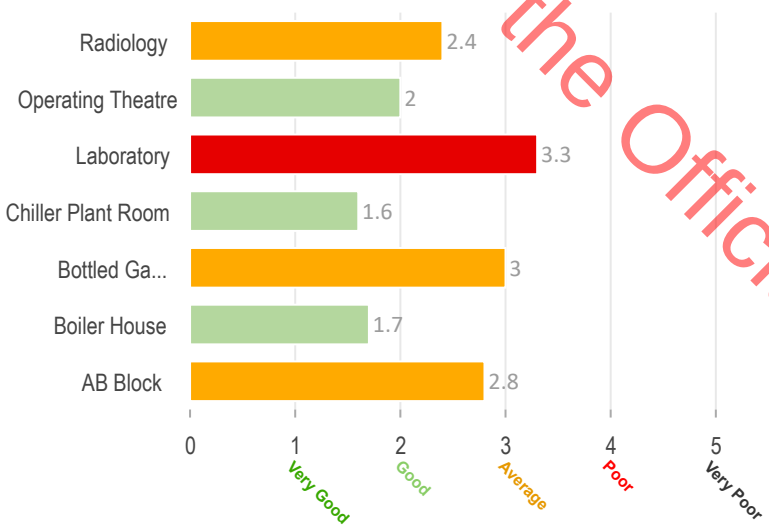
Hawkes Bay Hospital

Hawkes Bay DHB

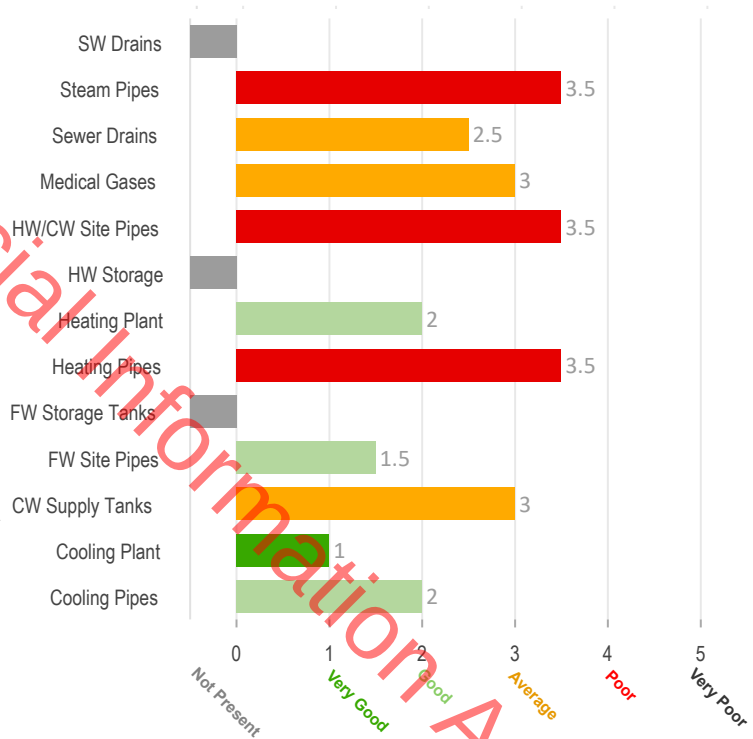
Beca Campus ID: 830
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 30/08/2019

Site Overview

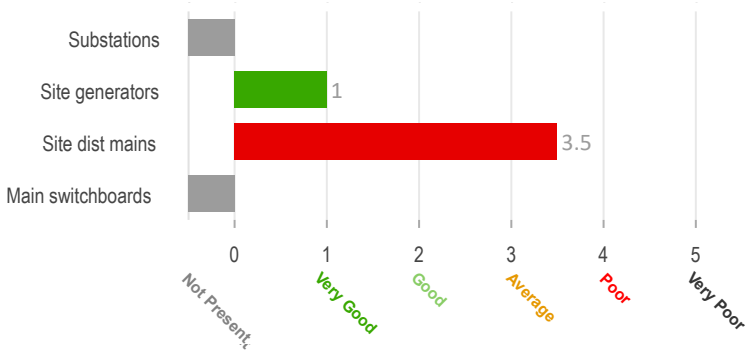
Buildings Surveyed



Site wide Mechanical Infrastructure Condition



Site wide Electrical Infrastructure Condition



Engineering commentary

The bulk of the departments are in buildings of varying age and joined at ground floor level. The joined buildings bring passive fire separation complexities which appear to be reasonably well managed at this time. The Laboratory is located on the fist floor and straddles the Emergency and Radiology departments. Roof leaks are occurring due to the dissimilar footprints of the two storeys.
In general the electrical infrastructure is near or beyond it's economic life. The HV supply to the site is poor and has regular failures. Some major switchgear is vulnerable and may fail particularly the Theatres.
The mechanical infrastructure is generally in an average condition and is near/at the end of useful economic life. Pipework throughout the campus is original and a monitoring programme is recommended. Inpatient ward area lack cooling which is not considered appropriate for clinical areas.

Radiology

Hawkes Bay Hospital (Hawkes Bay DHB)

Beca Building ID: 274
NAMP ID: 10382
DHB Ref: HA27
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 27/08/2019

Photo of Building Exterior

No photo available

Services & Fabric Score

2.4

DHB Assessed *% NBS* Rating

20% IL4

General Building Information

Approximate Building Age: 1983

Survey date: 18/02/2019

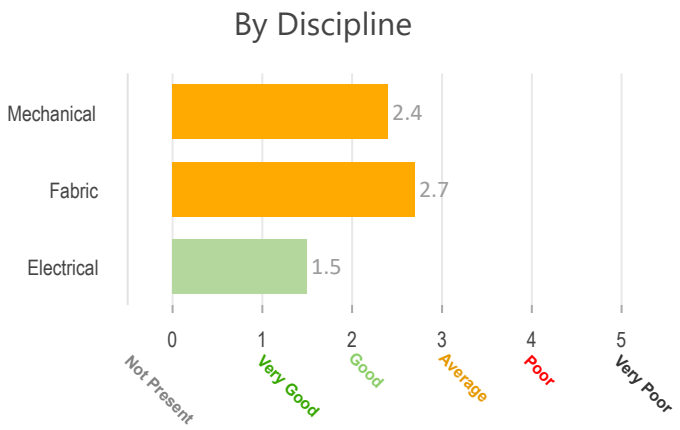
Gross Floor Area (m2): 1411

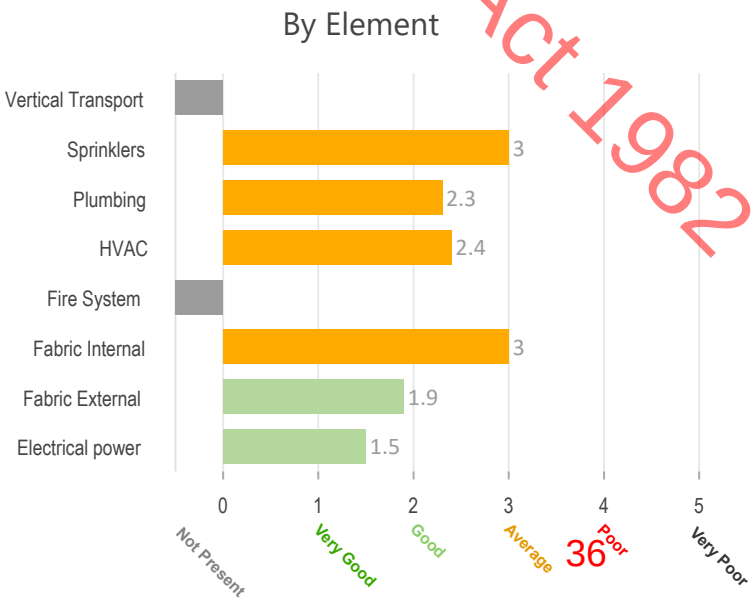
Fire Separation Issues: Significant known issues

Asbestos Issues: Limited issues observed/known

Seismic Services Restraint: Poor

Summary of building condition

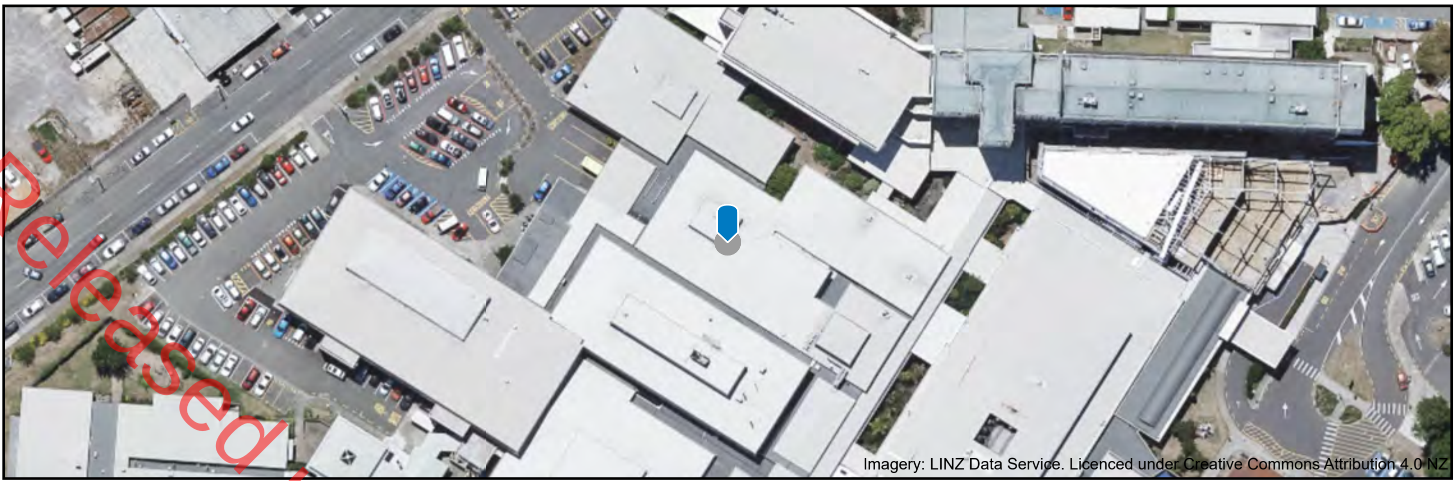




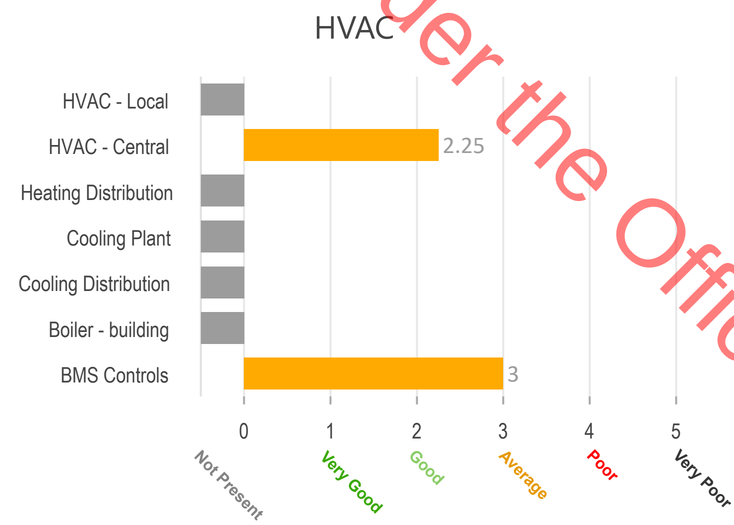
Beca Building ID: 274
NAMP ID: 10382
DHB Ref: HA27
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 27/08/2019

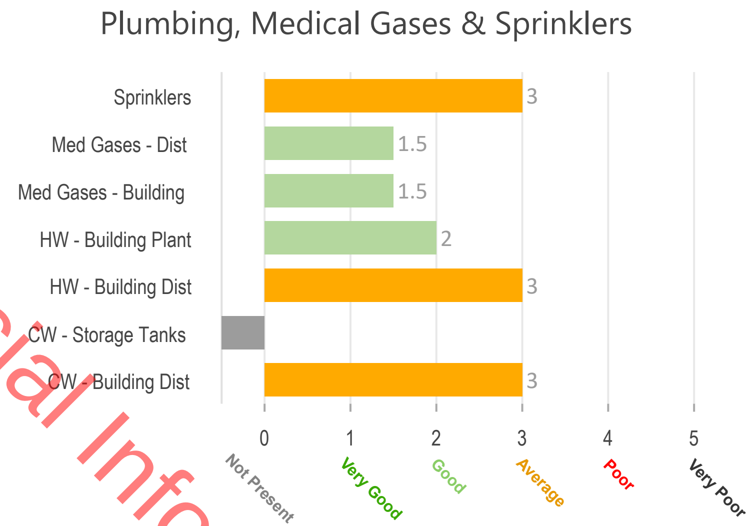
Approximate building location

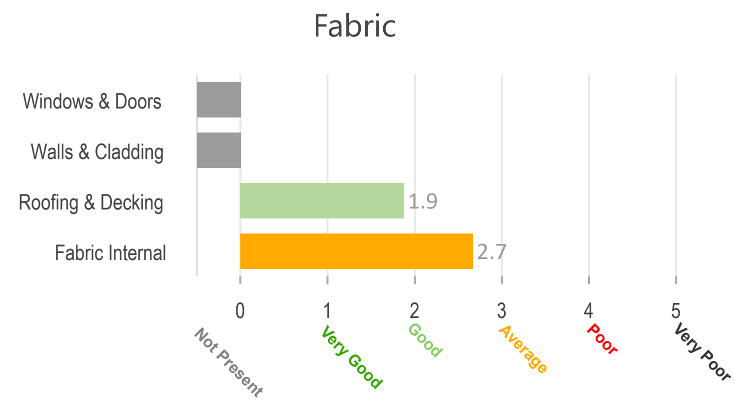
Radiology

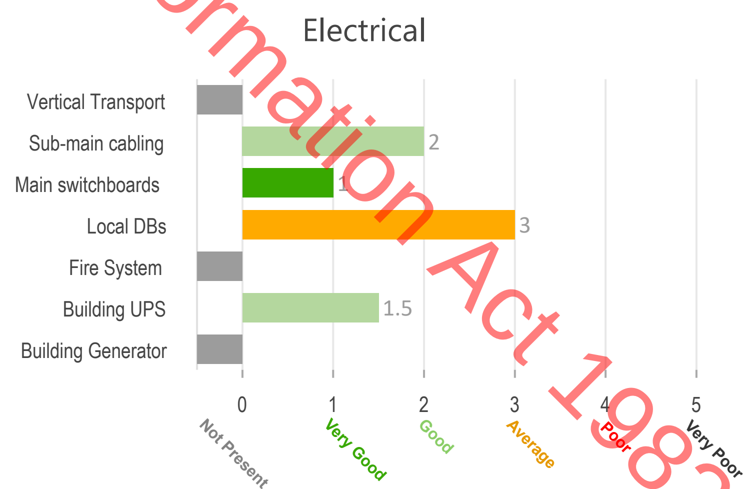


Summary of building element condition details









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.

Operating Theatre

Hawkes Bay Hospital (Hawkes Bay DHB)

Beca Building ID: 280
NAMP ID: 10379
DHB Ref: HA37
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 27/08/2019

Photo of Building Exterior

No photo available

Services & Fabric Score

2

DHB Assessed *% NBS* Rating

15% IL4

General Building Information

Approximate Building Age: 1997

Survey date: 18/02/2019

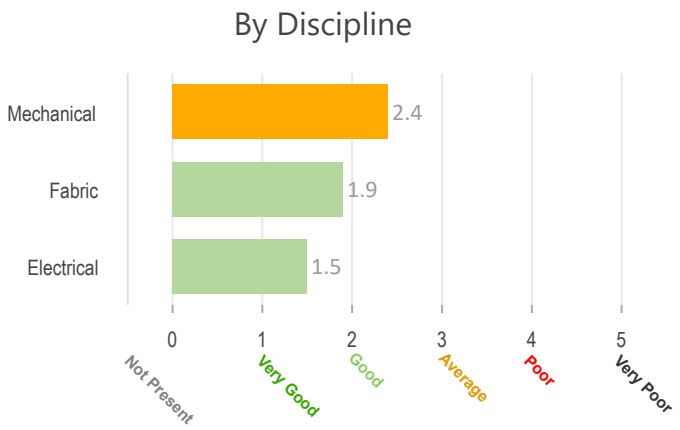
Gross Floor Area (m2): 2965

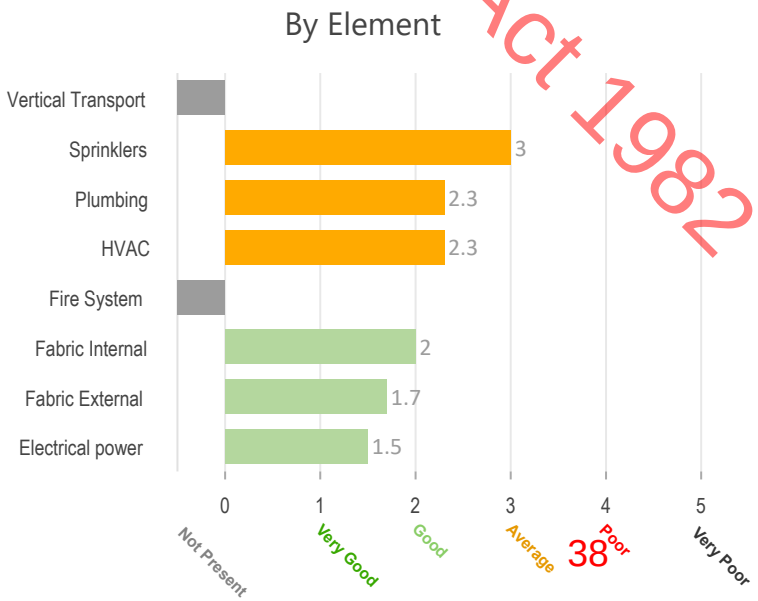
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Low likelihood of issues

Seismic Services Restraint: Poor

Summary of building condition

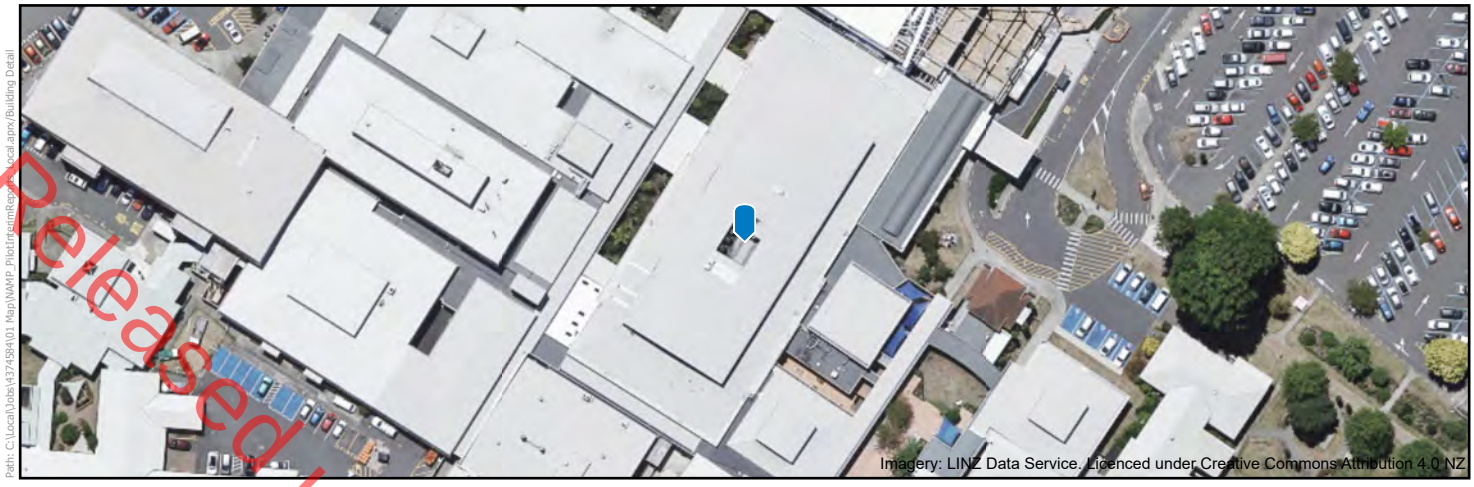




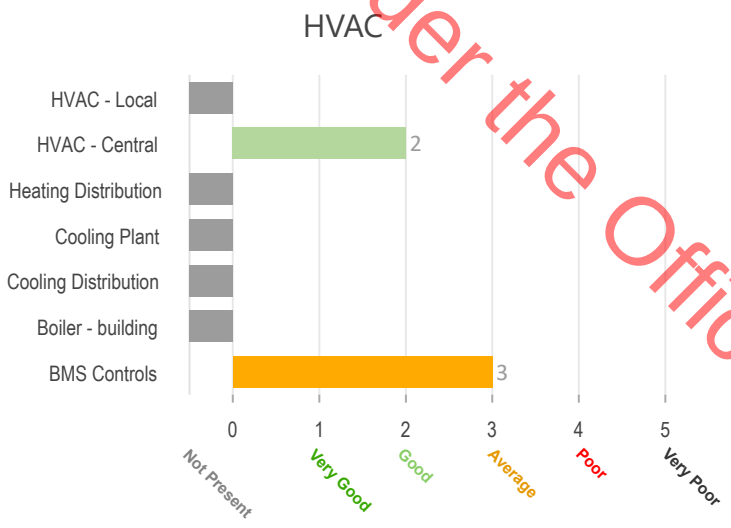
Beca Building ID: 280
NAMP ID: 10379
DHB Ref: HA37
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 27/08/2019

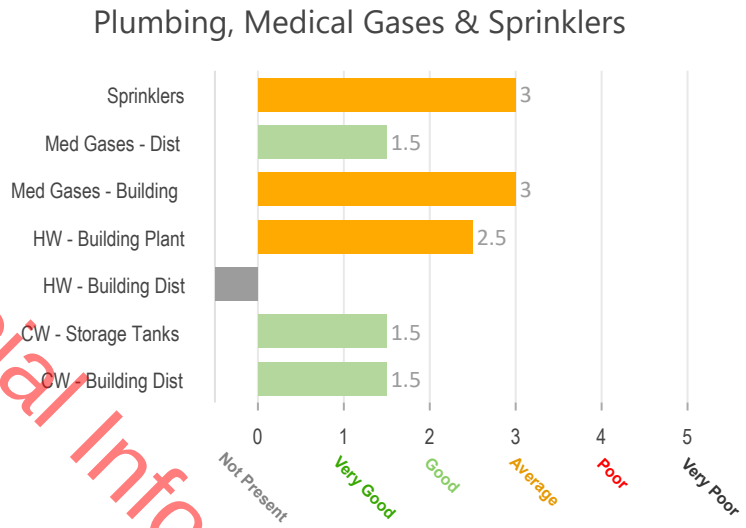
Approximate building location

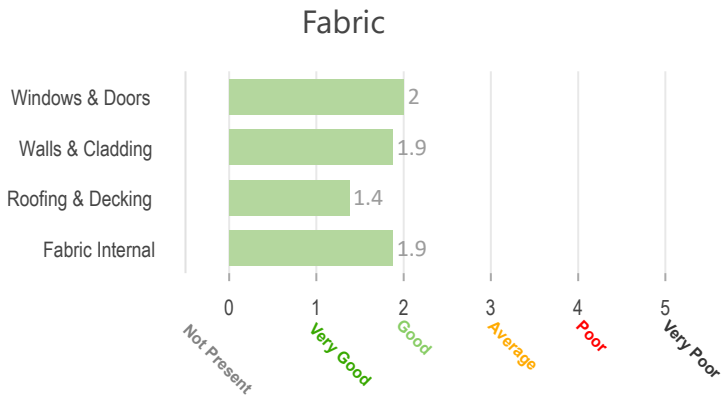
Operating Theatre

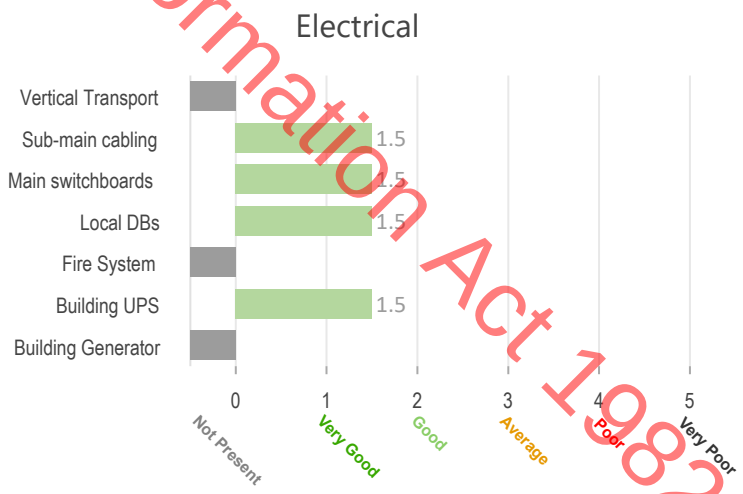


Summary of building element condition details









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.

Laboratory

Hawkes Bay Hospital (Hawkes Bay DHB)

Beca Building ID: 273
NAMP ID: 10373
DHB Ref: HA26
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 27/08/2019

Photo of Building Exterior

No photo available

Services & Fabric Score

3.3

DHB Assessed *% NBS* Rating

65% IL4

General Building Information

Approximate Building Age: 1983

Survey date: 18/02/2019

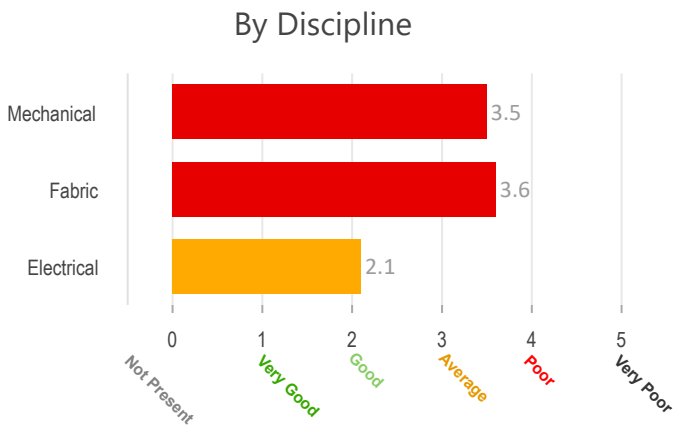
Gross Floor Area (m2): 891

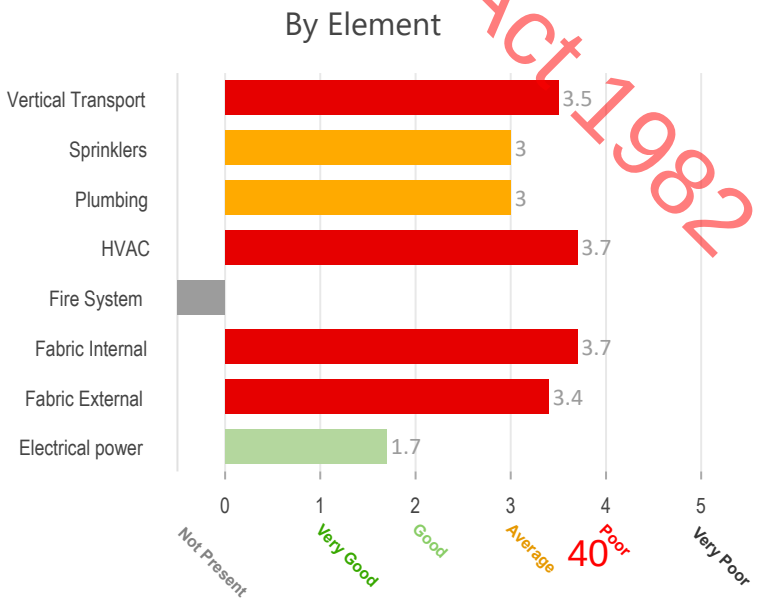
Fire Separation Issues: Significant known issues

Asbestos Issues: Limited issues observed/known

Seismic Services Restraint: Poor

Summary of building condition

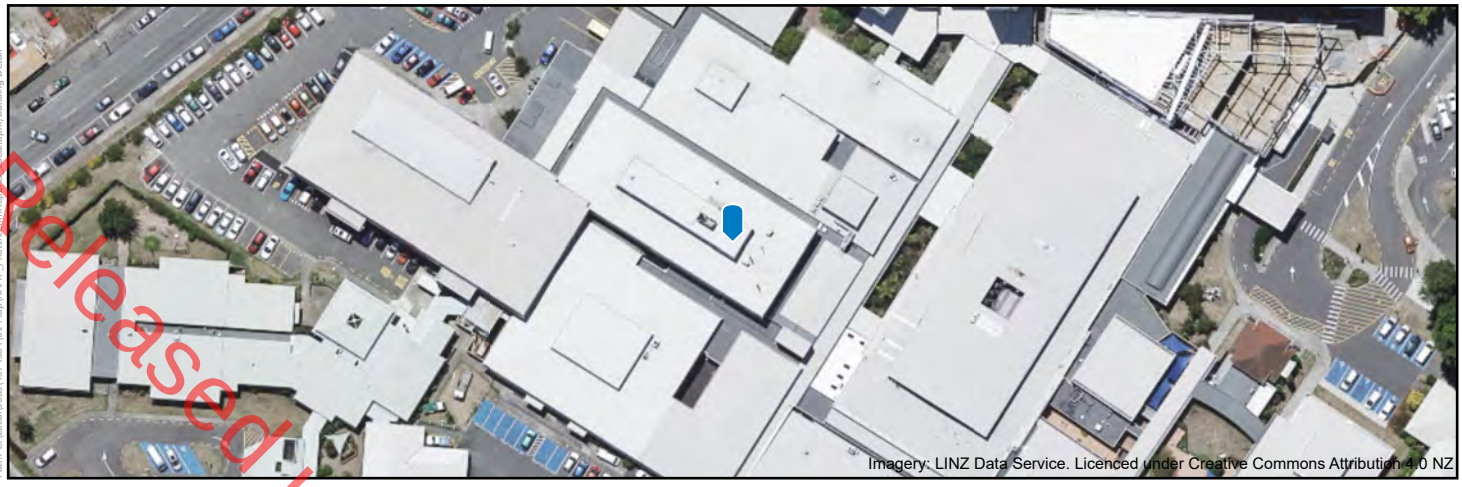




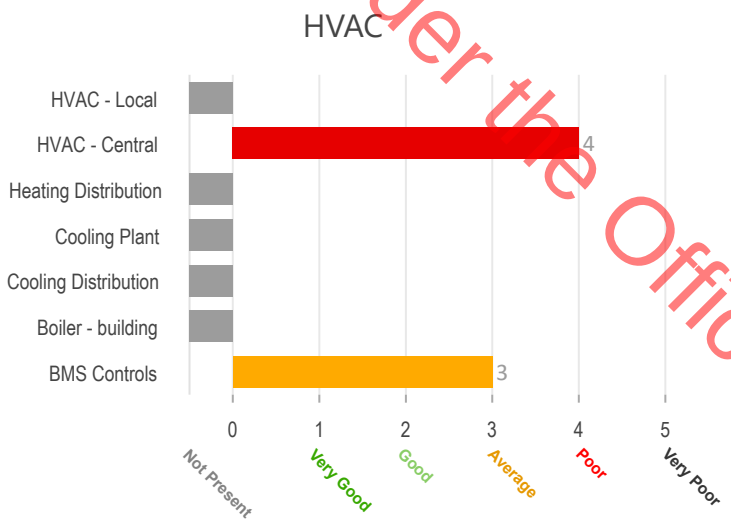
Beca Building ID: 273
NAMP ID: 10373
DHB Ref: HA26
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 27/08/2019

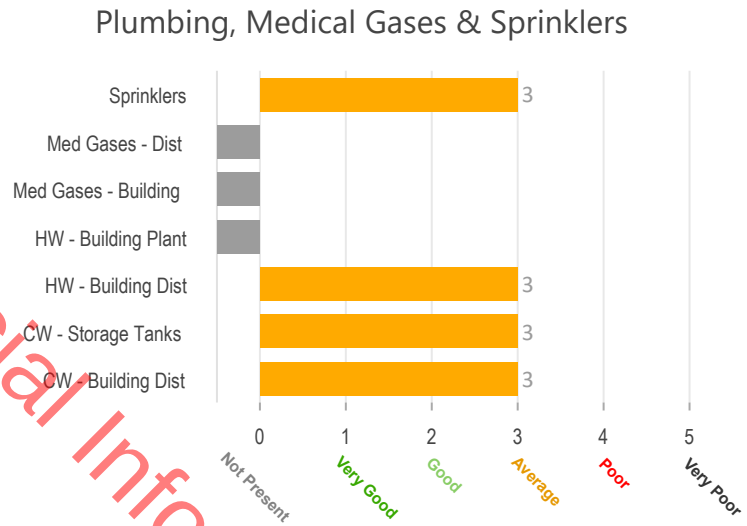
Approximate building location

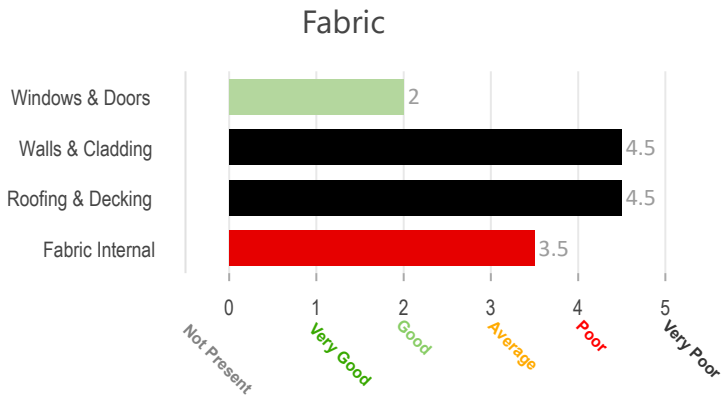
Laboratory

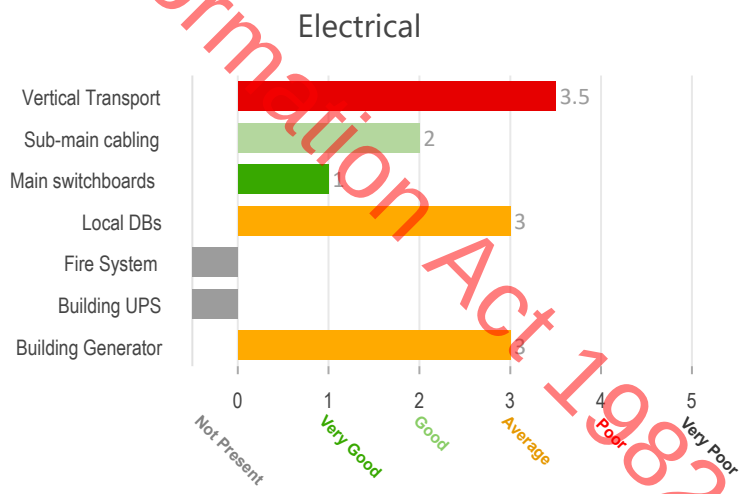


Summary of building element condition details









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.
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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.

