Construction and Operational Waste Management Plan

Construction and Operational Waste Management Plan

December 2024

V1.0

Turner & Townsend

NSW GOVERNMENT Health

Document Control

Version	Date	Issued to	Notes
0.1	20 August 2024	Hunter New England Local Health District – Sustainability Team	Review document and included forecast operational waste estimates and proposed waste streams
0.2	04 September 2024	Ethos Urban and Health Infrastructure	For Review
0.3	14 October 2024	Ethos Urban	For Review
1.0	17 December 2024	Health Infrastructure	FINAL REF

Contents

1. Introduction & Declaration

1.1 Project Introduction

This Construction & Operation Waste Management Plan has been prepared by Turner & Townsend and Hunter New England Local Health District on behalf of Health Infrastructure (HI) to assess the potential environmental impacts that could arise from infrastructure works at 51 Metford Rd, Metford NSW 2323 (the site). The project is seeking approval for a Development Without Consent (REF) application under Part 5 of the EP&A Act.

This report has been prepared to outline the proposed plan to manage construction and operational waste that will be generated by the

The site is located at the Maitland Hospital Campus on Metford Road, Maitland, approximately 6.4km from the CBD of Maitland. The project site is located within the development parcel, legally described as Lot 73 DP 1256781 and Part Lot 41 DP 1274253.

This report accompanies a State Significant Infrastructure Development Application that seeks approval for construction and operation of a 2 storey Mental Health Facility, including:

- Site establishment
- Site preparation including earthworks
- Construction of internal roads and addition of at-grade car parks
- Construction of 2 storey mental health facility
- 20 Medium Secure Forensic beds; 24 Low Secure Forensic beds; 20 Rehabilitation & Recovery General beds (64 beds total)
- Inground building services works and utility adjustments, including service diversions
- Building foundation works
- Tree removal
- Associated landscaping
- Bioretention basin

For a detailed project description refer to the Environmental Impact Statement prepared by Ethos Urban.

1.2 Proposed Site Plan

The below site plan identifies the scope of the proposed development:

