****

Project Name:

|  |
| --- |
| Project Name  Email: [xxxxxxx@xxxxxxxxx.com.au]  Website: [www.xxxxxxxx.com.au]  logo-placeholder  Contents  [Introduction 3](#_Toc120022516)  [Waste Minimisation Strategy 3](#_Toc120022517)  [Re-Use 3](#_Toc120022518)  [Recycle 3](#_Toc120022519)  [Residual Waste 4](#_Toc120022520)  [Chemicals 4](#_Toc120022521)  [Waste minimisation 4](#_Toc120022522)  [Industry Best Practice 4](#_Toc120022523)  [Induction Process 5](#_Toc120022524)  [Site Plan 6](#_Toc120022525)  [Description of the proposal for minimising waste on the project 7](#_Toc120022526)  [Site Rules 8](#_Toc120022527)  [Waste produced 9](#_Toc120022528)  [Identify materials to be re-used onsite 10](#_Toc120022529)  [Offsite Recycling (Specify Contractor & Recycling outlet Land Fill Disposal 11](#_Toc120022530)  [Design Plan 12](#_Toc120022531)  [Commercial waste service provision 13](#_Toc120022532)  [Impacts on public litter 13](#_Toc120022533)  [Fence Screening requirements 13](#_Toc120022534)  [Site Layout 14](#_Toc120022535) |
|  |

# Introduction

\_\_This is a series of strategies for waste management on the multi-purpose commercial development building site and waste minimisation plan. It includes a description of the proposal for minimising waste on the project. We will identify the types of waste produced, what can be re-used, what recycled materials we can reuse and materials from demolitions. We will mention the recycling options for waste products, as well as the impacts to public litter and commercial waste services. Along with the site rules for achieving the waste minimisation.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Waste Minimisation Strategy

## Re-Use

\_The wood can be re-used after demolition, The pallets for the bricks sinks and washing machines and toilets can all be re-used. The insulation and plaster will be re-used. The metal in the wires and broken electronics can be re-used at some point or by some particular country in need of it.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Recycle

\_Nails and plaster can be recycled after demolition and with excess waste off cuts and mistakes.

\_Mis-sized wood can be used in art installations or for box-work raised garden beds. The concrete after recycle will be re-used as crushed rock. The steel will have wasted away and will need re-working and electrochemistry to combat the rusting. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Residual Waste

\_Most plastic and cardboard packaging can be recycled as can the plastic straps and plastic tape.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Chemicals

\_The bonder in the pipes for both irrigation of the garden and lawn as well as for the plumbing. \_The paint on the walls, ceiling and outside

\_The sealer on the wooden floor, and decking

\_The varnish on the tables and chairs and cabinets.

\_The wood dust in the air.\_

\_The plaster dust in the air.

\_The iron crystals in the gravel dust for temporary roads on the way in.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Waste minimisation

\_\_\_This is practically a re-use and re-cycling plan. To minimise waste, re-cyclable and re-used materials will be incorporated into outdoor shedding of make-shift sizes. Whether it be with mud-brick or not, there’ll be a re-use and re-cycling plan for small size equivalents. Whether it’s just for pieces of insulation stacked into a mud-brick shelter surrounding a bed, as opposed to sending it great distances off-site and spending money on gas and labour in multi-spot transportation in the broader re-use re-cycle industry, ie. re-use and re-cycle by majority in-house.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Industry Best Practice

\_\_The industry best practice involves using aerogel insulation, as it is space grade but also cheap and inexpensive to produce, meaning it puts very little energy waste into the environment, and it can be re-used. As well as combining concrete, steel, and glass, with wood and plaster for walls. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Induction Process

\_\_**First, the Minimisation Plan and Policy will be given to the employees to read. Then the employees will go through a process of question and answer to check how much of it they remember, so we know what they can intuit and what we might have to pick them up on for the future. When the time comes for them to start a process that they failed in the Q and A they’ll be reminded of the process that they must follow. And they’ll be individually communicated to in the email of these documents to persuade based on the individual for them to really commit to following the plan and policy.**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Diagram Description automatically generatedSite Plan

# Description of the proposal for minimising waste on the project

|  |
| --- |
| **Description of the proposal for minimising waste on the project** |

|  |
| --- |
| waste minimisation for project 8168 will be achieved Through the use of building construction recycling centres.  List Of Items to be Recycled   1. ­­­­­­­­­­­­­­­­­­\_\_Plaster-board\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_Concrete\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_Bricks\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4. \_Cornice\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5. \_Plastic packaging\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6. \_Wood packaging\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7. \_Cardboard packaging\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 8. \_Nails, 9. screws, 10. staples, 11. wire-off-cuts\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 12. \_**Wood in wall-frames**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 13. Aerogel insulation\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