Chiller Plant Room

Hawkes Bay Hospital (Hawkes Bay DHB)

Beca Building ID: 269
NAMP ID: 10357
DHB Ref: HA12
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 27/08/2019

Photo of Building Exterior

Services & Fabric Score

1.6

DHB Assessed *% NBS* Rating

100% IL4

General Building Information

Approximate Building Age: 1947

Survey date: 18/02/2019

Gross Floor Area (m2): 253

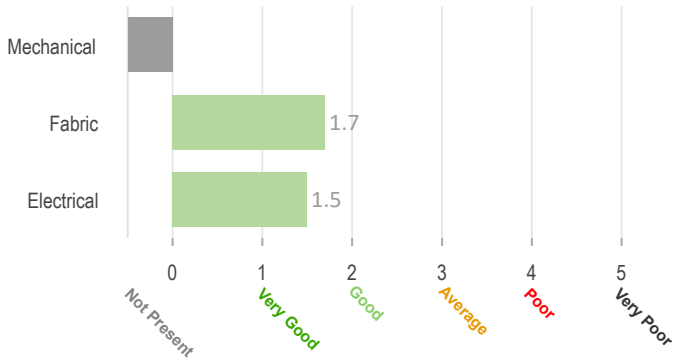
Fire Separation Issues: Low likelihood of issues

Asbestos Issues: Limited issues observed/known

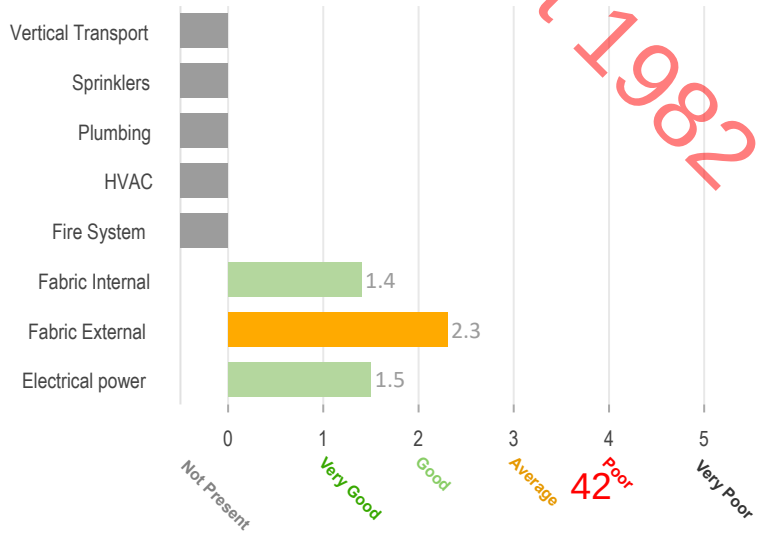
Seismic Services Restraint: Poor

Summary of building condition

By Discipline



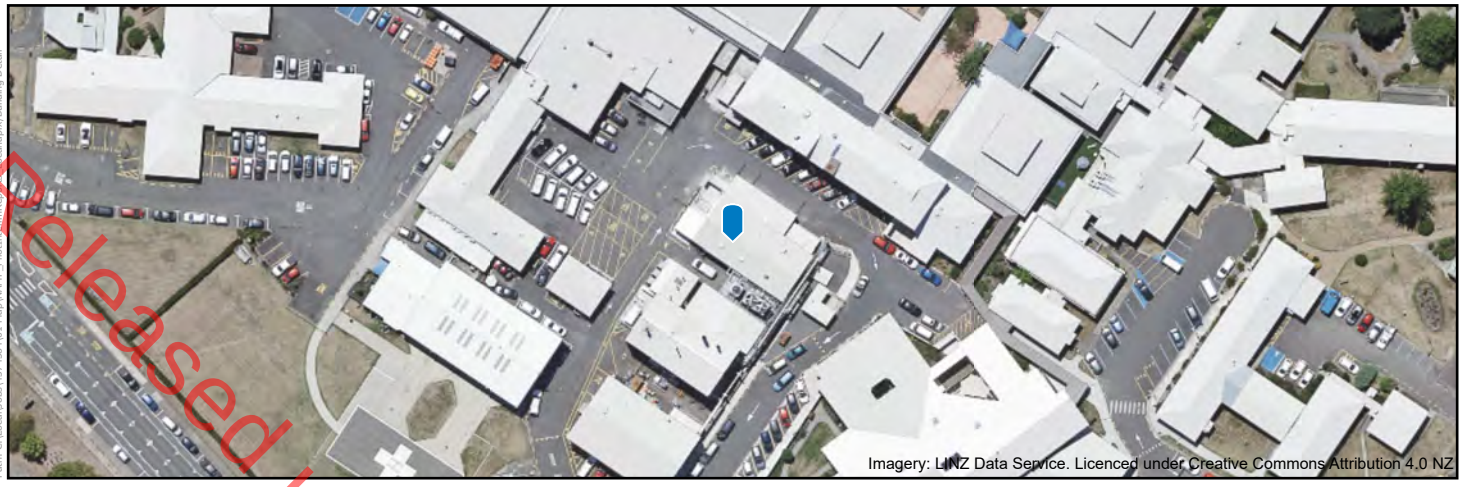
By Element



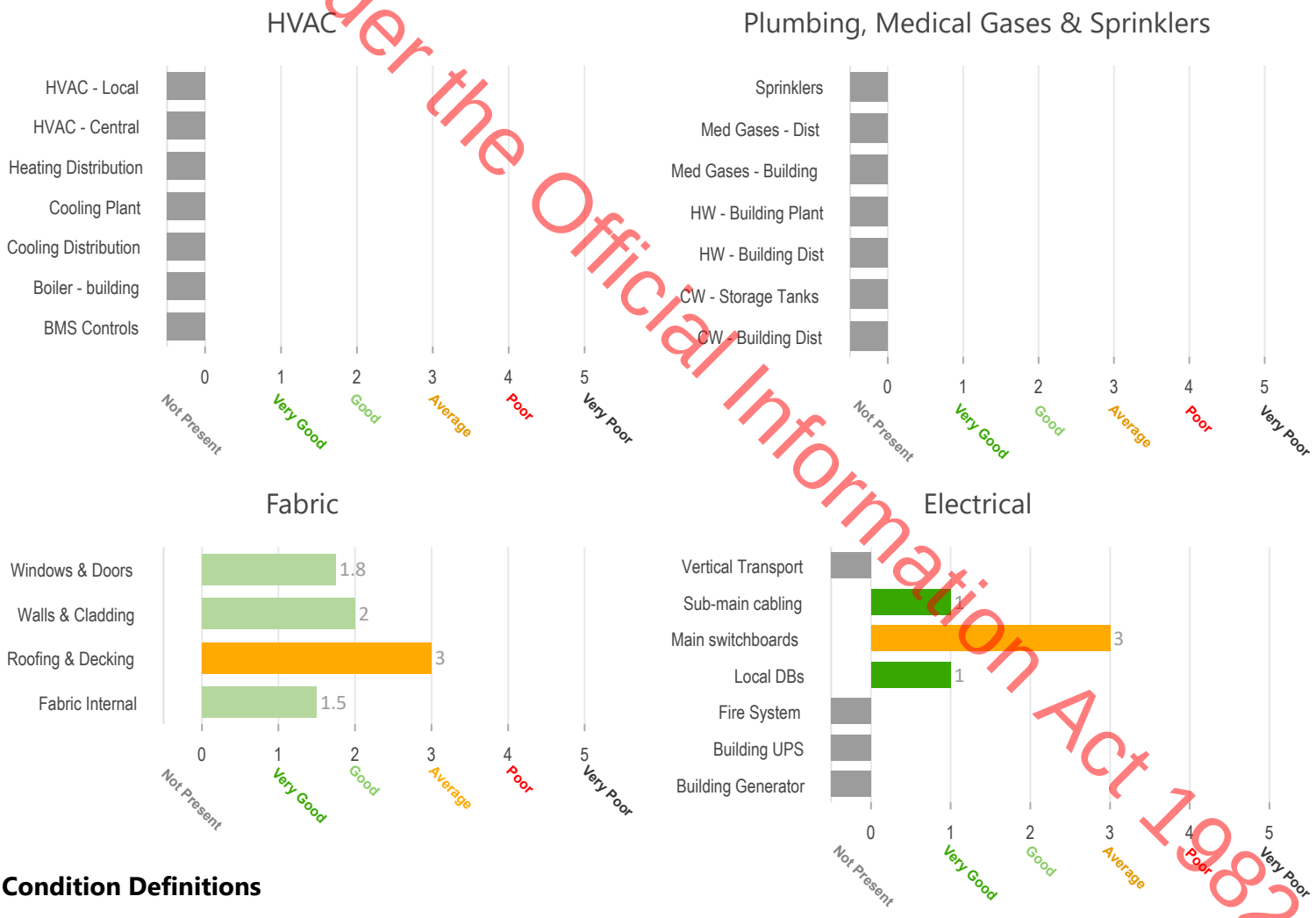
Beca Building ID: 269
NAMP ID: 10357
DHB Ref: HA12
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 27/08/2019

Approximate building location

Chiller Plant Room



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.

Bottled Gases Building

Hawkes Bay Hospital (Hawkes Bay DHB)

Beca Building ID: 271
NAMP ID: 10352
DHB Ref: HA16
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 27/08/2019

Photo of Building Exterior

Services & Fabric Score

3

DHB Assessed *% NBS* Rating

64% IL4

General Building Information

Approximate Building Age: 1961

Survey date: 18/02/2019

Gross Floor Area (m2): 64

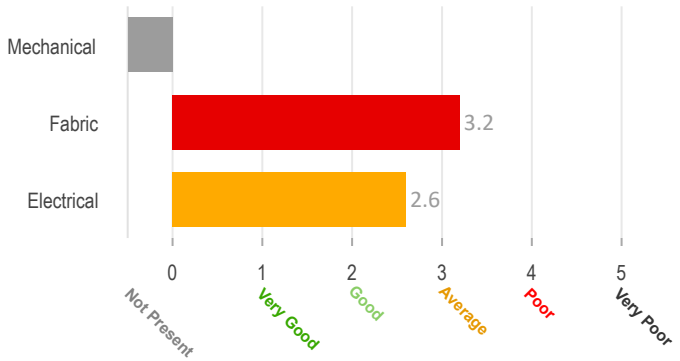
Fire Separation Issues: Low likelihood of issues

Asbestos Issues: Low likelihood of issues

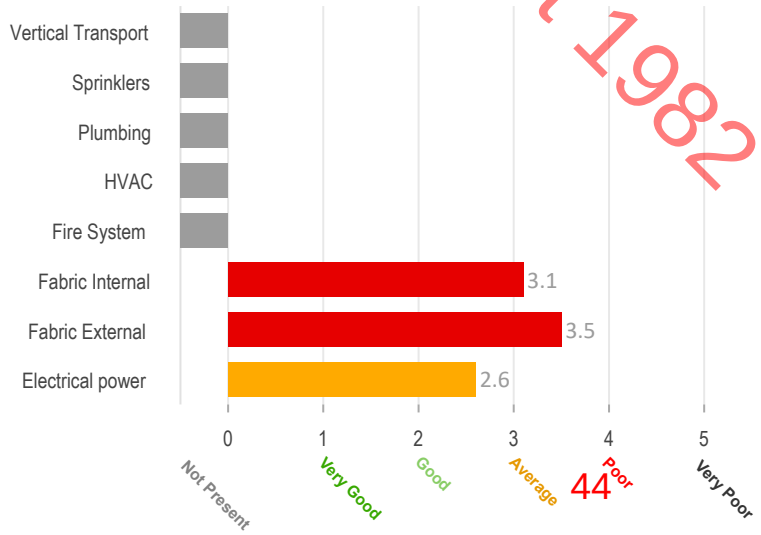
Seismic Services Restraint: Poor

Summary of building condition

By Discipline



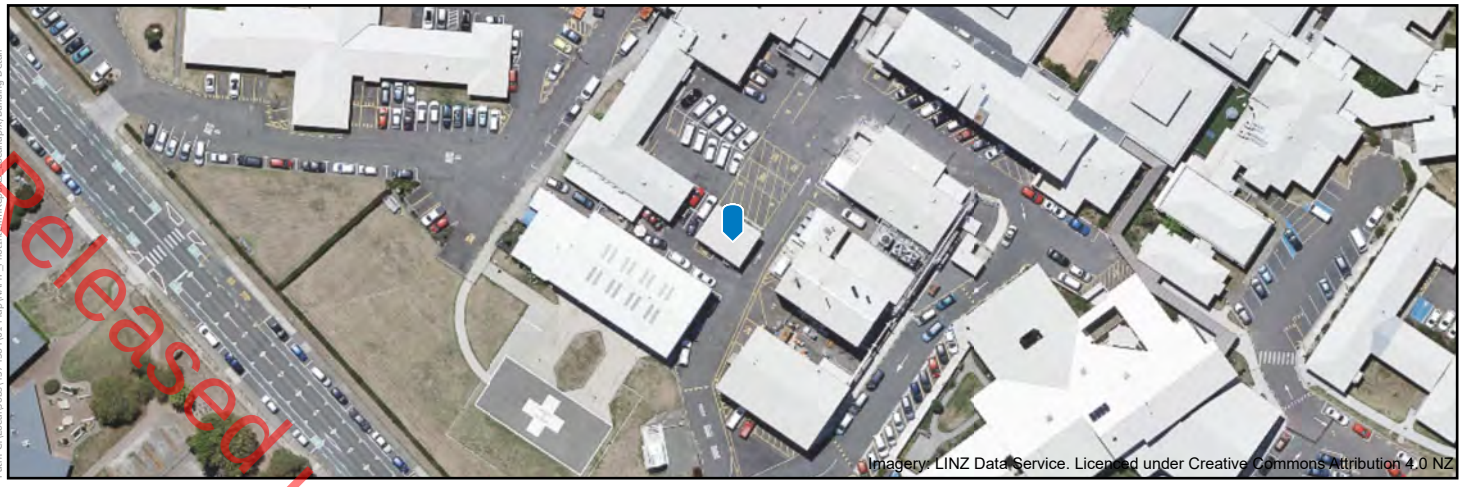
By Element



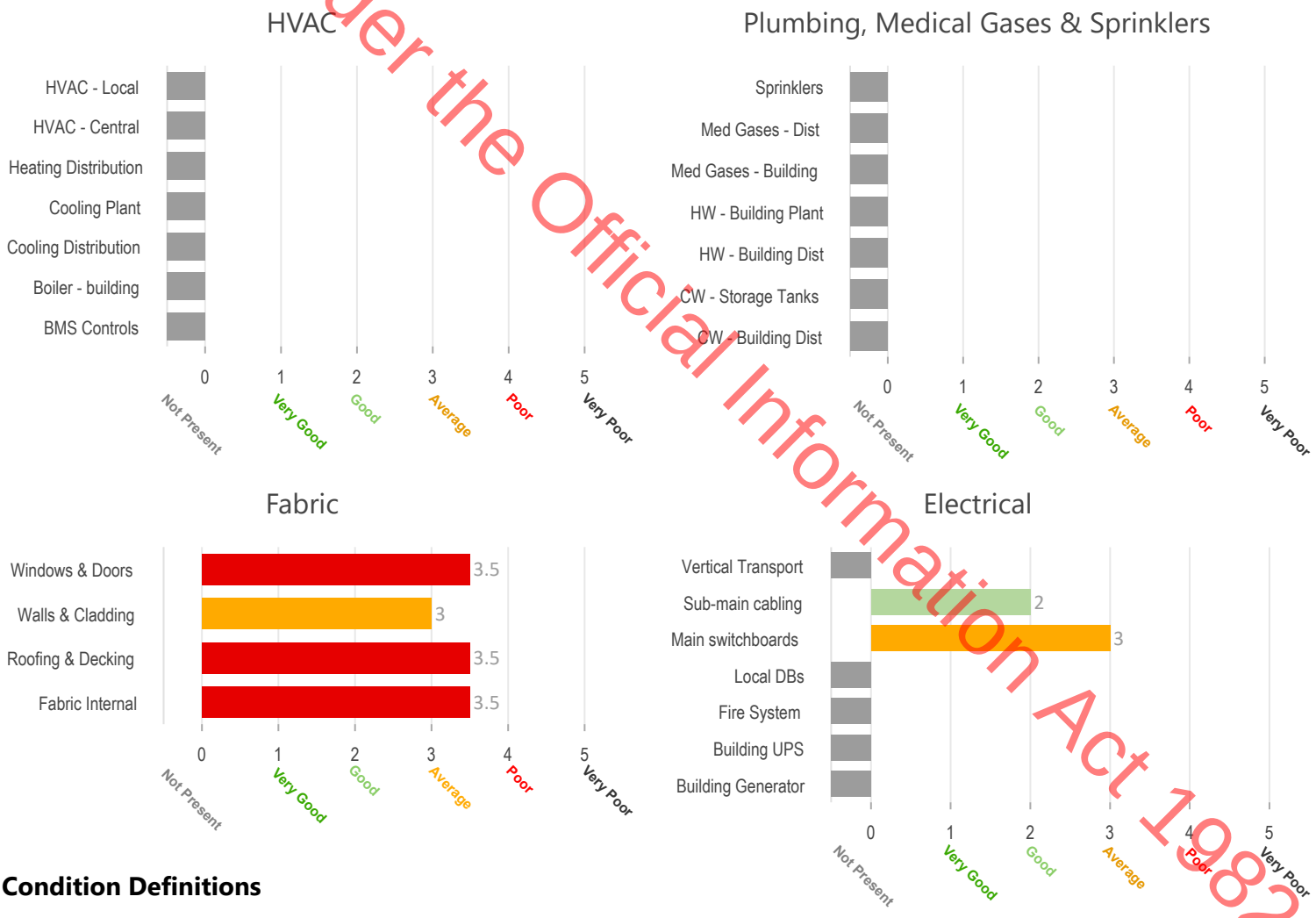
Beca Building ID: 271
NAMP ID: 10352
DHB Ref: HA16
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 27/08/2019

Approximate building location

Bottled Gases Building



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.

Boiler House

Hawkes Bay Hospital (Hawkes Bay DHB)

Beca Building ID: 270
NAMP ID: 10351
DHB Ref: HA13
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 27/08/2019

Photo of Building Exterior

Services & Fabric Score

1.7

DHB Assessed *% NBS* Rating

100% IL4

General Building Information

Approximate Building Age: 1958

Survey date: 17/02/2019

Gross Floor Area (m2): 369

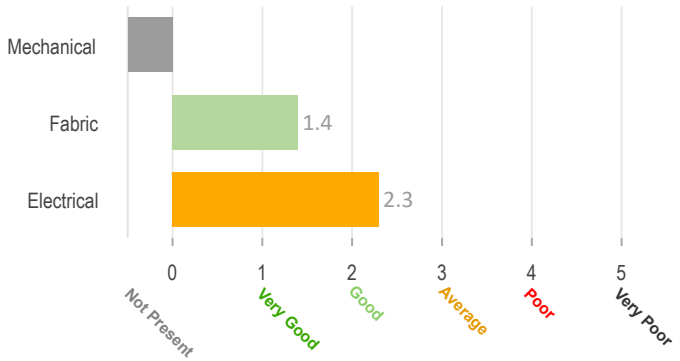
Fire Separation Issues: Low likelihood of issues

Asbestos Issues: Limited issues observed/known

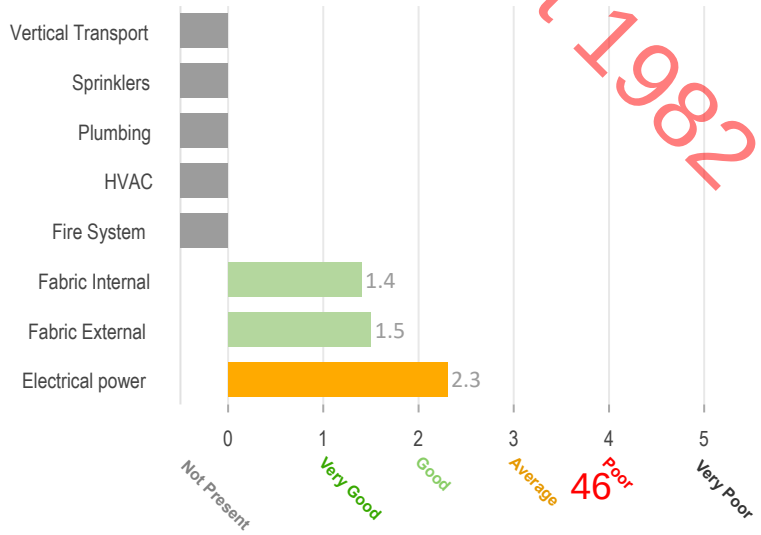
Seismic Services Restraint: Poor

Summary of building condition

By Discipline



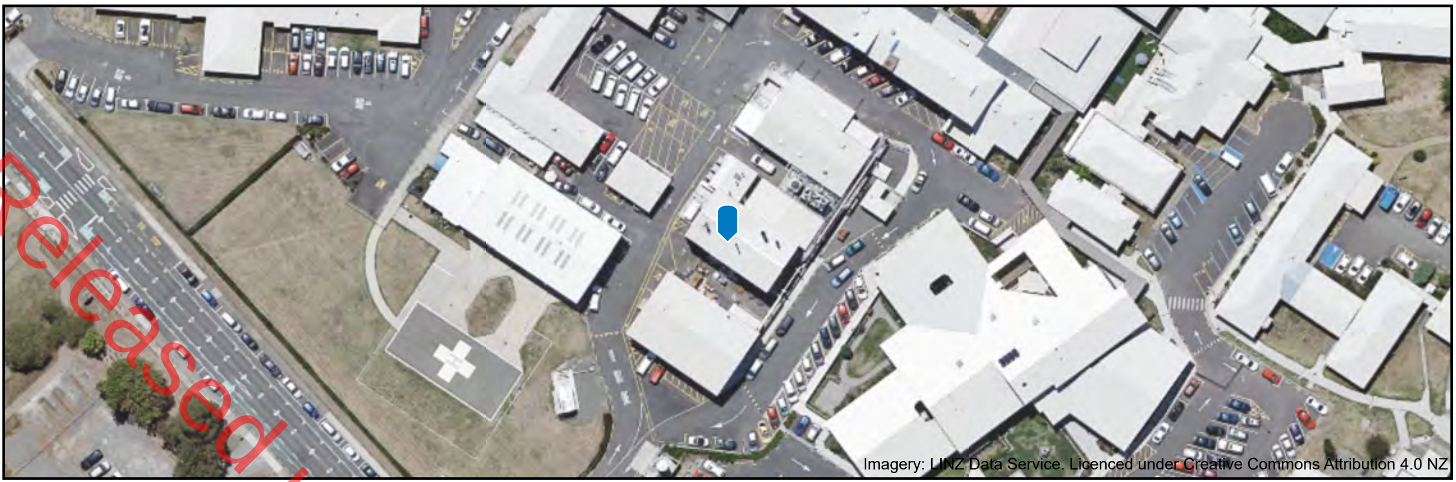
By Element



Beca Building ID: 270
NAMP ID: 10351
DHB Ref: HA13
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 27/08/2019

Approximate building location

Boiler House



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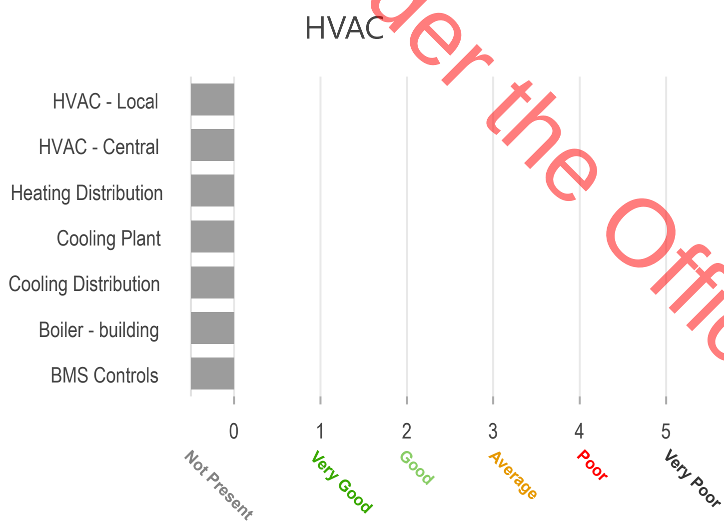
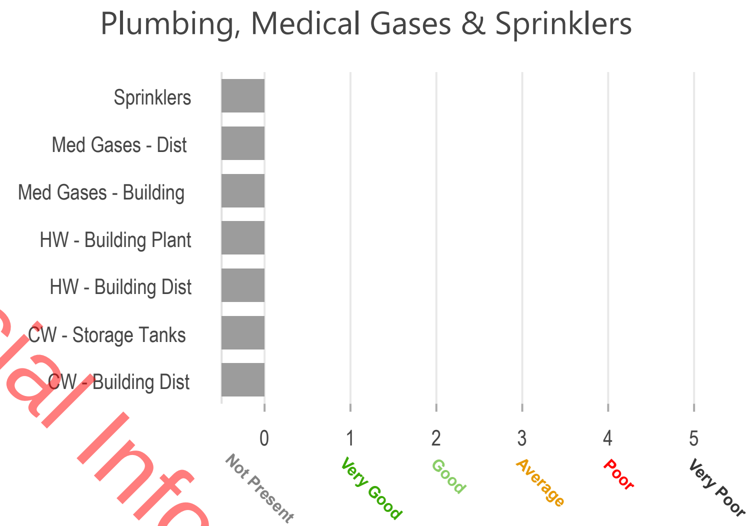
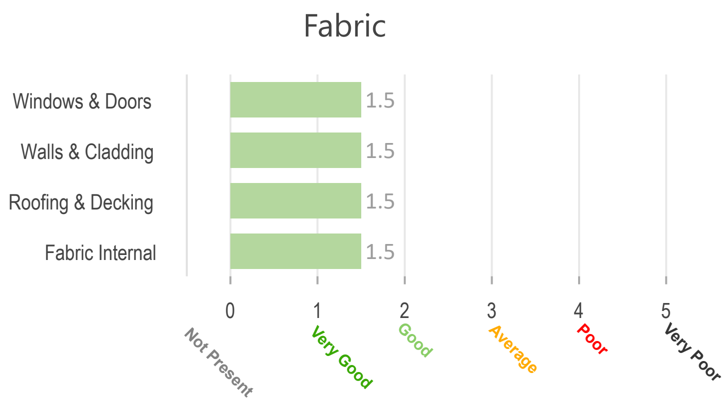
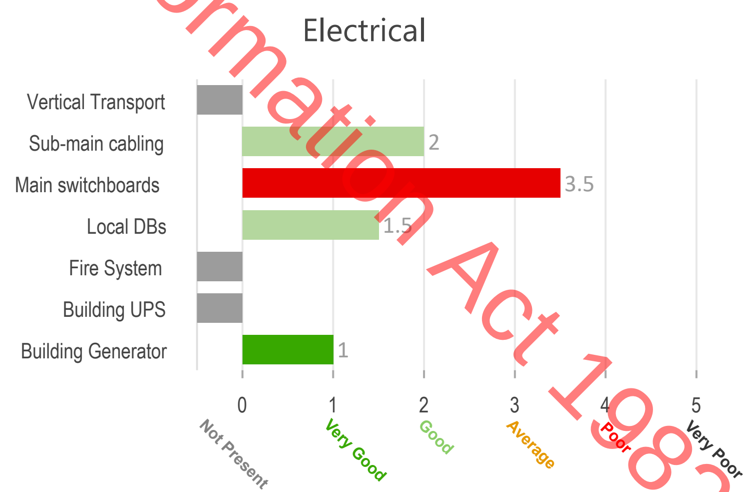
Summary of building element condition details









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.
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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.

AB Block

Hawkes Bay Hospital (Hawkes Bay DHB)

Beca Building ID: 278
NAMP ID: 10347
DHB Ref: HA31
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 27/08/2019

Photo of Building Exterior

Services & Fabric Score

2.8

DHB Assessed *% NBS* Rating

100% IL3

General Building Information

Approximate Building Age: 1958

Survey date: 17/02/2019

Gross Floor Area (m2): 2545

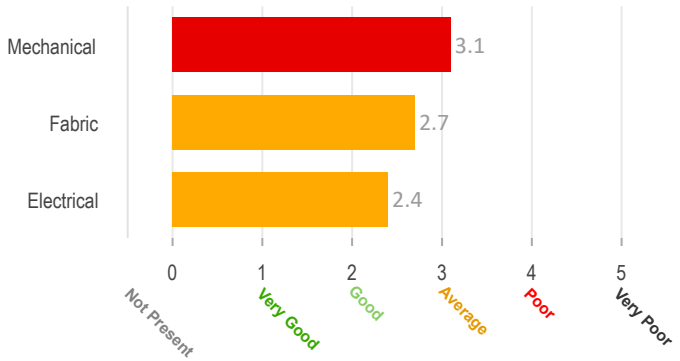
Fire Separation Issues: Significant known issues

Asbestos Issues: Limited issues observed/known

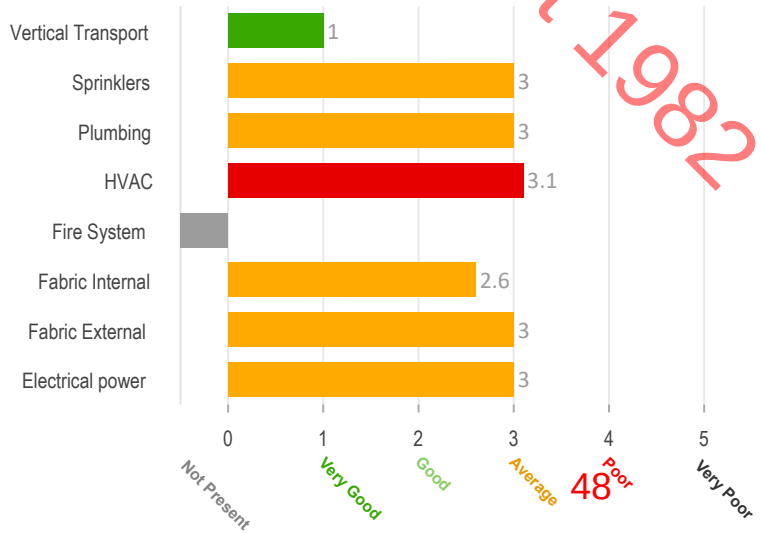
Seismic Services Restraint: Poor

Summary of building condition

By Discipline



By Element

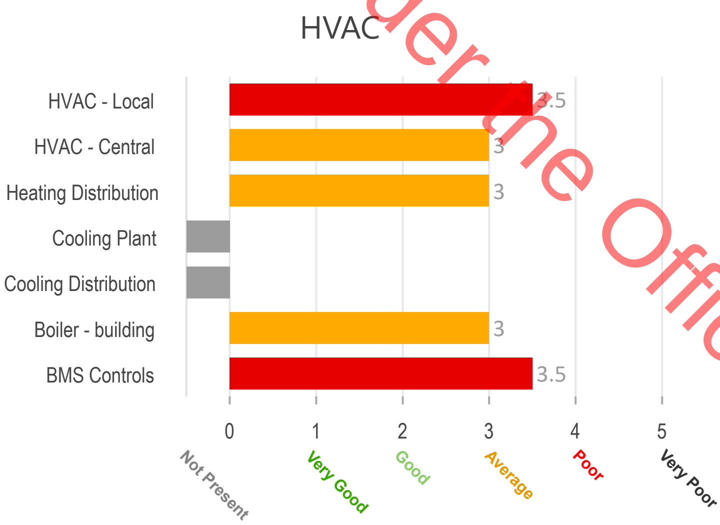


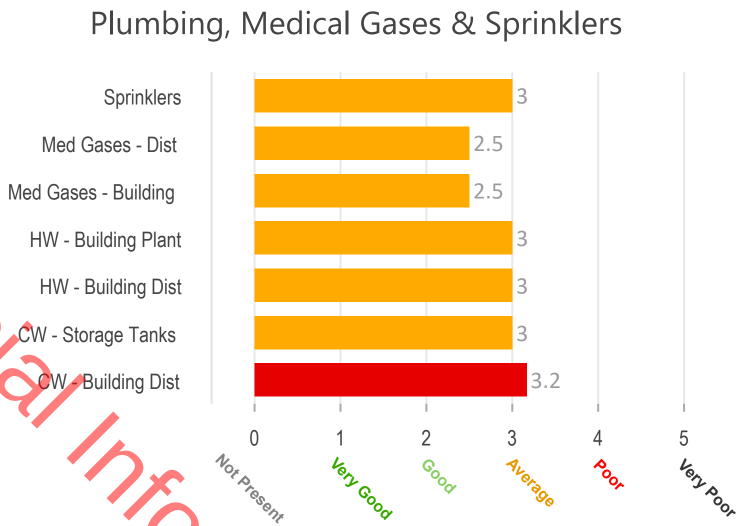
Beca Building ID: 278
NAMP ID: 10347
DHB Ref: HA31
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 27/08/2019

