**WASTE MANAGEMENT PLAN**

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| **PROJECT DETAILS** | |
| Address of Development | 1-3 Alfred Street and 315 West Street, Umina Beach |
| Existing buildings and other structures currently on site | Prefabricated building and single storey dwelling house (to be demolished), chemist store (to be retained) |
| Description of Proposed Development | Mixed Use Development comprising 14 shop top housing units located above ground level commercial premises and basement car parking |
| *This development achieves the waste objectives set out in the DCP. The details on this form are the provisions and intentions for minimising waste relating to this project. All records demonstrating lawful disposal of waste will be retained and kept readily accessible for inspection by regulatory authorities such as Council, OEH or Workcover NSW* | |
| Amended Plan Prepared By | PMAnderson Consulting Pty Ltd. |
| Date | 1st March 2022 |

**DEMOLITION**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of waste generated** | **Reuse** | **Recycle** | **Disposal** | **Comment** |
|  | **Estimated volume** | **Estimated volume** | **Estimated volume** | **Method of onsite reuse, recycling outlet and/or waste depot to be used** |
| Excavation Material |  | N/A |  | Excavation will be carried out at the construction stage |
| Timber |  | 16m3 |  | Transfer to Material Recovery Facility |
| Concrete |  | 20m3 | 5m3 | Transfer to Material Recovery Facility/ Council Waste Facility |
| Bricks/Pavers |  | 50m3 | 3m3 | Transfer to Material Recovery Facility |
| Tiles (roof) |  | 20m3 | 2m3 | Transfer to Material Recovery Facility |
| Metal (Misc) |  | 15m3 |  | Transfer to Material Recovery Facility |
| Gyprock |  | 6m3 |  | Transfer to Material Recovery Facility |
| Glass - |  | 4m3 |  | Transfer to Material Recovery Facility |
| Furniture |  | N/A |  | Will be removed by tenants |
| Fixtures & Fittings | 2m3 | 2m3 | 2m3 | Reuse/ Transfer to Material Recovery Facility/ Council Waste Facility |
| Floor Coverings |  | 3m3 | 1 m3 | Transfer to Material Recovery Facility |
| Packaging (used pallets, pallet wrap) |  | N/A |  |  |
| Garden Organics |  | 12m3 |  | Transfer to Material Recovery Facility |
| Containers (Cans, plastic, glass) |  | N/A |  |  |
| Residual Waste |  |  | 15m3 | Transfer to Council Waste Facility |
| Asbestos (potential) |  | N/A |  | Nil asbestos discovered on site. |

**Note**: if any other hazardous or special waste is found during demolition, measures will be put in place to ensure they are removed in accordance with relevant legislative requirements.

**CONSTRUCTION**

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| --- | --- | --- | --- | --- |
| **Type of waste generated** | **Reuse** | **Recycle** | **Disposal** | **Comment** |
|  | **Estimated volume** | **Estimated volume** | **Estimated volume** | **Method of onsite reuse, recycling outlet and/or waste depot to be used** |
| Excavation Material |  | 2,950m3 |  | Transfer to Material Recovery Facility or other approved facility |
| Timber |  | 8m3 |  | Transfer to Material Recovery Facility |
| Concrete |  | 9m3 | 3m3 | Transfer to Material Recovery Facility/ Council Waste Facility |
| Bricks/Pavers |  | 3m3 | 1m3 | Transfer to Material Recovery Facility |
| Tiles (bathroom) |  | 2m3 | 1m3 | Transfer to Material Recovery Facility |
| Metal - Roofing, Guttering, Framing |  | 6m3 | 1m3 | Transfer to Material Recovery Facility |
| Gyprock |  | 4m3 | 1m3 | Transfer to Material Recovery Facility |
| Glass - Windows |  | 4m3 | 1m3 | Transfer to Material Recovery Facility |
| Furniture |  | N/A |  | Will be made to order by third party contract |
| Fixtures & Fittings |  | N/A |  | Will be made to order |
| Floor Coverings |  | 4m3 |  | Transfer to Material Recovery Facility |
| Packaging (used pallets, pallet wrap) | 4m3 | 2m3 | 1m3 | For reuse and transfer to Material Recovery Facility |
| Garden Organics |  | 2m3 |  | Transfer to Material Recovery Facility/ reuse for landscaping |
| Containers (Cans, plastic, glass) |  | 3m3 |  | Transfer to Material Recovery Facility |
| Residual Waste |  |  | 15m3 | Transfer to Council Waste Facility |
| Hazardous/special waste eg. Asbestos (specify) |  | N/A |  | No hazardous materials proposed |
| Other (specify) |  | N/A |  |  |