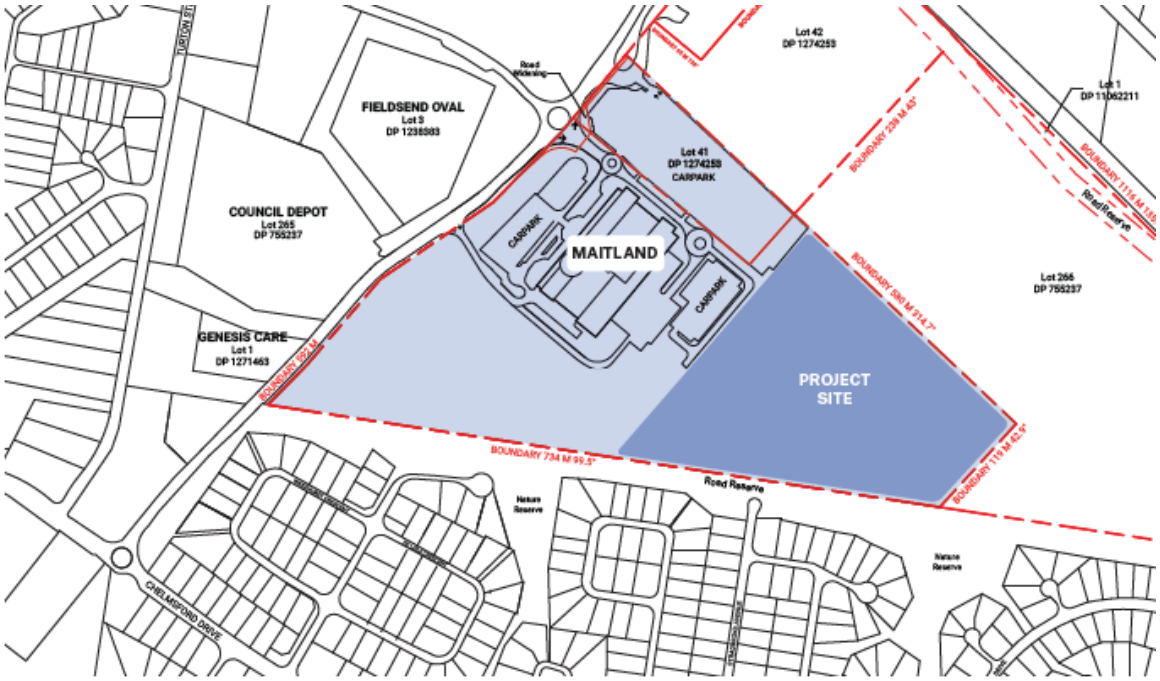

Figure 1: Maitland Mental Health Rehabilitation Site Plan (BVN)

1.3 Statement of Significance

Based on the identification of potential issues, and an assessment of the nature and extent of the impacts of the proposed development, it is determined that:

- The extent and nature of potential impacts are low and will not have significant adverse effects on the locality, community and the environment;
- Potential impacts can be appropriately mitigated or managed to ensure that there is minimal effect on the locality, community.

1.4 Proposed Mitigations

Project Stage	Mitigation Measures	Relevant Section of Report
Prior to Construction	The contractor to prepare a Construction Waste Management Plan in accordance with GC21 contract specifications.	Section 08
Prior to Operation	LHD to finalise operational waste management plan in accordance with relevant legislation, Policies, Australian Standards and Guidelines.	Section 07

2. Purpose

The Construction and Operational Waste Management Plan has been prepared to support the Maitland Mental Health Rehabilitation Project (MMH) Development without consent (REF) planning pathway.

The Works will be undertaken by a Principal Contractor. All statements and proposals documented in this WMP are a guide only. At the time of contract award, the Contractor(s) will formulate their own WMP for the Works and ensure alignment with the legislation, health services requirements and project requirements. This WMP will be replaced by the Contractor's WMP once appointed.

The development application pathway for the MMH Project will be in accordance with the approval pathway under Part 5, Division 5.1 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

This report will address the following REF requirements as detailed in the table below:

Table 1: REF requirements

Item	REF Requirement	Relevant Section of Report
1.0	Identify, quantify and classify the likely waste streams to be generated during construction and operation.	Section 4.1, 4.2, 4.3 & 5.0
2.0	Provide the measures to be implemented to manage, reuse, recycle and safely dispose of this waste.	Section 4.4, 4.5 & 4.6
3.0	Identify appropriate servicing arrangements for the site.	Section 6.0

3. Legislative Requirements

The works will be undertaken in accordance with the following legislative requirements relevant to the management of waste in New South Wales, and any others that must be complied with in carrying out the works as required:

- NSW Health – Waste Reduction and Purchasing Policy 2011 ‑ 2014
- Waste Management Guidelines for Health Care Facilities
- NSW Occupational Health and Safety Act (2000) NSW OH&S Regulation (2001)
- Protection of the Environment Operations Act and Regulation
- Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA)
- Waste Avoidance and Resource Recovery Act
- Contaminated Land Management Act
- NSW EPA, 2014 – Waste Classification Guidelines 201016_JHHIP WMP v0.1| Page 3
- NSW EPA, 2014 – The Excavated Natural Material Order
- NSW EPA, 2014 – The Excavated Public Road Material Order and The Reclaimed Asphalt Pavement Order
- NSW WorkCover, 2011 – How to Safely Remove Asbestos Code of Practice
- Australian Code for the Transport of Dangerous Goods by Road and Rail
- AS/NZS 4031:1992 (Non ‑ reusable containers for the collection of sharp medical items used in health care areas)
- AS/NZS 4261:1994 (Reusable containers for the collection of sharp items used in human and animal medical applications)
- AS/NZS 3816:1998 (Management of clinical and related waste)
- AS/NZS 2161.10 Parts 1 ‑ 3:2005 (Occupational protective gloves)
- AS/NZS 4123 Parts 1 ‑ 7:2008 (Mobile waste containers)
- AS/NZS 2243 Part 3:2010 (Safety in Laboratories)