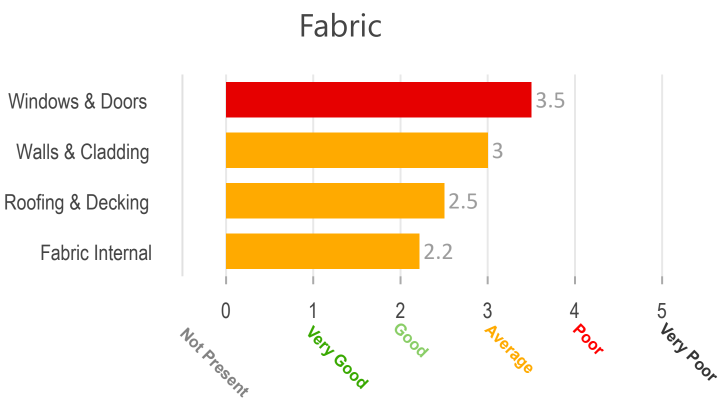
Approximate building location

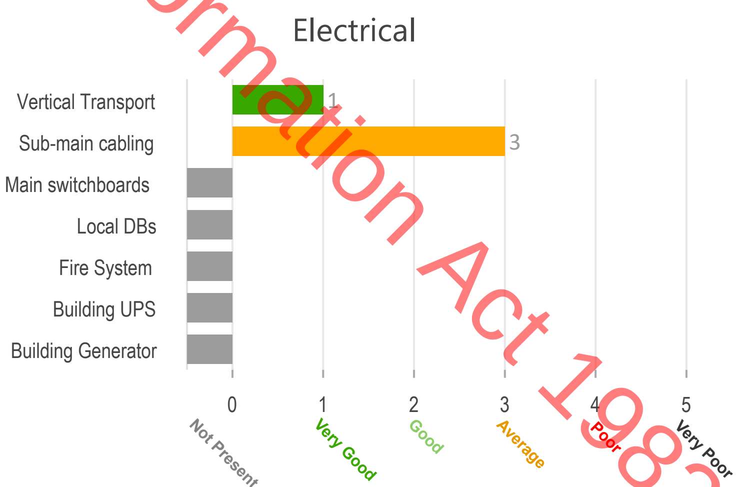
AB Block

Summary of building element condition details









Condition Definitions

Rating	Condition	Definition (Services and Fabric)
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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
Hawkes Bay Hospital	AB Block	Electrical power	Building Generator		Not Present				
Hawkes Bay Hospital	AB Block	Electrical power	Building Main Switchboard		Not Present				
Hawkes Bay Hospital	AB Block	Electrical power	Building UPS		Not Present				
Hawkes Bay Hospital	AB Block	Electrical power	Local DBs		Not Present				
Hawkes Bay Hospital	AB Block	Electrical power	Site Generator			yes			
Hawkes Bay Hospital	AB Block	Electrical power	Sub-main cabling		Present		3	1	original
Hawkes Bay Hospital	AB Block	Fabric External	Roofing and Decking	Iron/metal	Present		2	2	original
Hawkes Bay Hospital	AB Block	Fabric External	Windows and Doors	Metal	Present		3	2	original
Hawkes Bay Hospital	AB Block	Fabric External	Walls and Cladding		Present		3	1	original
Hawkes Bay Hospital	AB Block	Fabric Internal	G		Present		3	2	original
Hawkes Bay Hospital	AB Block	Fabric Internal	3		Present		2	1	10+
Hawkes Bay Hospital	AB Block	Fabric Internal	1		Present		2	1	10+
Hawkes Bay Hospital	AB Block	Fabric Internal	2		Present		2	1	10+
Hawkes Bay Hospital	AB Block	Fabric Internal	4		Present		2	1	10+
Hawkes Bay Hospital	AB Block	Fabric Internal	5		Present		3	2	original
Hawkes Bay Hospital	AB Block	Fabric Internal	6		Present		3	1	10+
Hawkes Bay Hospital	AB Block	Fire Alarm	No information/access						
Hawkes Bay Hospital	AB Block	HVAC	BMS Controls		Present		4	1	10+
Hawkes Bay Hospital	AB Block	HVAC	Boiler Plant in building		Present		3	2	10+
Hawkes Bay Hospital	AB Block	HVAC	Building HVAC - Central plant		Present		3	2	10+
Hawkes Bay Hospital	AB Block	HVAC	Boiler Plant - Site Plant			yes			
Hawkes Bay Hospital	AB Block	HVAC	Building HVAC - Local plant		Present		3	2	10+
Hawkes Bay Hospital	AB Block	HVAC	Cooling Distribution		Not Present				
Hawkes Bay Hospital	AB Block	HVAC	Cooling Plant - Site Plant			yes			
Hawkes Bay Hospital	AB Block	HVAC	Cooling Plant in building		Not Present				
Hawkes Bay Hospital	AB Block	HVAC	Heating Distribution		Present		3	1	original
Hawkes Bay Hospital	AB Block	Plumbing	Cold water - Building distribution		Present		3	2	original
Hawkes Bay Hospital	AB Block	Plumbing	Cold water - Building distribution		Present		3	2	10+
Hawkes Bay Hospital	AB Block	Plumbing	Cold water - Building distribution		Present		3	1	original
Hawkes Bay Hospital	AB Block	Plumbing	Hot water - Building plant		Present		3	2	10+
Hawkes Bay Hospital	AB Block	Plumbing	Cold water - Building storage tanks		Present		3	1	original
Hawkes Bay Hospital	AB Block	Plumbing	Cold water - Site storage and mains			yes			
Hawkes Bay Hospital	AB Block	Plumbing	Hot water - Building distribution		Present		3	2	10+
Hawkes Bay Hospital	AB Block	Plumbing	Hot water - Site Plant			yes			
Hawkes Bay Hospital	AB Block	Plumbing	Medical gases and vacuum - Building plant		Present		3	1	10+
Hawkes Bay Hospital	AB Block	Plumbing	Medical gases and vacuum - Site Plant			yes			
Hawkes Bay Hospital	AB Block	Plumbing	Medical gases and vacuum distribution		Present		3	1	10+
Hawkes Bay Hospital	AB Block	Sprinklers			Present		3	2	10+
Hawkes Bay Hospital	AB Block	Vertical Transport			Present		2	1	0 to 3
Hawkes Bay Hospital	Boiler House	Electrical power	Sub-main cabling		Present		2	2	10+
Hawkes Bay Hospital	Boiler House	Electrical power	Local DBs		Present		2	1	10+
Hawkes Bay Hospital	Boiler House	Electrical power	Building Main Switchboard		Present		3	2	original
Hawkes Bay Hospital	Boiler House	Electrical power	Building Generator		Present		1	1	3 to 10
Hawkes Bay Hospital	Boiler House	Electrical power	Building UPS		Not Present				
Hawkes Bay Hospital	Boiler House	Electrical power	Site Generator			yes			

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Hawkes Bay Hospital	Boiler House	Fabric External	Roofing and Decking	Iron/metal	Present		2	1	10+
Hawkes Bay Hospital	Boiler House	Fabric External	Walls and Cladding	Sheet	Present		2	1	10+
Hawkes Bay Hospital	Boiler House	Fabric External	Walls and Cladding	Masonry	Present		2	1	10+
Hawkes Bay Hospital	Boiler House	Fabric External	Windows and Doors	Metal	Present		2	1	10+
Hawkes Bay Hospital	Boiler House	Fabric Internal	G		Present		2	1	10+
Hawkes Bay Hospital	Boiler House	Fire Alarm		No information/access					
Hawkes Bay Hospital	Boiler House	HVAC	BMS Controls		Not Present				
Hawkes Bay Hospital	Boiler House	HVAC	Boiler Plant - Site Plant			no			
Hawkes Bay Hospital	Boiler House	HVAC	Boiler Plant in building		Not Present				
Hawkes Bay Hospital	Boiler House	HVAC	Building HVAC - Central plant		Not Present				
Hawkes Bay Hospital	Boiler House	HVAC	Building HVAC - Local plant		Not Present				
Hawkes Bay Hospital	Boiler House	HVAC	Cooling Distribution		Not Present				
Hawkes Bay Hospital	Boiler House	HVAC	Cooling Plant - Site Plant		Not Present	no			
Hawkes Bay Hospital	Boiler House	HVAC	Cooling Plant in building		Not Present				
Hawkes Bay Hospital	Boiler House	HVAC	Heating Distribution		Not Present				
Hawkes Bay Hospital	Boiler House	Plumbing	Cold water - Building distribution		Not Present				
Hawkes Bay Hospital	Boiler House	Plumbing	Cold water - Building storage tanks		Not Present				
Hawkes Bay Hospital	Boiler House	Plumbing	Cold water - Site storage and mains		Not Present	no			
Hawkes Bay Hospital	Boiler House	Plumbing	Hot water - Building distribution		Not Present				
Hawkes Bay Hospital	Boiler House	Plumbing	Hot water - Building plant		Not Present				
Hawkes Bay Hospital	Boiler House	Plumbing	Hot water - Site Plant		Not Present	no			
Hawkes Bay Hospital	Boiler House	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Hawkes Bay Hospital	Boiler House	Plumbing	Medical gases and vacuum - Site Plant		Not Present	no			
Hawkes Bay Hospital	Boiler House	Plumbing	Medical gases and vacuum distribution		Not Present				
Hawkes Bay Hospital	Boiler House	Sprinklers			Not Present				
Hawkes Bay Hospital	Boiler House	Vertical Transport		No information/access					
Hawkes Bay Hospital	Bottled Gases Building	Electrical power	Building Generator		Not Present				
Hawkes Bay Hospital	Bottled Gases Building	Electrical power	Building Main Switchboard		Present		3	1	original
Hawkes Bay Hospital	Bottled Gases Building	Electrical power	Building UPS		Not Present				
Hawkes Bay Hospital	Bottled Gases Building	Electrical power	Local DBs		Not Present				
Hawkes Bay Hospital	Bottled Gases Building	Electrical power	Sub-main cabling		Present		2	1	original
Hawkes Bay Hospital	Bottled Gases Building	Fabric External	Walls and Cladding	Sheet	Present		3	1	original
Hawkes Bay Hospital	Bottled Gases Building	Fabric External	Walls and Cladding	Masonry	Present		3	1	original
Hawkes Bay Hospital	Bottled Gases Building	Fabric External	Windows and Doors		Present		4	1	original
Hawkes Bay Hospital	Bottled Gases Building	Fabric External	Roofing and Decking		Present		4	1	original
Hawkes Bay Hospital	Bottled Gases Building	Fabric Internal	1		Present		3	2	original
Hawkes Bay Hospital	Bottled Gases Building	Fire Alarm		No information/access					
Hawkes Bay Hospital	Bottled Gases Building	HVAC	BMS Controls		Not Present				
Hawkes Bay Hospital	Bottled Gases Building	HVAC	Boiler Plant - Site Plant		Not Present	no			
Hawkes Bay Hospital	Bottled Gases Building	HVAC	Boiler Plant in building		Not Present				
Hawkes Bay Hospital	Bottled Gases Building	HVAC	Building HVAC - Central plant		Not Present				
Hawkes Bay Hospital	Bottled Gases Building	HVAC	Building HVAC - Local plant		Not Present				
Hawkes Bay Hospital	Bottled Gases Building	HVAC	Cooling Distribution		Not Present				
Hawkes Bay Hospital	Bottled Gases Building	HVAC	Cooling Plant - Site Plant		Not Present	no			
Hawkes Bay Hospital	Bottled Gases Building	HVAC	Cooling Plant in building		Not Present				

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Hawkes Bay Hospital	Bottled Gases Building	HVAC	Heating Distribution		Not Present				
Hawkes Bay Hospital	Bottled Gases Building	Plumbing	Cold water - Building distribution		Not Present				
Hawkes Bay Hospital	Bottled Gases Building	Plumbing	Cold water - Building storage tanks		Not Present				
Hawkes Bay Hospital	Bottled Gases Building	Plumbing	Cold water - Site storage and mains		Not Present	no			
Hawkes Bay Hospital	Bottled Gases Building	Plumbing	Hot water - Building distribution		Not Present				
Hawkes Bay Hospital	Bottled Gases Building	Plumbing	Hot water - Building plant		Not Present				
Hawkes Bay Hospital	Bottled Gases Building	Plumbing	Hot water - Site Plant		Not Present	no			
Hawkes Bay Hospital	Bottled Gases Building	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Hawkes Bay Hospital	Bottled Gases Building	Plumbing	Medical gases and vacuum - Site Plant		Not Present	no			
Hawkes Bay Hospital	Bottled Gases Building	Plumbing	Medical gases and vacuum distribution		Not Present				
Hawkes Bay Hospital	Bottled Gases Building	Sprinklers			Not Present				
Hawkes Bay Hospital	Bottles Gases Building	Vertical Transport			No information/access				
Hawkes Bay Hospital	Chiller Plant Room	Electrical power	Sub-main cabling		Present		1	1	0 to 3
Hawkes Bay Hospital	Chiller Plant Room	Electrical power	Local DBs		Present		1	1	3 to 10
Hawkes Bay Hospital	Chiller Plant Room	Electrical power	Building Generator		Not Present				
Hawkes Bay Hospital	Chiller Plant Room	Electrical power	Building Main Switchboard		Present		3	1	original
Hawkes Bay Hospital	Chiller Plant Room	Electrical power	Building UPS		Not Present				
Hawkes Bay Hospital	Chiller Plant Room	Electrical power	Site Generator			yes			
Hawkes Bay Hospital	Chiller Plant Room	Fabric External	Walls and Cladding	Masonry	Present		2	1	original
Hawkes Bay Hospital	Chiller Plant Room	Fabric External	Windows and Doors	Metal	Present		2	1	original
Hawkes Bay Hospital	Chiller Plant Room	Fabric External	Windows and Doors	Aluminium	Present		1	1	3 to 10
Hawkes Bay Hospital	Chiller Plant Room	Fabric External	Roofing and Decking		Present		3	1	original
Hawkes Bay Hospital	Chiller Plant Room	Fabric Internal	1		Present		2	1	10+
Hawkes Bay Hospital	Chiller Plant Room	Fire Alarm			No information/access				
Hawkes Bay Hospital	Chiller Plant Room	HVAC	BMS Controls		Not Present				
Hawkes Bay Hospital	Chiller Plant Room	HVAC	Boiler Plant - Site Plant		Not Present	no			
Hawkes Bay Hospital	Chiller Plant Room	HVAC	Boiler Plant in building		Not Present				
Hawkes Bay Hospital	Chiller Plant Room	HVAC	Building HVAC - Central plant		Not Present				
Hawkes Bay Hospital	Chiller Plant Room	HVAC	Building HVAC - Local plant		Not Present				
Hawkes Bay Hospital	Chiller Plant Room	HVAC	Cooling Distribution		Not Present				
Hawkes Bay Hospital	Chiller Plant Room	HVAC	Cooling Plant - Site Plant		Not Present	no			
Hawkes Bay Hospital	Chiller Plant Room	HVAC	Cooling Plant in building		Not Present				
Hawkes Bay Hospital	Chiller Plant Room	HVAC	Heating Distribution		Not Present				
Hawkes Bay Hospital	Chiller Plant Room	Plumbing	Cold water - Building distribution		Not Present				
Hawkes Bay Hospital	Chiller Plant Room	Plumbing	Cold water - Building storage tanks		Not Present				
Hawkes Bay Hospital	Chiller Plant Room	Plumbing	Cold water - Site storage and mains		Not Present	no			
Hawkes Bay Hospital	Chiller Plant Room	Plumbing	Hot water - Building distribution		Not Present				
Hawkes Bay Hospital	Chiller Plant Room	Plumbing	Hot water - Building plant		Not Present				
Hawkes Bay Hospital	Chiller Plant Room	Plumbing	Hot water - Site Plant		Not Present	no			
Hawkes Bay Hospital	Chiller Plant Room	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Hawkes Bay Hospital	Chiller Plant Room	Plumbing	Medical gases and vacuum - Site Plant		Not Present	no			
Hawkes Bay Hospital	Chiller Plant Room	Plumbing	Medical gases and vacuum distribution		Not Present				
Hawkes Bay Hospital	Chiller Plant Room	Sprinklers			Not Present				
Hawkes Bay Hospital	Chiller Plant Room	Vertical Transport			No information/access				
Hawkes Bay Hospital	Laboratory	Electrical power	Sub-main cabling		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
Hawkes Bay Hospital	Laboratory	Electrical power	Local DBs		Present		3	1	original
Hawkes Bay Hospital	Laboratory	Electrical power	Building Main Switchboard		Present		1	1	0 to 3
Hawkes Bay Hospital	Laboratory	Electrical power	Building Generator		Present		3	1	original
Hawkes Bay Hospital	Laboratory	Electrical power	Building UPS		Not Present				
Hawkes Bay Hospital	Laboratory	Electrical power	Site Generator			yes			
Hawkes Bay Hospital	Laboratory	Fabric External	Roofing and Decking	Iron/metal	Present		2	1	original
Hawkes Bay Hospital	Laboratory	Fabric External	Roofing and Decking	Iron/metal	Present		2	2	original
Hawkes Bay Hospital	Laboratory	Fabric External	Walls and Cladding	Sheet	Present		2	1	original
Hawkes Bay Hospital	Laboratory	Fabric External	Walls and Cladding	Sheet	Present		2	2	original
Hawkes Bay Hospital	Laboratory	Fabric External	Windows and Doors	Aluminium	Present		2	1	original
Hawkes Bay Hospital	Laboratory	Fabric Internal	1		Present		3	2	original
Hawkes Bay Hospital	Laboratory	Fabric Internal	2		Present		3	2	original
Hawkes Bay Hospital	Laboratory	Fire Alarm		No information/access					
Hawkes Bay Hospital	Laboratory	HVAC	BMS Controls		Present		3	1	10+
Hawkes Bay Hospital	Laboratory	HVAC	Building HVAC - Central plant		Present		4	2	original
Hawkes Bay Hospital	Laboratory	HVAC	Boiler Plant - Site Plant			yes			
Hawkes Bay Hospital	Laboratory	HVAC	Boiler Plant in building		Not Present				
Hawkes Bay Hospital	Laboratory	HVAC	Building HVAC - Local plant		Not Present				
Hawkes Bay Hospital	Laboratory	HVAC	Cooling Distribution		Not Present				
Hawkes Bay Hospital	Laboratory	HVAC	Cooling Plant - Site Plant			yes			
Hawkes Bay Hospital	Laboratory	HVAC	Cooling Plant in building		Not Present				
Hawkes Bay Hospital	Laboratory	HVAC	Heating Distribution		Not Present				
Hawkes Bay Hospital	Laboratory	Plumbing	Cold water - Building distribution		Present		3	1	original
Hawkes Bay Hospital	Laboratory	Plumbing	Cold water - Building storage tanks		Present		3	1	original
Hawkes Bay Hospital	Laboratory	Plumbing	Cold water - Site storage and mains			yes			
Hawkes Bay Hospital	Laboratory	Plumbing	Hot water - Building distribution		Present		3	1	original
Hawkes Bay Hospital	Laboratory	Plumbing	Hot water - Building plant		Not Present				
Hawkes Bay Hospital	Laboratory	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Hawkes Bay Hospital	Laboratory	Plumbing	Medical gases and vacuum - Site Plant			no			
Hawkes Bay Hospital	Laboratory	Plumbing	Medical gases and vacuum distribution		Not Present				
Hawkes Bay Hospital	Laboratory	Sprinklers			Present		3	2	10+
Hawkes Bay Hospital	Laboratory	Vertical Transport			Present		4	1	original
Hawkes Bay Hospital	Operating Theatre	Electrical power	Sub-main cabling		Present		2	1	3 to 10
Hawkes Bay Hospital	Operating Theatre	Electrical power	Local DBs		Present		2	1	3 to 10
Hawkes Bay Hospital	Operating Theatre	Electrical power	Building Main Switchboard		Present		2	1	3 to 10
Hawkes Bay Hospital	Operating Theatre	Electrical power	Building UPS		Present		2	1	3 to 10
Hawkes Bay Hospital	Operating Theatre	Electrical power	Building Generator		Not Present				
Hawkes Bay Hospital	Operating Theatre	Electrical power	Site Generator			yes			
Hawkes Bay Hospital	Operating Theatre	Fabric External	Roofing and Decking	Rubber Sheet	Present		2	2	original
Hawkes Bay Hospital	Operating Theatre	Fabric External	Roofing and Decking	Iron/metal	Present		1	1	10+
Hawkes Bay Hospital	Operating Theatre	Fabric External	Walls and Cladding	Sheet	Present		3	1	original
Hawkes Bay Hospital	Operating Theatre	Fabric External	Walls and Cladding	Concrete	Present		1	1	original
Hawkes Bay Hospital	Operating Theatre	Fabric External	Windows and Doors	Wood	Present		3	2	original
Hawkes Bay Hospital	Operating Theatre	Fabric External	Windows and Doors	Aluminium	Present		2	1	10+
Hawkes Bay Hospital	Operating Theatre	Fabric Internal	G		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
Hawkes Bay Hospital	Operating Theatre	Fabric Internal	1		Present		2	1	original
Hawkes Bay Hospital	Operating Theatre	Fabric Internal	2		Present		2	1	original
Hawkes Bay Hospital	Operating Theatre	Fabric Internal	G		Present		2	1	original
Hawkes Bay Hospital	Operating Theatre	Fire Alarm		No information/access					
Hawkes Bay Hospital	Operating Theatre	HVAC	BMS Controls		Present		3	1	original
Hawkes Bay Hospital	Operating Theatre	HVAC	Building HVAC - Central plant		Present		2	1	original
Hawkes Bay Hospital	Operating Theatre	HVAC	Boiler Plant - Site Plant			yes			
Hawkes Bay Hospital	Operating Theatre	HVAC	Boiler Plant in building		Not Present				
Hawkes Bay Hospital	Operating Theatre	HVAC	Building HVAC - Local plant		Not Present				
Hawkes Bay Hospital	Operating Theatre	HVAC	Cooling Distribution		Not Present				
Hawkes Bay Hospital	Operating Theatre	HVAC	Cooling Plant - Site Plant			yes			
Hawkes Bay Hospital	Operating Theatre	HVAC	Cooling Plant in building		Not Present				
Hawkes Bay Hospital	Operating Theatre	HVAC	Heating Distribution		Not Present				
Hawkes Bay Hospital	Operating Theatre	Plumbing	Hot water - Building plant		Present		2	1	original
Hawkes Bay Hospital	Operating Theatre	Plumbing	Hot water - Building plant		Present		3	1	original
Hawkes Bay Hospital	Operating Theatre	Plumbing	Cold water - Building distribution		Present		2	1	mixed
Hawkes Bay Hospital	Operating Theatre	Plumbing	Cold water - Building storage tanks		Present		2	1	mixed
Hawkes Bay Hospital	Operating Theatre	Plumbing	Cold water - Site storage and mains			yes			
Hawkes Bay Hospital	Operating Theatre	Plumbing	Hot water - Building distribution		No information/ access				
Hawkes Bay Hospital	Operating Theatre	Plumbing	Hot water - Site Plant			yes			
Hawkes Bay Hospital	Operating Theatre	Plumbing	Medical gases and vacuum - Building plant		Present		3	2	mixed
Hawkes Bay Hospital	Operating Theatre	Plumbing	Medical gases and vacuum - Site Plant			yes			
Hawkes Bay Hospital	Operating Theatre	Plumbing	Medical gases and vacuum distribution		Present		2	1	mixed
Hawkes Bay Hospital	Operating Theatre	Sprinklers			Present		3	2	10+
Hawkes Bay Hospital	Operating Theatre	Vertical Transport		No information/access					
Hawkes Bay Hospital	Radiology	Electrical power	Sub-main cabling		Present		2	1	original
Hawkes Bay Hospital	Radiology	Electrical power	Local DBs		Present		3	1	original
Hawkes Bay Hospital	Radiology	Electrical power	Building Main Switchboard		Present		1	1	0 to 3
Hawkes Bay Hospital	Radiology	Electrical power	Building Generator		Not Present				
Hawkes Bay Hospital	Radiology	Electrical power	Building UPS		Present		2	1	3 to 10
Hawkes Bay Hospital	Radiology	Electrical power	Site Generator			yes			
Hawkes Bay Hospital	Radiology	Fabric External	Roofing and Decking	Iron/metal	Present		2	1	10+
Hawkes Bay Hospital	Radiology	Fabric External	Roofing and Decking	Rubber Sheet	Present		3	1	original
Hawkes Bay Hospital	Radiology	Fabric External	Walls and Cladding		Not Present				
Hawkes Bay Hospital	Radiology	Fabric External	Windows and Doors		Not Present				
Hawkes Bay Hospital	Radiology	Fabric Internal	G		Present		2	2	10+
Hawkes Bay Hospital	Radiology	Fabric Internal	1		Present		2	2	original
Hawkes Bay Hospital	Radiology	Fabric Internal	B1		Present		3	2	original
Hawkes Bay Hospital	Radiology	Fire Alarm		No information/access					
Hawkes Bay Hospital	Radiology	HVAC	BMS Controls		Present		3	1	10+
Hawkes Bay Hospital	Radiology	HVAC	Building HVAC - Central plant		Present		3	1	10+
Hawkes Bay Hospital	Radiology	HVAC	Building HVAC - Central plant		Present		2	2	10+
Hawkes Bay Hospital	Radiology	HVAC	Boiler Plant - Site Plant			yes			
Hawkes Bay Hospital	Radiology	HVAC	Boiler Plant in building		Not Present				
Hawkes Bay Hospital	Radiology	HVAC	Building HVAC - Local plant		Not Present				

Raw Condition Scores

Campus Name	Building Name	Asset Group	Element	Material	Element Presence	Fed from site generator	Condition	Variability	Approx age
Hawkes Bay Hospital	Radiology	HVAC	Cooling Distribution		Not Present				
Hawkes Bay Hospital	Radiology	HVAC	Cooling Plant - Site Plant			yes			
Hawkes Bay Hospital	Radiology	HVAC	Cooling Plant in building		Not Present				
Hawkes Bay Hospital	Radiology	HVAC	Heating Distribution		Not Present				
Hawkes Bay Hospital	Radiology	Plumbing	Hot water - Building plant		Present		2	1	original
Hawkes Bay Hospital	Radiology	Plumbing	Cold water - Building distribution		Present		3	1	original
Hawkes Bay Hospital	Radiology	Plumbing	Cold water - Building distribution		Present		3	1	original
Hawkes Bay Hospital	Radiology	Plumbing	Cold water - Building storage tanks		Not Present				
Hawkes Bay Hospital	Radiology	Plumbing	Cold water - Site storage and mains			yes			
Hawkes Bay Hospital	Radiology	Plumbing	Hot water - Building distribution		Present		3	1	original
Hawkes Bay Hospital	Radiology	Plumbing	Hot water - Site Plant			yes			
Hawkes Bay Hospital	Radiology	Plumbing	Medical gases and vacuum - Building plant		Present		2	1	mixed
Hawkes Bay Hospital	Radiology	Plumbing	Medical gases and vacuum - Site Plant			yes			
Hawkes Bay Hospital	Radiology	Plumbing	Medical gases and vacuum distribution		Present		2	1	mixed
Hawkes Bay Hospital	Radiology	Sprinklers			Present		3	2	10+
Hawkes Bay Hospital	Radiology	Vertical Transport		No information/access					
Hawkes Bay Hospital	Site wide	Electrical	Site distribution mains		Present		3	2	original
Hawkes Bay Hospital	Site wide	Electrical	Site generators		Present		1	1	3 to 10
Hawkes Bay Hospital	Site wide	Electrical	Substations	No information/ access					
Hawkes Bay Hospital	Site wide	Electrical	Main switchboards	No information/ access					
Hawkes Bay Hospital	Site wide	Mechanical Infrastructure	Site Fire Water site pipes		Present		2	1	10+
Hawkes Bay Hospital	Site wide	Mechanical Infrastructure	Site Heating Plant		Present		2	2	mixed
Hawkes Bay Hospital	Site wide	Mechanical Infrastructure	Site Steam pipes		Present		3	2	original
Hawkes Bay Hospital	Site wide	Mechanical Infrastructure	Site Hot and Cold Water site pipes		Present		3	3	mixed
Hawkes Bay Hospital	Site wide	Mechanical Infrastructure	Site Cold Water supply tanks		Present		3	2	mixed
Hawkes Bay Hospital	Site wide	Mechanical Infrastructure	Site Cooling plant		Present		1	1	mixed
Hawkes Bay Hospital	Site wide	Mechanical Infrastructure	Site sewer drains		Present		2	2	original
Hawkes Bay Hospital	Site wide	Mechanical Infrastructure	Site Heating pipes		Present		3	2	original
Hawkes Bay Hospital	Site wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		3	2	mixed
Hawkes Bay Hospital	Site wide	Mechanical Infrastructure	Site Cooling pipes		Present		2	2	mixed
Hawkes Bay Hospital	Site wide	Mechanical Infrastructure	Site storm water drains	No information/access					
Hawkes Bay Hospital	Site wide	Mechanical Infrastructure	Site Hot Water storage	No information/access					
Hawkes Bay Hospital	Site wide	Mechanical Infrstructure	Site Fire Water storage tanks	No information/access					

2019

Clinical Facility fitness for Purpose

MID CENTRAL DISTRICT HEALTH BOARD

Author: Rose Macfarlane
Project: National Asset Management Plan
Date: 02 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;

- Emergency department (ED)
- Operating Theatre suite (OT)
- Intensive Care units (ICU)
- Typical Inpatient Units (IPU)

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 – ED, ICU, OT, IPU & 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 – Mid Central

2.1 Clinical facilities assessed in your DHB

The following facilities were assessed in your DHB:

DHB	Campus/Hospital	Clinical Unit	Date
Mid Central	Palmerston North	ED	17 April 2019
Mid Central	Palmerston North	ICU	17 April 2019
Mid Central	Palmerston North	Ward 21, Orthopaedic	17 April 2019
Mid Central	Palmerston North	OT	17 April 2019
Mid Central	Palmerston North	Ward 24, Mental Health	17 April 2019

3 Findings per Clinical Facility

3.1 Palmerston North Hospital – Emergency Department

3.1.1 Gross Floor Area

The AHFG recommend emergency departments are planned at approximately 50m2/bed. Palmerston North Hospital ED is approximately 32m2/bed which is 65% 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 an ED was 195. Palmerston North Hospital ED scored a total of 131/195.

Campus	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
Palmerston North	13	14	3	15	9	5	34	15	23	131
Total Possible Scor	**20**	**25**	**5**	**35**	**15**	**5**	**35**	**20**	**35**	**195**

3.1.3 Supporting notes from CFFFP Assessment

The ED has 36 patient spaces (bays/chairs/resuscitation). Approximately half of the unit was reconfigured, and went live in 2019, to improve patient throughput and flows, however, most of these spaces (fast-track patient bays, sub-acute patient bays and ED observation patient bays) are undersized (to AHFG). The balance of patient spaces are cramped and resuscitation rooms could be larger.

There is a serious lack of clinical support space, especially storage. All corridors were cluttered with equipment and trolleys. There is no medication room – it is open to the corridor, which is unsafe. The main staff base is raised. Approximately 50% of patients can be seen from a staff base. The waiting room has 44 chairs which is inadequate for the patient throughput.

Demand exceeds capacity and often, the department is at capacity and patients are placed on beds in corridors as there are not enough patient bays. There is one negative pressure room. There are two enclosed rooms without ensuites which are used for the isolation of patients, however, there are not enough of these spaces for the model of care. There is no designated and purpose designed paediatric area.

The overall layout does not support the MoC. The department is cramped and inadequately sized for the throughput. Flows are confusing and service and patient/visitor flows cross.

DHB Feedback 10/09/2019: No private [ensuited] room in ED for O&G patients and no privacy for acute MH patients.

3.2 Palmerston North Hospital – Intensive Care Unit

3.2.1 Gross Floor Area

The AHFG recommend ICU units are planned at approximately 85m2/bed. Palmerston North Hospital ICU is approximately 58m2/bed which is 69% 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 an ICU was 185. The Palmerston North Hospital ICU/HDU scored a total of 135/185.

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
Palmerston North	ICU	11	14	1	15	9	5	35	20	25	135
	Total Possible Score	**15**	**20**	**5**	**25**	**15**	**5**	**35**	**20**	**45**	**185**

3.2.3 Supporting notes from CFFFP Assessment

The ICU/HDU has 7 patient bed spaces; six in the main unit and one side room which is used for end of life care and on rare occasions as an isolation rooms (it is meant to have negative pressure).

The model of care: Level 2; ICU/surgical HDU (no ventilated pts on day of visit).

Level II units are "capable of providing a high standard of general intensive care, including complex multi-system life support…mechanical ventilation, renal replacement therapy and invasive cardiovascular monitoring for an indefinite period"

Mixed unit – admits medical surgical trauma and paediatric patients.

The unit runs a closed unit model where the ICU Team has the primary role in the delivery of critical care the ICU specialists are responsible (after consultation with sub-specialty teams) for all admissions, discharges and management decisions

HDU – HDU level support for critically ill medical and surgical patients[2].

The unit is cramped.

All clinical patient bay spaces undersized to AHFG. As a result, there is inadequate space for nurse base within each bed space. Floor mounted bollards mean placement of beds is inflexible.

There is a serious lack of storage.

Serious issues with infection control; surfaces and finishes for walls, ceilings and floors were sub-optimal, separation of service and patient visitor flows is sub-optimal as was purpose designed storage space for consumables and waste and dirty linen holding.

There are no single bedrooms with ensuite facilities.

Key clinical support spaces are missing. There is no medications room – the area for medications management is an open bay which is open directly to the patient spaces.

Beds are arranged in a horseshoe around the staff base and there is no ability for staff to be in a discrete off-stage space.

The unit is single glazed, and several window panes were cracked. There are inadequate environmental systems (heating/cooling/ventilation). Maintenance was poor.

The reverse osmosis water system for renal dialysis appeared to be retro-fitted.

The environment is seriously run down.

The layout does not support safe MoC delivery.

3.3 Palmerston North Hospital – Inpatient Unit – Ward 24

3.3.1 Gross Floor Area

The AHFG recommend IPU units are planned at approximately 36m2/bed. Ward 24 is approximately 27m2/bed which is 75% of the benchmark 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 an IPU was 190. Ward 5 scored a total of 122/190.

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
Palmerston N	Orthopaedic (surg o'flow) Wd 2	9	20	1	11	13	3	29	12	24	122
	Total Possible Score	15	20	5	30	15	5	35	20	45	190

3.3.3 Supporting notes from CFFFP Assessment

Ward 24 is a 32-bed orthopaedic unit which takes overflow for surgical and medical.

[2] Clinical Director, ICU, PNH

While the layout of the unit is reasonable (perhaps originally a racecourse ward) it is old, shabby and run down.

There is a mix of 1, 4 and 5 bed bedrooms. None are ensuited, so the ability to isolate patients is inadequate. All ablutions shared and inadequate.

Bedrooms although AHFG sized are too small for management of some orthopaedic patients.

There is a serious lack of storage throughout the unit.

Flows in large dirty utility room do not support clean to dirty flows and it doubles as waste and dirty linen repository.

There is a lack of clinical support spaces; storage, whanau, procedure room and staff spaces.

There are issues with the environmental systems (heating/cooling/ventilation), and the ward is single glazed.

Although the unit could be reconfigured to meet AHFG (36m2/bed), it would likely mean a reduction in bed numbers if enough and storage and support spaces were included.

3.4 Palmerston North Hospital - Operating Theatre

3.4.1 Gross Floor Area

The AHFG recommend OT units are planned at approximately 280m2/OR. Palmerston North Hospital OT Suite is approximately 319m2/OR which is 114% 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 an OT suite was 220. The Palmerston North Hospital OT suite scored a total of 139/220.

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
Palmerston North	OT's	13	13	1	28	9	5	32	15	23	139
	Total Possible Score	**20**	**25**	**5**	**50**	**15**	**5**	**40**	**20**	**40**	**220**

3.4.3 Supporting notes from CFFFP Assessment visit

There are 7 x operating rooms (2 of which are smaller) in the OT suite.

The overall space provided does not support the 7 x operating rooms (OR's).

There are an inadequate number of, and non-AHFG compliant, pre-op and PACU spaces.

The pre-op arrival patient spaces double as post-op spaces. There are insufficient private spaces for patient interviews in this space. A separate pre-op holding space is provided deeper within the unit.

PACU has 12 beds on plan, but 6 are used for a short stay surgical unit (SSSU) with an overnight LOS, in the heart of the OT suite. Patients in the SSSU have no ablution facilities, so must use the facilities located in the patient arrival space, so wander through the unit to access these.

5 of the 7 x OR's have good clean and dirty flows to/from SSU, but the other 2 do not – they use a public corridor.

There are not enough enclosed patient spaces on the patient journey to support flows for infectious patients.

ECT is carried out in PACU 2-3 times a week.

There is an overall lack of storage space and corridors have been commandeered for this purpose.

