

### **WASTE MANAGEMENT PLAN**

For new offices and student accommodation at

# 157-163 CLEVELAND STREET CHIPPENDALE

FEBUARY 2010 Prepared by Fortey & Grant Architecture

#### 1. THE PROPPOSED BUILDING

The site total site area is 3348m2. This area is divided into two parts. The first part is No136-144 Cleveland Street on 660m2. This part of the site is already occupied by an existing building and has existing waste management procedures in place and operating. These waste management procedures will not be altered or connected to the new building in any way and are therefore not part of this report.

The second part of the site is No 157-163 and it contains the proposed new building. The site is 2688m2 and the proposed building covers most of that area. The new building is four stories high with one level of basement. It contains two separate functions. These are commercial offices and student accommodation. The areas Nett Lettable areas or these functions are listed below-

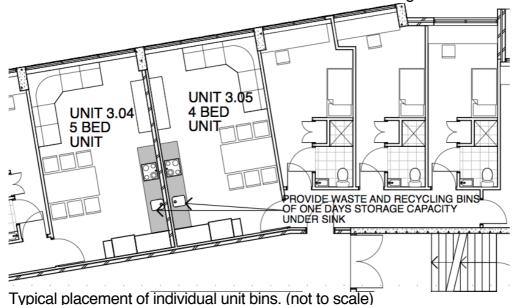
Ground Floor - 1816m2 - Commercial Office
First Floor - 2306m2 - Commercial Office
Second Floor - 2358m2 - Commercial Office
Third Floor - 1701m2 - student accommodation

Commercial Office waste and Accommodation waste will be kept separated and dealt with separately.

#### 2. STUDENT ACCOMMODATION - THIRD FLOOR

The area of student accommodation is not large enough to warrant the use of garbage chutes and the provision of compactors or areas for discarded bulky items. The amount of refuse generated is not large enough to make the provision of a dedicated goods lift viable.

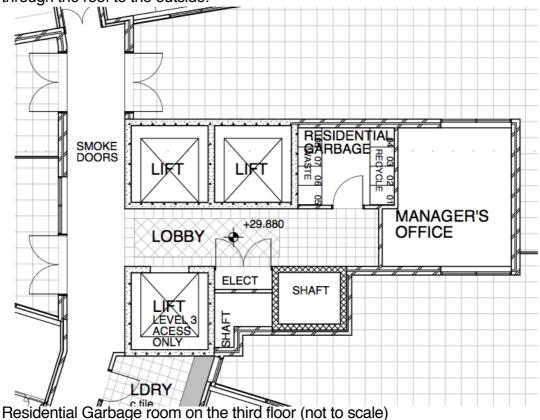
There are 73 bedrooms on this floor divided into 15 units. Each unit will be provided with bins stored under the sink in the kitchen to accommodate one day's volume of waste, recyclables and compostables. The occupants of the units will be responsible for transferring the waste collected to the residential garbage room located in the on the third floor near the lifts and managers office.



#### 3. STUDENT ACCOMMODATION GARBAGE ROOM

The 15 units of student accommodation generate 1200 litres of waste per week. This can be accommodated in five 240-litre bins.

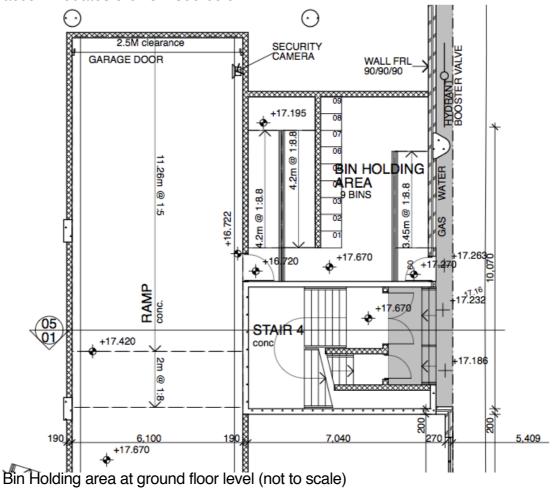
This creates a total of eight 240-litre bins if the 240-litre bins are collected weekly. These bins are stored on the third floor in a separate room located near the lifts and labeled "Residential Garbage" – see below. This room can be vented through the roof to the outside.



#### 4. STUDENT ACCOMMODATION GARBAGE COLLECTION

The residential garbage bins will be placed in a bin holding area for collection by council. This action will be organized internally by the building management and will be coordinated with council's weekly collection timetable. The building manager will take the bins from the third floor to the basement and then wheel the bins up the basement driveway access to the bin holding area at ground level. This action will take place outside normal business hours.