- RPS No.20 Safety Guide for Classification of Radioactive Waste (ARPANSA, 2010)
- Code for the Safe Transport of Radioactive Material (ARPANSA, 2014)
- Code of Practice for Radiation Protection in the Medical Applications of Ionizing Radiation (RPS14) (ARPANS A, 2008)
- Industry Code of Practice for the Management of Biohazardous Waste (including Clinical & Related Wastes)
- (WMAA, 2014)
- The Australian Council on Healthcare Standards (ACHS) EQuIPNational Guidelines Standard 15
- (ACHS, 2012)
- Labelling of workplace hazardous chemicals Code of Practice (SafeWork NSW, 2016)
- Code of Practice: Hazardous manual tasks (SafeWork NSW, 2016)
- PD2008_004 Community Sharps Disposal by Area Health Services
- PD2013_043 Medication Handling in NSW Public Health Facilities
- Guideline for Approval of Method to Treat Clinical Waste
- PD2017_013 Infection Prevention and Control Policy
- PD2017_010 HIV, Hepatitis B and Hepatitis C – Management of Health Care Workers Potentially Exposed
- PD2007_052 Sharps Injuries – Prevention in the NSW Public Health System
- PD2012_061 Environmental Cleaning Policy
- Infection prevention and control practice handbook. Principles for NSW public health organisations
- (CEC, 2016)
- Environmental Cleaning Standard Operating Procedures. Module 3.4 Environment (CEC‐HAI, 2012)
- Environmental Cleaning Standard Operating Procedures. Module 6 Cleaning Agents (CEC‐HAI, 2012)
- Environmentally Hazardous Chemicals Act 1985
- Environmentally Hazardous Chemicals Regulation 2017
- Protection of the Environment Administration Act and Regulations
- Code of Practice for the Safe Removal of Asbestos (NOHSC:2002 (2005))
- Guide to the Control of Asbestos Hazards in Buildings and Structures (NOHSC:3002 (1998)
- Resource and Recovery Act 2001
- Environmental Planning and Assessment Act 1979
- Local Government Act 1993
- Soil Conservation Act 1938

4. Waste Management Principles

In accordance with NSW Health requirements for health care facilities, a detailed WMP will be developed by the Principal Contractor providing detailed information regarding the nature and volume of waste generated by the development and the means of storage and disposal of waste from the site. Waste management practices will adopt the waste hierarchy established by the Waste Avoidance and Resource Recovery Act 2001 (WARR Act) of reduce, reuse, recycle, treat and dispose.

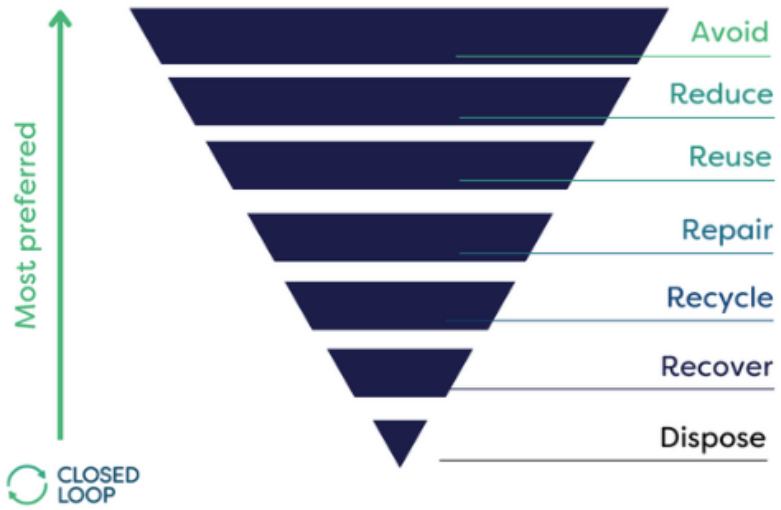

Figure 2: Waste Hierarchy (Closedloop.com.au)

5. Waste Management Principles – Construction

The construction contractor for the construction phase of the project is to understand the critical importance of providing a waste management system that protects the health and safety of personnel, patients and the public and minimises overall environmental impacts by focusing on strategies for minimisation, disposal and recycling of materials during construction.

- The construction contractor should also recognise the need for providing a design flow for waste that allows for safe and efficient disposal of waste.
- The construction contractor will take a proactive approach to accurately segregating waste and identifying opportunities for recycling of building materials where possible and feasible.