Environmental systems are inadequate; heating/cooling/ventilation.

2 x operating rooms are sized to AHFG sized rooms, but the others are too small for current purpose. All ceilings are at 2.7m high (AHFG 3.0m) so staff constantly have to manoeuvre around ceiling mounted equipment, lights, pendants etc.

Overall the OT suite does not support the MoC and could not be reconfigured within existing space to do so.

DHB Feedback 05/09/2019;

Query size of OT suite: MoH re-measured off CAD drawings issued by DHB on 09/09/2019. The SSSU which is embedded in the suite was then omitted from the GFA, and the new total GFA is 2234m2 which is 319m2/OR giving a new overall percentage of 114%. (updated above).

Query size of individual OR's: MoH re-measured off CAD drawings issued by DHB on 09/09/2019. There are 4 x 38m2, 1 x 54m2, 1 x 55m2 and 1 x 58m2.

Significant lack of storage was an issue in the suite. Items are stored in corridors which obstructs and reduces circulation space to the extent that turning circles to enter some key rooms is compromised. The lack of storage and work arounds cause safety and infection control concerns.

3.4.3.1 Endoscopy suite

The endoscopy suite is in a separate location to the OT suite and did not undergo a full CFFFP assessment, however clinical staff requested we had a quick look as they had concerns about the area. The patient pre/post-procedural spaces were not seen.

The endoscopy suite consisted of two endoscopy procedure rooms with one clean-up/scope reprocessing space positioned between the two rooms.

The patient pre/post procedure space was over the corridor opposite the suite and was not seen due to time constraints.

The procedure rooms are undersized and cramped (AHFG size 42m2)

Clean-up/scope processing space is sub-optimal: it is very small with inadequate layout to support clean and dirty flows (it is designed around a structural column). It is likely to be an infection control risk. It is placed between and accessed from the two procedure rooms and opens into the corridor. The two procedure rooms are undersized to AHFG.

AHFG guidelines; Procedure/operating room general, 42m2 and the space to support 2 x procedure rooms: scope reprocessing room 17m2, endoscope store, 2m2 endoscope store and scrub-up/gowning, 6m2).

3.5 Palmerston North Hospital – Mental Health Inpatient Unit – Ward 21

3.5.1 Gross Floor Area

The AHFG recommend MH units are planned at approximately 80m2/bed. The Palmerston North Hospital MH inpatient unit is approximately 68m2/bed which is 85% of the recommended size.

3.5.2 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 Palmerston North Hospital MH IPU scored a total of 171/275.

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
Palmerston North	MHIPU	20	25	3	34	26	5	17	7	34	171
	Total Possible Score	**20**	**30**	**15**	**55**	**30**	**5**	**35**	**20**	**65**	**275**

3.5.3 Supporting notes from CFFFP Assessment visit

Ward 21 is a 24-bed closed unit, including a 6 bed Higher Needs Unit (HNU) with 3 seclusion rooms.

Inpatient Wings

There are two wings of beds which are used to support gender separation (10 F and 8 M). All bedrooms in these two wings are on external walls but none are ensuited, so isolation (infectious or otherwise) of patients is not supported. There are 3 other beds which have ensuites in the general part of the unit. There is inadequate clinical support space to support the patient cohort; lounge/dining/activity etc.

HNU: There are 6 beds in the HNU, 3 of which are seclusion rooms, which are used as bedrooms when demand exceeds capacity. All have ensuites. The area has one courtyard however does not have enough clinical support spaces; lounge/dining/activity etc.

Overall

The whole unit is dark, run-down, has sharp edges, blind spots (necessitating the use of internal CCTV's for patient observation), has a raised staff base and inadequate clinical support space to support the patient cohort; especially lounge/dining/activity/family/whanau and external courtyards.

Staff consider the unit a non-therapeutic, dangerous and unsafe environment. Improvements to the environment have been reactive to particular incidents, rather than planned.

The overall layout of the unit does not support a contemporary MH IPU MoC.

2019

Clinical Facility fitness for Purpose

HAWKES BAY DISTRICT HEALTH BOARD

Author: Rose Macfarlane
Project: National Asset Management Plan
Date: 02 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.

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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;

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- Building & infrastructure
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- 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 Units or Emergency Departments 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;

- Emergency department (ED)
- Operating Theatre suite (OT)
- Intensive Care units (ICU)
- Typical Inpatient Units (IPU)

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 – ED, ICU, OT, IPU & 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 – Hawkes Bay

2.1 Clinical facilities assessed in your DHB

Hawkes Bay DHB was used as a pilot DHB for the CFFFP Assessments.

The following facilities were assessed in your DHB:

DHB	Campus/Hospital	Clinical Unit	Date
Hawkes Bay	Hawkes Bay Hospital	Inpatient unit – Ward B2 - medical	18/19 February 2019
		Inpatient unit – Ward A - surgical	
		Operating theatre suite	
		Emergency department	
		Intensive care unit	

3 Findings per Clinical Facility

3.1 Hawkes Bay Hospital – Inpatient Unit – Ward B2

3.1.1 Gross Floor Area

The AHFG recommend IPU units are planned at approximately 36m2/bed. Ward B2 is approximately 28m2/bed which is 78% of the benchmark 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 an IPU was 190. Ward M2 scored a total of 120/190.

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
Hawkes Bay	Medical IPU - Blk B	12	14	3	16	13	3	23	12	24	120
	Total Possible Score	**15**	**20**	**5**	**30**	**15**	**5**	**35**	**20**	**45**	**190**

3.1.3 Supporting notes from CFFFP Assessment

Ward B2 is a medical ward with 27 beds (+ 1 un-resourced bed).

The bedroom configuration is; 6 x single bedrooms (4 of which are negative pressure), 3 x 4 bed bedrooms, 3 x 3 bed bedrooms (1 of which is bariatric). 1 x un-resourced bed is set-up in a former staff room which has no hand wash basin or medical services (oxygen, suction) and is frequently used for overflow patients. All single bedrooms and three bed bedrooms have dedicated ensuites, the rest share bathroom facilities which are located in the central core.

Ward B2 is configured as a racecourse ward with a layout that does not suit the model of care.

All bed spaces undersized (to AHFG).

The negative pressure room configuration is not compliant with AHFG, which recommends a negative pressure bedroom should have its own ensuite and ante-room. The unit has two, two-bedroom negative pressure pods (total 4 beds). In this configuration each set of two rooms shares a lobby which provides direct access into each bedroom and the airlock/ante-room which is positioned between the bedrooms. Each bedroom has a dedicated ensuite. If an infectious patient

who requires negative pressure is admitted, the shared ante room precludes the use of the other bedroom in the pod. This is problematic in a ward which has demand and capacity issues.

The bariatric three bed bedroom has a dedicated internal ensuite, which is a converted former bed space. Access into the ensuite is difficult due to the angles of the walls.

There are significant issues with the heating/cooling/ventilation systems

There is a lack of storage space.

Remodel of existing spaces to meet AHFG standards within existing footprint would not be possible.

3.2 Hawkes Bay Hospital – Inpatient Unit – Ward A3

3.2.1 Gross Floor Area

The AHFG recommend IPU units are planned at approximately 36m2/bed. Ward A3 is approximately 18m2/bed which is 50% of the benchmark 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 an IPU was 190. Ward A3 scored a total of 118/190.

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
Hawkes Bay	Surgical IPU - Blk A	12	18	1	18	13	3	27	4	22	118
	Total Possible Score	**15**	**20**	**5**	**30**	**15**	**5**	**35**	**20**	**45**	**190**

3.2.3 Supporting notes from CFFFP Assessment

Ward A3 is a surgical ward. It has 26 beds (+ 3 un-resourced) and often runs at 29 beds due to demand. The three un-resourced beds are set up in the patient lounge (2) which has no medical services (oxygen/vacuum) nor hand wash basin and a clinic room (1) which does have medical services (oxygen, vacuum) and a hand wash basin.

It has a single corridor configuration.

The bedroom configuration is; 4 x 3 bed bedrooms (with dedicated internal ensuite created in former bed space), 2 x 4 bed bedrooms with shared bathroom facilities across the corridor, 6 x single bedrooms; 2 with full ensuites, the other 4 with either showers or WC's that they share.

All bedroom spaces are undersized to AHFG.

Their model of care requires a higher ratio of single bedrooms.

There are significant issues with heating/cooling/ventilation systems and there is poor clinical lighting the bedrooms.

The layout is poor and there is a serious lack of storage and clinical support spaces.

Remodel of existing spaces to meet AHFG standards within existing footprint would not be possible.

3.3 Hawkes Bay Hospital - Operating Theatre

3.3.1 Gross Floor Area

The AHFG recommend OT units are planned at approximately 280m2/OR. Hawkes Bay Hospital OT Suite (Kempthorne & Meade Clinical Centre) is approximately 276m2/OR which is 99% 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 an OT suite was 220. The Hawkes Bay Hospital OT suite scored a total of 96/220.

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
Hawkes Bay	OT's	10	10	1	26	9	3	16	10	11	96
	Total Possible Score	**20**	**25**	**5**	**50**	**15**	**5**	**40**	**20**	**40**	**220**

3.3.3 Supporting notes from CFFFP Assessment visit

There are 7 OR's and 1 procedure room in the OT suite.

Demand exceeds capacity and staff felt they required 3 more OR's and associated pre/post-operative spaces to meet demand.

The layout is reasonable and supports the model of care, however, there is no dedicated space to support a paediatric flow through the suite.

DOSA and day cases arrive at a dedicated pre-operative area which doubles as third stage recovery. Acute and caesarean sections and emergency surgery arrives at a separate entry which has a 2 bay waiting space. OT suite waste and acute patient flows cross through the same entry/exit point.

Overall the unit lacks clinical support space for staff and storage spaces, especially for large items of equipment such as image intensifiers. Biomedical engineers provide a hospital wide service and are based outside the unit.

CSSD is in one corner of the OT suite.

3.4 Hawkes Bay Hospital – Emergency Department

3.4.1 Gross Floor Area

The AHFG recommend emergency departments are planned at approximately 50m2/bed. Hawkes Bay Hospital ED is approximately 43m2/bed which is 86% 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 an ED was 195. Hawkes Bay Hospital ED scored a total of 120/195.

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
Hawkes Bay	ED	9	9	3	19	9	5	29	15	22	120
Total Possible Score		**20**	**25**	**5**	**35**	**15**	**5**	**35**	**20**	**35**	**195**

3.4.3 Supporting notes from CFFFP Assessment

While the ED has good external functional relationships it still has significant issues.

The layout of the unit is piecemeal and does not the support desired flows for the model of care.

All patient spaces too small (to AHFG).

Demand exceeds capacity and there is a significant shortfall of patient bay & resuscitation spaces for the demand. The current patient bay configuration has 30 patient spaces and has;

- 6 x triage/fast-track,
- 10 x spaces in cubicles area,
- 3 x resuscitation bays,
- 6 x assessment area (ballroom),
- 4 x observation area and
- 1 x isolation room.

The current assessment/resuscitation/cubicle area has a total of 19 patient bays which staff believe is a shortfall of approximately 30% - if the FACEM[2] guidelines were applied at a ratio of 1 bay: 15000 presentations, 30 would be needed for the current workload. The current demand in the observation area would support an additional two bays.

The ED is missing some key clinical spaces such as dedicated eye/ENT room, dental room, plaster room. There are no designated mental health interview rooms and the room that is used for mental health assessments doubles as a whanau room for relatives of sick patients. It only has one door which does not meet the AHFG for mental health assessment (should be two doors to ensure staff have an exit).

The waiting room is overlooked by triage and reception. Patients lie on trolleys in this space. A staff meeting room that opens directly into the waiting room is used as the eye room.

The ambulance bay (3 bays) opens directly into the resuscitation area.

The ED lacks key clinical support spaces, including staff facilities and storage spaces.

There is a serious lack of storage throughout the unit.

Patient observation from staff bases is compromised.

A remodel within existing footprint to meet AHFG standards would not be possible.

[2] Faculty Australasian College of Emergency Medicine

3.5 Hawkes Bay Hospital – Intensive Care Unit

3.5.1 Gross Floor Area

The AHFG recommend ICU units are planned at approximately 70m2/bed. Hawkes Bay Hospital ICU is approximately 43m2/bed which is 86% of the recommended size.

3.5.2 Total score of the CFFFP Assessment

The CFFFP assessment included nine principles most of which had multiple questions. The total score possible for an ICU was 185. The Hawkes Bay Hospital ICU/HDU scored a total of 133/185.

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
Hawkes Bay	ICU	12	11	3	20	9	3	29	20	26	133
	Total Possible Score	15	20	5	25	15	5	35	20	45	185

3.5.3 Supporting notes from CFFFP Assessment

The ICU operates a n ICU/HDU model.

The unit has;

- 4 x HDU bed bays,
- 1 x isolation/paediatric room, (positioned between HDU and ICU beds and used as a flex space,
- 6 x ICU bed bays which includes 1 x enclosed room for negative pressure patients (with anteroom and ensuite).

The unit is funded for 5 x ICU and 6 x HDU beds and demand exceeds capacity.

The beds are placed in a horseshoe configuration around a central staff base and clinical support areas. Staff support space and the main waiting room for visitors are on the other side of the main entry corridor.

The main entry is a single point of entry to the unit so is used for all patient, staff, visitor, service and waste removal flows. The exception being deceased patients who are taken out the fire exit between ICU beds 4 & 5.

The unit has good external functional relationships; ED, OT, radiology.

There are significant issues in the unit;

- The unit is cramped
- Serious lack of storage – cluttered corridors and bays
- The medications space is open,
- Infection control issues; storage, poor surfaces walls/ceilings/floors, poor maintenance
- Dirty utility used for storage of rubbish and dirty linen
- All patient bed spaces are all smaller than AHFG except ICU 6 and the isolation/paediatric room
- Ceiling mounted bollards in ICU beds remain in the same position as they cannot be manoeuvred easily (maintenance issue).
- Lack of staff support space; meeting rooms, offices, change rooms etc.

- Lack of family support space; whanau, interview rooms etc.
- Circulation space within the unit is tight as corridors are narrow,
- Procedure lighting is poor in the patient bays

Remodel within existing footprint to meet AHFG standards would not be possible.

2019

Clinical Facility fitness for Purpose

CAPITAL & COAST DISTRICT HEALTH BOARD

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

Contents

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

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- Typical Inpatient Units (IPU)

And

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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.

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#3	Improve access
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#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 – Capital & Coast

2.1 Clinical facilities assessed in your DHB

The following facilities were assessed in your DHB:

DHB	Campus/Hospital	Clinical Unit	Date
Capital & Coast	Kenepuru Hospital	Operating Theatres	4 & 5 June 2019
	Kenepuru	Mental Health inpatient unit	
	Kenepuru Hospital	Ward 7, ORA	
	Kenepuru Hospital	Accident & Medical	

3 Findings per Clinical Facility

3.1 Kenepuru Hospital - Operating Theatre

3.1.1 Gross Floor Area

The AHFG recommend OT units are planned at approximately 280m2/bed. Kenepuru Hospital OT Suite is approximately 333m2/OR which is 119% 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 an OT suite was 220. The Kenepuru Hospital OT suite scored a total of 80/220.

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
Kenepuru	OT's	10	5	1	16	3	3	20	4	18	80
	Total Possible Score	**20**	**25**	**5**	**50**	**15**	**5**	**40**	**20**	**40**	**220**

3.1.3 Supporting notes from CFFFP Assessment visit

The OT Suite has 3 OR's and 1 procedure room. The largest OR is approximately 60m2 while the other two are the size of former AHFG small OT. The procedure room which is long and narrow, is currently used for dental procedures and it is proposed to be used for endoscopy in future.

The post-operative stage 2 chair bays are a little cramped.

The sterile store opens directly onto the main hospital corridor which is not ideal and access to CSSD one floor below is not optimal.

Storage an issue with some equipment items being stored in corridors.

The unit is well maintained.

There is limited ability to re-plan within existing footprint

3.2 Kenepuru Hospital – Mental Health Inpatient Unit – Psychogeriatric

3.2.1 Gross Floor Area

The AHFG recommend MH units are planned at approximately 80m2/bed. The Kenepuru Hospital MH inpatient unit is approximately 71m2/bed which is 89% 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 Kenepuru Hospital MH IPU scored a total of 136/275.

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
Kenepuru	Older Persons MHIPU	16	23	11	17	18	3	23	5	20	136
	Total Possible Score	**20**	**30**	**15**	**55**	**30**	**5**	**35**	**20**	**65**	**275**

3.2.3 Supporting notes from CFFFP Assessment visit

The psychogeriatric unit has an H shaped footprint and has 16 beds.

They admit patients from the 3-DHB's (Wairarapa, Hutt, C&C). Capacity is only just keeping pace with demand and there are several strategies in place to manage this; criteria for admission keeps tightening although this has almost reached a ceiling and they run an outreach service to the hospital within general medicine at C&C.

A de-escalation room has been created next to the main dining room, but tits location is problematic as it is remote from rest of unit.

10 beds have dedicated ensuites and the remaining 6 beds share two well placed bathrooms.

It is difficult to separate cohorts; age, gender, diagnoses within the bed arrangement. Diagnostic groups are varied as are age groups, with younger adults presenting more than in the past.

There is a blind spot from the door, within the bedrooms with ensuites.

There is a lack of space for clinical staff, communal space for patients and spaces for families.

The general layout compromises the model of care.

There would appear to be some scope within the H-plan form of the building to re-plan to better meet model of care requirements and AHFG.

The unit is well maintained.

3.3 Kenepuru Hospital – Inpatient Unit – Ward 7

3.3.1 Gross Floor Area

The AHFG recommend IPU units are planned at approximately 36m2/bed. Ward 7, ORA, is approximately 51m2/bed which is 141% of the benchmark 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 an IPU was 190. Ward 7, ORA, scored a total of 90/190.

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
Kenepuru	Older Persons Rehab	6	10	1	8	11	3	15	12	24	90
	Total Possible Score	**15**	**20**	**5**	**30**	**15**	**5**	**35**	**20**	**45**	**190**

3.3.3 Supporting notes from CFFFP Assessment

Ward 7 is a racecourse ward for older persons rehabilitation and assessment (ORA), with the following bed configuration; 2 x 4 bed bedrooms, 2 x 3 bed bedrooms, 6 x single bedrooms. One single bedroom has a dedicated ensuite, the rest of the bathroom facilities are shared.

The ward is generally a well fitted and maintained unit, suitable for its purpose. It appears to have been a larger ward originally, reduced in size for current purpose. It has large gym space.

There are some issues with the HVAC system.

There is limited storage.

Building grid and width would appear to allow for refit to AHFG e.g. the addition of ensuites.

3.4 Kenepuru Hospital – Emergency Department

3.4.1 Gross Floor Area

The AHFG recommend emergency departments are planned at approximately 50m2/bed. Kenepuru Hospital A&M is approximately 91m2/bed which is 182% 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 an ED was 195. Kenepuru Hospital ED scored a total of 69/195.

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
Kenepuru	A&M	14	8	3	7	6	3	14	4	10	69
Total Possible Score		**20**	**25**	**5**	**35**	**15**	**5**	**35**	**20**	**35**	**195**

3.4.3 Supporting notes from CFFFP Assessment

This is an Accident & medical unit, not an emergency department. It is run by local GP service after hours. All significant cases bypass and go to Wellington, however, it can get busy and often peaks during the weekend.

Resuscitation room used for emergencies such as unexpected cardiac arrest but no major trauma.

It the unit was ever to become a full ED; re-planning would require the building to be expanded or space taken from adjacent areas.

The unit is well maintained.

2019

Clinical Facility fitness for Purpose

HUTT VALLEY 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;

- Emergency department (ED)
- Operating Theatre suite (OT)
- Intensive Care units (ICU)
- Typical Inpatient Units (IPU)

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 – ED, ICU, OT, IPU & 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 – Hutt Valley

2.1 Clinical facilities assessed in your DHB

The following facilities were assessed in your DHB:

DHB	Campus/Hospital	Clinical Unit	Date
Hutt Valley	Hutt Hospital	Ward GSG	29 May 2019
Hutt Valley	Hutt Hospital	OPRS	29 May 2019
Hutt Valley	Hutt Hospital	Mental Health inpatient unit	29 May 2019

3 Findings per Clinical Facility

3.1 Hutt Valley hospital – Inpatient Unit – Ward GSG

3.1.1 Gross Floor Area

The AHFG recommend IPU units are planned at approximately 36m2/bed. Ward GSG is approximately 34m2/bed which is 94% of the benchmark 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 an IPU was 190. Ward GSG scored a total of 103/190.

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
Hutt	Surg/Gynae Heretaunga	11	9	3	11	13	3	17	10	26	103
	Total Possible Score	**15**	**20**	**5**	**30**	**15**	**5**	**35**	**20**	**45**	**190**

3.1.3 Supporting notes from CFFFP Assessment

The GSG inpatient ward has 27 beds and is a general surgical and gynaecology surgical unit.

It is configured as a racetrack unit with support spaces in the middle and staff and patient day room at one end on an external wall and bedrooms along the two other external walls. There are; 7 x single bedrooms and 5 x four bed bedrooms. Bathroom facilities are shared except for one single bedroom which has a dedicated ensuite.

Demand exceeds capacity.

Unit generally shabby throughout - painted surfaces, torn wall paper, shower linings etc.

There are issues with tap hardware; old taps and shower heads fall off. Showers hardware and flooding issues - some with drainage grills at entrance to prevent water flowing back into the bedrooms. Curtain tracks can't take disposable curtains which is an infection control issue. Walls are covered in wallpaper so are more difficult to clean. The unit is single glazed. Carpet tiles have been used and they have no trim on upper cove edge. The main patient lifts are too small especially for bariatric beds. Fire egress for the unit is via the patient day room, which is accessed through a set of double doors.

3.2 Hutt Valley hospital– Inpatient Unit – OPRS

3.2.1 Gross Floor Area

The AHFG recommend IPU units are planned at approximately 36m2/bed. OPRS is approximately 62m2/bed which is 173% of the benchmark 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 an IPU was 190. Ward 9 scored a total of 112/190.

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
Hutt	Older Persons Rehabilitation Se	12	14	3	7	6	5	27	10	28	112
	Total Possible Score	**15**	**20**	**5**	**30**	**15**	**5**	**35**	**20**	**45**	**190**

3.2.3 Supporting notes from CFFFP Assessment

The Older Persons Rehabilitation Service (OPRS) consists of two wings; east and west which are run as one unit, each wing is a ward configured in a racecourse layout.

There is a total of 43 physical beds across both wings, but the unit is resourced for 32. The bed configuration in the west wing is; 5 x 4 bed bedrooms, 4 x 1 bedroom (total of 24 beds with 18 funded) and in the east wing; 3 x 4 bed bedrooms, 1 x 3 bed bedroom, 4 x 1 bedrooms (total 19 beds with 14 funded).

The ALOS is around 30 days. Demand exceeds capacity so they utilise the 11 un-resourced beds when necessary.

Although most bedrooms are AHFG compliant, they are considered too small for the purpose of rehabilitation when considering LOS, whanau, and equipment so the 11 un-resourced beds allow some flexibility of use/space e.g. use 4 bed bedrooms for only 2 pts. Only 1 single bedroom has access to an ensuite, but it is shared with a 3-bed bedroom on the other side, so all the bathroom facilities in the unit are shared.

Only half the beds have medical gases, but they are required at each bed head – portable O2 is used when necessary.

It would be desirable to have more single beds for isolation/palliation for the model of care as well as 2 x ADL independent living flats (bed, lounge, kitchen, bathroom).

The gym and ADL spaces are currently downstairs which is sub-optimal.

There are no whanau or interview spaces for families.

They practice gender separation which sometimes limits the use of beds.

There is pin pad access to the clean utility (medications room) and would prefer swipe. The only fire escape has swipe access.

There is one relatively new air handling unit (approximately 2 years old) for whole unit, but there are still issues between the wings – one too hot the other too cool. The position of the sun creates a challenge in calibration between the two wings.

3.3 Hutt Valley hospital– Mental Health Inpatient Unit – Te Whare Ahuru

3.3.1 Gross Floor Area

The AHFG recommend MH units are planned at approximately 80m2/bed. The Hutt Valley hospital MH inpatient, Waahi Oranga, unit is approximately 71m2/bed which is 89% of the recommended size.

3.3.2 Total score of the CFFFP Assessment

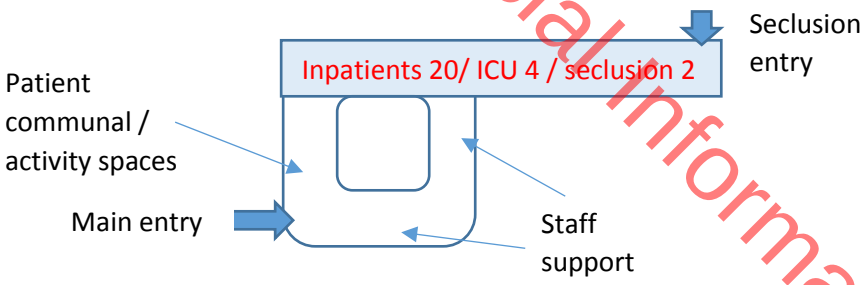
The CFFFP assessment included nine principles most of which had multiple questions. The total score possible for a MH IPU was 275. The Hutt Valley hospital MH IPU, Waahi Oranga, scored a total of 177/275.

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
Hutt	MHIPU TWA	20	21	11	24	28	5	21	9	38	177
	Total Possible Score	20	30	15	55	30	5	35	20	65	275

3.3.3 Supporting notes from CFFFP Assessment visit

Te Whare Ahuru (TWA) has 24 beds (20 acute and 4 ICU) and 2 seclusion rooms.

The unit is 'b' shaped with staff support on two sides of the 'o' shape, patient communal therapeutic spaces on one side of the 'o' and patient accommodation along the fourth side of the 'o' and extending along the finger. In the middle of the 'o' is an internal patient courtyard.



The unit consists of 24 single bedrooms with shared bathrooms and 2 seclusion rooms with a shared ensuite. A single central corridor system runs through the unit.

Layout of unit does not support model of care; internal access to seclusion is via ICU beds which is sub-optimal especially during crises. A patient being taken from open inpatient side to closed ICU side must go through ICU. ICU is area of greatest risk to staff and patients. There is no audio privacy especially between seclusion and ICU.

Cohorting patients by gender, diagnosis, acuity is extremely challenging. There is no de-escalation area other than the seclusion pod.

The unit has 100% single bedrooms, but none have ensuites, so all bathroom facilities are shared.

Demand exceeds capacity (3 DHB model (Wairarapa, Hutt, C&C) with most ICU beds at Hutt). Seclusion rooms are used as beds. There are too few ICU beds (4 currently).

There are not enough spaces for clinical interaction, patients to retreat or for activities.

Alcoves for interaction needed. There are not enough outdoor courtyards and main central one is of poor standard.

There is a lack of family and staff support spaces.

Staff have poor observation of patients throughout unit.

One external door constantly being busted out of which poses security risks for patients and staff.

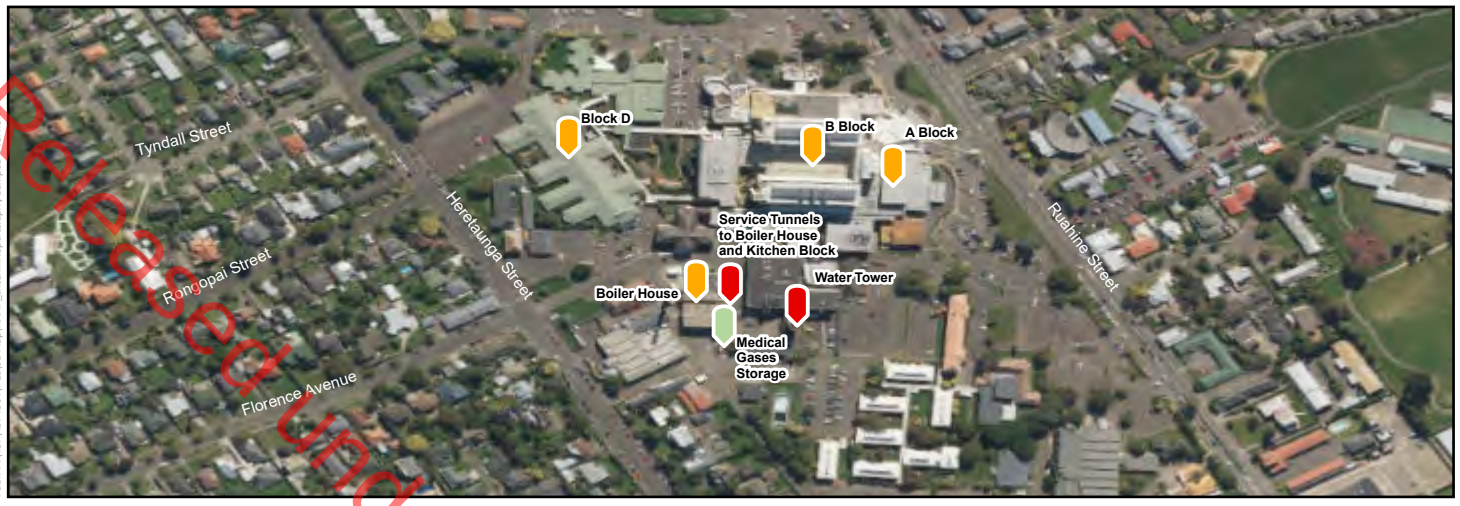
The unit is shabby and run down.

Palmerston North Hospital

MidCentral DHB

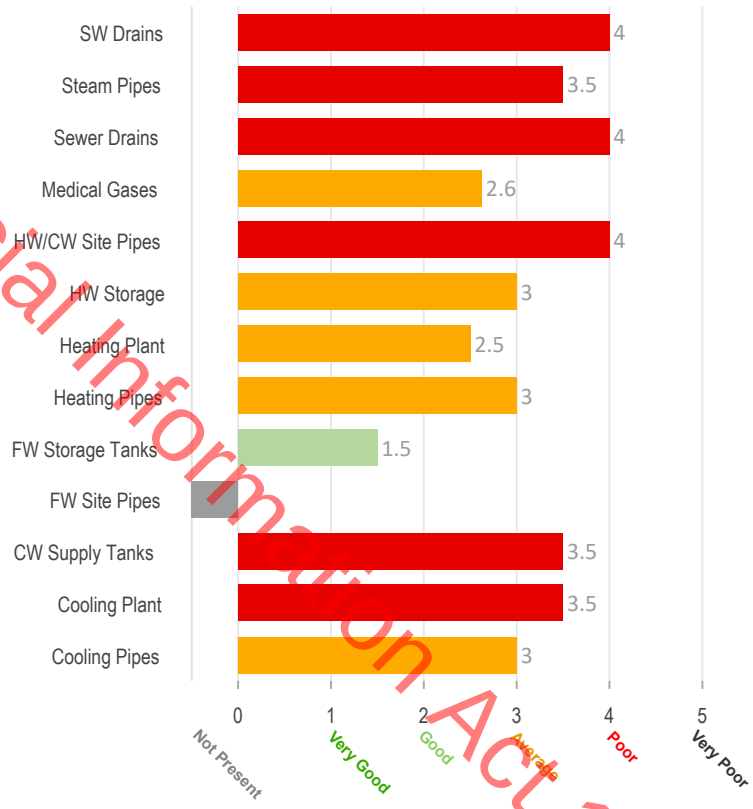
Beca Campus ID: 815
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 9/09/2019

Site Overview

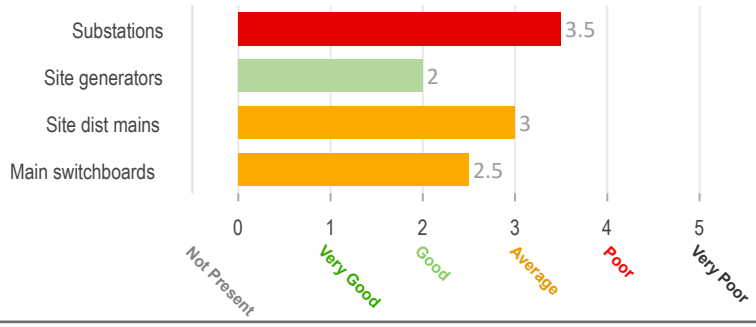


Buildings Surveyed

Site wide Mechanical Infrastructure Condition



Site wide Electrical Infrastructure Condition



Engineering Commentary

The boiler chimney appears ok but there is a risk that it could collapse onto other buildings in an earthquake. Anecdotal evidence suggested there are historic structural, fire separation and building fabric issues on several other buildings. There appeared to be a lot of organic growth on the walls and roof forms of taller buildings; inferring routine maintenance is not occurring frequently.

Part of the electrical infrastructure is in original conditions, e.g. the transformers are 47 years old and nearing the end of its life expectancy. The electrical infrastructure generally is of good to average condition with some recommendations to replace some of the low voltage main switchboards. The backup generator plant is in varied but overall good condition.

Mechanical sitewide infrastructure is of average to very poor condition. Suspected capacity issues exist for the medical gas and aging assets nearing the end of its life expectancy. Failures (of sitewide infrastructure) are evident and increasing rates of failure can be expected.

The DHB advised that recently commissioned detailed engineering reports (including medical gases and 3 waters) have since identified fire separation issues and very poor fire systems generally together major structural issues with the water tower (which leaves this site without water storage).