# Site Rules

|  |  |  |
| --- | --- | --- |
| **Site rules** | **Clean site check list** | |
| Task | |
| **Site rule 1**- check council requirements and plan before you start on site. | Have all staff re-check this document before beginning the project.  Check council website and waste management consultants if need-be.  Order bins for site. |  |
| **Site rule 2**- stop erosion on the site and contain sediments. | Place roads at 1+mm/1m degree incline facing one way with a drain on that side.  Place rock rivers at low-points of surface, tilt surrounding ground to meet it.  Grow reeds and wildflowers for local flora and fauna. |  |
| **Site rule 3 –** protect stockpiles | Fence off worksite  Install CCTV with warning signs. Give CCTV physical protection and alarm system.  Tie-down with metal bracing all exposed materials. Or build a make-shift temporary-shed on-site. |  |
| **Site rule 4** – keep mud off road and on the site | Have high pressure water hoses,  and drive on grassy paths with shifting centres,  or place hay over mud by 9:1. |  |
| **Site rule 5 –** keep litter contained on site | Install temporary fencing with a locked entry-gate  Ensure there is a rubbish bin with a sign to find it, and the workers know where it is |  |
| **Site rule 6** – clean and wash up on site | Clean up waste into bin before each break and end of day  Wash away dust, dirt, and grime after build up or end of week  Have orange oil mechanics soap, rags, and toilet soap, and hand soap at break-point on site. |  |

# Waste produced

|  |
| --- |
| **Identify the possible types of waste produced** |

|  |  |  |
| --- | --- | --- |
| Item Number | Item | Description of waste and found in what process? |
|  | Concreting | Left over rock, cement, and rio off-cuts from before the pour, after pour, |
|  | Plumbing | Left over piping, pipe shavings, plastic-pipe-bonder, copper off-cuts and shavings. |
|  | Electrical | Left over wiring and wire-sheathing / insulation, optic fibre (internet), drillings (satellite, power-points, battery, solar, hot water.) |
|  | Timber walls and roofing | Timber off-cuts from noggings, shavings, insulation dust, dead nails/screws, broken tiles |
|  | Plastering | Plastering to size, large sizes re-use onsite, dust can be vacuumed. |
|  | Painting | Tape, drop-sheets, paint left-over for the day. Occasional drop here and there. |
|  | Roofing | Tiles screws, banisters and railings and triangle off-cuts + shavings. |
|  | Solar panel installation | Metal bracing to size of roof railings (offcuts + shavings). |
|  | Decking built | Left over concrete reuse, adjusting height of wood to depth of hole and height of fence, wood to size, left over varnish/paint to re-use |
|  | Footpath | Get concreters in, left over rock and rio off cuts |
|  | Elevator | Install elevator, via contract, and cleanup whatever dust remains. |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

# Identify materials to be re-used onsite

|  |
| --- |
| **Identify materials to be re-used onsite** |

|  |  |  |
| --- | --- | --- |
| Item Number | Item | Description |
|  | Dead-screws and nails | Melt-down on-site with induction into build-date and name plaque. |
|  | Timber off-cuts | Can be re-used when installing nogging or blocking behind fixtures. |
|  | Soil from digging | Used as garden-flattening soil. |
|  | Metal from off-cuts | Art project on-site, just screw in-place. |
|  | Drop-sheets | Bleach and tie die. |
|  |  |  |
|  |  |  |
|  |  |  |