This section of the report provides:

- a plan to quantify and classify the likely waste streams generated during construction and measures to be implemented to manage, reuse, recycle and safely dispose of this waste to reduce the load on landfill availability.
- a description of the likely waste streams to be generated during operation and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste; and
- Identify appropriate servicing arrangement (including but not limited to, waste management, loading zones, mechanical plan) for the site.

5.1 Waste Assessment

Indicative quantities of waste likely to be generated during construction have been set out per the below assumptions. This will be developed in further detail by the Principal Contractor. It is expected that actual waste quantities and comp osition will vary depending on outcomes of detailed design, materials specification and construction planning and meth ods.

Quantities of waste likely to be generated can be calculated based on benchmarks provided by the UK Building Research Establishment (See Table 1).

Table 1: Average Volume of Waste Produced by Different Project Types

Project Type	Average volume (m3) of waste per 100m2
Residential	18.1
Public Buildings	20.9
Leisure	14.4
Industrial Buildings	13.0
Healthcare	19.1
Education	20.7
Commercial Other	17.4
Commercial Offices	19.8
Commercial Retail	20.9

Source: BRE (2012)

If the average volumes in table 1 are then cross referenced against ratios of likely waste streams provided by the Sustainability Victoria Waste Wise Tool Kit (2013) in Table 2 we can estimate the likely waste streams and quantities for the project.

Table 2: Guideline to Waste Composition and Volumes - Construction

Material	Estimated Waste %	Conversion Factor (density) (Tonne per m3)
Hard Material	32%	1.2
Timber	24%	0.3
Plastics	15%	0.13
Cement Sheet	9%	0.5
Gypsum material	6%	0.2
Metals	6%	0.9
Paper / Card	4%	0.1
Vegetation	3%	0.15
Soil	1%	1.6
Other	0.3%	0.3

Source: Sustainability Victoria Waste Wise Tool kit (2013)

In Table 3 we have cross referenced the area of the project with Tables 1 & 2 to provide the estimate of total quantity of waste for the project. Area 6519m2 with 36m2 of designated Waste allocation, including 15m2 of waste hold, 20m2 of waste compound and 1.7m2 of waste storage.

Table 3: Likely Waste Quantities During Construction

Material	Average Volume/ 100m2	Total (m3)	Total (t)
Hard Materials (32%)	6.10	398	477
Timber (24%)	4.60	300	90
Plastic (15%)	2.90	189	25
Cement Sheet (9%)	1.70	111	55
Gypsum Material (6%)	1.10	72	14
Metals (6%)	1.10	72	65

Paper/ Card (4%)	0.80	52	5
Vegetation (3%)	0.60	39	6
Soil (1%)	0.20	13	21
Other (0.3%)	0.03	2	1
Total Waste	19.10	1,245	759

Strategies will be implemented to minimise waste generation and maximise reuse and recycling.

The Construction Contractor will be engaged to manage the collection of waste and sort off-site at a purpose made Bingo's Tomago facility or similar. Records will be collected for each month's collections and will be reported monthly and collated at the completion of the project.

Further measures to manage waste are located below in section 6.2 Construction Waste Management Procedures and Strategies.

6.2 Construction Waste Management Procedures and Strategies

The following construction waste management strategies and procedures have been developed to manage the waste generated and encountered over the course of the Project to achieve the Objectives and Targets indicated below.

6.3 Objectives and Targets

Objective	Target	Key Performance Indicator
Solid and Liquid waste to be disposed of as per Regulatory requirements.	All waste to be disposed of by a licensed waste contractor at licensed waste facilities only.	Onsite waste disposal facilities confirmed and documented.
The contractor will aim to maximise landfill diversion	Recycle 80% of demolition and construction waste.	Waste Reporting by waste contractors
No waste to affect nearby premises	No complaints related to construction waste affecting nearby premiss during construction	No. of complains relating to waste