Water Tower

Palmerston North Hospital (MidCentral DHB)

Beca Building ID: 186
NAMP ID: 10530
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

3.4

DHB Assessed *% NBS* Rating

No Data

General Building Information

Approximate Building Age: 1925

Survey date: 12/05/2019

Gross Floor Area (m2): No data

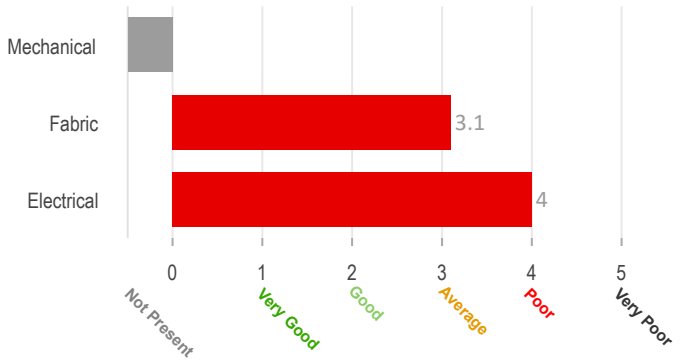
Fire Separation Issues: Low likelihood of issues

Asbestos Issues: Low likelihood of issues

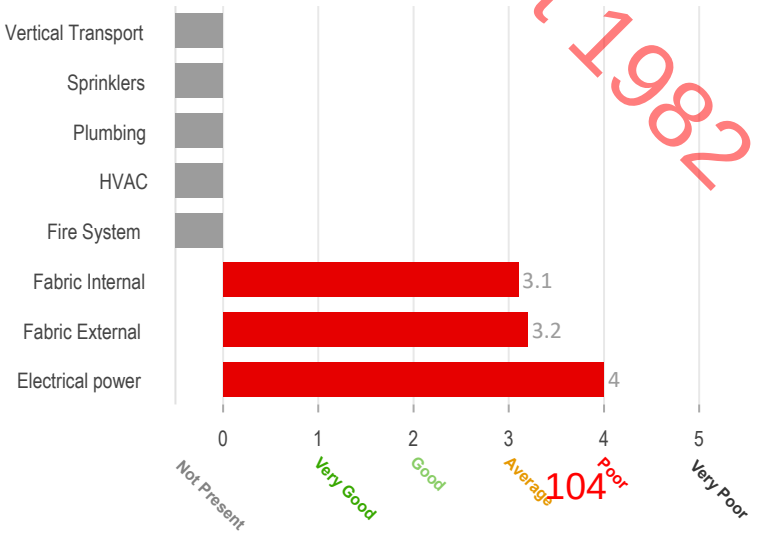
Seismic Services Restraint: Not Observed

Summary of building condition

By Discipline



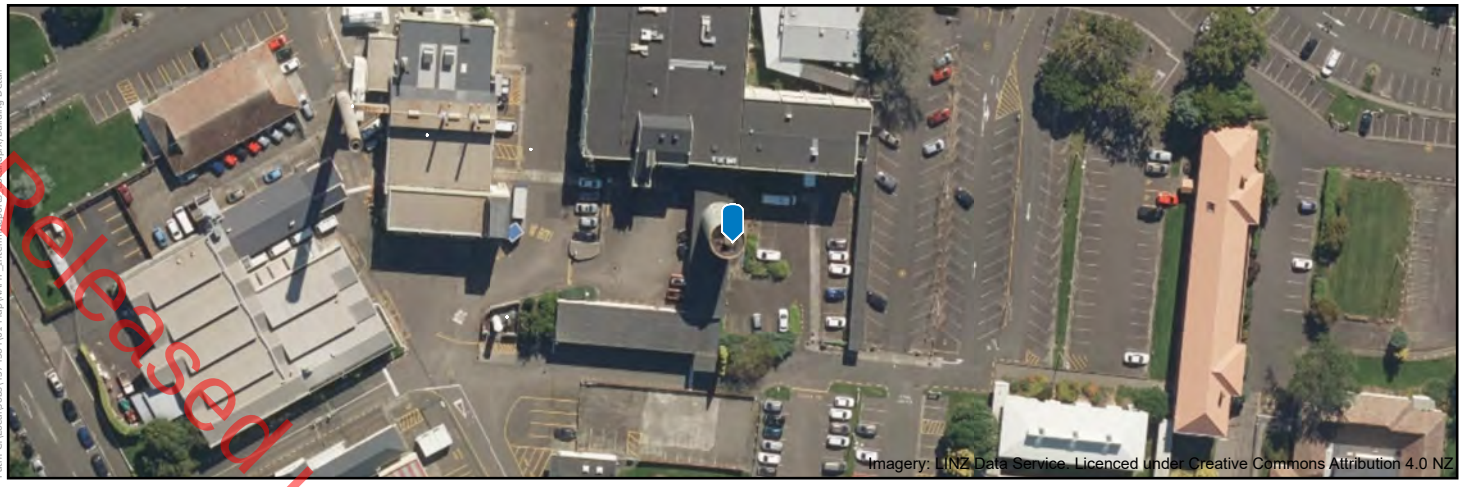
By Element



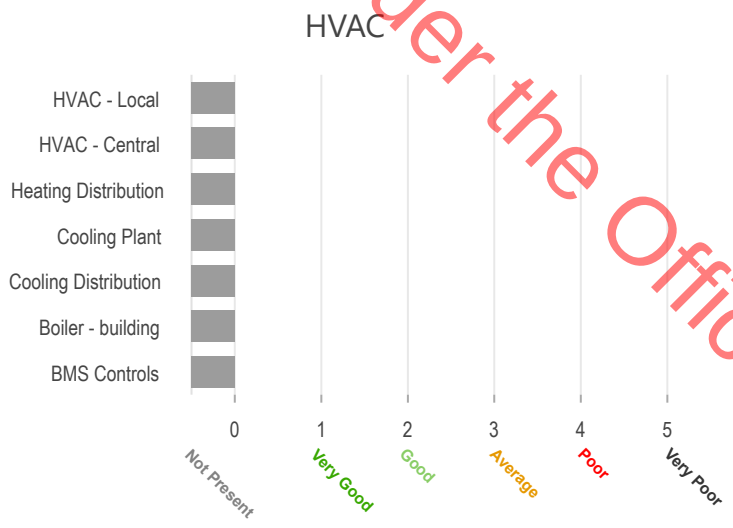
Beca Building ID: 186
NAMP ID: 10530
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

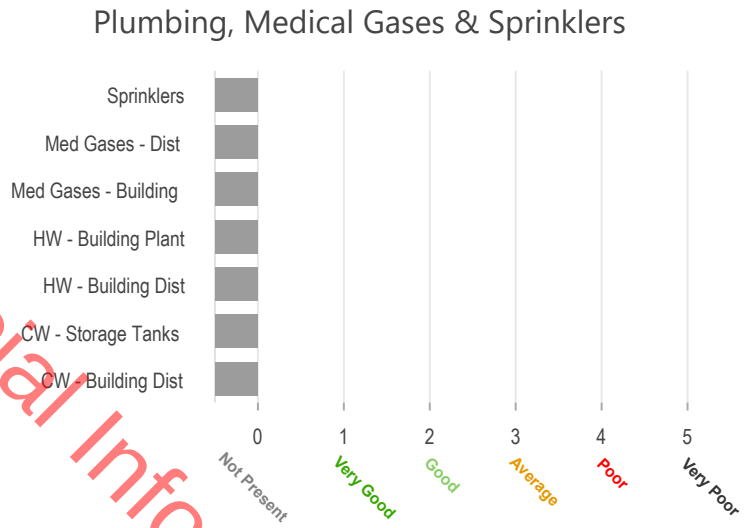
Approximate building location

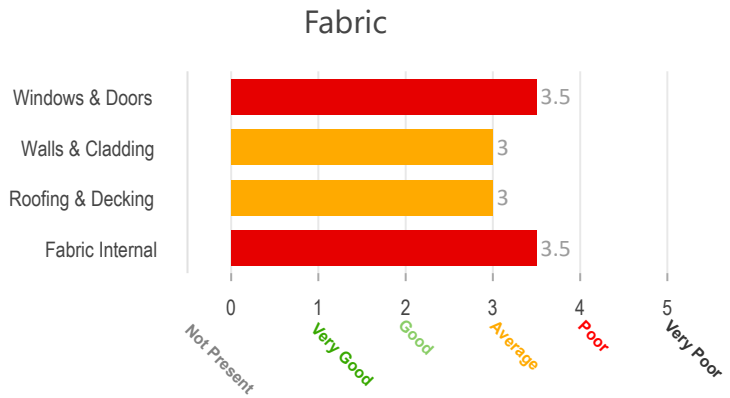
Water Tower

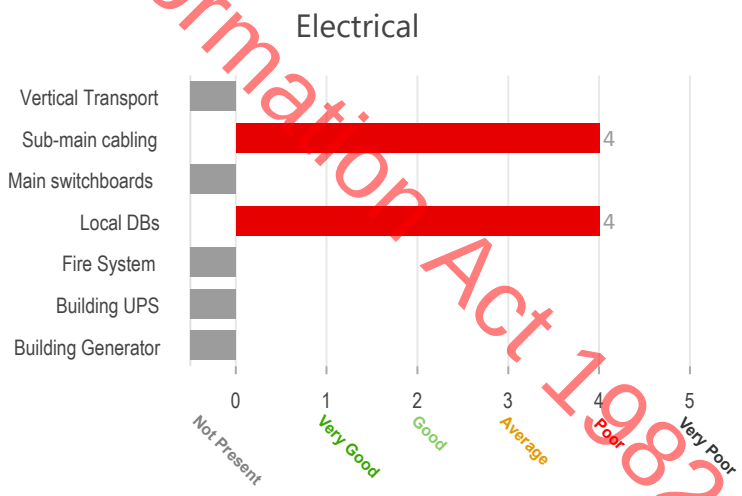


Summary of building element condition details









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.

Service Tunnels to Boiler House and

Palmerston North Hospital (MidCentral DHB)

Beca Building ID: 185
NAMP ID: 10526
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior

No photo available

Services & Fabric Score

2.8

DHB Assessed *% NBS* Rating

72% IL4

General Building Information

Approximate Building Age: No data

Survey date: 12/05/2019

Gross Floor Area (m2): 1580

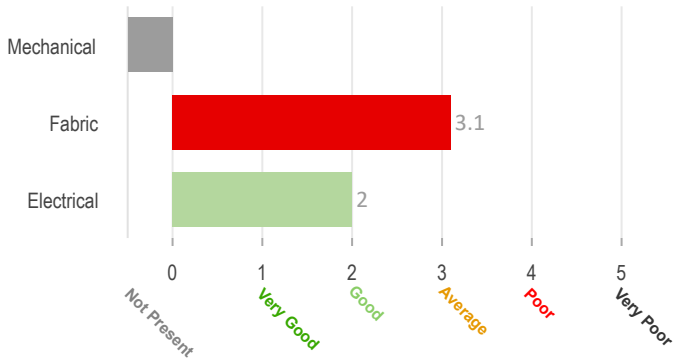
Fire Separation Issues: Significant known issues

Asbestos Issues: Low likelihood of issues

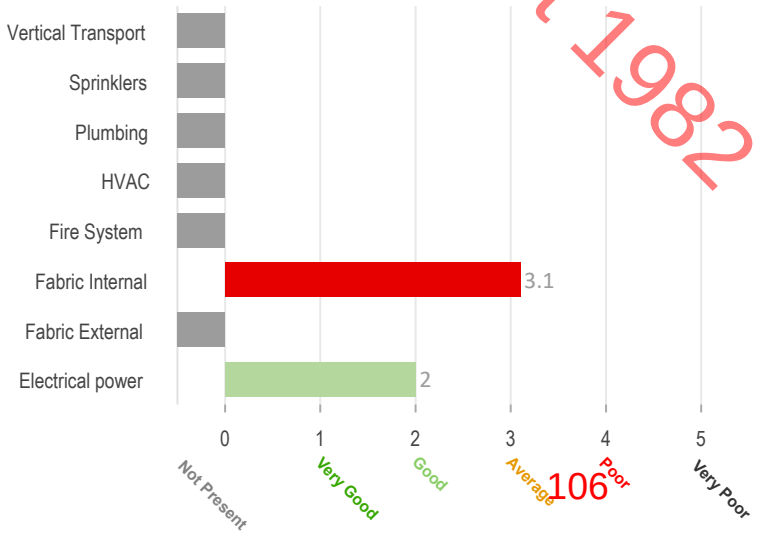
Seismic Services Restraint: Very Poor

Summary of building condition

By Discipline



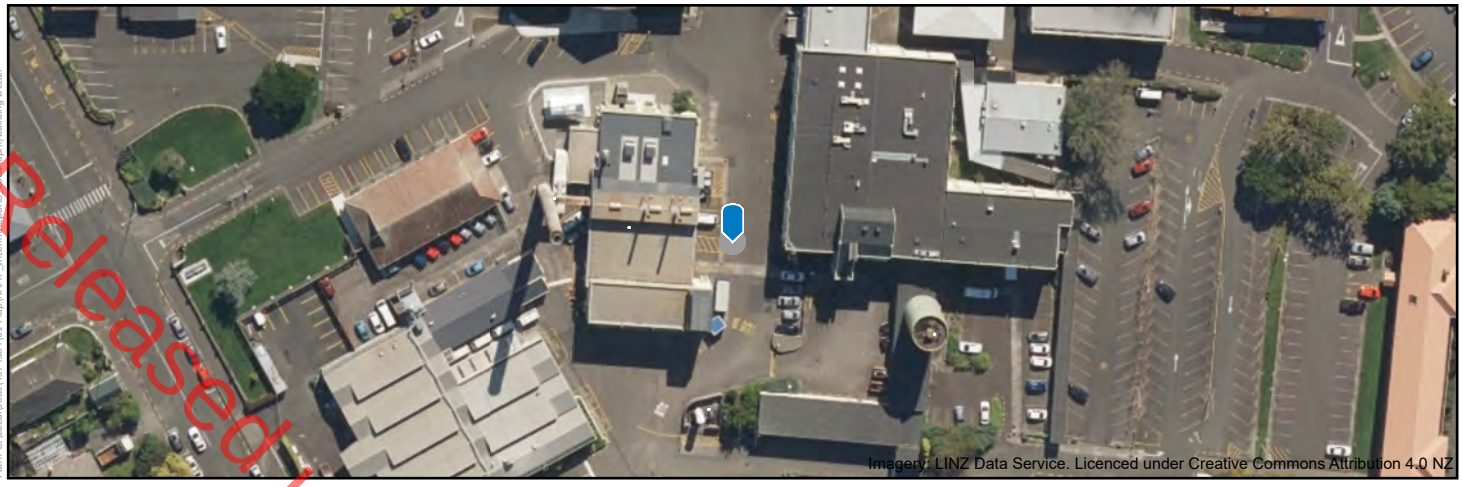
By Element



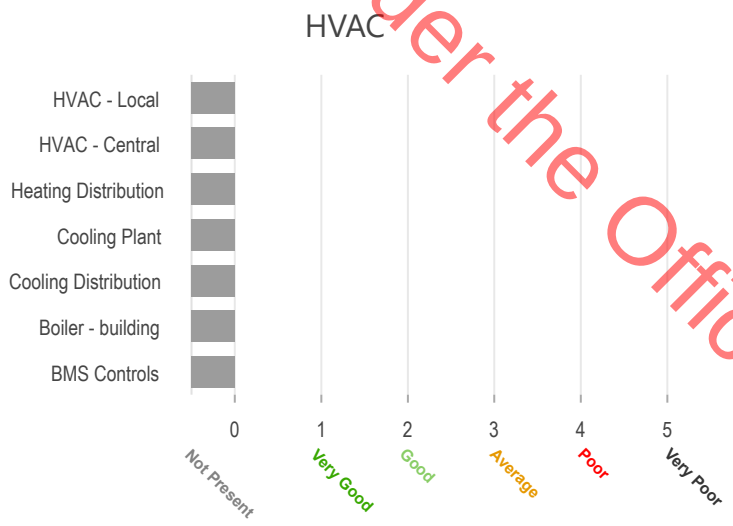
Beca Building ID: 185
NAMP ID: 10526
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

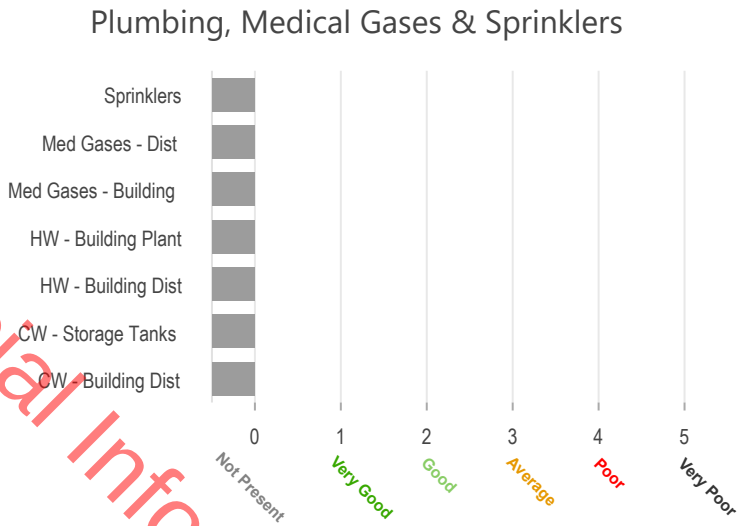
Approximate building location

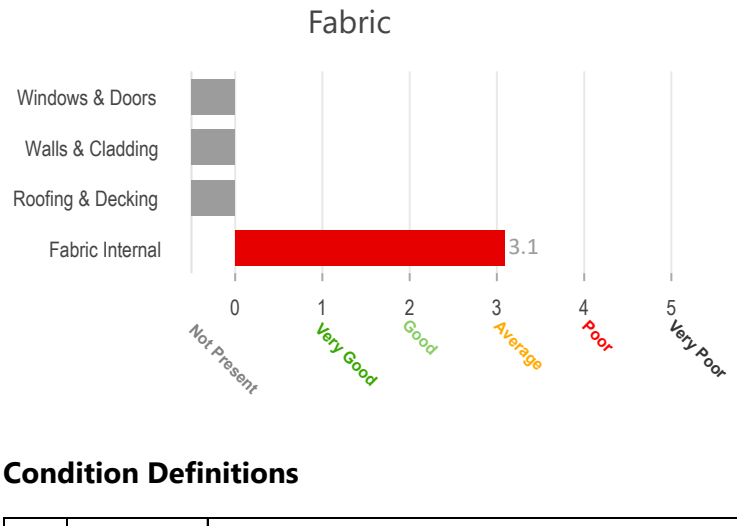
Service Tunnels to Boiler House and Kitchen Block

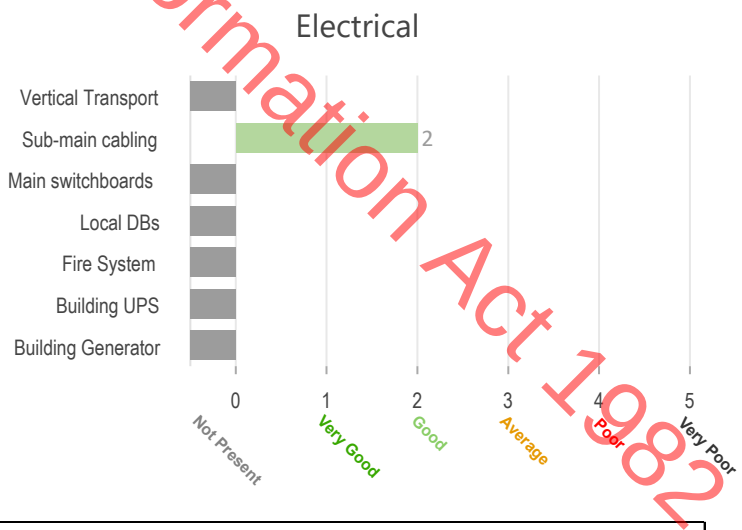


Summary of building element condition details









Condition Definitions

Rating	Condition	Definition (Services and Fabric)
	Not Present	Assets were not present or inaccessible when site was visited.
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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.

Medical Gases Storage

Palmerston North Hospital (MidCentral DHB)

Beca Building ID: 184
NAMP ID: 10514
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

1.8

DHB Assessed *% NBS* Rating

No Data

General Building Information

Approximate Building Age: 1925

Survey date: 12/05/2019

Gross Floor Area (m2): No data

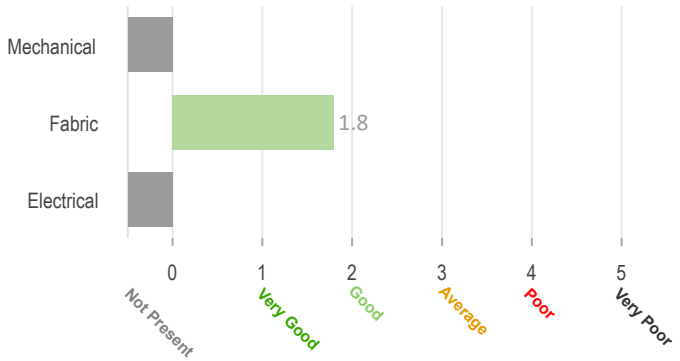
Fire Separation Issues: Low likelihood of issues

Asbestos Issues: Low likelihood of issues

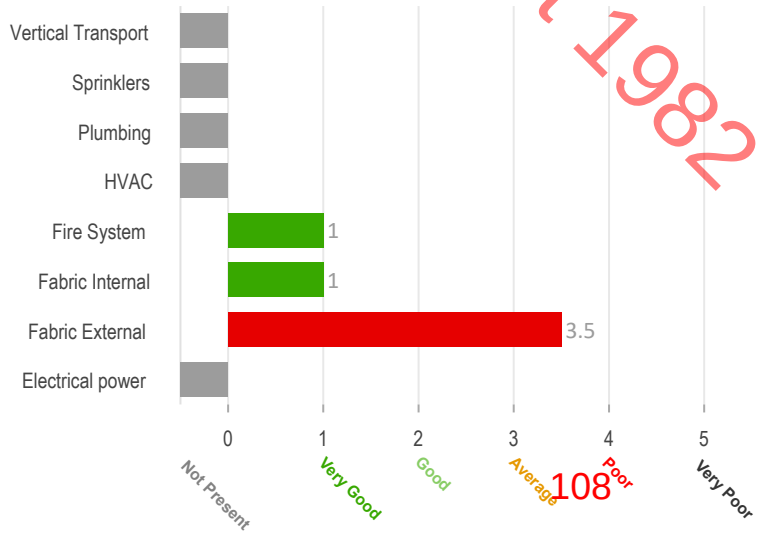
Seismic Services Restraint: Not Observed

Summary of building condition

By Discipline



By Element

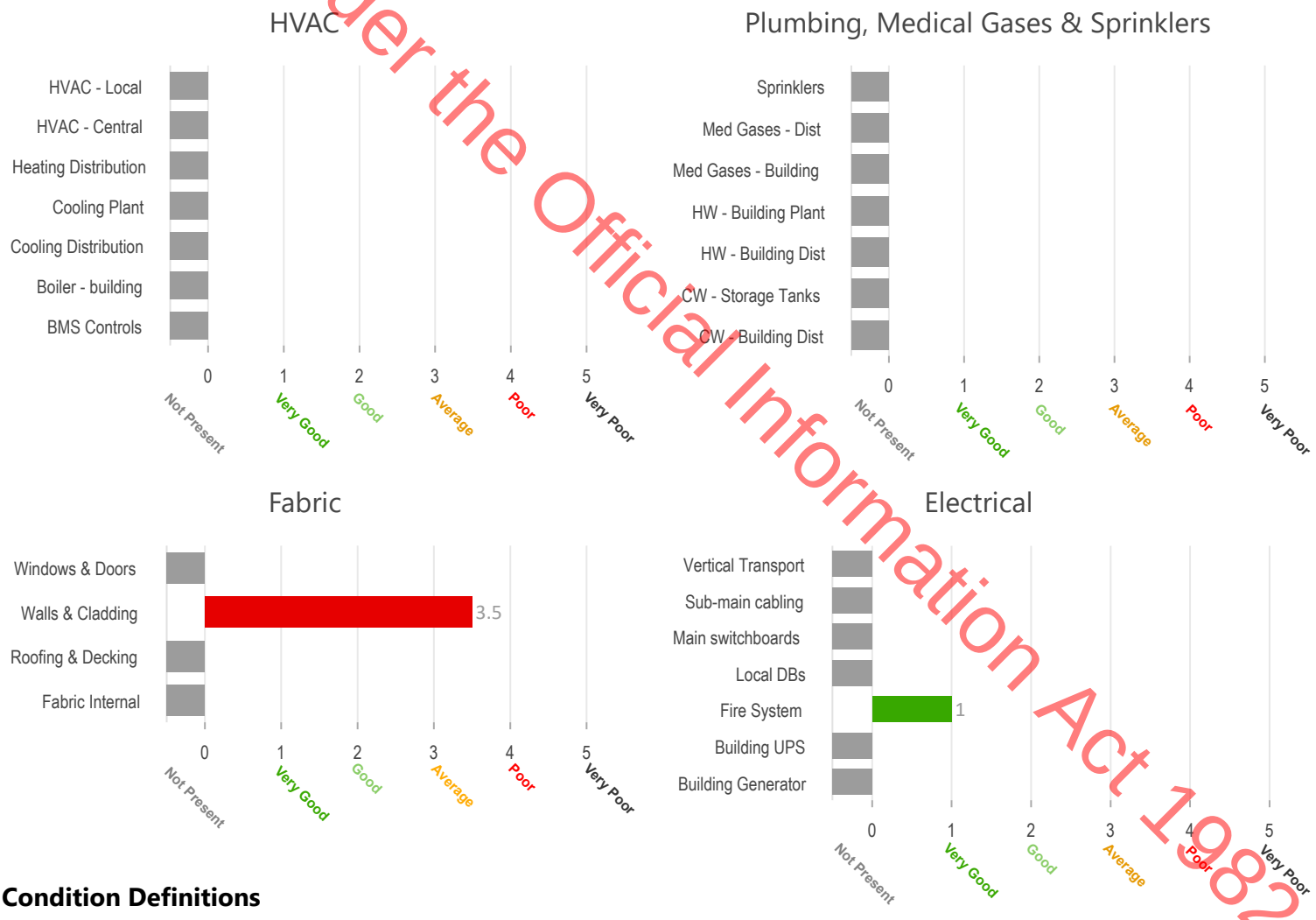


Beca Building ID: 184
NAMP ID: 10514
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Approximate building location

Medical Gases Storage

Summary of building element condition details



Condition Definitions

Rating	Condition	Definition (Services and Fabric)
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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.
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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.

Boiler House

Palmerston North Hospital (MidCentral DHB)

Beca Building ID: 181
NAMP ID: 10494
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

68% IL4

General Building Information

Approximate Building Age: 1975

Survey date: 12/05/2019

Gross Floor Area (m2): 974

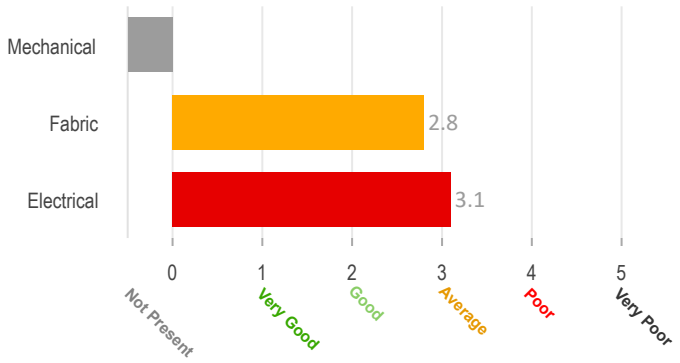
Fire Separation Issues: Low likelihood of issues

Asbestos Issues: Low likelihood of issues

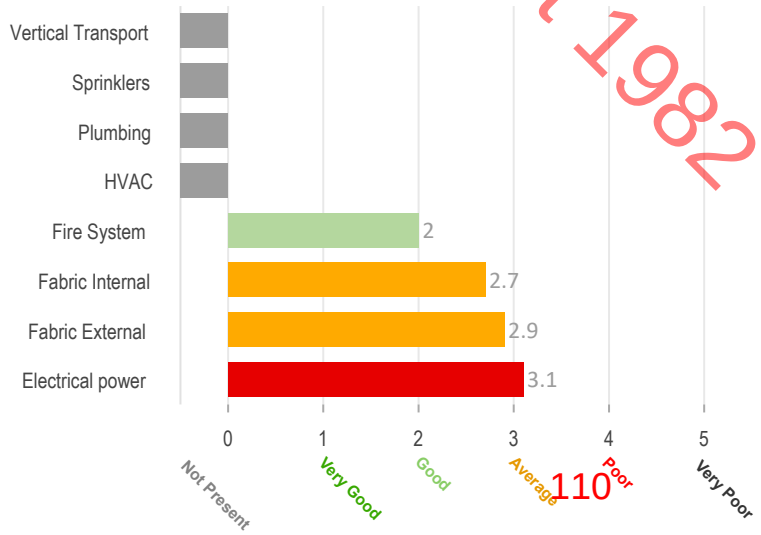
Seismic Services Restraint: Not Observed

Summary of building condition

By Discipline



By Element

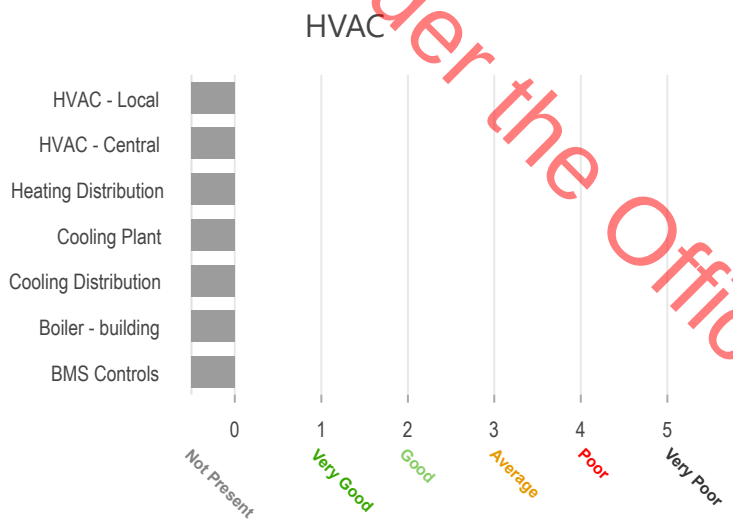


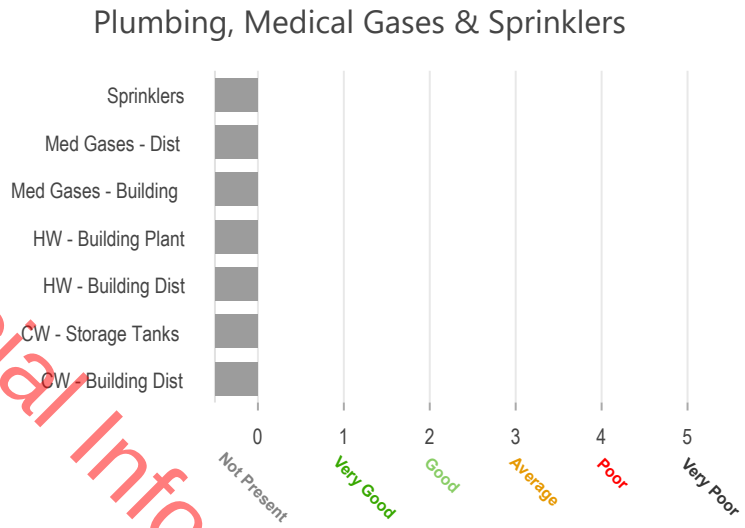
Beca Building ID: 181
NAMP ID: 10494
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

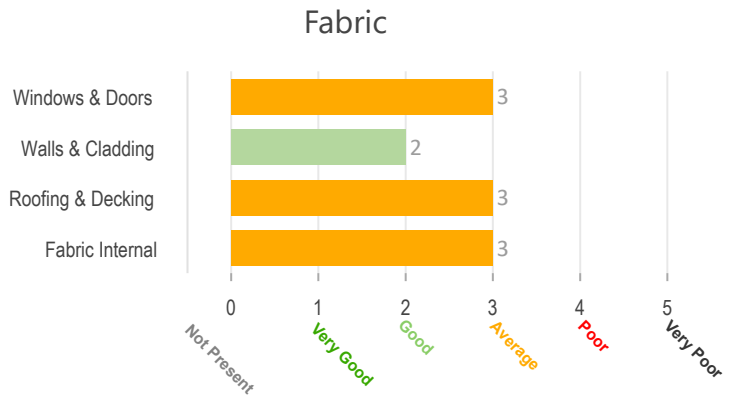
Approximate building location

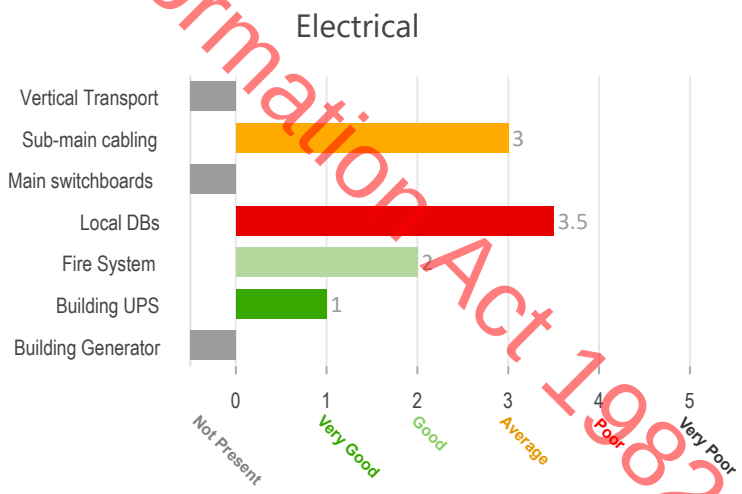
Boiler House

Summary of building element condition details









Condition Definitions

Rating	Condition	Definition (Services and Fabric)
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Boiler Chimney

Palmerston North Hospital (MidCentral DHB)

Beca Building ID: 180
NAMP ID: 10493
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

1.6

DHB Assessed *% NBS* Rating

57% IL3

General Building Information

Approximate Building Age: 1974

Survey date: 12/05/2019

Gross Floor Area (m2): 11

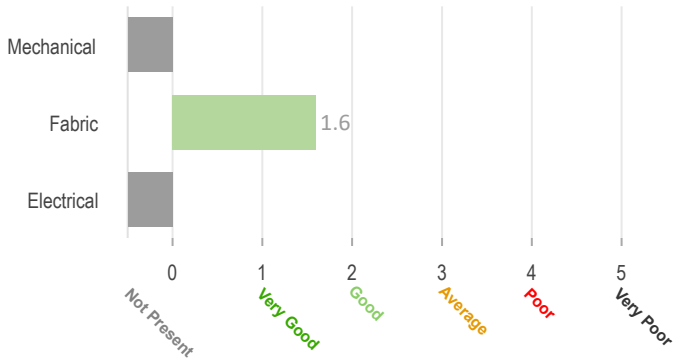
Fire Separation Issues: Low likelihood of issues

Asbestos Issues: Low likelihood of issues

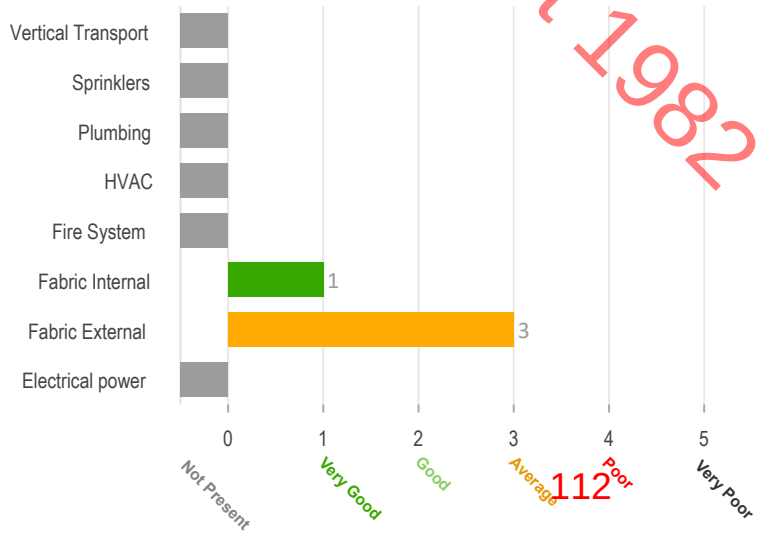
Seismic Services Restraint: Not Observed

