

St Vincent's and Mater Health



Justinian House Redevelopment

Construction and Operational Waste Management Plan

18 October 2007

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St Vincent's and Mater Health



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Construction and Operational Waste Management Plan

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1 Introduction

Hyder Consulting have been commissioned to prepare a Waste Management Plan (WMP) for the Justinian House Redevelopment Project (JHR) in Wollstonecraft, North Sydney.

This WMP is intended to form part of the Development Application (DA) for the project which is scheduled to be lodged with the Department of Planning (DoP). The WMP describes the demolition/excavation, construction and operational phases of the project. The WMP has been prepared in accordance with North Sydney Development Control Plan 2002, Section 19 Waste Management (DCP2002:S19).

The objectives of this WMP are to meet the requirements of DCP2002:S19 which are:

- Reduce the demand for waste disposal,
- Maximise reuse and recycling of building and construction materials as well as household, industrial and commercial waste,
- Assist in achieving Federal and Government waste minimisation targets in accordance with regional waste plans,
- Minimise the overall environmental impacts of waste,
- Require the source separation, design and location standards which complement waste collection and management services offered by Council and private providers,
- Encourage building design and construction techniques which will minimise future waste generation,
- To achieve waste reduction, waste separation and resource efficiency, and
- To achieve the design of waste and recycling storage/collection systems in buildings and land use activities which are hygienic, accessible, safe and quiet to operate, of an adequate size, and visually compatible with their surroundings.

2 The Proposed Development

The aim of the development is to create a world-class centre of excellence for research, treatment and teaching which will predominantly address skin cancer.

The development proposes the construction of a new facility on the site of the existing Justinian House, adjacent to the Mater Hospital on Rocklands Road and Sinclair Street in North Sydney.

The facility will be owned by Saint Vincents and Mater Health Sydney (SV&MHS) and will be tenanted by multiple parties for periods of approximately 20-25 years.

The Sydney Melanoma Unit (SMU) will be the primary occupier of the facility. In addition the facility will provide accommodation for the Mercy Foundation, associated car parking and support spaces, and consulting suites that will be occupied by individual clinicians. There will also be facilities that will be shared by SV&MHS, SMU and any other relevant parties. These include an auditorium and some meeting rooms.

It is proposed to demolish the existing Justinian House and to construct a 4-storey building plus two basement levels.

It is anticipated that the building will initially accommodate 63 staff members in 2009 and up to 83 by 2014. The building will accommodate patients and visitors and the shared auditorium will accommodate approximately 100 people. The proposed activities to be facilitated within the building, as summarised in Table 2-1, will be desktop research, laboratory research, medical consultations/examinations, internal lectures/presentations and office/administration (including administration of the SMU database).

Table 2-1 Summary of the Proposed Development

Floor Level	Details per Level	Gross Floor Area (m ²)
Basement Level 2	Carpark	2050
Basement Level 1	Carpark	2000
Level 1	Laboratory, loading dock and stores, office/academic research, auditorium.	1300
Level 2	Consultation, treatment and office	1500
Level 3	Consultation, treatment and office	630
Level 4	Plant room	170



This WMP has been prepared in consultation with the following reports and documents:

Reports

- Justinian House Redevelopment Function Brief, Prepared by Collen Wilson Health Strategies, May 2007
- Justinian House Redevelopment Return Brief Revision E, Prepared by Daryl Jackson Architects, September 2007
- Arboricultural assessment and Demolition Report. Prepared by Urban Forestry Australia, August 2007
- Hazardous Materials Survey Report, Prepared by New Environment / Heggies Australia, July 2006
- Draft Demolition Management Plan: Statement of Commitments, Author and date unknown
- Traffic Report for Proposed Redevelopment of Justinian House, Prepared by Colston Budd Hunt & Kafes, October 2007.
- Dangerous Goods Compliance Report, Prepared by Bill Callan, October 2007

Drawings: existing buildings

- Structural Drawings, Prepared by Harry Partridge & Associates, 1996, Landscape Plan & Levels 1-6
- Electrical Services Drawings, Prepared by Wallis & Spratt Consulting Chartered Engineers, June 2000. Levels 1-6

Drawings: proposed building

Prepared by Daryl Jackson Architects

- Existing East & West Elevations,
- Proposed North & South Elevations
- Basement Level 2 Floor Plan
- Basement Level 1 Floor Plan
- Floor Plans, Levels 1-4
- Proposed Sections 01-03, 04-08

3 Demolition / Excavation Phase

3.1 Background

The proposal will involve some minor demolition / excavation.

