



DEMOLITION • ENVIRONMENTAL • CIVIL • CONTRACTORS

DECC HEALTH SAFETY & ENVIRONMENTAL MANAGEMENT SYSTEM

WASTE MANAGEMENT PLAN

LIVERPOOL CIVIC PLACE
52 SCOTT STREET, LIVERPOOL



PROJECT DETAILS

PROJECT NAME	:	LIVERPOOL CIVIC PLACE
CLIENT NAME	:	BUILT DEVELOPMENT GROUP Pty Ltd
PROJECT ADDRESS	:	52 SCOTT Street, LIVERPOOL
DOCUMENT NUMBER	:	MP-09 Waste Management Plan –

PREPARED BY (PROJECT MANAGER)	:	NAME: BLAIR FOWLER	SIGNATURE:	DATE:
AUTHORISED BY (STATE GENERAL MANAGER)	:	NAME: FRANK LOMBARDI	SIGNATURE:	DATE:
PROJECT MANAGER (RESPONSIBLE FOR IMPLEMENTATION)	:	NAME: TBC	SIGNATURE:	DATE:
SITE FOREMAN (APPROVED FOR USE ON SITE)	:	NAME: TBC	SIGNATURE:	DATE:

DOCUMENT CONTROL					
No.	USER	POSITION	VERSION No.	DATE REVISED	COMMENTS

Distribution List

Controlled versions of this WHS Management Plan have been issued to the persons listed below.

No.	USER	POSITION	VERSION No.	DATE

HEAD OFFICE ADDRESS	CONTACT DETAILS	LICENCES
Unit: 30 19 McCauley Street PORT BOTANY, NSW, 2036	Phone: (02) 9003 0684 FAX: (02) 9003 0688 EMAIL: www.decc.com.au	NSW: AD211299 QLD: 230503 ACT: 2011503