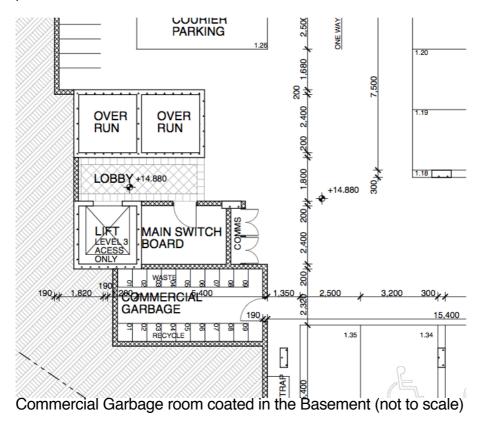
The bin holding area is located on the ground floor at the top of the basement access ramp. It exits onto Hart Street which contains low levels of traffic and already accommodates residential council pickup services. Its floor level is raised to deal with possible local flooding in this part of the site so the entrances and exits to it need to be ramped. The bin holding area is less than ten meters from the property boundary and located in a discrete position so that bins awaiting collection are not dominant in the streetscape or capable of being tampered with. There is internal access to the bin holding area to promote building security. Council collects recycling and waste bins on separate days on a weekly timetable. The Residential Garbage collection requires a maximum of 5 bins to be contained within the bin holding area at any one time. The Bin holding area accommodates 9 bins – see below.



## 5. COMMERCIAL OFFICE AREAS - GROUND, FIRST AND SECOND FLOORS

The refuse for the commercial offices will be dealt with as one system separate from the accommodation waste system. The commercial waste will be calculated per floor.

A private contractor will transfer waste generated by the commercial offices to the dedicated commercial garbage room in the basement. The building's management will organize the contractor. This transfer will be done via the passenger lift outside normal business hours. The dedicated garbage room for the commercial office space is labeled "Commercial Garbage" and shown on the plan below.



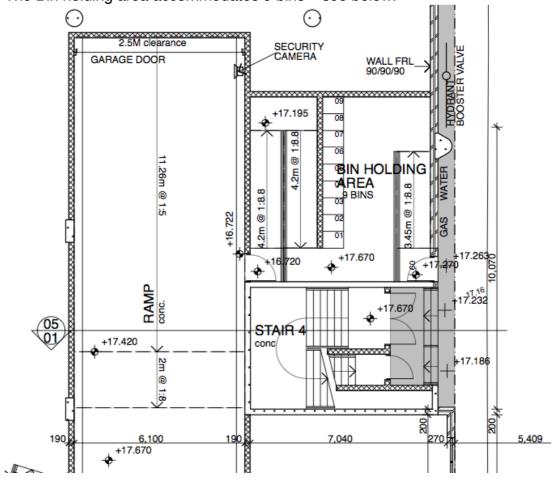
The total net lettable area proposed for commercial offices is 6480m2 and the largest floor is 2358m2. It is assumed that the waste generated by the proposed offices is equal to the rate for offices as setout in Appendix B council's "Policy for Waste Minimisation in New Developments". For the largest office floor this generation is no more than 234 litres per day of waste and 234 litres per day of recycling for each commercial floor. Five working days of waste generation is equal to 1170 litres for waste and 1170 litres for recycling per floor. This can be accommodated in three 240 litre waste bins and three 240 litre recycling bins per floor if collection occurs twice a week. As there are three floors of commercial accommodation the total number of bins will be nine 240 litre waste bins and nine 240 litre recycled bins based on two collections of each kind of waste per week. As this calculation is based on the largest office floor there is some excess capacity in this waste collection system. The excess capacity can be used to help maintain the non-lettable areas in the basement and on the roof. Collection will

occur twice a week so that the Commercial Garbage room needs to accommodate 9 waste bins and 9 recycling bins as shown above.

#### 6. COMMERCIAL OFFICES GARBAGE COLLECTION

A private contractor will remove the bins from the commercial garbage room and place the commercial garbage bins in a bin holding area for collection. The building management will organize this action internally. It will occur twice a week for waste and twice a week for recyclables. These four collection days will be coordinated to avoid the two days of council's pickup service.

The bin holding area is located on the ground floor at the top of the basement access ramp on Hart Street. Hart Street contains low levels of traffic. The bin holding area is less than ten meters from the property boundary and located in a discrete position so that bins awaiting collection are not dominant in the streetscape and are secured against tampering. Council collects recycling and waste bins on separate days. The Commercial Garbage collection requires a maximum of 9 bins to be contained within the bin holding area at any one time. The Bin holding area accommodates 9 bins – see below.



#### 7. GARBAGE COLLECTION AMENITY

The combined residential and commercial garbage collection as described means that garbage will be collected 6 out 7 days a week. Although the frequency of collection is high the amounts collected are low. This reduces the time taken to perform garbage collection and the amount of bins awaiting collection at any one time.

Both garbage rooms and the bin holding area will be provided with hose cocks and drainage to facilitate cleaning. The building management will organize regular cleaning of these areas. All Garbage rooms will be designed to Australian standards.

Both garbage rooms and the will be mechanically ventilated.

Both garbage rooms are sealed against vermin and the frequency of waste collection reduces the risk ok vermin infestation.

The Bin Holding area presents a minimal visual impact to the street as it is concealed behind doors. The building's management will control access to the bin holding area. External access will be co-coordinated by Building Management with waste pick up times.

Recycle and waste bins in both garbage rooms will be clearly labeled with signage consistent with Appendix E of council's Policy for Waste Minimalisation in New Developments to ensure that users understand how to use the bins provided.