Summary of building condition

By Discipline



By Element

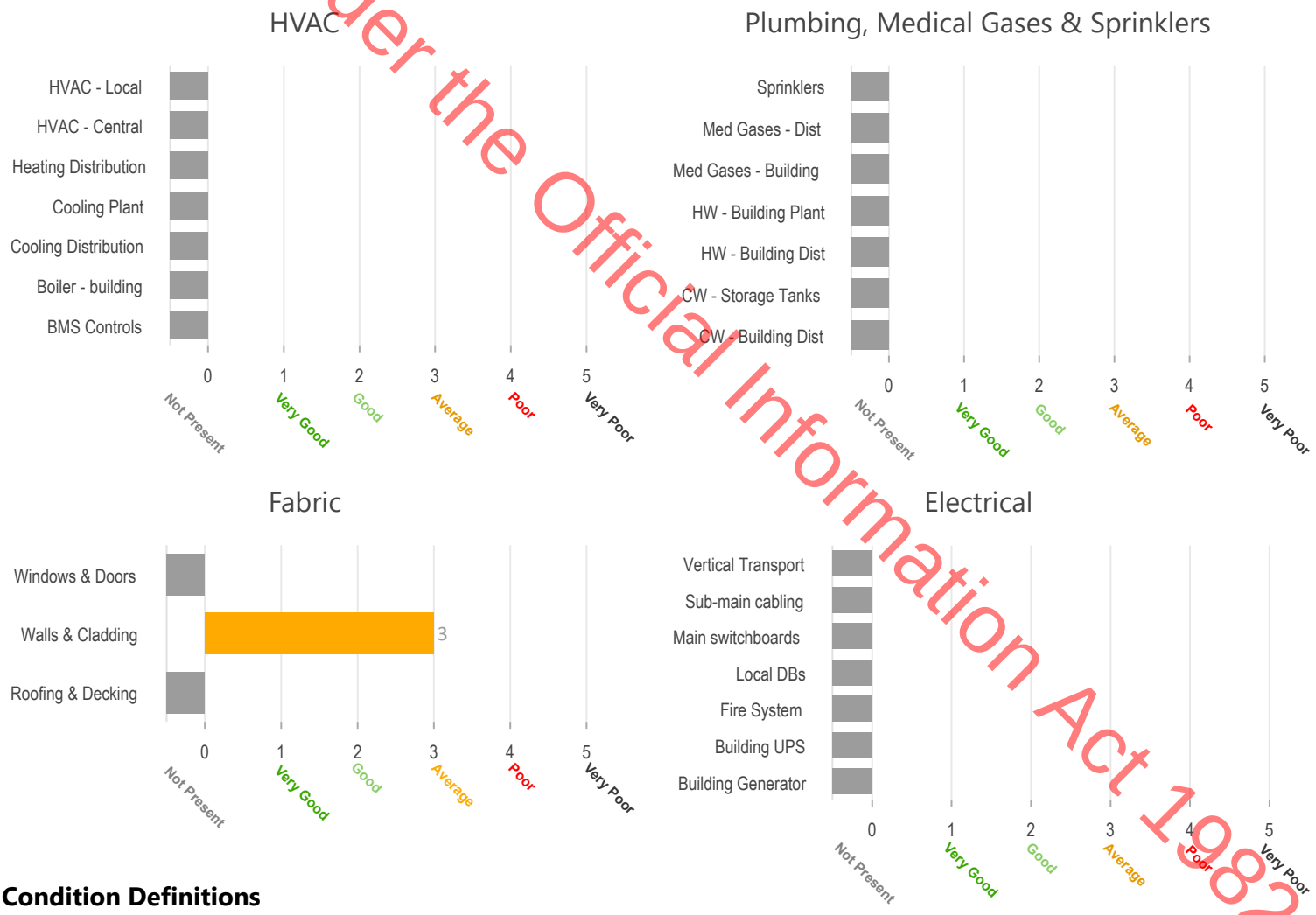


Beca Building ID: 180
NAMP ID: 10493
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Approximate building location

Boiler Chimney

Summary of building element condition details



Condition Definitions

Rating	Condition	Definition (Services and Fabric)
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Block D

Palmerston North Hospital (MidCentral DHB)

Beca Building ID: 179
NAMP ID: 10488
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

2.6

DHB Assessed *% NBS* Rating

81% IL3

General Building Information

Approximate Building Age: 2001

Survey date: 12/05/2019

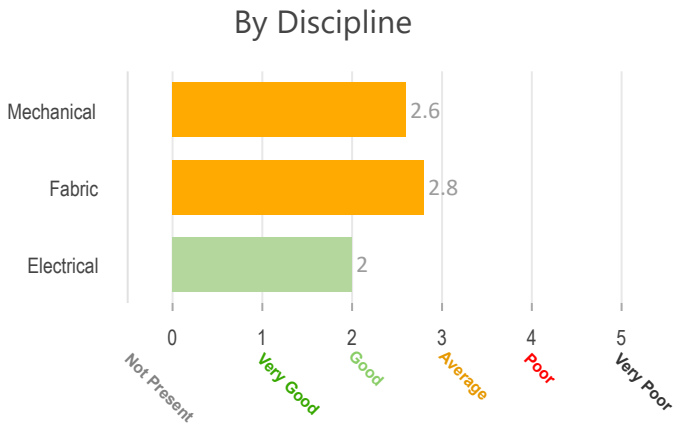
Gross Floor Area (m2): 2578

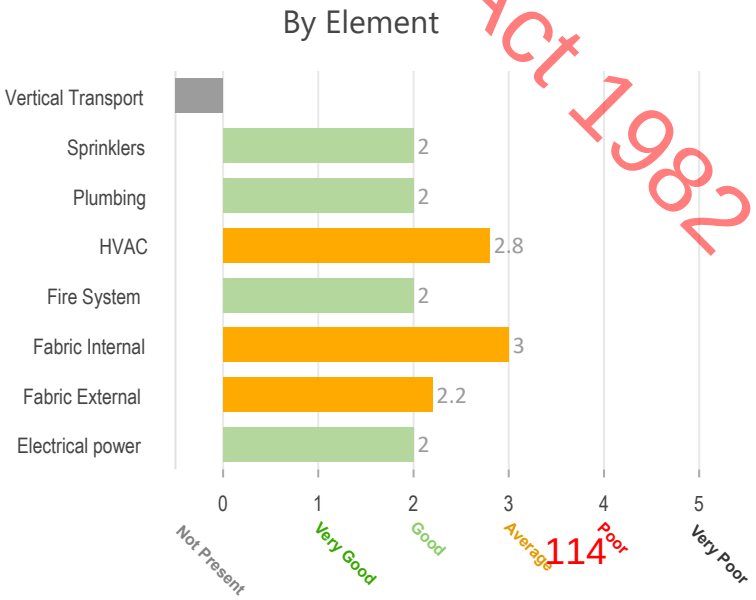
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Low likelihood of issues

Seismic Services Restraint: Poor

Summary of building condition

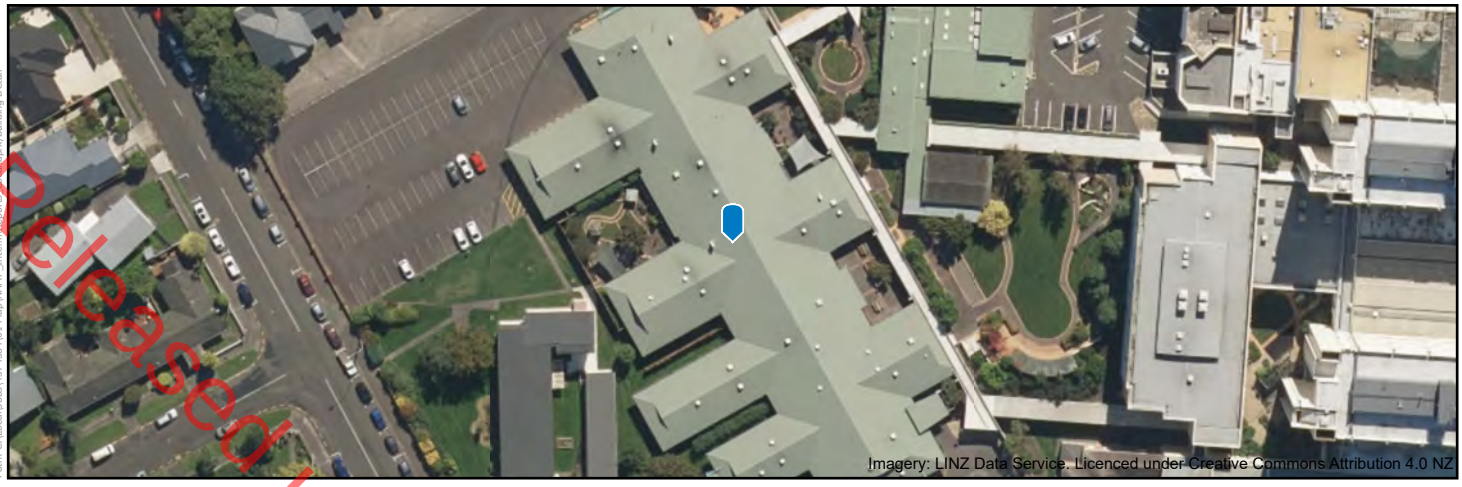




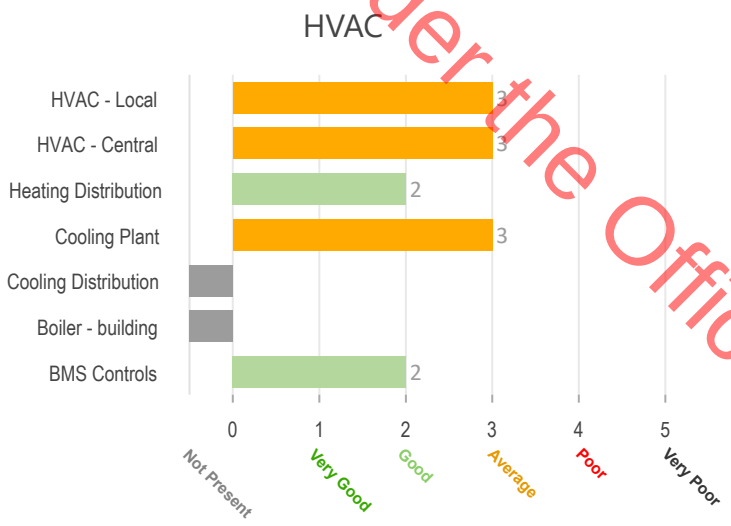
Beca Building ID: 179
NAMP ID: 10488
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

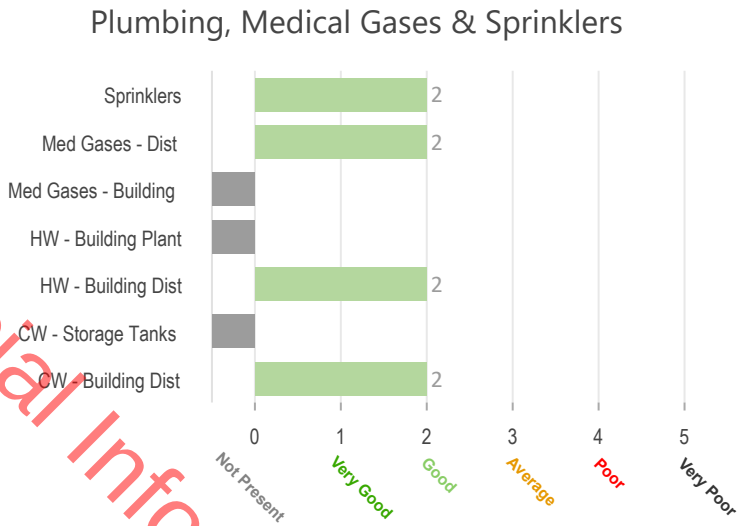
Approximate building location

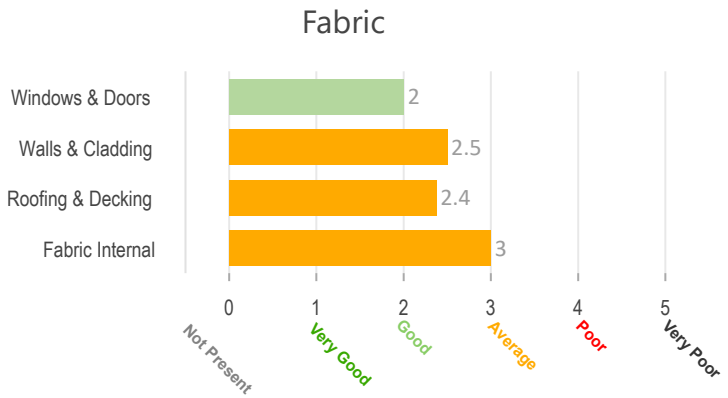
Block D

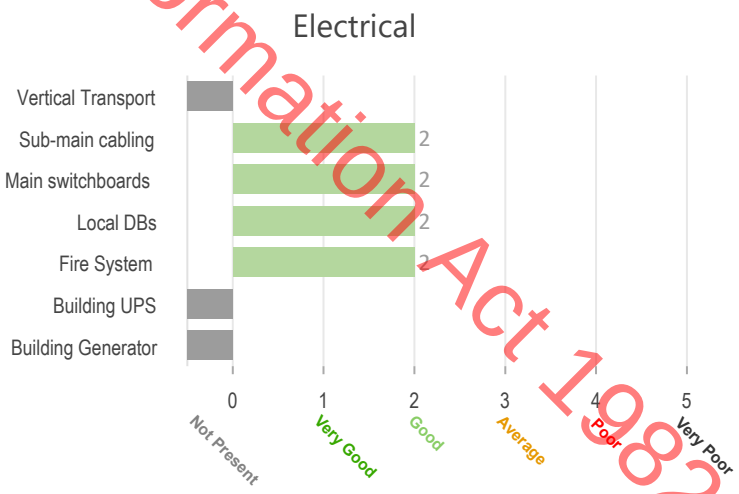


Summary of building element condition details









Condition Definitions

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B Block

Palmerston North Hospital (MidCentral DHB)

Beca Building ID: 183
NAMP ID: 10499
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

DHB Assessed *% NBS* Rating

40% IL4

General Building Information

Approximate Building Age: 2001

Survey date: 12/05/2019

Gross Floor Area (m2): 16797

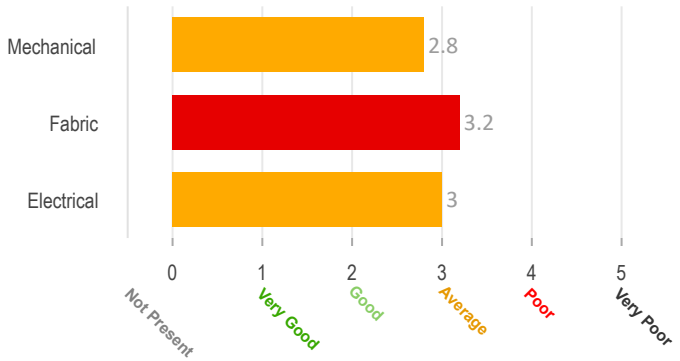
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Limited issues observed/known

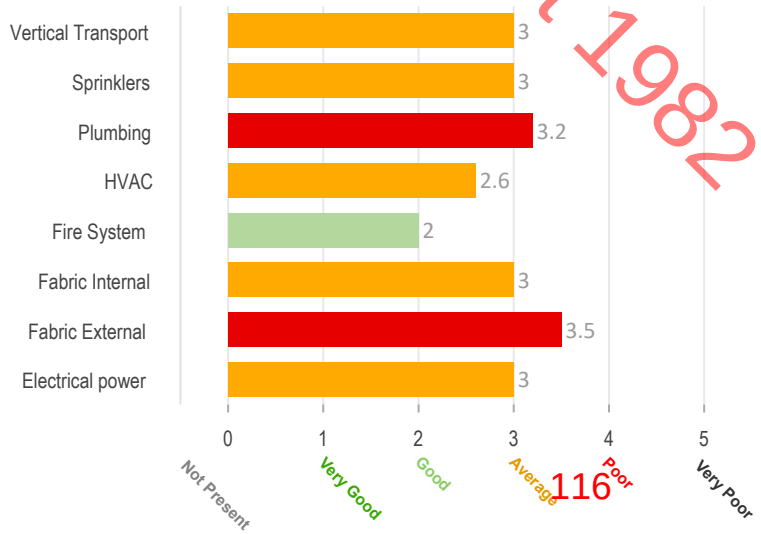
Seismic Services Restraint: Very Poor

Summary of building condition

By Discipline



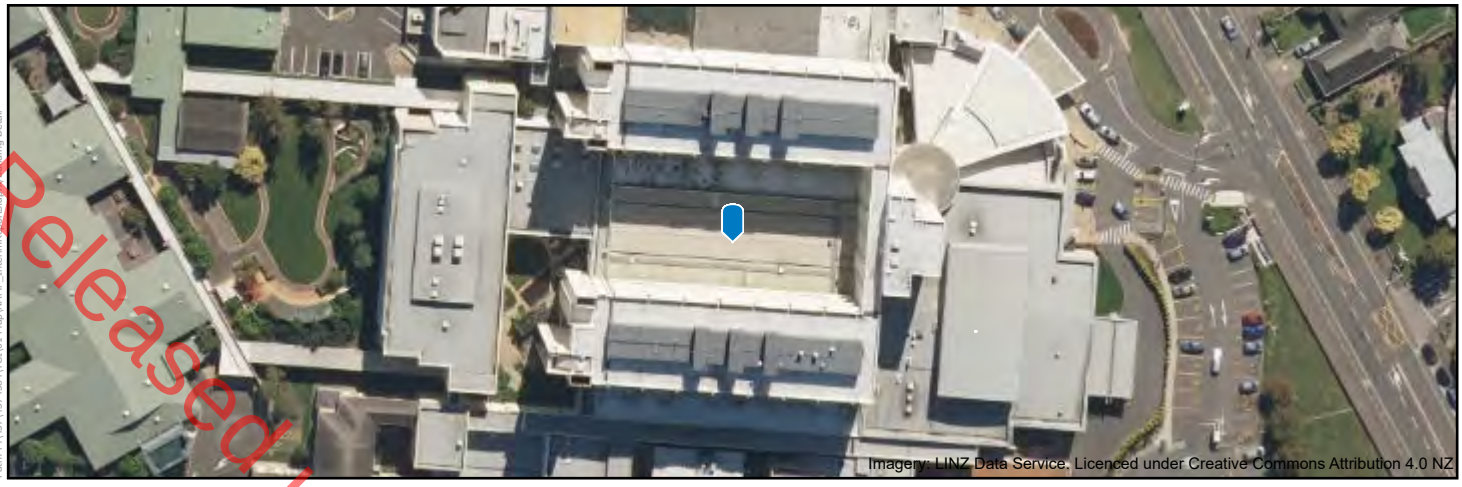
By Element



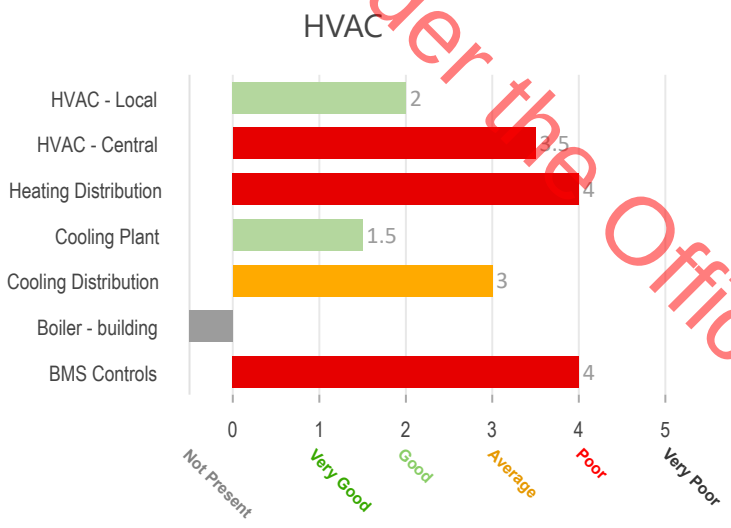
Beca Building ID: 183
NAMP ID: 10499
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 9/09/2019

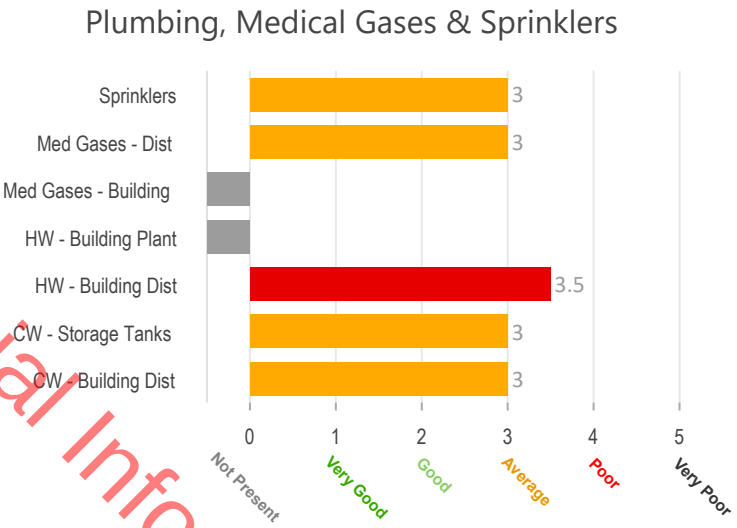
Approximate building location

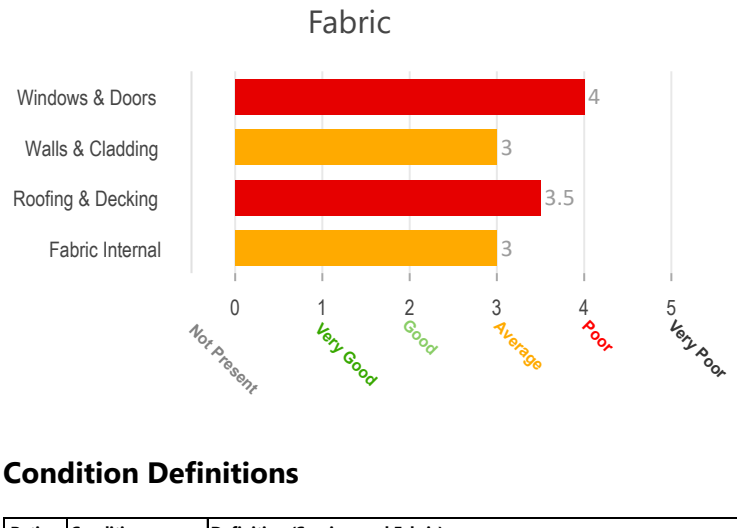
B Block

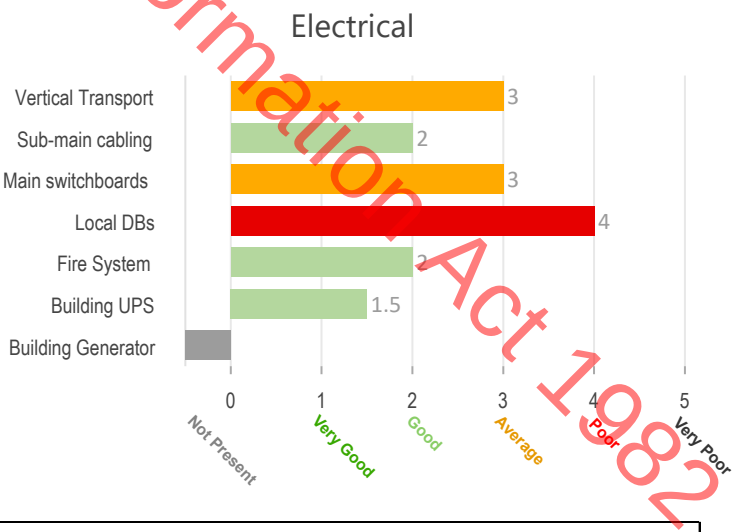


Summary of building element condition details









Condition Definitions

Rating	Condition	Definition (Services and Fabric)
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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.

A Block

Palmerston North Hospital (MidCentral DHB)

Beca Building ID: 182
NAMP ID: 10498
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 9/09/2019

Photo of Building Exterior

Services & Fabric Score

2.4

DHB Assessed *% NBS* Rating

50% IL4

General Building Information

Approximate Building Age: 2001

Survey date: 12/05/2019

Gross Floor Area (m2): 3005

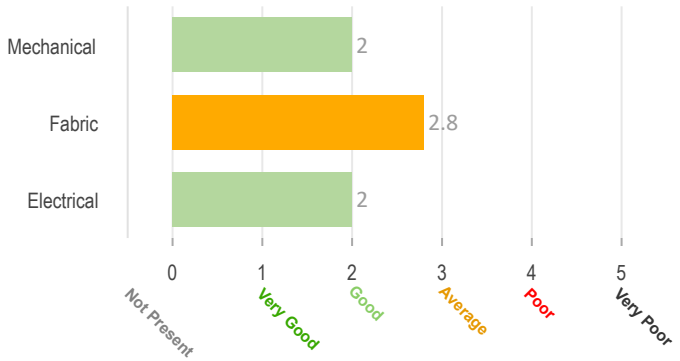
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Low likelihood of issues

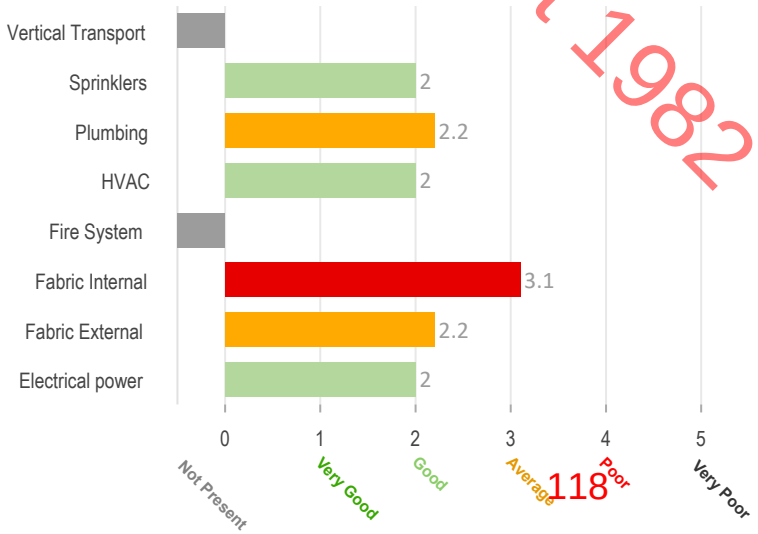
Seismic Services Restraint: Poor

Summary of building condition

By Discipline



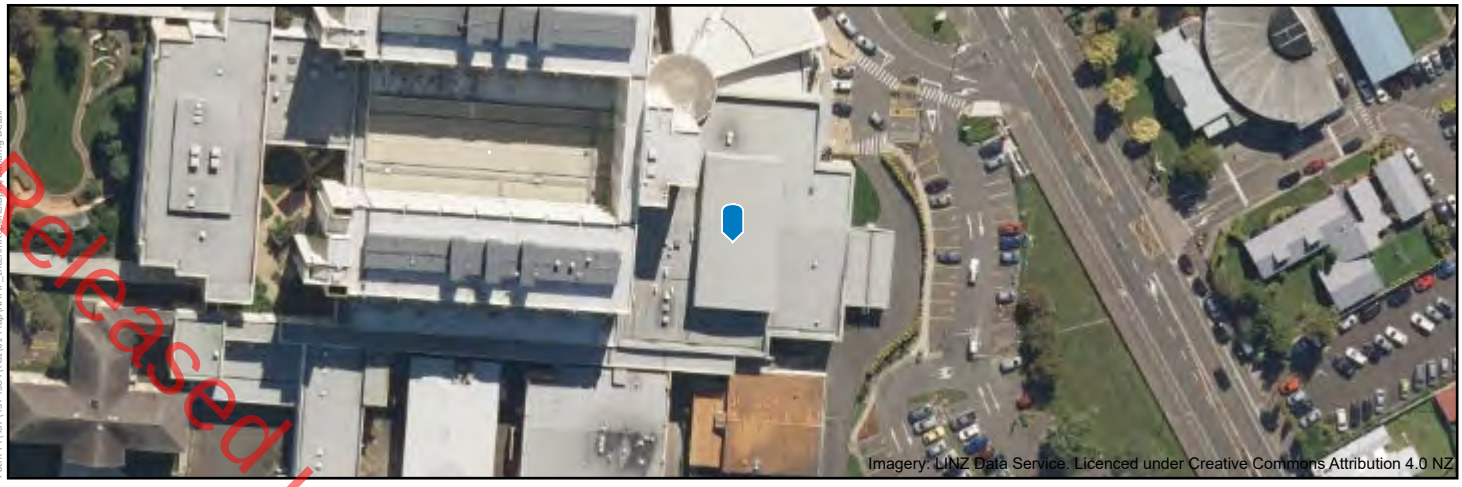
By Element



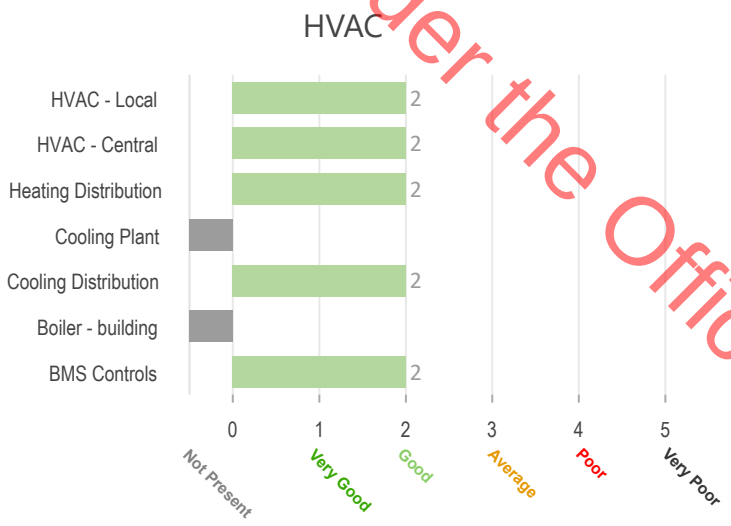
Beca Building ID: 182
NAMP ID: 10498
DHB Ref:
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 9/09/2019