Table of Contents

1. Principles 4

2. Waste Management 5

 2.1 WASTE STREAMS 6

 2.2 RE-USE OF WASTE 6

 2.3 STOCKPILE MANAGEMENT 7

3. Recycling Rate 8

4. Site Workers and Management Declaration 10

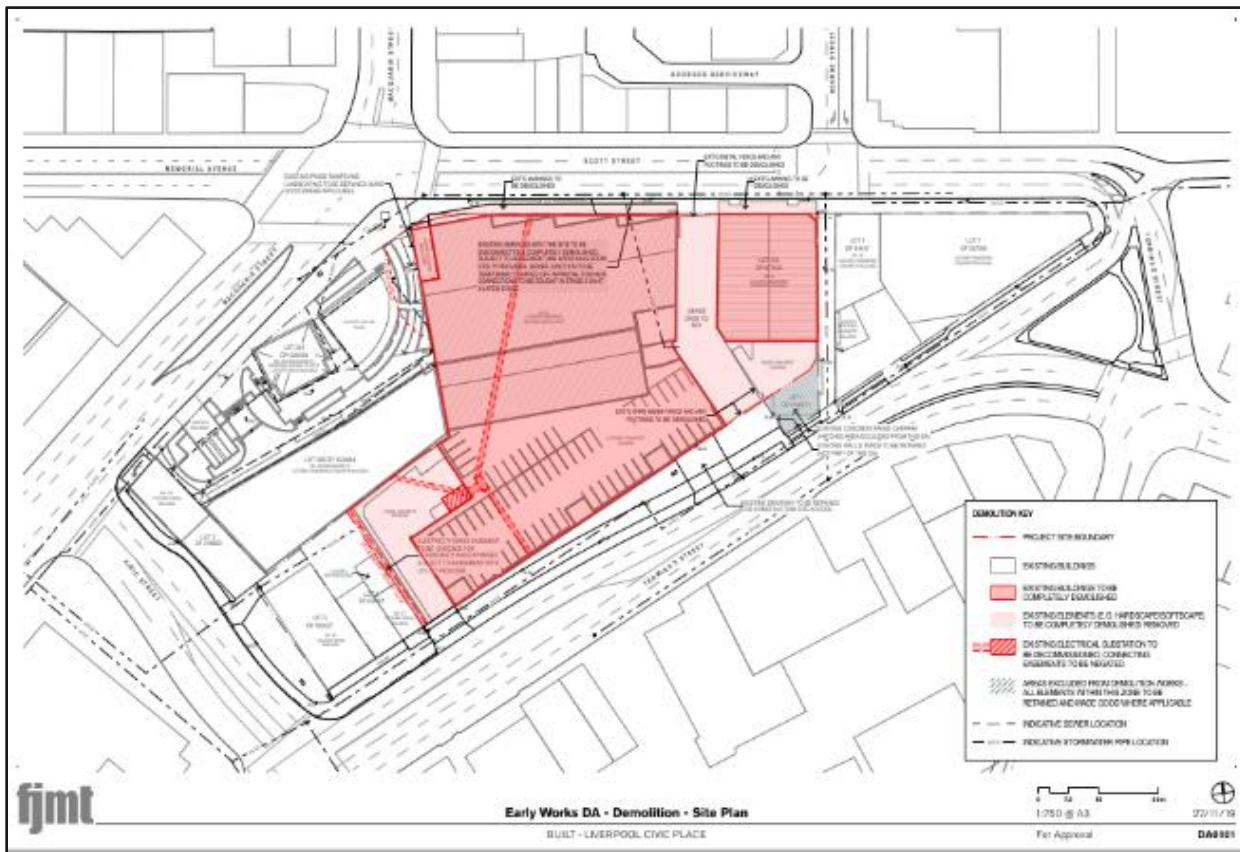
5. Waste Plan Review 12

1. Principles

This report has been prepared in support of a Early Works Development Application (DA) for the site preparation works at 52 Scott Street, Liverpool (Liverpool Civic Place).

The project involves the following:

1. Demolition of all site existing structures and improvements;
2. Bulk earthworks inclusive of site retention works; and
3. Construction and development of the site (multiple buildings of varying heights)



The demolition and civil works at 52 Scott Street, Liverpool (LIVERPOOL CIVIC PLACE) will utilise the following waste management principles:

- Avoid the use of excess materials and production of waste;
- Reuse waste materials (such as off-cuts) on site where possible;
- Recycle waste;
- Dispose of waste correctly

When deciding how to minimize waste management impacts, consider the following:

- Will construction/demolition generate surplus material that can be recycled?
- Will construction/demolition generate waste material that can be disposed of onsite?
- Will construction/demolition generate waste that will have to be disposed off-site?
- Will site personnel generate litter or rubbish?

2. Waste Management

The waste management plan involves four major steps:

1. Estimating the type and quantity of waste generated on site;
2. Identifying who is responsible for recycling or disposal
 - DECC is responsible for on-site processing of concrete and steel;
 - Local Concrete recycler is responsible for off –site crushing and re-use of concrete;
 - Local Scrap and Recycling yard is responsible for off-site recycling of steel.
3. Specifying whether the waste is:
 - Re-used on site;
 - Re-used or recycled off-site;
 - Disposed off-site (landfill)
4. Recording the type and quantity of waste recycled.
 - Concrete tipping dockets to be received from Concrete recycler;
 - Steel tipping dockets to be received from Steel Recycler.

The material from the project will be recycled off site. Refer to Table 1 for quantities of recycled material.

Effluent from the amenities will either be discharged into the local sewerage system, where available. Otherwise septic tanks and portable self-contained toilets will be used.

Littering or dumping of unwanted waste or disposal of surplus waste on any land on or around the site is illegal unless specifically permitted in accordance with the Contract.

Set up skip bins or other appropriate receptacles to contain waste materials, litter and spoil. Provide separate bins for recyclable material and non-recyclable material ensuring recycling potential is optimized with efficient material sorting, processing and stockpiling.