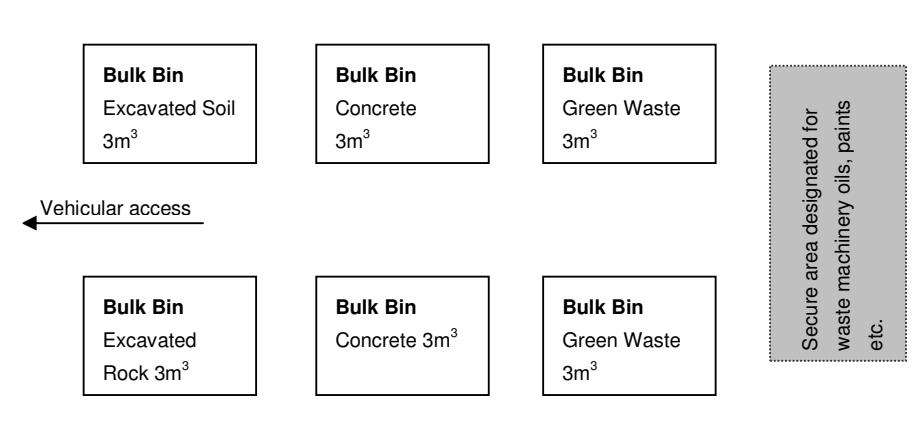
The primary objective for waste management during the demolition / excavation phase of the development is to maximise reuse and recycling of demolition materials.

3.2 Waste storage and recycling area

It is anticipated that where possible, waste would be sorted and stored according to material type in a designated waste storage area at the site. Clearly labelled bulk bins would be available for the placement of different materials. Access to the site for waste removal vehicles would be as determined for all construction and demolition vehicles.

Figure 3-1 depicts an example waste storage area that would be established at the demolition site. The exact configuration and number of bins would be determined by the materials being generated at the time.

Figure 3-1 Example Waste Storage Area



Not drawn to scale



3.3 Estimated materials and quantities

The materials and estimated volumes, expected to be generated during the demolition / excavation process, and the anticipated off-site use/destination are provided in Table 3-1.



Table 3-1 Estimated Waste Streams, Quantities and Management: Demolition Phase

Type of materials	Estimated Quantity	Destination		
		On-Site	Off-site	Contractor/landfill site
Concrete	1266 m ³	Some quantities may be crushed and reused in construction, for fill material	Remainder to recycling facility	To be Advised
Excavated materials (soil and rock)	13056 m ³	Stockpiled and reused on-site as backfill	Remainder sold off-site for reuse, or to recycling facility	To be Advised
Green waste	285 m ³	Of vegetation to be removed, some to be preserved for use at new development.	Remainder to composting facility	To be Advised

3.4 Recommendations for waste minimisation

Re-use of material would have priority over recycling. Measures to improve the minimisation of demolition waste include:

- Select waste removal contractors who will guarantee that recyclable material will be recycled.
- Any vegetative matter removed as a result of demolition activities would be either preserved for use in the new development, or mulched for inclusion in landscaping activities. The remainder would be sent to a composting facility.
- Earth excavated from the demolition site would be used in fill and landscaping where feasible, the remainder would be sent to a recycling facility.
- Concrete components from existing structures would be crushed and reused on site where possible, the remainder would be sent to a recycling facility.
- Fuel and oil storage from demolition machinery would be secured and managed responsibly within compound sites during works, and removed upon completion of works.

All waste that cannot be re-used or recycled would be disposed of in accordance with the NSW EPA's *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes* (1997).



4 Construction Phase

4.1 Background

The primary objectives for waste management during the construction phase of the development is to minimise waste generation and maximise reuse and recycling of construction materials.

The purpose of this WMP is to recommend measures for minimisation of construction waste and to estimate volumes of materials of any wastes that may be generated.

4.2 Waste storage and recycling area

It is anticipated that a waste storage area would be established at the construction site where all waste materials would be separated into bulk bins and stored until removal. An example waste storage area is depicted in Figure 3-1 although the exact configuration and number of bins would be determined by the materials being used in the construction process at the time.