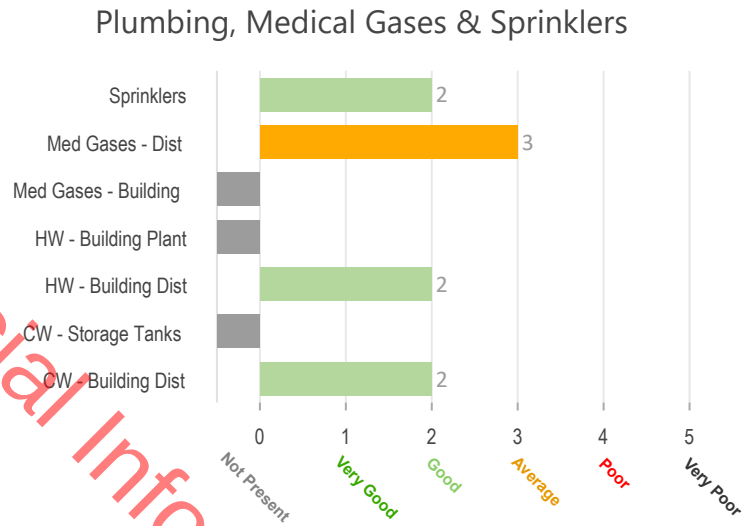
Approximate building location

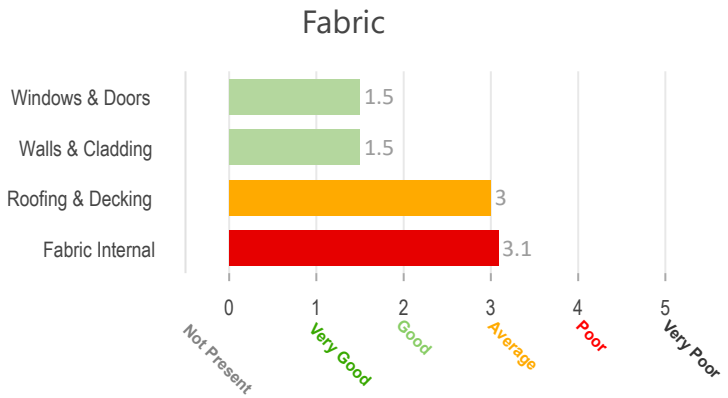
A Block

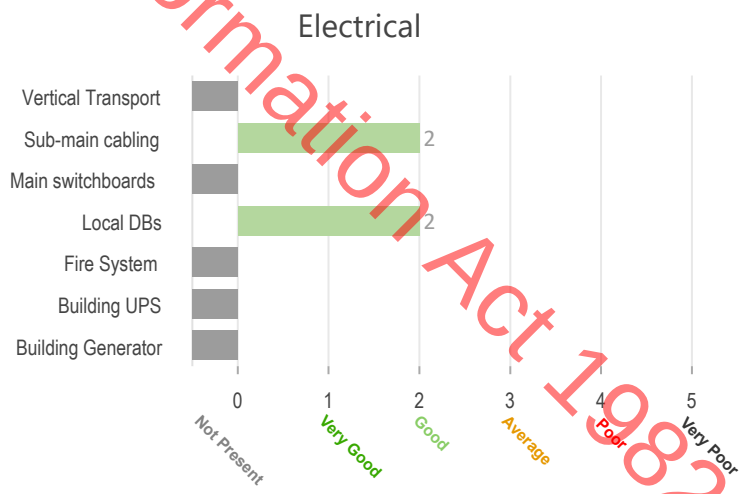


Summary of building element condition details









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
Palmerston North Hospital	Block D	Electrical Power	Building Generator		Not Present				
Palmerston North Hospital	Block D	Electrical Power	Building Main Switchboard		Present		2	1	original
Palmerston North Hospital	Block D	Electrical Power	Building UPS		Not Present				
Palmerston North Hospital	Block D	Electrical Power	Local DBs		Present		2	2	10+
Palmerston North Hospital	Block D	Electrical Power	Site Generator			yes			
Palmerston North Hospital	Block D	Electrical Power	Sub-main cabling		Present		2	1	original
Palmerston North Hospital	Block D	Fabric External	Roofing and Decking	Iron/metal	Present		2	1	original
Palmerston North Hospital	Block D	Fabric External	Roofing and Decking	Rubber Sheet	Present		4	1	original
Palmerston North Hospital	Block D	Fabric External	Walls and Cladding	Sheet	Present		3	1	original
Palmerston North Hospital	Block D	Fabric External	Walls and Cladding	Concrete	Present		2	1	original
Palmerston North Hospital	Block D	Fabric External	Windows and Doors	Aluminium	Present		2	1	original
Palmerston North Hospital	Block D	Fabric Internal	1		Present		3	1	original
Palmerston North Hospital	Block D	Fabric Internal	G		Present		3	1	original
Palmerston North Hospital	Block D	Fire Alarm	Wormald		Present		2	1	original
Palmerston North Hospital	Block D	HVAC	BMS Controls		Present		2	1	original
Palmerston North Hospital	Block D	HVAC	Boiler Plant - Site Plant			yes			
Palmerston North Hospital	Block D	HVAC	Boiler Plant in building		Not Present				
Palmerston North Hospital	Block D	HVAC	Building HVAC - Central plant		Present		3	1	original
Palmerston North Hospital	Block D	HVAC	Building HVAC - Local plant		Present		3	1	original
Palmerston North Hospital	Block D	HVAC	Cooling Distribution		Not Present				
Palmerston North Hospital	Block D	HVAC	Cooling Plant - Site Plant			no			
Palmerston North Hospital	Block D	HVAC	Cooling Plant in building		Present		3	1	original
Palmerston North Hospital	Block D	HVAC	Heating Distribution		Present		2	1	original
Palmerston North Hospital	Block D	Plumbing	Cold water - Building distribution		Present		2	1	original
Palmerston North Hospital	Block D	Plumbing	Cold water - Building storage tanks		Not Present				
Palmerston North Hospital	Block D	Plumbing	Cold water - Site storage and mains			yes			
Palmerston North Hospital	Block D	Plumbing	Hot water - Building distribution		Present		2	1	original
Palmerston North Hospital	Block D	Plumbing	Hot water - Building plant		Not Present				
Palmerston North Hospital	Block D	Plumbing	Hot water - Site Plant			yes			
Palmerston North Hospital	Block D	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Palmerston North Hospital	Block D	Plumbing	Medical gases and vacuum - Site Plant			yes			
Palmerston North Hospital	Block D	Plumbing	Medical gases and vacuum distribution		Present		2	1	original
Palmerston North Hospital	Block D	Sprinklers	Sprinklers		Present		2	1	original
Palmerston North Hospital	Block D	Vertical Transport			Not Present				
Palmerston North Hospital	Boiler Chimney	Electrical Power	Building Generator		Not Present				
Palmerston North Hospital	Boiler Chimney	Electrical Power	Building Main Switchboard		Not Present				
Palmerston North Hospital	Boiler Chimney	Electrical Power	Building UPS		Not Present				
Palmerston North Hospital	Boiler Chimney	Electrical Power	Local DBs		Not Present				
Palmerston North Hospital	Boiler Chimney	Electrical Power	Site Generator			yes			
Palmerston North Hospital	Boiler Chimney	Electrical Power	Sub-main cabling		Not Present				
Palmerston North Hospital	Boiler Chimney	Fabric External	Roofing and Decking	Other/mixed	Not Present				
Palmerston North Hospital	Boiler Chimney	Fabric External	Walls and Cladding	Concrete	Present		3	1	original
Palmerston North Hospital	Boiler Chimney	Fabric External	Windows and Doors	Other/mixed	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
Palmerston North Hospital	Boiler Chimney	Fire Alarm			Not Present				
Palmerston North Hospital	Boiler Chimney	HVAC	BMS Controls		Not Present				
Palmerston North Hospital	Boiler Chimney	HVAC	Boiler Plant - Site Plant			no			
Palmerston North Hospital	Boiler Chimney	HVAC	Boiler Plant in building		Not Present				
Palmerston North Hospital	Boiler Chimney	HVAC	Building HVAC - Central plant		Not Present				
Palmerston North Hospital	Boiler Chimney	HVAC	Building HVAC - Local plant		Not Present				
Palmerston North Hospital	Boiler Chimney	HVAC	Cooling Distribution		Not Present				
Palmerston North Hospital	Boiler Chimney	HVAC	Cooling Plant - Site Plant			no			
Palmerston North Hospital	Boiler Chimney	HVAC	Cooling Plant in building		Not Present				
Palmerston North Hospital	Boiler Chimney	HVAC	Heating Distribution		Not Present				
Palmerston North Hospital	Boiler Chimney	Plumbing	Cold water - Building distribution		Not Present				
Palmerston North Hospital	Boiler Chimney	Plumbing	Cold water - Building storage tanks		Not Present				
Palmerston North Hospital	Boiler Chimney	Plumbing	Cold water - Site storage and mains			no			
Palmerston North Hospital	Boiler Chimney	Plumbing	Hot water - Building distribution		Not Present				
Palmerston North Hospital	Boiler Chimney	Plumbing	Hot water - Building plant		Not Present				
Palmerston North Hospital	Boiler Chimney	Plumbing	Hot water - Site Plant			no			
Palmerston North Hospital	Boiler Chimney	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Palmerston North Hospital	Boiler Chimney	Plumbing	Medical gases and vacuum - Site Plant			no			
Palmerston North Hospital	Boiler Chimney	Plumbing	Medical gases and vacuum distribution		Not Present				
Palmerston North Hospital	Boiler Chimney	Sprinklers	Sprinklers		Not Present				
Palmerston North Hospital	Boiler Chimney	Vertical Transport			Not Present				
Palmerston North Hospital	Boiler House	Electrical Power	Building Generator		Not Present				
Palmerston North Hospital	Boiler House	Electrical Power	Building Main Switchboard		Not Present				
Palmerston North Hospital	Boiler House	Electrical Power	Building UPS		Present		1	1	3 to 10
Palmerston North Hospital	Boiler House	Electrical Power	Local DBs		Present		4	1	original
Palmerston North Hospital	Boiler House	Electrical Power	Site Generator			yes			
Palmerston North Hospital	Boiler House	Electrical Power	Sub-main cabling		Present		3	1	original
Palmerston North Hospital	Boiler House	Fabric External	Roofing and Decking	Iron/metal	Present		3	1	original
Palmerston North Hospital	Boiler House	Fabric External	Roofing and Decking	Rubber Sheet	Present		3	1	original
Palmerston North Hospital	Boiler House	Fabric External	Walls and Cladding	Sheet	Present		2	1	original
Palmerston North Hospital	Boiler House	Fabric External	Walls and Cladding	Concrete	Present		2	1	original
Palmerston North Hospital	Boiler House	Fabric External	Windows and Doors	Aluminium	Present		3	1	original
Palmerston North Hospital	Boiler House	Fabric Internal	B1		Present		3	1	original
Palmerston North Hospital	Boiler House	Fabric Internal	G		Present		3	1	original
Palmerston North Hospital	Boiler House	Fire Alarm	Pertronic		Present		2	1	original
Palmerston North Hospital	Boiler House	HVAC	BMS Controls		Not Present				
Palmerston North Hospital	Boiler House	HVAC	Boiler Plant - Site Plant			no			
Palmerston North Hospital	Boiler House	HVAC	Boiler Plant in building		Not Present				
Palmerston North Hospital	Boiler House	HVAC	Building HVAC - Central plant		Not Present				
Palmerston North Hospital	Boiler House	HVAC	Building HVAC - Local plant		Not Present				
Palmerston North Hospital	Boiler House	HVAC	Cooling Distribution		Not Present				
Palmerston North Hospital	Boiler House	HVAC	Cooling Plant - Site Plant			no			
Palmerston North Hospital	Boiler House	HVAC	Cooling Plant in building		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
Palmerston North Hospital	Boiler House	HVAC	Heating Distribution		Not Present				
Palmerston North Hospital	Boiler House	Plumbing	Cold water - Building distribution		Not Present				
Palmerston North Hospital	Boiler House	Plumbing	Cold water - Building storage tanks		Not Present				
Palmerston North Hospital	Boiler House	Plumbing	Cold water - Site storage and mains			no			
Palmerston North Hospital	Boiler House	Plumbing	Hot water - Building distribution		Not Present				
Palmerston North Hospital	Boiler House	Plumbing	Hot water - Building plant		Not Present				
Palmerston North Hospital	Boiler House	Plumbing	Hot water - Site Plant			no			
Palmerston North Hospital	Boiler House	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Palmerston North Hospital	Boiler House	Plumbing	Medical gases and vacuum - Site Plant			no			
Palmerston North Hospital	Boiler House	Plumbing	Medical gases and vacuum distribution		Not Present				
Palmerston North Hospital	Boiler House	Sprinklers	Sprinklers		Not Present				
Palmerston North Hospital	Boiler House	Vertical Transport			Not Present				
Palmerston North Hospital	ED; Main Entrance - A Block	Electrical Power	Building Generator		Not Present				
Palmerston North Hospital	ED; Main Entrance - A Block	Electrical Power	Building Main Switchboard		Not Present				
Palmerston North Hospital	ED; Main Entrance - A Block	Electrical Power	Building UPS		Not Present				
Palmerston North Hospital	ED; Main Entrance - A Block	Electrical Power	Local DBs		Present		2	1	original
Palmerston North Hospital	ED; Main Entrance - A Block	Electrical Power	Site Generator			yes			
Palmerston North Hospital	ED; Main Entrance - A Block	Electrical Power	Sub-main cabling		Present		2	1	original
Palmerston North Hospital	ED; Main Entrance - A Block	Fabric External	Roofing and Decking	Rubber Sheet	Present		4	1	original
Palmerston North Hospital	ED; Main Entrance - A Block	Fabric External	Roofing and Decking	Iron/metal	Present		3	1	original
Palmerston North Hospital	ED; Main Entrance - A Block	Fabric External	Walls and Cladding	Concrete	Present		2	1	10+
Palmerston North Hospital	ED; Main Entrance - A Block	Fabric External	Walls and Cladding	Sheet	Present		2	1	10+
Palmerston North Hospital	ED; Main Entrance - A Block	Fabric External	Windows and Doors	Metal	Present		2	2	original
Palmerston North Hospital	ED; Main Entrance - A Block	Fabric Internal	1		Present		3	2	10+
Palmerston North Hospital	ED; Main Entrance - A Block	Fabric Internal	2		Present		4	1	original
Palmerston North Hospital	ED; Main Entrance - A Block	Fabric Internal	3		Present		4	1	original
Palmerston North Hospital	ED; Main Entrance - A Block	Fabric Internal	4		Present		4	1	original
Palmerston North Hospital	ED; Main Entrance - A Block	Fabric Internal	5		Present		3	1	10+
Palmerston North Hospital	ED; Main Entrance - A Block	Fabric Internal	G		Present		3	1	10+
Palmerston North Hospital	ED; Main Entrance - A Block	Fire Alarm			Not Present				
Palmerston North Hospital	ED; Main Entrance - A Block	HVAC	BMS Controls		Present		2	1	original
Palmerston North Hospital	ED; Main Entrance - A Block	HVAC	Boiler Plant - Site Plant			yes			
Palmerston North Hospital	ED; Main Entrance - A Block	HVAC	Boiler Plant in building		Not Present				
Palmerston North Hospital	ED; Main Entrance - A Block	HVAC	Building HVAC - Central plant		Present		2	1	original
Palmerston North Hospital	ED; Main Entrance - A Block	HVAC	Building HVAC - Local plant		Present		2	1	mixed
Palmerston North Hospital	ED; Main Entrance - A Block	HVAC	Cooling Distribution		Present		2	1	original
Palmerston North Hospital	ED; Main Entrance - A Block	HVAC	Cooling Plant - Site Plant			yes			
Palmerston North Hospital	ED; Main Entrance - A Block	HVAC	Cooling Plant in building		Not Present				
Palmerston North Hospital	ED; Main Entrance - A Block	HVAC	Heating Distribution		Present		2	1	original
Palmerston North Hospital	ED; Main Entrance - A Block	Plumbing	Cold water - Building distribution		Present		2	1	original
Palmerston North Hospital	ED; Main Entrance - A Block	Plumbing	Cold water - Building storage tanks		Not Present				
Palmerston North Hospital	ED; Main Entrance - A Block	Plumbing	Cold water - Site storage and mains			yes			
Palmerston North Hospital	ED; Main Entrance - A Block	Plumbing	Hot water - Building distribution		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
Palmerston North Hospital	ED; Main Entrance - A Block	Plumbing	Hot water - Building plant		Not Present				
Palmerston North Hospital	ED; Main Entrance - A Block	Plumbing	Hot water - Site Plant			yes			
Palmerston North Hospital	ED; Main Entrance - A Block	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Palmerston North Hospital	ED; Main Entrance - A Block	Plumbing	Medical gases and vacuum - Site Plant			yes			
Palmerston North Hospital	ED; Main Entrance - A Block	Plumbing	Medical gases and vacuum distribution		Present		3	1	original
Palmerston North Hospital	ED; Main Entrance - A Block	Sprinklers	Sprinklers		Present		2	1	original
Palmerston North Hospital	ED; Main Entrance - A Block	Vertical Transport			Not Present				
Palmerston North Hospital	ED; Main Entrance - B Block	Electrical Power	Building Generator		Not Present				
Palmerston North Hospital	ED; Main Entrance - B Block	Electrical Power	Building Main Switchboard		Present		3	1	original
Palmerston North Hospital	ED; Main Entrance - B Block	Electrical Power	Building UPS		Present		2	1	3 to 10
Palmerston North Hospital	ED; Main Entrance - B Block	Electrical Power	Local DBs		Present		3	3	original
Palmerston North Hospital	ED; Main Entrance - B Block	Electrical Power	Site Generator			yes			
Palmerston North Hospital	ED; Main Entrance - B Block	Electrical Power	Sub-main cabling		Present		2	1	original
Palmerston North Hospital	ED; Main Entrance - B Block	Fabric External	Roofing and Decking	Rubber Sheet	Present		4	1	original
Palmerston North Hospital	ED; Main Entrance - B Block	Fabric External	Roofing and Decking	Iron/metal	Present		3	2	original
Palmerston North Hospital	ED; Main Entrance - B Block	Fabric External	Walls and Cladding	Concrete	Present		3	1	original
Palmerston North Hospital	ED; Main Entrance - B Block	Fabric External	Windows and Doors	Metal	Present		4	1	original
Palmerston North Hospital	ED; Main Entrance - B Block	Fabric Internal	1		Present		3	1	10+
Palmerston North Hospital	ED; Main Entrance - B Block	Fabric Internal	3		Present		4	1	original
Palmerston North Hospital	ED; Main Entrance - B Block	Fabric Internal	4		Present		4	1	original
Palmerston North Hospital	ED; Main Entrance - B Block	Fabric Internal	5		Present		3	1	original
Palmerston North Hospital	ED; Main Entrance - B Block	Fabric Internal	6		Present		3	1	original
Palmerston North Hospital	ED; Main Entrance - B Block	Fabric Internal	B1		Present		2	1	original
Palmerston North Hospital	ED; Main Entrance - B Block	Fabric Internal	G		Present		4	2	10+
Palmerston North Hospital	ED; Main Entrance - B Block	Fire Alarm	Wormald		Present		2	1	original
Palmerston North Hospital	ED; Main Entrance - B Block	HVAC	BMS Controls		Present		4	2	mixed
Palmerston North Hospital	ED; Main Entrance - B Block	HVAC	Boiler Plant - Site Plant			yes			
Palmerston North Hospital	ED; Main Entrance - B Block	HVAC	Boiler Plant in building		Not Present				
Palmerston North Hospital	ED; Main Entrance - B Block	HVAC	Building HVAC - Central plant		Present		4	1	original
Palmerston North Hospital	ED; Main Entrance - B Block	HVAC	Building HVAC - Local plant		Present		2	1	mixed
Palmerston North Hospital	ED; Main Entrance - B Block	HVAC	Cooling Distribution		Present		3	1	original
Palmerston North Hospital	ED; Main Entrance - B Block	HVAC	Cooling Plant - Site Plant			yes			
Palmerston North Hospital	ED; Main Entrance - B Block	HVAC	Cooling Plant in building		Present		2	1	3 to 10
Palmerston North Hospital	ED; Main Entrance - B Block	HVAC	Heating Distribution		Present		4	2	original
Palmerston North Hospital	ED; Main Entrance - B Block	Plumbing	Cold water - Building distribution		Present		3	1	original
Palmerston North Hospital	ED; Main Entrance - B Block	Plumbing	Cold water - Building storage tanks		Present		3	1	original
Palmerston North Hospital	ED; Main Entrance - B Block	Plumbing	Cold water - Site storage and mains			yes			
Palmerston North Hospital	ED; Main Entrance - B Block	Plumbing	Hot water - Building distribution		Present		4	1	original
Palmerston North Hospital	ED; Main Entrance - B Block	Plumbing	Hot water - Building plant		Not Present				
Palmerston North Hospital	ED; Main Entrance - B Block	Plumbing	Hot water - Site Plant			yes			
Palmerston North Hospital	ED; Main Entrance - B Block	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Palmerston North Hospital	ED; Main Entrance - B Block	Plumbing	Medical gases and vacuum - Site Plant			yes			
Palmerston North Hospital	ED; Main Entrance - B Block	Plumbing	Medical gases and vacuum distribution		Present		3	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
Palmerston North Hospital	ED; Main Entrance - B Block	Sprinklers	Sprinklers		Present		3	1	original
Palmerston North Hospital	ED; Main Entrance - B Block	Vertical Transport	10 lifts		Present		3	2	10+
Palmerston North Hospital	Medical Gases Storage	Electrical Power	Building Generator		Not Present				
Palmerston North Hospital	Medical Gases Storage	Electrical Power	Building Main Switchboard		Not Present				
Palmerston North Hospital	Medical Gases Storage	Electrical Power	Building UPS		Not Present				
Palmerston North Hospital	Medical Gases Storage	Electrical Power	Local DBs		Not Present				
Palmerston North Hospital	Medical Gases Storage	Electrical Power	Site Generator			no			
Palmerston North Hospital	Medical Gases Storage	Electrical Power	Sub-main cabling		Not Present				
Palmerston North Hospital	Medical Gases Storage	Fabric External	Roofing and Decking	Other/mixed	Not Present				
Palmerston North Hospital	Medical Gases Storage	Fabric External	Walls and Cladding	Concrete	Present		4	1	original
Palmerston North Hospital	Medical Gases Storage	Fabric External	Windows and Doors	Other/mixed	Not Present				
Palmerston North Hospital	Medical Gases Storage	Fire Alarm	Tyco		Present		1	1	0 to 3
Palmerston North Hospital	Medical Gases Storage	HVAC	BMS Controls		Not Present				
Palmerston North Hospital	Medical Gases Storage	HVAC	Boiler Plant - Site Plant			no			
Palmerston North Hospital	Medical Gases Storage	HVAC	Boiler Plant in building		Not Present				
Palmerston North Hospital	Medical Gases Storage	HVAC	Building HVAC - Central plant		Not Present				
Palmerston North Hospital	Medical Gases Storage	HVAC	Building HVAC - Local plant		Not Present				
Palmerston North Hospital	Medical Gases Storage	HVAC	Cooling Distribution		Not Present				
Palmerston North Hospital	Medical Gases Storage	HVAC	Cooling Plant - Site Plant			no			
Palmerston North Hospital	Medical Gases Storage	HVAC	Cooling Plant in building		Not Present				
Palmerston North Hospital	Medical Gases Storage	HVAC	Heating Distribution		Not Present				
Palmerston North Hospital	Medical Gases Storage	Plumbing	Cold water - Building distribution		Not Present				
Palmerston North Hospital	Medical Gases Storage	Plumbing	Cold water - Building storage tanks		Not Present				
Palmerston North Hospital	Medical Gases Storage	Plumbing	Cold water - Site storage and mains			no			
Palmerston North Hospital	Medical Gases Storage	Plumbing	Hot water - Building distribution		Not Present				
Palmerston North Hospital	Medical Gases Storage	Plumbing	Hot water - Building plant		Not Present				
Palmerston North Hospital	Medical Gases Storage	Plumbing	Hot water - Site Plant			no			
Palmerston North Hospital	Medical Gases Storage	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Palmerston North Hospital	Medical Gases Storage	Plumbing	Medical gases and vacuum - Site Plant			no			
Palmerston North Hospital	Medical Gases Storage	Plumbing	Medical gases and vacuum distribution		Not Present				
Palmerston North Hospital	Medical Gases Storage	Sprinklers	Sprinklers		Not Present				
Palmerston North Hospital	Medical Gases Storage	Vertical Transport			Not Present				
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	Electrical Power	Building Generator		Not Present				
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	Electrical Power	Building Main Switchboard		Not Present				
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	Electrical Power	Building UPS		Not Present				
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	Electrical Power	Local DBs		Not Present				
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	Electrical Power	Site Generator			yes			
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	Electrical Power	Sub-main cabling		Present		2	1	original
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	Fabric External	Roofing and Decking	Other/mixed	Not Present				
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	Fabric External	Walls and Cladding	Other/mixed	Not Present				
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	Fabric External	Windows and Doors	Other/mixed	Not Present				
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	Fabric Internal	B1		Present		4	1	original
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	Fire Alarm			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
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	HVAC	BMS Controls		Not Present				
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	HVAC	Boiler Plant - Site Plant			no			
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	HVAC	Boiler Plant in building		Not Present				
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	HVAC	Building HVAC - Central plant		Not Present				
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	HVAC	Building HVAC - Local plant		Not Present				
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	HVAC	Cooling Distribution		Not Present				
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	HVAC	Cooling Plant - Site Plant			no			
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	HVAC	Cooling Plant in building		Not Present				
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	HVAC	Heating Distribution		Not Present				
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	Plumbing	Cold water - Building distribution		Not Present				
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	Plumbing	Cold water - Building storage tanks		Not Present				
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	Plumbing	Cold water - Site storage and mains			no			
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	Plumbing	Hot water - Building distribution		Not Present				
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	Plumbing	Hot water - Building plant		Not Present				
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	Plumbing	Hot water - Site Plant			no			
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	Plumbing	Medical gases and vacuum - Site Plant			no			
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	Plumbing	Medical gases and vacuum distribution		Not Present				
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	Sprinklers	Sprinklers		Not Present				
Palmerston North Hospital	Service Tunnels to Boiler House and Kitchen Block	Vertical Transport			Not Present				
Palmerston North Hospital	Site Wide	Electrical Infrastructure	Main switchboards		Present		2	2	original
Palmerston North Hospital	Site Wide	Electrical Infrastructure	Site distribution mains		Present		3	1	original
Palmerston North Hospital	Site Wide	Electrical Infrastructure	Site generators		Present		2	2	10+
Palmerston North Hospital	Site Wide	Electrical Infrastructure	Substations		Present		4	1	original
Palmerston North Hospital	Site Wide	Mechanical Infrastructure	Site Cold Water supply tanks		Present		4	1	original
Palmerston North Hospital	Site Wide	Mechanical Infrastructure	Site Cooling pipes		Present		3	2	mixed
Palmerston North Hospital	Site Wide	Mechanical Infrastructure	Site Cooling plant		Present		3	3	mixed
Palmerston North Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water site pipes		Not Present				
Palmerston North Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water storage tanks		Present		2	1	10+
Palmerston North Hospital	Site Wide	Mechanical Infrastructure	Site Heating pipes		Present		3	1	original
Palmerston North Hospital	Site Wide	Mechanical Infrastructure	Site Heating Plant		Present		3	1	10+
Palmerston North Hospital	Site Wide	Mechanical Infrastructure	Site Hot and Cold Water site pipes		Present		4	3	mixed
Palmerston North Hospital	Site Wide	Mechanical Infrastructure	Site Hot Water storage		Present		3	1	original
Palmerston North Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		3	1	mixed
Palmerston North Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		3	1	10+
Palmerston North Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		3	1	10+
Palmerston North Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		3	2	mixed
Palmerston North Hospital	Site Wide	Mechanical Infrastructure	Site sewer drains		Present		5	2	mixed
Palmerston North Hospital	Site Wide	Mechanical Infrastructure	Site Steam pipes		Present		4	1	original
Palmerston North Hospital	Site Wide	Mechanical Infrastructure	Site storm water drains		Present		5	2	mixed
Palmerston North Hospital	Water Tower	Electrical Power	Building Generator		Not Present				
Palmerston North Hospital	Water Tower	Electrical Power	Building Main Switchboard		Not Present				
Palmerston North Hospital	Water Tower	Electrical Power	Building UPS		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
Palmerston North Hospital	Water Tower	Electrical Power	Local DBs		Present		5	1	original
Palmerston North Hospital	Water Tower	Electrical Power	Site Generator			yes			
Palmerston North Hospital	Water Tower	Electrical Power	Sub-main cabling		Present		4	2	original
Palmerston North Hospital	Water Tower	Fabric External	Roofing and Decking	Other/mixed	Present		3	1	original
Palmerston North Hospital	Water Tower	Fabric External	Walls and Cladding	Concrete	Present		3	1	original
Palmerston North Hospital	Water Tower	Fabric External	Windows and Doors	Wood	Present		4	1	original
Palmerston North Hospital	Water Tower	Fabric Internal	G		Present		4	1	original
Palmerston North Hospital	Water Tower	Fire Alarm			Not Present				
Palmerston North Hospital	Water Tower	HVAC	BMS Controls		Not Present				
Palmerston North Hospital	Water Tower	HVAC	Boiler Plant - Site Plant		Not Present				
Palmerston North Hospital	Water Tower	HVAC	Boiler Plant in building		Not Present				
Palmerston North Hospital	Water Tower	HVAC	Building HVAC - Central plant		Not Present				
Palmerston North Hospital	Water Tower	HVAC	Building HVAC - Local plant		Not Present				
Palmerston North Hospital	Water Tower	HVAC	Cooling Distribution		Not Present				
Palmerston North Hospital	Water Tower	HVAC	Cooling Plant - Site Plant		Not Present				
Palmerston North Hospital	Water Tower	HVAC	Cooling Plant in building		Not Present				
Palmerston North Hospital	Water Tower	HVAC	Heating Distribution		Not Present				
Palmerston North Hospital	Water Tower	Plumbing	Cold water - Building distribution		Not Present				
Palmerston North Hospital	Water Tower	Plumbing	Cold water - Building storage tanks		Not Present				
Palmerston North Hospital	Water Tower	Plumbing	Cold water - Site storage and mains		Not Present				
Palmerston North Hospital	Water Tower	Plumbing	Hot water - Building distribution		Not Present				
Palmerston North Hospital	Water Tower	Plumbing	Hot water - Building plant		Not Present				
Palmerston North Hospital	Water Tower	Plumbing	Hot water - Site Plant		Not Present				
Palmerston North Hospital	Water Tower	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Palmerston North Hospital	Water Tower	Plumbing	Medical gases and vacuum - Site Plant		Not Present				
Palmerston North Hospital	Water Tower	Plumbing	Medical gases and vacuum distribution		Not Present				
Palmerston North Hospital	Water Tower	Sprinklers	Sprinklers		Not Present				
Palmerston North Hospital	Water Tower	Vertical Transport			Not Present				

Wellington Hospital

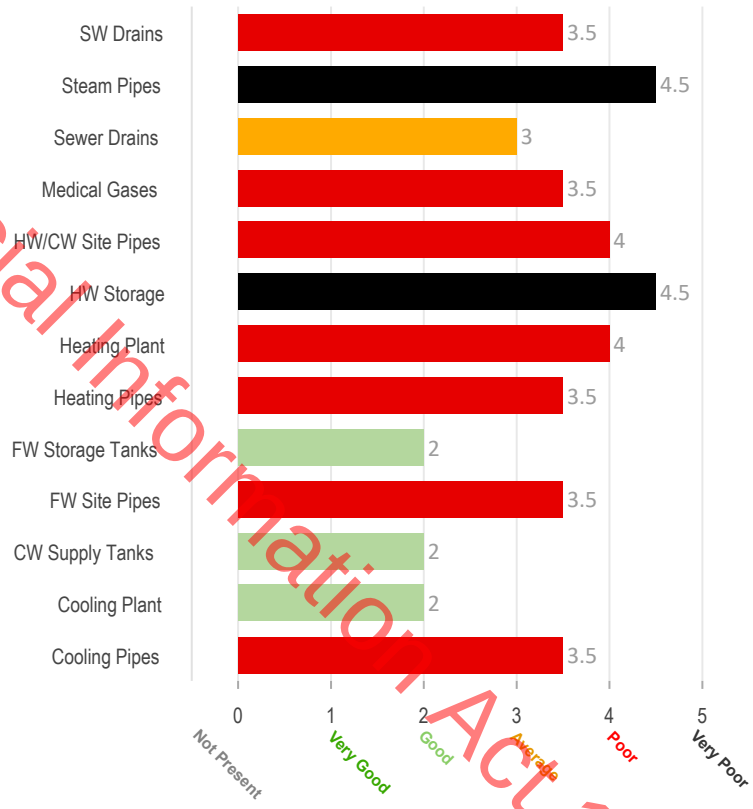
Capital and Coast DHB

Beca Campus ID: 809
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 9/09/2019

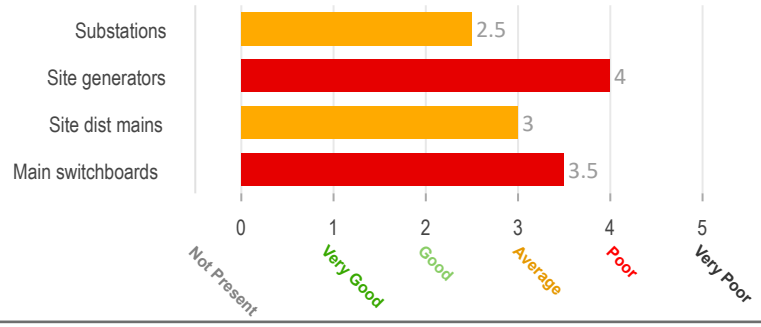
Site Overview

Buildings Surveyed

Site wide Mechanical Infrastructure Condition



Site wide Electrical Infrastructure Condition



Engineering Commentary

A key concern is the Energy Centre (TEC) as elements of the envelope contain asbestos and are preventing roof access. We understand there are concerns some key site services are not located on drawings.
Hospital owns 11kV site infrastructure. Majority of HV cabling around site generally appear to be beyond life expectancy and should be replaced. Site LV MSB at end of life expectancy and replacement is being investigated.
Mechanical services were generally of average (boiler system) to good (chiller system) condition. Domestic and heating hot water valves, pumps and storage tanks in Total Energy Centre were in poor condition which require constant attention.

Total Energy Centre

Wellington Hospital (Capital and Coast DHB)

Beca Building ID: 247
NAMP ID: 10286
DHB Ref: TEC
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% IL4

General Building Information

Approximate Building Age: 1980

Survey date: 21/05/2019

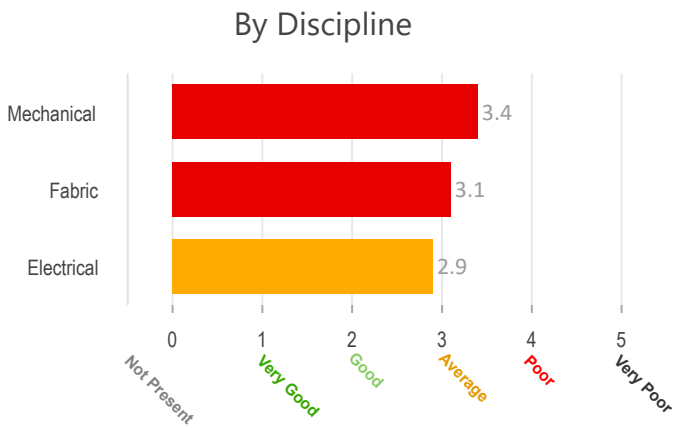
Gross Floor Area (m2): 10300

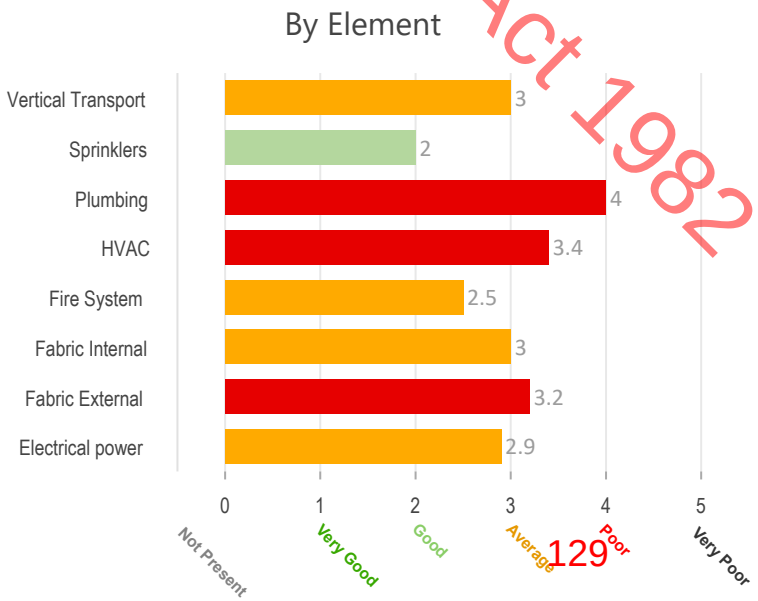
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Significant known issues

Seismic Services Restraint: Poor

Summary of building condition



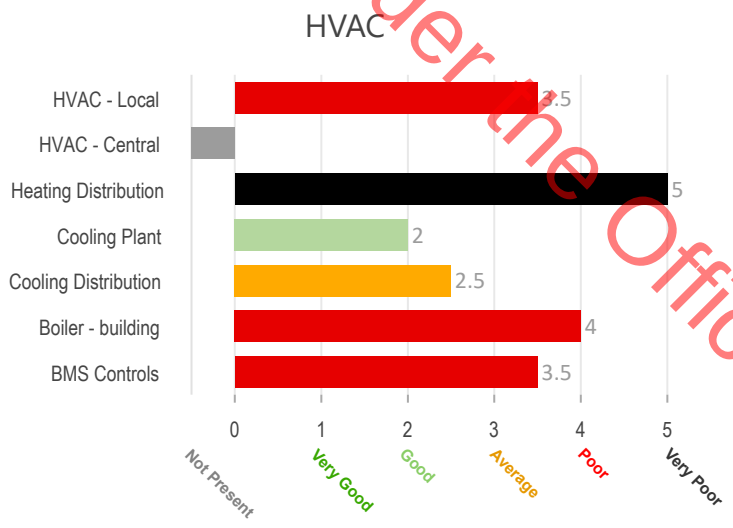


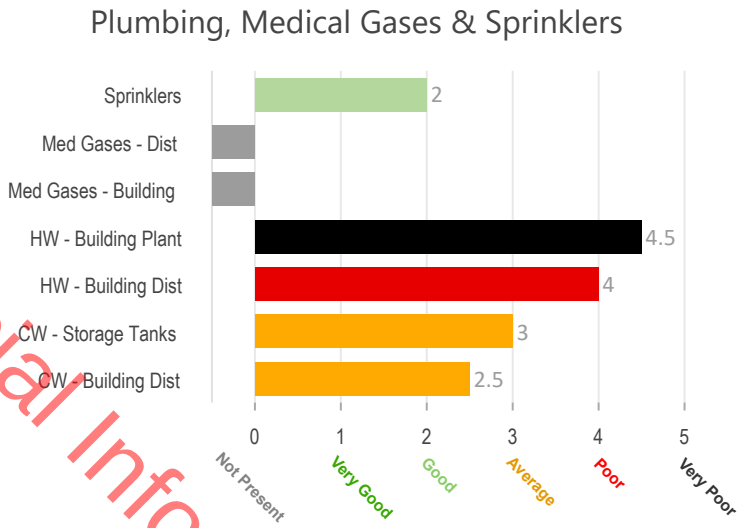
Beca Building ID: 247
NAMP ID: 10286
DHB Ref: TEC
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

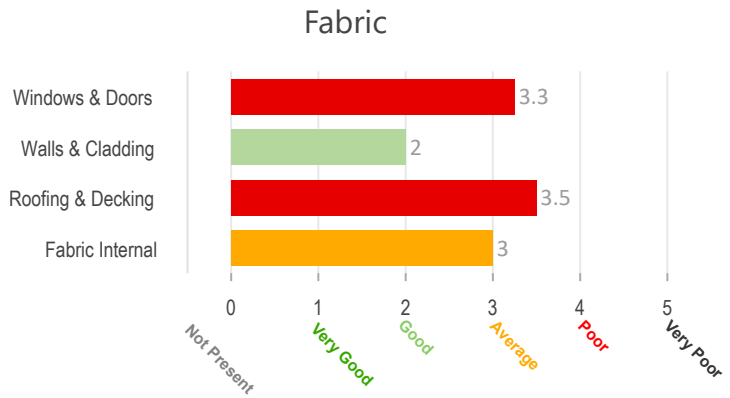
Approximate building location

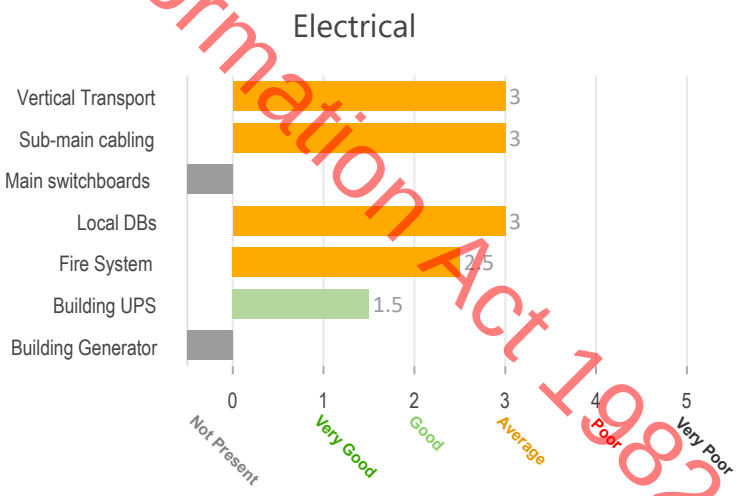
Total Energy Centre

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.