6.4 Management Strategies

Parameter	Action	Timing	Responsibility
Induction	During inductions all personnel are to be made aware of individual responsibilities in regard to waste management, including the understanding that all personal rubbish and construction rubbish generated is to be properly disposed of in designated disposal facilities.	Establishment	All subcontractors
Waste Reduction	Design in waste minimisation during the design phases by standard sizing of materials, the use of modular and prefabricated construction techniques. Stockpile clean fill during the excavation phase by for use as backfill on-site. Provide sub-contractors during the construction phase with clear guidance for reducing packaging on their own materials by both their suppliers and subcontractors, by accurate ordering and handling of materials. Specify reusable, stackable and returnable packaging.	Establishment / Construction	Construction Contractor, Consultants and Subcontractors

Waste disposal Storage area	Appropriate waste disposal facilities (e.g. bins) shall be provided in strategic locations onsite. Waste bins shall be located such that they do not affect the community and not close to surrounding premises. Separation of waste for recycling will be enforced and monitored.	Establishment / Construction	Construction Contractor
	Waste disposal facilities shall be regularly collected or emptied by a licensed waste collector in accordance with Local Council Health Laws.	Construction	Construction Contractor
	Where possible a storage area allocated for the separation, collection and recycling of wastes will be established.	Establishment	Construction Contractor
Waste contractors	Licensed contractors shall be engaged to remove construction waste. A minimum target of 80% landfill waste diversion will be achieved. In	Establishment	Construction Contractor
Putrescibles waste (Organic waste)	All putrescibles waste to be placed in a lidded bin and removed separately.	Establishment	Construction Contractor
Recycling / waste reduction	Waste contractors will collect the waste in a single stream (or two or three if we separate steel, general rubbish, etc. on-site) from site and sort the waste back at their processing yard. All waste stream quantities removed from the site will be tracked, including the collection of disposal dockets from licensed waste management facilities, and reported on a monthly basis. Reporting will detail the quantities of each waste type generated during construction. Refer to 'Waste Streaming' section below for proposed reuse, recycling and disposal locations. Note: Cleared vegetation needs to be chipped for re-use on- site for ground stabilisation and erosion control.	Establishment / Construction	Construction Contractor / All subcontractors
Site office	The site office shall implement office waste minimisation techniques	Establishment	Construction Contractor
Hazardous waste	Hazardous waste will be managed and disposed of as per the Safety Data Sheet requirements and Environmental Protection (Controlled Waste) Regulations 2004. A site-specific Contamination Management Plan will be developed and methods for the containment of air-borne fibre emissions will be included in the Plan. Likely controls include the following: • Dust suppression of asbestos-contaminated soils using onsite stationary sprinklers. • Dust suppression of asbestos-contaminated soils using hand-held gurneys. All hazardous waste will be disposed of at approved waste facilities only in accordance with the requirements of the relevant legislation.	Construction	Contractor / All subcontractors
Material Tracking Plan	A site-specific Material Tracking Plan will be developed to track: • All material from source to final placement (including interim movements); • As well as material descriptions, volumes, dates and locations/movements (from/to); and • Material verified as uncontaminated.	Construction	Construction Contractor/ Civil subcontractor
Servicing	Where practicable plant will be serviced offsite to reduce the generation of hydrocarbon waste onsite and potential for spills.	Construction	All Subcontractors

6.5 Monitoring and Reporting

Type of Monitoring / Reporting	Timing	Responsibility	Record
Contaminated Material Notice	As required	Contractor	Incident notification form
Percentage of diversion from landfill	Monthly	Contractor	Monthly Waste Report
Health Infrastructure progress report	Every 2-months	Contractor	Progress Waste Recycling and Purchasing Report
Health Infrastructure summary report	Before Completion	Contractor	Summary Waste Recycling and Purchasing Report
Segregated waste and appropriate waste placement	Weekly	Contractor	Environmental Site Inspection

This reporting also includes the quantities for the **'total material purchased'** and the **'total material purchased with recycled content'.**