4.3 Estimated materials and quantities

The exact materials to be used in the construction of the building are yet to be confirmed. Therefore, quantities of waste construction materials have not yet been determined. Table 4-1 identifies the types of materials likely to be generated at the construction site and estimated quantities of general, paper and recyclable plastic. The anticipated off-site use / destination are also provided.



Table 4-1 Estimated Waste Streams, Quantities and Management: for the Construction Phase

Type of material	Estimated Quantity	Destination		
		On-Site	Off-site	Contractor/landfill site
Concrete	Unknown		To be recycled	To be Advised
Bricks	Unknown		To be recycled	To be Advised
Tiles	Unknown		To be recycled	To be Advised
General Solid Waste (plastic wrapping, food waste)	480L weekly		Landfill	To be Advised
Cardboard, paper,	240L weekly		To be recycled	To be Advised
Plastic	240L weekly		To be recycled	To be Advised
Paints/Solvents	Unknown		Removed by accredited contractor, disposed at an EPA licensed facility	To be Advised

4.4 Hazardous materials

Hazardous wastes such as paints, solvents or machinery oils may arise during the construction phase. It is recommended that these be segregated from other waste types and stored securely within a clearly marked section of the waste storage area until disposal via an accredited contractor.

4.5 Recommendations for waste minimisation

In accordance with DCP2002:S19 it is recommended that the following measures are taken for the minimisation of construction waste at the site:

- Select waste removal contractors who will guarantee that recyclable waste will be recycled,
- Order the correct quantities of materials,
- Prefabricate materials where possible,
- Reuse formwork,
- Use modular construction and basic designs to reduce the need for off-cuts,
- Separate off-cuts to facilitate reuse, resale or efficient recycling,
- Minimise site disturbance and limit unnecessary excavation,
- Reuse or recycle materials from the demolition phase where possible, e.g. use timber from demolition as formwork,
- Select landscaping which reduces green waste, and
- Coordinate and sequence trades people to minimise waste.

In addition it is recommended that:

- Excess concrete produced during construction will be re-used or recycled where feasible, otherwise it should be disposed of responsibly.
- Recycling bins will be provided on site for paper and cardboard, metals, glass, plastic and oil, which would then be sent to approved recyclers.

All waste that cannot be re-used or recycled would be disposed of in accordance with the NSW EPA's *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes* (1997).

5 Operational Phase

5.1 Background

In addition to DCP2002:S19, this section of the WMP has been prepared in consultation with *NSW Health Waste Management Guidelines for Health Care Facilities 1998* and also with reference to the *City of Sydney Policy for Waste Minimisation in New Developments 2005*

Waste management for the JHR will draw from the principles of Environmentally Sustainable Design (ESD). Provision will be made for the reduction of waste by source separation of recyclable paper, cardboard and co-mingled recyclables.

Due to the nature of some of the activities within the building, health and safety considerations will take precedence with regard to clinical waste.

5.2 Compatibility with SV&MHS waste contract

The JHR would be a separate entity to the Mater Hospital. It is therefore anticipated that the handling and storage of waste within the proposed building would be managed internally, but that waste removal would be integrated with waste removal services for the Mater Hospital which are overseen by the SV&MHS waste contract.

The SV&MHS procedures for removal of waste are well established. Clinical waste specialist Stericorp is the current contractor for clinical and sharps waste. Commingled recyclables, recyclable paper, paper for secure destruction, and general wastes are removed under contract by Cleanaway.

It is proposed therefore that JHR waste will be removed under an 'add-on' agreement to the current SV&MHS contract until the contract is renewed, at which JHR waste removal requirements may be incorporated within the overall SV&MH waste removal contract.

The benefits of integrated waste management systems with those already in place at the SV&MHS campus are operational and social. Operationally, the JHR have the advantage of utilising a service that is well established and proven to be efficient. Economies of scale would enable the same contractors to be used for all SV&MHS facilities across Sydney. Socially, the service would involve minimal additional traffic movements which may impact upon neighbouring residents.