Mein Street Sub Station

Wellington Hospital (Capital and Coast DHB)

Beca Building ID: 246
NAMP ID: 10280
DHB Ref: MSS
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 9/09/2019

Photo of Building Exterior

Services & Fabric Score

2.6

DHB Assessed *% NBS* Rating

No Data

General Building Information

Approximate Building Age: 1970

Survey date: 21/05/2019

Gross Floor Area (m2): 16

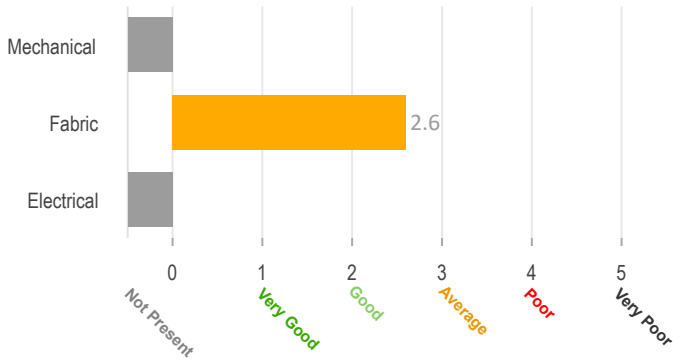
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Low likelihood of issues

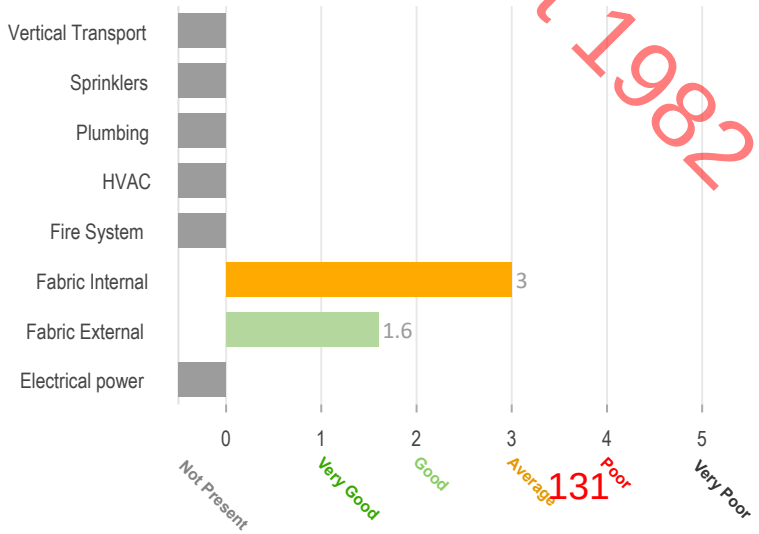
Seismic Services Restraint: Not Observed

Summary of building condition

By Discipline



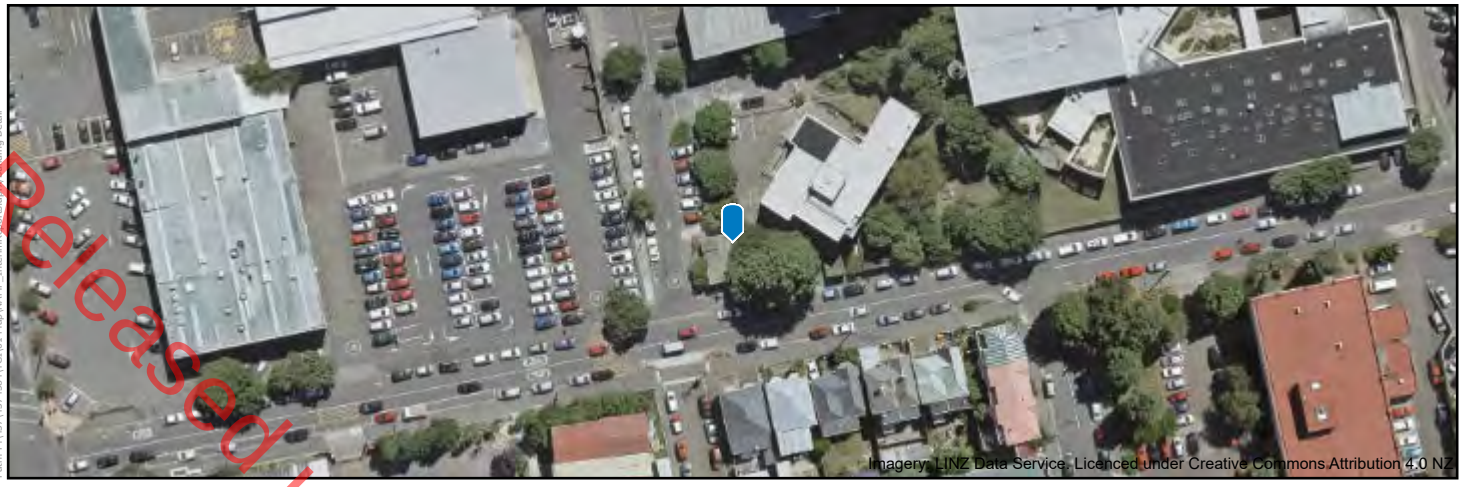
By Element



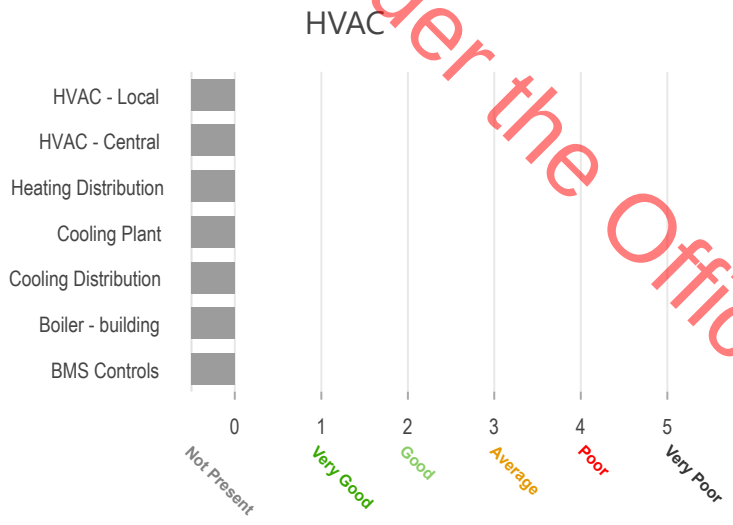
Beca Building ID: 246
NAMP ID: 10280
DHB Ref: MSS
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 9/09/2019

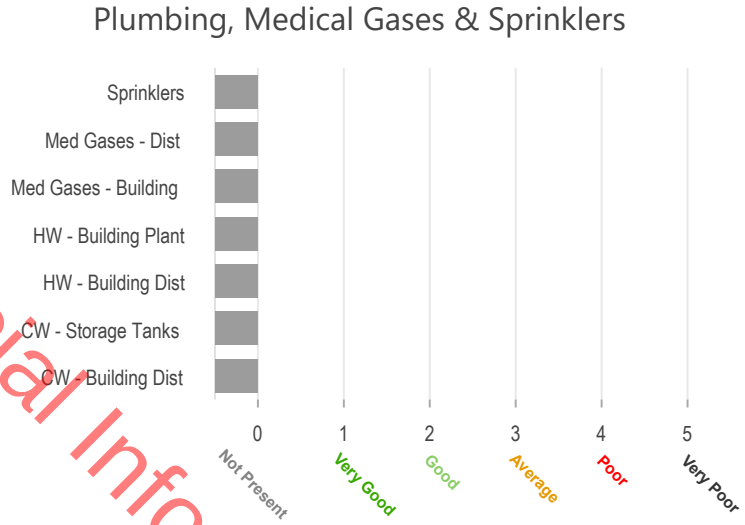
Approximate building location

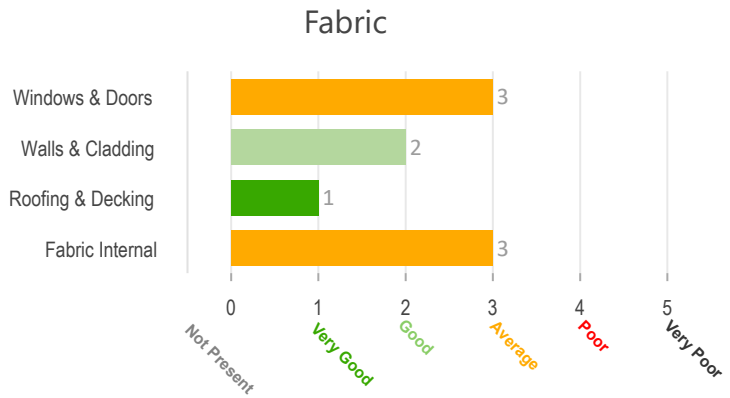
Mein Street Sub Station

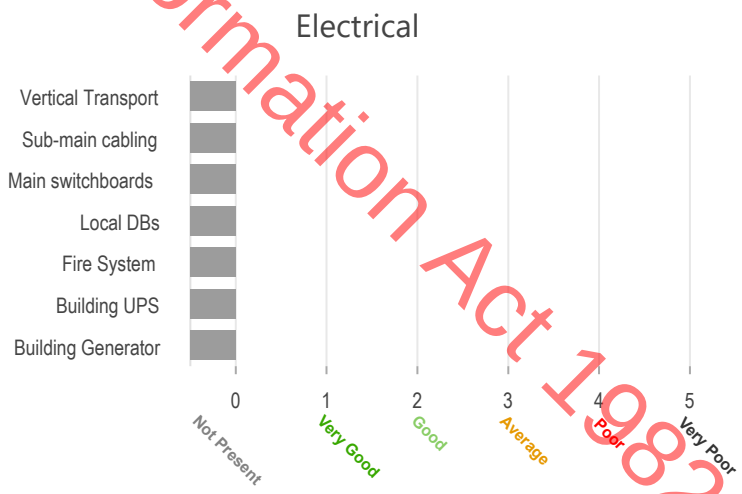


Summary of building element condition details









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.

Clinical Services Block

Wellington Hospital (Capital and Coast DHB)

Beca Building ID: 245
NAMP ID: 10272
DHB Ref: CSB
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

Photo of Building Exterior

Services & Fabric Score

2.7

DHB Assessed *% NBS* Rating

68% IL3

General Building Information

Approximate Building Age: 1979

Survey date: 21/05/2019

Gross Floor Area (m2): 25635

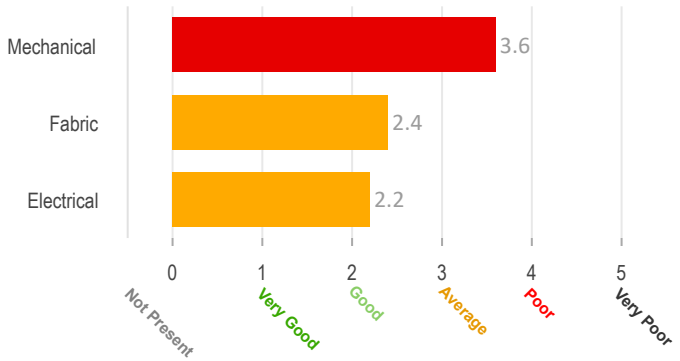
Fire Separation Issues: Limited issues observed/known

Asbestos Issues: Limited issues observed/known

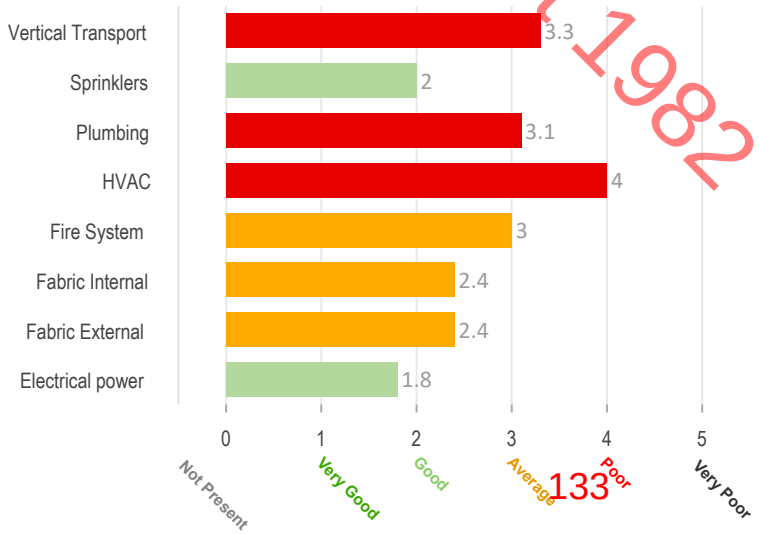
Seismic Services Restraint: Moderate

Summary of building condition

By Discipline



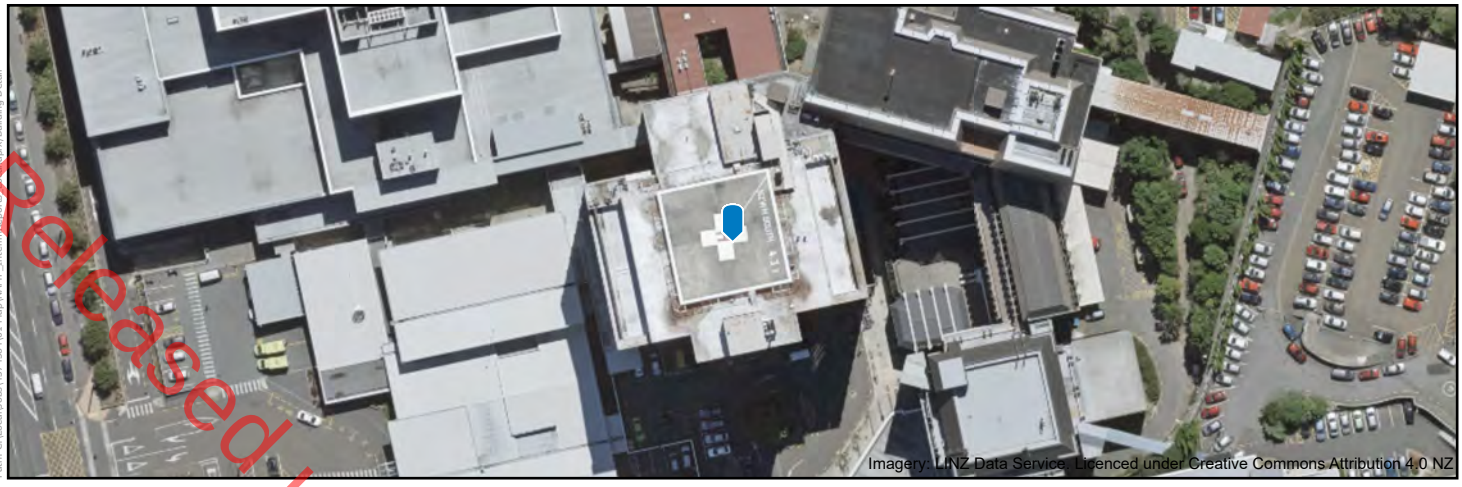
By Element



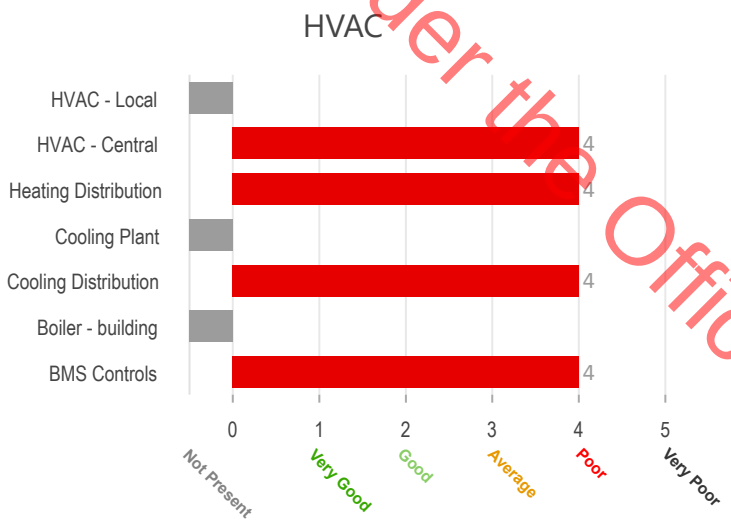
Beca Building ID: 245
NAMP ID: 10272
DHB Ref: CSB
Report prepared by: Beca
MoH Contact: Leigh Halstead
Revision Number: 3
Update Date: 2/09/2019

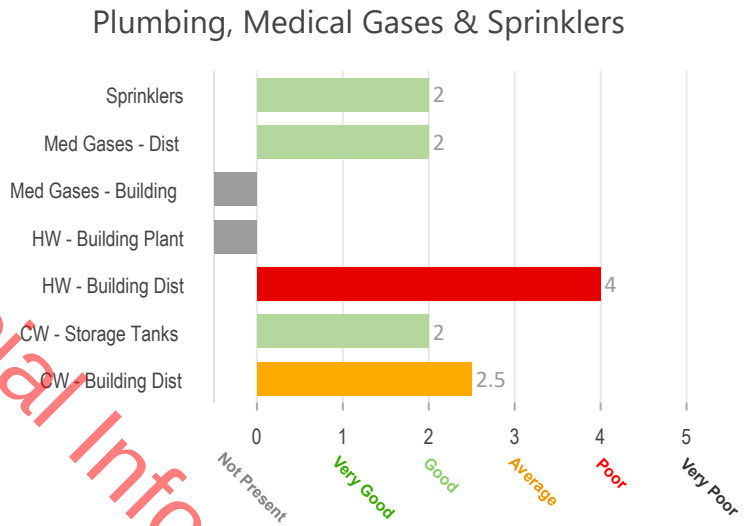
Approximate building location

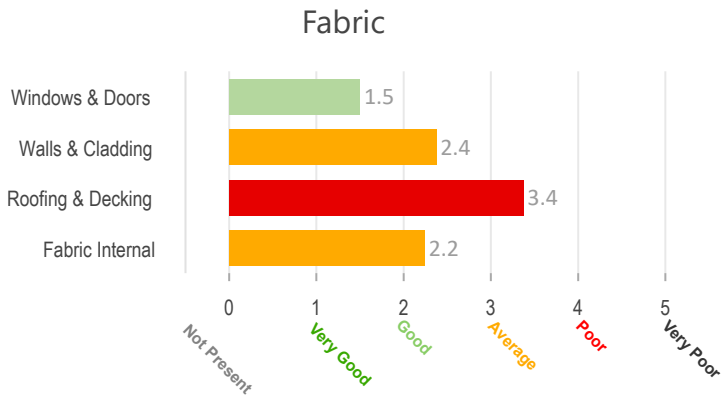
Clinical Services Block

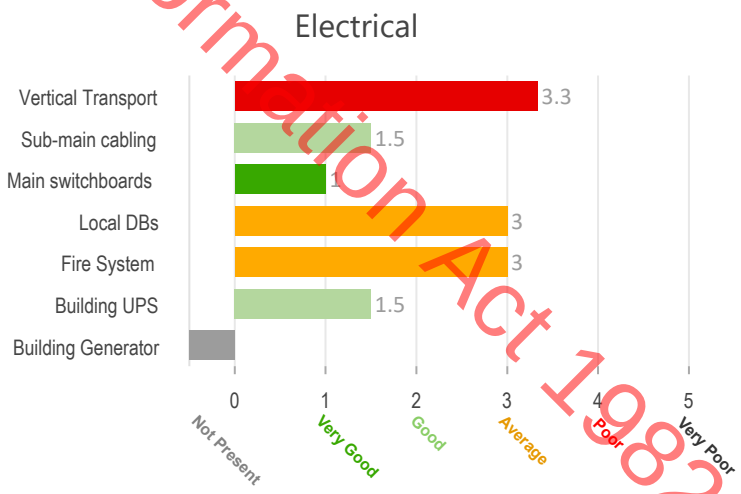


Summary of building element condition details









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.
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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
Wellington Hospital	Clinical Services Block	Electrical Power	Building Generator		Not Present				
Wellington Hospital	Clinical Services Block	Electrical Power	Building Main Switchboard		Present		1	1	3 to 10
Wellington Hospital	Clinical Services Block	Electrical Power	Building UPS		Present		2	1	3 to 10
Wellington Hospital	Clinical Services Block	Electrical Power	Local DBs		Present		3	2	mixed
Wellington Hospital	Clinical Services Block	Electrical Power	Site Generator			yes			
Wellington Hospital	Clinical Services Block	Electrical Power	Sub-main cabling		Present		2	1	mixed
Wellington Hospital	Clinical Services Block	Fabric External	Roofing and Decking	Iron/metal	Present		5	2	original
Wellington Hospital	Clinical Services Block	Fabric External	Roofing and Decking	Mastic Asphalt	Present		3	1	original
Wellington Hospital	Clinical Services Block	Fabric External	Walls and Cladding	Concrete	Present		2	1	original
Wellington Hospital	Clinical Services Block	Fabric External	Walls and Cladding	Sheet	Present		4	1	original
Wellington Hospital	Clinical Services Block	Fabric External	Windows and Doors	Aluminium	Present		2	1	3 to 10
Wellington Hospital	Clinical Services Block	Fabric Internal	1		Present		2	1	original
Wellington Hospital	Clinical Services Block	Fabric Internal	2		Present				
Wellington Hospital	Clinical Services Block	Fabric Internal	3		Present		2	2	3 to 10
Wellington Hospital	Clinical Services Block	Fabric Internal	4		Present		2	1	3 to 10
Wellington Hospital	Clinical Services Block	Fabric Internal	6		Present				
Wellington Hospital	Clinical Services Block	Fabric Internal	7		Present			2	10+
Wellington Hospital	Clinical Services Block	Fabric Internal	8		Present		2		3 to 10
Wellington Hospital	Clinical Services Block	Fabric Internal	9		Present		3	1	10+
Wellington Hospital	Clinical Services Block	Fabric Internal	10		Present		3	1	original
Wellington Hospital	Clinical Services Block	Fabric Internal	11		Present		4	1	original
Wellington Hospital	Clinical Services Block	Fabric Internal	12		Present		2	1	10+
Wellington Hospital	Clinical Services Block	Fabric Internal	13		Present		2	1	10+
Wellington Hospital	Clinical Services Block	Fabric Internal	14		Present		3		original
Wellington Hospital	Clinical Services Block	Fire Alarm			Present		3	2	10+
Wellington Hospital	Clinical Services Block	HVAC	BMS Controls		Present		4	2	mixed
Wellington Hospital	Clinical Services Block	HVAC	Boiler Plant - Site Plant			yes			
Wellington Hospital	Clinical Services Block	HVAC	Boiler Plant in building		Not Present				
Wellington Hospital	Clinical Services Block	HVAC	Building HVAC - Central plant		Present		4	2	mixed
Wellington Hospital	Clinical Services Block	HVAC	Building HVAC - Local plant		Not Present				
Wellington Hospital	Clinical Services Block	HVAC	Cooling Distribution		Present		3	3	original
Wellington Hospital	Clinical Services Block	HVAC	Cooling Plant - Site Plant			yes			
Wellington Hospital	Clinical Services Block	HVAC	Cooling Plant in building		Not Present				
Wellington Hospital	Clinical Services Block	HVAC	Heating Distribution		Present		3	3	original
Wellington Hospital	Clinical Services Block	Plumbing	Cold water - Building distribution		Present		2	2	original
Wellington Hospital	Clinical Services Block	Plumbing	Cold water - Building storage tanks		Present		2	1	original
Wellington Hospital	Clinical Services Block	Plumbing	Cold water - Site storage and mains			yes			
Wellington Hospital	Clinical Services Block	Plumbing	Hot water - Building distribution		Present		3	3	original
Wellington Hospital	Clinical Services Block	Plumbing	Hot water - Building plant		Not Present				
Wellington Hospital	Clinical Services Block	Plumbing	Hot water - Site Plant			yes			
Wellington Hospital	Clinical Services Block	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Wellington Hospital	Clinical Services Block	Plumbing	Medical gases and vacuum - Site Plant			yes			
Wellington Hospital	Clinical Services Block	Plumbing	Medical gases and vacuum distribution		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
Wellington Hospital	Clinical Services Block	Sprinklers	Sprinklers		Present		2	1	original
Wellington Hospital	Clinical Services Block	Vertical Transport	Lift 1-4		Present		3	2	10+
Wellington Hospital	Clinical Services Block	Vertical Transport	Lift 5-6		Present		3	2	original
Wellington Hospital	Clinical Services Block	Vertical Transport	Lift BG3 for backup helipad		Present		3	2	original
Wellington Hospital	Mein Street Sub Station	Electrical Power	Building Generator		Not Present				
Wellington Hospital	Mein Street Sub Station	Electrical Power	Building Main Switchboard		No information/access				
Wellington Hospital	Mein Street Sub Station	Electrical Power	Building UPS		Not Present				
Wellington Hospital	Mein Street Sub Station	Electrical Power	Local DBs		No information/access				
Wellington Hospital	Mein Street Sub Station	Electrical Power	Site Generator			no			
Wellington Hospital	Mein Street Sub Station	Electrical Power	Sub-main cabling		No information/access				
Wellington Hospital	Mein Street Sub Station	Fabric External	Roofing and Decking	Rubber Sheet	Present		1	1	0 - 3
Wellington Hospital	Mein Street Sub Station	Fabric External	Walls and Cladding	Masonry	Present		2	1	original
Wellington Hospital	Mein Street Sub Station	Fabric External	Windows and Doors	Wood	Present		3	1	original
Wellington Hospital	Mein Street Sub Station	Fabric Internal	G		Present		3	1	original
Wellington Hospital	Mein Street Sub Station	Fire Alarm							
Wellington Hospital	Mein Street Sub Station	HVAC	BMS Controls		Not Present				
Wellington Hospital	Mein Street Sub Station	HVAC	Boiler Plant - Site Plant			no			
Wellington Hospital	Mein Street Sub Station	HVAC	Boiler Plant in building		Not Present				
Wellington Hospital	Mein Street Sub Station	HVAC	Building HVAC - Central plant		Not Present				
Wellington Hospital	Mein Street Sub Station	HVAC	Building HVAC - Local plant		Not Present				
Wellington Hospital	Mein Street Sub Station	HVAC	Cooling Distribution		Not Present				
Wellington Hospital	Mein Street Sub Station	HVAC	Cooling Plant - Site Plant			no			
Wellington Hospital	Mein Street Sub Station	HVAC	Cooling Plant in building		Not Present				
Wellington Hospital	Mein Street Sub Station	HVAC	Heating Distribution		Not Present				
Wellington Hospital	Mein Street Sub Station	Plumbing	Cold water - Building distribution		Not Present				
Wellington Hospital	Mein Street Sub Station	Plumbing	Cold water - Building storage tanks		Not Present				
Wellington Hospital	Mein Street Sub Station	Plumbing	Cold water - Site storage and mains			no			
Wellington Hospital	Mein Street Sub Station	Plumbing	Hot water - Building distribution		Not Present				
Wellington Hospital	Mein Street Sub Station	Plumbing	Hot water - Building plant		Not Present				
Wellington Hospital	Mein Street Sub Station	Plumbing	Hot water - Site Plant			no			
Wellington Hospital	Mein Street Sub Station	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Wellington Hospital	Mein Street Sub Station	Plumbing	Medical gases and vacuum - Site Plant			no			
Wellington Hospital	Mein Street Sub Station	Plumbing	Medical gases and vacuum distribution		Not Present				
Wellington Hospital	Mein Street Sub Station	Sprinklers	Sprinklers		Not Present				
Wellington Hospital	Mein Street Sub Station	Vertical Transport			Not Present				
Wellington Hospital	Site Wide	Electrical Infrastructure	Main switchboards		Present		4	1	original
Wellington Hospital	Site Wide	Electrical Infrastructure	Site distribution mains		Present		3	2	mixed
Wellington Hospital	Site Wide	Electrical Infrastructure	Site generators		Present		4	2	original
Wellington Hospital	Site Wide	Electrical Infrastructure	Substations		Present		2	2	original
Wellington Hospital	Site Wide	Mechanical Infrastructure	Site Cold Water supply tanks		Present		2	1	original
Wellington Hospital	Site Wide	Mechanical Infrastructure	Site Cooling pipes		Present		3	2	original
Wellington Hospital	Site Wide	Mechanical Infrastructure	Site Cooling plant		Present		2	2	10+
Wellington Hospital	Site Wide	Mechanical Infrastructure	Site Fire 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
Wellington Hospital	Site Wide	Mechanical Infrastructure	Site Fire Water storage tanks		Present		2	1	original
Wellington Hospital	Site Wide	Mechanical Infrastructure	Site Heating pipes		Present		3	2	original
Wellington Hospital	Site Wide	Mechanical Infrastructure	Site Heating Plant		Present		3	3	original
Wellington Hospital	Site Wide	Mechanical Infrastructure	Site Hot and Cold Water site pipes		Present		4	2	original
Wellington Hospital	Site Wide	Mechanical Infrastructure	Site Hot Water storage		Present		5	2	original
Wellington Hospital	Site Wide	Mechanical Infrastructure	Site Medical Gases and vacuum		Present		3	3	mixed
Wellington Hospital	Site Wide	Mechanical Infrastructure	Site sewer drains		Present		3	1	original
Wellington Hospital	Site Wide	Mechanical Infrastructure	Site Steam pipes		Present		5	2	original
Wellington Hospital	Site Wide	Mechanical Infrastructure	Site storm water drains		Present		3	2	original
Wellington Hospital	Total Energy Centre	Electrical Power	Building Generator		Not Present				
Wellington Hospital	Total Energy Centre	Electrical Power	Building Main Switchboard		Not Present				
Wellington Hospital	Total Energy Centre	Electrical Power	Building UPS		Present		2	1	10+
Wellington Hospital	Total Energy Centre	Electrical Power	Local DBs		Present		3	2	mixed
Wellington Hospital	Total Energy Centre	Electrical Power	Site Generator			yes			
Wellington Hospital	Total Energy Centre	Electrical Power	Sub-main cabling		Present		3	2	mixed
Wellington Hospital	Total Energy Centre	Fabric External	Roofing and Decking	Rubber Sheet	Present		4	1	original
Wellington Hospital	Total Energy Centre	Fabric External	Walls and Cladding	Concrete	Present		2	1	original
Wellington Hospital	Total Energy Centre	Fabric External	Windows and Doors	Wood	Present		4	1	original
Wellington Hospital	Total Energy Centre	Fabric External	Windows and Doors	Metal	Present		3	1	original
Wellington Hospital	Total Energy Centre	Fabric Internal	1		Present		3	1	original
Wellington Hospital	Total Energy Centre	Fabric Internal	B1		Present		3	1	original
Wellington Hospital	Total Energy Centre	Fabric Internal	G		Present		3	1	original
Wellington Hospital	Total Energy Centre	Fire Alarm			Present		3	1	10+
Wellington Hospital	Total Energy Centre	HVAC	BMS Controls		Present		3	2	mixed
Wellington Hospital	Total Energy Centre	HVAC	Boiler Plant - Site Plant			no			
Wellington Hospital	Total Energy Centre	HVAC	Boiler Plant in building		Present		3	3	original
Wellington Hospital	Total Energy Centre	HVAC	Building HVAC - Central plant		Not Present				
Wellington Hospital	Total Energy Centre	HVAC	Building HVAC - Local plant		Present		3	2	original
Wellington Hospital	Total Energy Centre	HVAC	Cooling Distribution		Present		2	3	mixed
Wellington Hospital	Total Energy Centre	HVAC	Cooling Plant - Site Plant			no			
Wellington Hospital	Total Energy Centre	HVAC	Cooling Plant in building		Present		2	2	10+
Wellington Hospital	Total Energy Centre	HVAC	Heating Distribution		Present		5	3	original
Wellington Hospital	Total Energy Centre	Plumbing	Cold water - Building distribution		Present		2	2	original
Wellington Hospital	Total Energy Centre	Plumbing	Cold water - Building storage tanks		Present		3	1	original
Wellington Hospital	Total Energy Centre	Plumbing	Cold water - Site storage and mains			yes			
Wellington Hospital	Total Energy Centre	Plumbing	Hot water - Building distribution		Present		4	2	original
Wellington Hospital	Total Energy Centre	Plumbing	Hot water - Building plant		Present		5	2	original
Wellington Hospital	Total Energy Centre	Plumbing	Hot water - Site Plant			no			
Wellington Hospital	Total Energy Centre	Plumbing	Medical gases and vacuum - Building plant		Not Present				
Wellington Hospital	Total Energy Centre	Plumbing	Medical gases and vacuum - Site Plant			no			
Wellington Hospital	Total Energy Centre	Plumbing	Medical gases and vacuum distribution		Not Present				
Wellington Hospital	Total Energy Centre	Sprinklers	Sprinklers		Present		2	1	original
Wellington Hospital	Total Energy Centre	Vertical Transport	Hydraulic lift G1		Present		4	1	original