6.6 Works Phase waste streaming

Materials Onsite	Reuse and Recycling	Disposal

ONSITE		OFF-SITE	
Type of Materials	**Specify methods**	**Specify contractor and recycling outlet**	**Disposal**
EXCAVATION			
Clean Fill	Assess, excavate & stockpile	Transport & fill	No excavated material to be removed from site unless approved by the Client.
GENERAL WASTE			
General waste	On-site skip bins/ front lift bins and sort waste streams at off-site facility	Dial-A-Dump Bingo Recycling Centre, Tomago	Local licensed waste facility
Concrete	Skip bin and sort waste streams at off-site facility	Dial-A-Dump	Local licensed waste facility
Cardboard	Skip bin and sort waste streams at off-site facility	Bingo Recycling Centre, Tomago	Local licensed waste facility
Metal	Skip bin and sort waste streams at off-site facility	Dial-A-Dump	Local licensed waste facility
Paper	Skip bin and sort waste streams at off-site facility	Bingo Recycling Centre, Tomago	Local licensed waste facility
Packaging	Skip bin and sort waste streams at off-site facility	Dial-A-Dump	Local licensed waste facility
Timber	Skip bin and sort waste streams at off-site facility	Bingo Recycling Centre, Tomago	Local licensed waste facility
Any hazardous waste will be isolated and managed as per the legislation for hazardous waste. 100% of the clean excavation material will be retained on-site (unless otherwise approved by Health Infrastructure) and thoroughly documented in the Project's 'Material Tracking Plan' in preparation for the creation of the Long Term Environmental Management Plan (LTEMP) for the MMH site.			

7. Waste Management (During Operations)

Operational waste management services for the MMRP will be provided in accordance with all relevant regulations and Codes of Practice, including infection control guidelines, Department of Environment and Conservation guidelines, and the Industry Code of Practice for the Management of Clinical and Related Wastes. The waste management services for the Maitland Mental Health Rehabilitation Project will be consistent with the existing management measures in place at Maitland Hospital.

As part of logistics planning of the new hospitals operations likely waste streams have been identified. The likely waste streams include:

- General waste
- Paper/Cardboard Recycling
- Co-Mingled Recycling
- Food and Garden Organics
- Clinical waste
- Pharmaceutical waste
- Anatomical waste
- Cytotoxic waste
- Sharps
- eWaste recycling
- Battery recycling
- Printer Cartridge/Toner Recycling
- Secure Document Destruction
- Secure eWaste Destruction
- Soft Plastic Recycling
- Metal Recycling
- Rigid Medical Plastic Recycling (i.e. items not eligible for co-mingled recycling)
- Intershred

Quantities of these likely waste stream have been calculated using data provided in:

- PD2017_026 District Waste Management Plan
- Dangerous Goods Management Report (GHD Consultants 05/24)
- Benchmarks from other recent hospital developments

Logistics of managing the waste streams have been assessed and are proposed to be serviced as per the below table:

Table 4: Waste Quantities and Service Frequency for External Bins

Waste Stream	Assets	Frequency
General Waste	General Waste Compactor	Weekly
Co-Mingled Recycling	660L for internal/ external use	Weekly
Paper/Cardboard Recycling	660L for internal/ external use	Weekly
Food/ Garden Organics	240L bins	Minimum service is weekly from an infection control perspective. May need more regular servicing in warmer months due to smell.

Logistics of managing the waste streams have been assessed and will be serviced as per the below table:

Table 5: Waste Quantities and Service Frequency for Bespoke Recycling Streams

Waste Stream	Assets	Frequency	Provider	Comments
Printer Cartridge/Toner Recycling	HNELHD has partnered with Close The Loop who offer a recycling program for compatible printer cartridges/toners. This is a stewardship scheme and is free of charge. Close The Loop provide detailed reporting that is compliant with C968 contract requirements.		HRV Multiple Times Per Week	General Waste Compactor
Batteries	Selected Waste Service Contractor Multiple Times per Week		HRV Multiple Times Per Week	Recyclable Waste Compactor holding plastic, glass, aluminium, paper and cardboard **incorrect – paper/cardboard compactor at New Maitland does NOT take plastic/glass/metal.
e-Waste	Veolia in the process of finalising e-Waste arrangement with HNELHD.	*Not yet in place however will mimic cartridge and battery recycling process.	Veolia	e-Waste bin (likely 660L bin) housed on the dock. Each department has a small e-Waste collection in the print room. When full, AFM lodged to centralise eWaste to central drop off point on the dock. Dock supervisor arranges ad hoc collection by calling Veolia.
Container Deposit Scheme (Return and Earn)				Recommendation to place CDS bins in public spaces rather than co-mingled recycling to reduce contamination. Option1: CDS bins can be deposited into co-mingled recycling by HealthShare staff as part of regular co-mingled recycling run. Option 2: Partnership with local charity (i.e. Vinnies) or ADE to service CDS bins. Scope to donate all profit or split 50:50.
Metal Recycling (including single use uncontaminated instruments) (could also potentially have yearly metal clean up for large items such as old beds etc)				Option to partner with local metal recycler. Likely to receive a rebate based on weight and quality of metals. 120L or 240L bins preferred due to weight off items.