5.3 Overview of waste types

The main waste types expected at the JHR will be general waste, clinical waste, sharps, co-mingled recyclables, recyclable paper, and recyclable paper for secure destruction. Other wastes include feminine hygiene and baby changing waste and expired x-ray film which will be disposed of on an ad-hoc basis.

Dangerous goods are addressed in a separate Dangerous Goods Compliance Report. All dangerous goods except class 6.2 Infectious Substances will be either consumed or neutralised on site. Therefore it is unlikely that dangerous goods waste would be generated. Class 6.2 Infectious Substances are addressed within this WMP under 'clinical waste'.

Table 5-1 summarises and provides a brief description of each waste type expected to arise at the JHR.

Labelling / coding of waste containers will be consistent with SV&MHS and standard EPA bin colour coding guidelines:

Table 5-1 Summary of wastes to be generated at the JHR

Waste type	Bin colour code	Description	Area likely to be generated
Recyclable paper and card	N/A	Waste office paper and card will be generated mainly in office/admin areas and consulting areas.	All areas
Confidential paper	N/A	Will mainly arise in consulting areas where patient records must be destroyed for confidentiality purposes.	Consulting suites, clinical trials labs and some office/admin areas
Co-mingled recyclables	Blue or blue and red	Consists mainly of recyclable plastic, liquid paperboard (LPB) and glass containers. May also include empty bottles from lab activities that are free from contamination.	Auditorium, staff utility areas, public/visitor areas (including coffee cart), labs
Clinical waste	Yellow	Waste generated by clinical procedures which requires treatment or incineration	Consulting suites, pathology, bio-specimen labs and clinical trial labs
Sharps	Yellow	Disposable sharps waste from surgical and general medical procedures	Consulting suites, pathology, bio-specimen labs and clinical trial labs
X-ray film	N/A	X-ray films are archived for 7 years before they can be disposed.	Consulting suites
Clinical trials drugs	N/A	Residual or expired clinical trials drugs will be collected by the pharmaceutical company for disposal	Clinical trials labs

General waste	Black	Food waste, non-recyclable food wrappers and any non-recyclable and non clinical or laboratory waste to be generated by typical office activities	All areas
Sanitary and baby changing facility waste	N/A	Feminine hygiene and nappy waste	Female and disabled toilets and baby changing areas

5.3.1 Overview of recycling facilities

To encourage recycling activities within the building and to promote ease and consistency, the WMP proposes the concept of 'recycling stations' of which there are two types explained below.

'Office recycling stations' would be located in or close to office areas such as in printer/photocopier areas and would contain bins for recyclable paper, confidential paper for secure destruction, and printer cartridges.

'Public recycling stations' would be located in patient/visitor areas and would consist of a split bin system or a similar arrangement for co-mingled recyclables, paper and general waste.

In addition, other recycling bins will be placed in convenient locations where required.

A typical floor layout plan with regard to waste management is provided as WMP Drawing 1. It shows the anticipated configuration of bins and recycling centres, and the proposed routes for cleaning staff to take in order for waste to be transferred to the waste storage area on level 1. Note that the bin locations shown are indicative only and that exact locations would be finalised once the JHR is operational.

5.4 Proposed management of wastes

This section provides a description of each waste stream and includes details regarding:

- where the waste is expected to be generated within the JHR,
- the types of containers in which the waste will be placed (note container sizes provided are indicative only),
- opportunities for recycling where appropriate,
- how the waste will be managed from point of generation to storage,
- where the waste will be stored, and
- removal of waste from the building

5.4.1 General waste

General waste will mainly consist of food waste, non recyclable food packaging and any non-recyclable waste generated in the suites or labs that is safe from contamination. Containers for placing general waste will be either shared or individual, depending on the location. Where possible, general waste bins will be shared/minimised in number to increase potential for separation of recyclables.

Small individual containers (approximately 30L in size) will be placed in consulting suites, individual offices and reception areas. Shared bins for general waste will also be placed in communal areas. This will include shared lab and office spaces, staff amenity areas, waiting rooms, meeting rooms and the auditorium which will be equipped with larger bins (approximately 30-60L). It is envisaged that in public areas such as patient/visitor lounges, general waste will be disposed in public recycling stations. In addition it is proposed to locate mobile garbage bins MGBs (either 120L or 240L) in plant rooms and on each carpark level.