# Offsite Recycling (Specify Contractor & Recycling outlet Land Fill Disposal

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Generated Waste Materials** | **Method for Waste Minimisation** | | | |
| **Amount**  M2 and/or tonnes | **Waste reduction Technique**  e.g. Minimal Quantity orders  Reuse on / off-site | **Off-site Reuse?**  Name of Recycler?  Transfer site? | **Disposal**  Name of Contractor  Landfill site  Amount |
| Green Waste | tonnes | Re-use off-site, good waste, get as much as possible with a spare gw bin | Wmwaste.com.au | Cleanaway.com.au |
| Soil | tonnes | Re-use off-site, stratify | Soilcyclers.com | Repurposeit.com.au |
| Concrete | tonnes | Re-use off-site, order rio to size | Iseekplant.com.au | Repurposeit.com.au |
| Timber | tonnes | Re-use onsite, build to size | Us | Chippy |
| Steel | M2 and tonnes | Recycle, order to size | Allsteelrecycling.com.au | Jjscrapmetals.com.au |
| Tin | M2 | Recycle, order to size | Allsteelrecycling.com.au | Simsmm.com.au |
| Block | tonnes | Re-use off-site, order/build to size | Iseekplant.com.au | Repurposeit.com.au |
| Cardboard and Paper | tonnes | Recycle offsite, buy recycled | Cleanaway.com.au | Urmgroup.com.au |
| Plaster | M2 | Recycle offsite, buy to size | Regyp.com.au | Jumbocorpcom.au |
| PVC | M2 | Recycle offsite, measure twice cut once | Plasticrecyclinghub.com.au | Nwcrecycling.com.au |
| Plastic Wrapping | tonnes | Recycle offsite, buy bulk | Wanless.com.au | Cleanaway.com.au |
| Carpet / Underlay | tonnes | Recycle offsite, small trimmings | Junkmoovaz.com.au | https://shawinc.com/shawrecycles |
| Pavers | tonnes | May need short path in garden to re-use some, otherwise recycle offsite | Repurposeit.com.au |  |
| Tiles | tonnes | Recycle offsite, and minimise tile cuts with size proportions | Repurposeit.com.au | https://businessrecycling.com.au/recycle/ceramics |
|  |  |  |  |  |

# Design Plan

|  |
| --- |
| **Design Plan** |

**Project Description**; ­­­­­­­­­­­­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_Johnswood\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
| **Material Type** | **Design Plan to Achieve Energy Ratings** |
|  |
| Concrete Roof | Aerogel insulation on top and bottom surfaces to prevent energy capture by concrete |
| Ceiling Insulation | Aerogel insulation between roof and ceiling |
| Walls | Aerogel insulation inside walls between surfaces |
| Insulation for external precast wall | Grow vines across the pre-casting to increase shade on wall |
| Acoustic insulation | Use earthwool inside walls between consecutive rooms/apartments within the building |
| Timber Frame External Wall Brick and Block walls | Insulate between sun and brick/block, and between brick/block and indoors |
| Orientation | Face north (long side exposed to sun) |
| Passive Heating And Cooling | Windows to every room, and on first floor floor to ceiling windows both exposed to high heat capacity flooring (concrete mostly) |
| Thermal mass | Low density materials such as aerogel, taller building for surface area to volume ratio and build underground carpark |
| Shading | Grow trees on the north side |
| Glazing | Double or triple glazed windows. |
| Skylights | Skylights built for rooms without exposure to windows. |
| Solar Hot Water Service | One per apartment, will need multiple stories to occupy the same roof space exposure |
| Rainwater Tank (min 2000 litres) | Consider building a water tank that is wide and long but not very tall and place it in the roof space to use gravity to pump it down. |
| Other: | |

# Commercial waste service provision

|  |
| --- |
| **Commercial waste service provision (attach detailed plan of storage area and access)** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Waste Service | 140ltr Garbage | 240ltr Garbage | 240ltr Organics | 10M3 Skip Recycling |
| Proposed bin types | Plastic red | Plastic yellow | Plastic with holes | Steel |

# Impacts on public litter

|  |
| --- |
| **Impacts on public litter** |

|  |
| --- |
| 1. ­­­­­­­­­­­­­­­­­­­­­­­­\_\_\_Big CO2 and transportation fees to send recycling and waste over long distances\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_ Public not able to use bins outside the fence, so things may end up being illegally dropped off, or just left laying around 3. \_\_\_Dust in the air from moving soil, dirt, gravel and crushed rock, as well as plaster. 4. \_\_\_ Demolition is largest source of waste, so techniques that allow for reuse are important 5. \_\_\_Large occupancy for little space, and no direct local onsite recycling due to constraints of recycling factory |

# Fence Screening requirements

|  |
| --- |
| **Fence Screening requirements** |

|  |
| --- |
| 1. \_\_\_\_Prevention of illegal dumping (waste in) and prevention of escape of material from the site (waste out) \_\_\_ 2. **And hoarding, preventing contaminants and dust from escaping the site to keep health of ecosystem and environment and neighbours.**   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

# Site Layout

|  |
| --- |
| **Site Layout** |

|  |  |
| --- | --- |
|  | **Site Layout Plan** |
|  |
| Legend |
| Stock pile  Site fence  Stabilised Access point  Litter Bin  Dump Bin  Recycling Bins  Vegetation  Drains  Silt Fence  Wash up area  Gravel Sausage |

End Of Document