Soft Plastics				Currently not in place Veolia unable to offer this waste stream at present. Limited local recyclers able to offer this service at present.
Rigid Medical Plastics				Currently not in place. Veolia can provide a service for this stream however it is cost prohibitive. New Maitland Hospital currently working with a local manufacturer who recycling rigidi medical plastics.

Table 6: Waste Quantities and Service Frequency for Internal Bins

Room	Waste Streams	Details
Indoor/Outdoor Public Areas (wait rooms, kitchenettes, cafes)	General Waste Container Deposit Scheme (Return and Earn)	Assuming 240L bins contained in decorative bin cage outdoors. Indoors aiming to utilise universal colour coding for bin identification. **Source Separation 45L Multisort Bins**
Staff Tea Rooms/Kitchens	General Waste Co-Mingled Recycling Food Organics Container Deposit Scheme (Return and Earn)	Aiming to utilise universal colour coding for bin identification. **Source Separation 45L Multisort Bins** Food Organics in Staff Tea Rooms/Kitchen best collected in bench top **Kitchen Caddy (sourceseparationsystems.com.au)** or **small bin inside cupboard**.
Administration Areas (offices, reception)	Strictly no bins (as per HNELHD Waste Management policy)	Option for staff to utilise a **mini desktop bin** to collect small bits of waste throughout the day with the view that the staff member decants this into a central bin system on a daily basis.
Staff Stations	Paper/Cardboard Recycling Secure Document Destruction	Aiming to utilise universal colour coding for bin identification. **Source Separation 45L Multisort Bins** *Should not require a general waste bin at staff stations (shouldn't be eating here, gloves and masks should be doffed at handwashing stations).
Print Rooms	Paper/Cardboard Recycling Battery collection e-Waste collection *printer cartridges delivered directly to dock	Aiming to utilise universal colour coding for bin identification. **Source Separation 45L Multisort Bins**
Patient Rooms	General Waste	Aiming to utilise universal colour coding for bin identification. **Source Separation 45L Multisort Bins**

Bathrooms	General Waste	Aiming to utilise universal colour coding for bin identification. **Source Separation 45L Multisort Bins**
Clean Utility Rooms	General Waste Co-Mingled Recycling Soft Plastic Recycling Rigid Medical Plastic Recycling Metal Recycling Sharps Pharmaceutical Waste	Aiming to utilise universal colour coding for bin identification. **Source Separation 45L Multisort Bins** For bespoke streams, you can customise the text on the lid of the multisort bins. 19L 19L
Dirty Utility Rooms	General Waste Clinical Waste Cytotoxic Waste (if required) Sharps	Aiming to utilise universal colour coding for bin identification. **Source Separation 45L Multisort Bins** 64L clinismart equivalent – similar to sharps system **https://www.danielshealth.com.au/our-solutions/clinical/** 64L clinismart equivalent – similar to sharps system **https://www.danielshealth.com.au/our-solutions/clinical/** 19L
Handwashing Stations	General Waste	Aiming to utilise universal colour coding for bin identification. **Source Separation 45L Multisort Bins**
Disposal Rooms	General Waste Co-Mingled Recycling Paper/Cardboard Recycling Secure Documents	660L → Swap out for empty 660L → Swap out for empty 660L → Swap out for empty 120 / 240L

The areas allocated within the design for waste management include 10m2 of clean bin storage space, 20m2 allocated to waste compound which can be utilised for a compactor or equivalent and 15m2 of waste hold for combined general and recycling in the Back of House Lower Ground Floor area with supplementary disposal rooms throughout the building of 20m2. This equates to a total of 65m2 throughout the building, exclusive of the waste compactor zone located at Maitland Hospital

The Waste compactor zone houses 2 off compactors for waste compacting. These compactors are serviced via an external service provider and all waste is sorted using the Bedminster system at an external facility. The compactors are serviced via a 12m Roll-on Roll-off Style Collection System that extracts and swaps in new compactors up to 4 times per week.