General waste from the various receptacles throughout the building will be decanted into 240L MGBs by cleaning staff on a daily basis. MGBs will be transferred via the lift to the waste storage area on level 1 where it will be stored in 240L mobile bins until removal.

It is anticipated that general waste would be removed under separate arrangements to SV&MHS. General waste at the Mater Hospital is compacted on site and the compactor is removed once per week. JHR general waste would be stored on level 1 in 240L bins and removed 2 - 3 times per week by the SV&MHS general waste contractor. A designated member of staff will ensure that bins are transferred to the loading area in time for collection as agreed with the general waste contractor.

5.4.2 Co-mingled recyclables

Containers for co-mingled recyclables (approximately 30-60 L) will be available in staff amenity areas, waiting rooms, meeting rooms and the auditorium. Recycling stations will be located in patient/visitors lounges.

Any recyclable containers used for laboratory purposes which are not contaminated and are safe from infection will be placed in a co-mingled recyclable bin in an amenity area.

Cleaning staff will decant co-mingled recyclable into 120L or 240L MGBs which will be stored in the recyclable waste room in the waste storage area.

Co-mingle recyclables are currently removed from the SV&MH health campus approximately 3 times per week.



5.4.3 Recyclable paper and cardboard

Cardboard and recyclable paper containers will be available at each desk/workstation. In addition, designated bins for recyclable paper will be made available at convenient locations such as in photocopier/printer areas, shared office areas, and shared by the consulting suites. It is also proposed to place cardboard and recyclable paper bins in or close to store rooms.

Cleaning staff will decant recyclable paper into 120L or 240L MGBs which will be stored in the recyclable waste room in the waste storage area.

Co-mingled recyclables are currently removed from the SV&MHS health campus approximately twice per week.

5.4.4 Paper for secure destruction

Mobile bins for confidential paper for secure destruction will be made available where required. It is envisaged that locked bins will be located in convenient locations to be shared amongst consulting suite staff, clinical trials labs, and also at office recycling stations if necessary. The bins will be collected directly by the designated waste contractor and exchanged for empty ones.

Confidential paper would be removed directly from source of generation as required.

5.4.5 Printer cartridges

It is proposed to make a container available on each floor for used printer cartridges. These would be located in a convenient central point such as an office recycling station and would be close to paper recycling bins.

Printer cartridges would be removed as required.

5.4.6 Clinical waste

Clinical waste includes all Dangerous Goods waste class 6.2 Infectious Substances. According to the NSW Health Waste Management Guidelines for Health Care Facilities, clinical waste is:

"waste which has the potential to cause sharps injury, infection or offence. When packaged and disposed of appropriately there is virtually no public health significance. Clinical waste contains the following types of waste:

- *Sharps¹*
- *Human tissue (excluding hair teeth and nails)*
- *Visibly blood stained body fluids and visibly blood stained disposal material and equipment*
- *Laboratory specimens and cultures*
- *Animal tissues, carcasses or other waste arising from laboratory investigation or for medical research²*

Unless treated by a method approved by the Director General, NSW Department of Health"

Clinical waste will be generated in the consulting suites, pathology, bio-specimen labs and clinical trials labs. It will be placed in suitably marked bags/containers which will be available in each suite.

Designated cleaning staff³ will transfer the clinical waste from the laboratories to the waste storage area where it will be stored in MGBs in a locked storage room until removal.

Clinical waste is currently removed from the SV&MHS campus every other day. The waste will be collected directly from the waste storage room by the clinical waste contractor and transported for treatment or incineration. Clinical waste MGBs will be exchanged for empty ones when removed.

5.4.7 Sharps waste

For the purpose of this WMP sharps waste is treated as a separate waste stream. Sharps waste however is included within the 'clinical waste' category of the *NSW Health waste Management Guidelines for Health Care Facilities* which defines Sharps as:

"Any object capable of inflicting a penetrating injury, which may or may not be contaminated with blood or body substances. This includes needles and any other sharp objects or instruments designed to perform penetrating procedures"

Sharps waste would include Dangerous Goods waste class 6.2 Infectious Substances if they were to be contaminated with any of the substances listed within the clinical waste definition above.

¹ Sharps are included within the NSW Health Waste Management Guidelines for Health Care Facilities clinical waste category, but are considered a separate waste stream in this WEP for operational purposes.