**ONGOING OPERATION**

***Commercial (as ‘shop’ > 100m2 as per Council’s DCP)***

*(Proposed commercial 582.62m2 + existing chemist 332.46m2 = 915.08m2)*

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|  | **Recyclables** | | **Residual**  **Waste** | **Compostable** |
|  | **Paper/**  **cardboard/** | **Metal/ plastic/ glass** |
| Amount generated (L per day) | 50L x (915m2/100m2)  = 457.5L | | 50L x (915m2/100m2)  = 457.5L |  |
| Amount generated (L per development per week @ 6 days) | 2,745L | | 2,745L |  |
| Any reduction due to compaction equipment | Nil | | Nil |  |
| Frequency of collections (per week) | Twice-Weekly  (by contractor) | | Twice-Weekly  (by contractor) |  |
| Number and size of storage bins required | 4 x 360L | | 4 x 360L |  |
| Floor area required for storage bins (m2) | 4m2 | | 4m2 |  |
| Floor area required for manoeuvrability (m2) | All bins are able to be manoeuvred within the garbage storage area | | | |
| Height required for manoeuvrability (m) | Height exceeds 2m | | | |

Notes: Green waste will be disposed of by the landscape maintenance contractor.

Existing Chemist premises wastes to be managed on that portion of the site/Buildings during development stage, once operational wastes to be secured within the Commercial bins storage facility. Bin delivery to the street during construction will be managed by development contractors on site.

**ONGOING OPERATION**

***Residential***

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| --- | --- | --- | --- | --- |
|  | **Recyclables** | | **Residual**  **Waste** | **Compostable** |
|  | **Paper/**  **cardboard/** | **Metal/ plastic/ glass** |
| Amount generated (L per day |  | |  |  |
| Amount generated (L per development per week) | 14 x 120L  = 1,680L | | 14 x 140L  = 1,960L |  |
| Any reduction due to compaction equipment | Nil | | Nil |  |
| Frequency of collections (per week) | Weekly | | Weekly | Fortnightly |
| Number and size of storage bins required | 4 x 360L  1 x 240L | | 5 x 360L  1 x 240L | 2 x 240L\* |
| Floor area required for storage bins (m2) | 5m2 | | 6m2 | 1m2 |
| Floor area required for manoeuvrability (m2) | All bins are able to be manoeuvred within the garbage storage areas | | | |
| Height required for manoeuvrability (m) | Height exceeds 2m | | | |

**Notes**: *green waste will be disposed of by the landscape maintenance contractor, and 2 nominal bins will be provided for resident’s only use\*.*

capacity for bulk waste storage is also available in the proposed residential waste storage room.

**CONSTRUCTION DESIGN**

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| **Outline how measures for waste avoidance have been incorporated into the design, material purchasing and construction techniques of the development (refer to section 7.2.14 of the DCP)** |
| **Materials**  Careful bill of quantities by builder to ensure that building materials are used or returned to the supplier for refund. Arrange for delivery of all materials to ensure that materials are used in an as needed basis. Any excess material will be recycled or reused in accordance with Part 3 of this Plan. Suppliers of materials are generally local so more direct quantities can be managed. |
| **Lifecycle**  material Selection has been managed to ensure the use of high quality finishes and materials to minimise the need for replacement of substandard products in years to come. Selection of quality paints and finishes will reduce the need to re-apply and minimise maintenance to the proposed structure. |
| **Detail the appropriate needs for the ongoing use of waste facilities including the transfer of waste between the residents or tenancy units, the servicing of waste location and frequent of waste transfer and collection. If truck access is required, then engineering details are required.** |
| Residents will transfer waste to bins located in the residential waste storage room on the ground level of the proposed building. The residential waste room has been located and designed to ensure easy access from the residential lift. Bins will be transported to the roadside by the Building Manager for collection by the Council contracted waste service on a weekly basis. The path of travel is along the entry footpath to Alfred Street. Upon collection the Building Manager will return bins to the waste storage room as soon as practical following collection of the bins. Capacity for bulk waste storage is also available in the proposed residential waste storage room if such a service is made available at a later date.  Commercial waste is stored in a separate commercial waste storage room, located adjacent to the residential waste storage room, and with easy access to the commercial premises. Bins will be collected on a twice-weekly basis, by separate private contract arrangements. Additional space and area exists in the commercial waste storage room for additional bins in the event of a change of use or demand for additional/larger bins.  The collection of the commercial waste will be managed by the building manager who will deliver the commercial bins to the street and immediately returned to the commercial waste room. This collection shall be arranged so as to not occur at times in conflict with the residential collection. Given the size of the bins proposed a side lifting mechanism is supported. |