The internal movements and logistics of this waste flow is outlined below:

Figure 2: MMH LG Waste Management Route

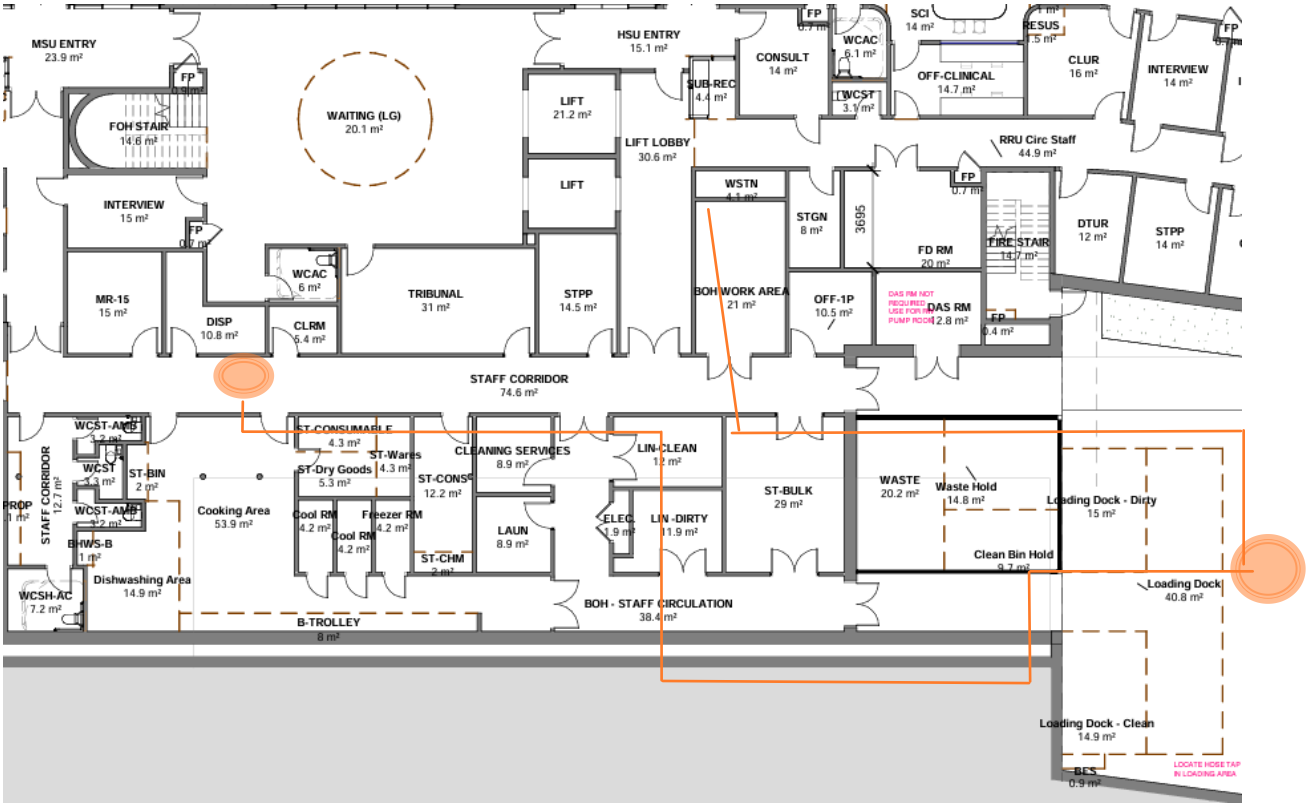

Figure 3: MMH GF Waste Management Route