² NB – This definition is included for completeness only. It is not intended that research involving animals be carried out at the facility.

³ It is anticipated that clinical waste would be stored in a locked room. It is possible therefore that not all cleaning staff would have access to the room. Access may be limited to designated members of cleaning staff.



Sharps waste will be generated in the consulting suites, pathology, bio-specimen labs and clinical trials labs and placed in sharps bins located within each consulting suite and lab. Sharps bins are colour coded yellow and are comprised of hard plastic which can be locked / secured when full.

When full, the sharps boxes will be transferred by the staff member involved (consultant or scientist) to either a lockable clinical waste MGB or to a locked storage room convenient to the laboratory areas and consulting suites. Empty replacement boxes will be available.

MGBs containing sharps waste containers will be transferred to the clinical waste room in the waste storage area by designated cleaning staff¹.

Clinical waste is currently removed from the SV&MH health campus every other day. The waste will be collected directly from the waste storage room by the clinical contractor and transported for treatment or incineration.

Clinical MGBs will be exchanged for empty ones when removed.

5.4.8 Clinical trials drugs

Residual or expired clinical trials drugs would be stored according to the appropriate storage procedures and collected by the supplying pharmaceutical company for disposal.

5.4.9 Waste X-ray film

X-ray film will be archived for a period of 7 years in a secure room or archive facility. A specialist X-ray film contractor would remove the film directly from the archive facility in order for secure destruction and recovery of silver.

5.4.10 Feminine hygiene and nappy waste

Disposal units for feminine hygiene and nappy waste will be placed in female toilets and baby changing facilities, and collected/exchanged directly from the point of waste generation by the designated contractor.

5.5 Estimated waste quantities

Estimated average weekly quantities of wastes arising from the operational phase of the development are provided in Table 5-2. These figures reflect the quantity of waste that would be generated with a maximum number of staff as discussed in Section 2. Additional wastes from patients/visitors and from conferences are also accounted for within the estimations.

The estimations have been derived taking into account the number of occupants in the building, the floor area, and known waste compositions of office/administration buildings and clinical/laboratory facilities based on previous studies.

Table 5-2 provides quantities of waste based on two recycling scenarios: good recycling systems and poor recycling systems. The same quantity of material would be generated under each scenario, but the composition of paper/cardboard, co-mingled recyclables and general waste would be different. Therefore the quantities of each material would differ.

The estimated waste quantities under good recycling systems have been derived assuming that adequate facilities for recycling are provided as recommended in this WMP, that containers are clearly labelled and that recycling is actively encouraged throughout the building. The estimated waste quantities under poor recycling systems have been derived assuming that recycling is not actively encouraged throughout the building.

Quantities are provided by volume and for indicative purposes, the number of 240L MGBs. It should be noted that this does not reflect the size of bin that may actually be used.

In addition estimated average daily quantities of wastes, for both recycling scenarios, requiring storage in the waste storage area are listed in Table 5-3.

Table 5-2 Estimated weekly quantities of operational waste

Waste type	Estimated quantity under good recycling systems		Estimated quantity under poor recycling systems		Removal Frequency
	Volume (L)	No. of 240 L MGBs	Volume (L)	No. of 240 L MGBs	
Paper/cardboard (including confidential paper)	3600	15	2400	10	Three times per week
Co-mingled recyclables	3360	14	960	4	Twice per week
General	1140	6	5040	21	Two -three times per week
Clinical (including sharps)	3120	13	3120	13	Every other day
Toner cartridges	As required				As required
Feminine hygiene and baby waste	As required				As required
Residual / expired clinical trials drugs	As required				As required

Table 5-3

Waste type	Estimated quantity under good recycling systems		Estimated quantity under poor recycling systems	
	Volume (L)	No. of 240 L MGBs	Volume (L)	No. of 240 L MGBs
Paper/cardboard (including confidential paper)	600	3	400	2
Co-mingled recyclables	560	3	160	4
General	190	1	840	4
Clinical (including sharps)	520	3	520	3

5.6 Waste storage area

The waste storage area is located on level 1 adjacent to the loading dock and lifts. Access would be from Gilles street as identified in the Traffic Report. The proposed layout is shown on WMP Drawing 1.