**PLANS & DRAWINGS**

The following checklists are designed to help ensure WMP are accompanied by sufficient information to allow assessment of the application.

Drawings are to be submitted to scale, clearly indicating the location of and provisions for the storage and collection of waste and recyclable during:

* Demolition – to be provided at Construction Certificate stage
* Construction – to be provided at Construction Certificate stage
* Ongoing operation.

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| **DEMOLITION**  *Refer to Section 7.2.13 of the chapter for specific objectives and measures.*  Do the site plans detail/indicate: | **Y/N** |
| Size & location of waste storage areas | Detail at CC stage |
| Access for waste collection vehicles | Detail at CC stage |
| Areas to be excavated | Detail at CC stage |
| Types and numbers of storage bins likely to be required | Detail at CC stage |
| Signage required to facilitate correct use of storage facilities | Detail at CC stage |

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| **CONSTRUCTION**  *Refer to Section 7.2.15 – 7.2.19 of the chapter for specific objectives and measures.*  Do the site plans detail/indicate: | **Y/N** |
| Size & location of waste storage areas | Detail at CC stage |
| Access for waste collection vehicles | Detail at CC stage |
| Areas to be excavated | Detail at CC stage |
| Types and numbers of storage bins likely to be required | Detail at CC stage |
| Signage required to facilitate correct use of storage facilities | Detail at CC stage |

**ONGOING OPERATION**

|  |  |
| --- | --- |
|  | **Comment** |
| **SPACE** |  |
| Size and location of waste storage areas | Shown on plans |
| Recycling bins placed next to residual waste bins | Shown on plans |
| Space provided for access to and the manoeuvring of bins/equipment | Adequate access and manoeuvring area is provided |
| Any additional facilities | Bulk waste storage area for residents proposed |
| **ACCESS** | |
| Access route to deposit waste in storage room/area | Suitable internal access route is available |
| Access route to collect waste from storage room/area |
| Bin carting grade not to exceed 10% and travel distance not greater than 100m in length | Complies |
| Clearance, geometric design and strength of internal access driveways and roads | N/A – road side collection |
| Direction of traffic flow for internal access driveway and roads |
| **AMENITY** | |
| Aesthetic design of waste storage areas, including being compatible with the main buildings and adequately screened and visually unobtrusive from the street | Storage areas are in enclosed ventilated rooms and setback from the street |
| Signage type and location | Detail at CC stage as required |
| Construction details of storage rooms/areas (including floor, walls, doors, ceiling design, sewer connection, lighting, ventilation, security, wash down provisions, cross and longitudinal section showing clear internal dimensions between engaged pier and other obstructions etc |

**NOTES REGARDING ASBESTOS**

Buildings built before 1988 may contain asbestos in the form of flat or corrugated sheets (‘fibro’) used for walls, ceilings and roofing, or in products such as pipes, electrical conduit and eaves.

To prevent access to the area which may contain asbestos the site should be securely fenced. The site will need to be continually damped down so as not to cause runoff or sprayed with PVA to ensure that the asbestos cannot become airborne. This needs to continue until the site is cleaned up.

If asbestos is discovered during demolition, all work is to cease until the extent is determined and a suitably qualified and approved contractor is used to appropriately remove and dispose of all material.