The waste storage area consists of 3 enclosed rooms providing a total of approximately 50 m² for the storage of bins. Recyclable material would be kept in the largest room, with capacity for 31 240L MGBs. Each The recyclables storage room would be clearly marked to distinguish between storage areas for paper/cardboard and for co-mingled recyclables.

Clinical waste and general waste would be kept in separate rooms, each with capacity for 13 240L bins. The clinical waste storage room would be locked with access by designated members of staff and waste removal contractors only.

It is unlikely that any storage room would be full at any time as waste would be removed several times per week. However surplus space has been provided to allow for unexpected generation or accumulation of waste that may arise under unforeseen circumstances (such as a waste contractor strike, road blockages, or a succession of large conferences / auditorium events).

Designated cleaning staff and removal contractors would be able to access the waste storage room from the loading/stores area.

5.6.1 Removal of waste from the waste storage area

A designated member of staff such as a facilities or building manager will ensure that waste is collected from the waste storage room on the agreed frequency and that bins will be ready for collection.

MGBs containing general waste and recyclable material will be transferred to the loading dock from where they will be emptied and the MGBs moved back to the relevant storage rooms

Clinical waste bins will be collected directly from the clinical waste storage room. Each MGB would be loaded onto the vehicle and replaced with an empty one.

Other waste collection vehicles (e.g. for feminine hygiene waste or for collection of residual / expired clinical trials drugs) will make use of the loading dock in order for contractors to access the building.

5.6.2 Bin maintenance

Cleaners will be responsible for keeping the shared general waste bins clean, clearly labelled and for informing a representative from the JHR should bins need maintenance or replacement.

5.7 Organic Waste

Organic waste would consist of food waste or green waste such as dead flowers. At this stage it is not expected that quantities of organic waste would be large enough to warrant a separate organics collection, given that:

- food will not be prepared in large quantities (i.e. there will be no catering or kitchen facility other than a coffee cart and limited staff facilities for heating / preparing lunch and snacks)
- the nature of the facility will not involve patients staying for long periods of time thus having flowers delivered
- garden waste would be removed under separate gardener / landscaping arrangements

It is therefore anticipated that any food or patient green waste would be included within the general waste stream. If at a later stage sufficient organic waste is generated to warrant source separation, options such as a separate organics collection, or onsite composting or worm farm could be considered.

6 Recommendations

It is recommended that waste management within the JHR is centrally administered so as to maintain one consistent system thought the building. An all-encompassing waste management system would enable the system to be as efficient as possible and would maximise potential for source separation of waste. This may not be the case if each entity were to adopt different waste management practices.

Hyder recommend that both public and staff bins and recycling stations are clearly and appropriately labelled to maximise potential for recycling. It also recommended to inform all new staff of the waste management system and to frequently provide information or reminders such as posters to ensure the continual performance of the system.

The following recommendations are made with regard to the waste storage area:

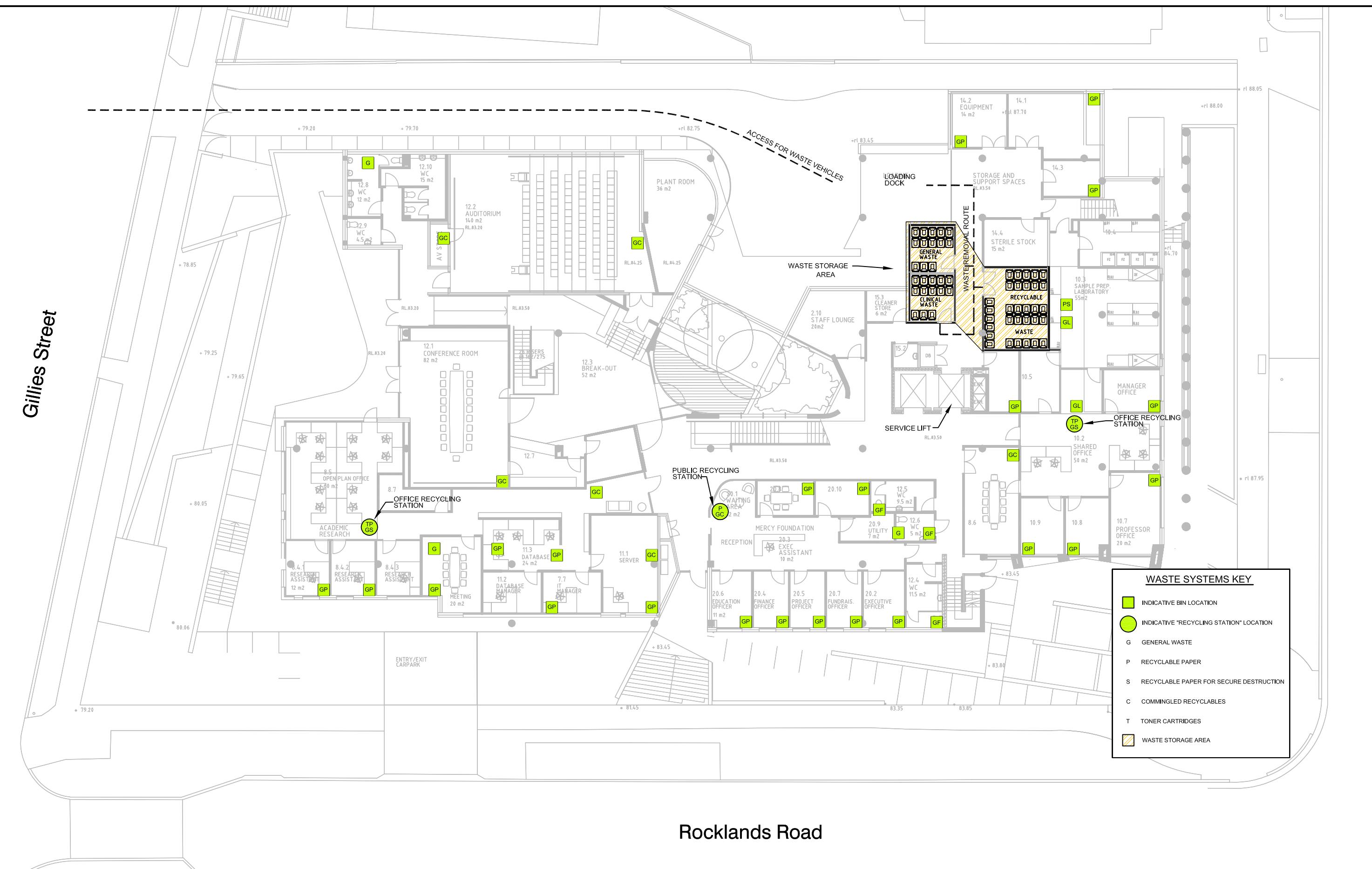
- Between collection periods, all waste/recyclable materials generated on the site should be kept in enclosed bins with securely fitting lids so that the contents are not able to leak or overflow.
- The waste storage area should be able to accommodate bins which are of sufficient volume to contain the quantity of waste generated between collections.
- The type and volume of containers used to hold waste should be compatible with the collection practices of the nominated waste contractor.
- Waste management facilities should be suitably enclosed, covered and maintained so as to prevent polluted waste water runoff from entering the storm water system.
- Consideration should be given to the time of day at which containers are collected to minimise the adverse impacts on residential amenity, pedestrian movement and local traffic.
- Arrangements should be in place regarding the regular maintenance and cleaning of waste management facilities.
- Facilities should be provided for bin washing
- The waste storage area should be appropriately lit to maintain security of staff and be equipped with fire extinguishing equipment and smoke alarm.
- The waste storage area should be secure. Clinical waste should be contained in lockable bins or rooms. Confidential paper should be kept in locked bins.



Appendix A

WMP Drawing 1 – Typical Floor Layout & Waste Storage Area

Gillies Street



0 5 10m
1:250

FOR INFORMATION

B	WASTE STORAGE AREA REVISED	DGB	CG	CG	18OCT07	Status	Client		Project	JUSTINIAN HOUSE REDEVELOPMENT WASTE MANAGEMENT PLAN		Title	Project Code	Drawing No.	Issue
A	ISSUE FOR APPROVAL	TJH	CG	CG	15OCT07		Scale (A3)	1:250	Datum	AHD					
Issue	Description	Drwn	Ckd	Appd.	Date	Drawn	DGB	Designed	CG	TYPICAL FLOOR LAYOUT AND WASTE STORAGE AREA		NS04102	SKC001	B	