All Green waste is to be mulched on site and re-used (if possible otherwise disposed of from site) with the exception of noxious weeds.

Pollution control licenses and permits will be obtained, if applicable to the project.

2.1 WASTE STREAMS

The demolition works for the project will produce the following waste streams having the following waste classification:

- Concrete – General solid waste (“non-putrescible”- Not Liable to become putrid);
- Masonry (Brick) – General solid waste (“non-putrescible”- Not Liable to become putrid);
- Steel reinforcement – General solid waste (“non-putrescible”- Not Liable to become putrid);
- Rubbish – General solid waste;
- Timber – General solid waste;
- Hazardous materials (asbestos);
- See Asbestos Removal Control Plan (ARCP). No Asbestos disposed of by DECC
- Timber - is to be disposed of to an authorized landfill;

2.2 RE-USE OF WASTE

Concrete – A mixture of excavators with pulveriser attachments will be used to process concrete into a manageable size. The concrete will then be transported by trucks to a recycling facility for reuse.

The concrete will be used as a “raw feed” for the production of recycled concrete. The recycling potential of the concrete is 100%.

Concrete will be transported off site to a nominated recycling facility. Here the concrete will be further processed where it will be crushed into a recycled concrete product. The recycled concrete will be a saleable product that may be re-used as drainage, subgrade and/or fill material depending on the grade and particle size.

Brick – Excavators will be used to process the brickwork into manageable size. It will then be transported by trucks to a recycling facility for reuse.

The brick will be used as a “raw feed” for the production of recycled brick. The recycling potential of the brick is 100%.

Brick will be transported off site to a nominated recycling facility. Here the brick will be further processed where it will be crushed into a recycled brick product. The recycled brick will be a saleable product that may be re-used as drainage, subgrade and/or fill material depending on the grade and particle size.

Steel – During the processing of the concrete steel reinforcement is detached from the concrete. The reinforcement/steel is cut into manageable sections/lengths for loading onto a truck for removal off site. The steel is delivered to a steel merchant for further processing. The recycling potential of the steel is 100%.

The steel will be transported to a nominated recycling/scrap yard. Here the steel will be further processed into manageable lengths for transportation to a smelter.

General Waste – General waste will be processed with small machines using grapple attachments to maximize density and therefore reducing landfill space. There is NO recycling of rubbish material; it is to be taken to a licensed landfill.

Green Waste – Where possible Green waste will be reused onsite as garden mulch, if required. Otherwise it will be disposed of at appropriate waste disposal facility.

Asbestos – Asbestos is to be removed by a licensed contractor. It will then be wrapped in 200UM plastic, sealed and taken to a licensed landfill. For further details see Asp Australia Asbestos Removal Control Plan (ARCP).

2.3 STOCKPILE MANAGEMENT

The demolition earthworks of the buildings and site respectively will require the management of the following stockpiles.

- Concrete;
- Brick;
- Steel;
- Non-Ferrous Metals
- Rubbish;
- Gyprock;
- Fill material (GSW);
- VENM (Shale)
- VENM (Silty Clay);
- VENM (Sandstone)

The **recycled material** is generated by the complete strip out and demolition of the buildings.

An excavator and or a bobcat will commence processing the building material prior to the loading of trucks for disposal off-site. The trucks will transport the material from the point of generation (site) to the point of recycling for (concrete) and for (steel). From here the two recycling facilities will transport the material to the point of re-use.

The stockpiling of material throughout the recycling process is required to ensure efficiency during processing on site, loading out from site and processing at the recycling facility. Proper stockpiling and separation optimizes the recycling potential and quality of the recycled product.

From an environmental perspective stockpiling material into separate and individual concrete, brick, steel and rubbish waste stockpiles is to maximize the recycling potential of the demolition process and minimize material landfilled.

Water will be sprayed over the concrete and brick stockpile prior to and during (if required) the loading out process to mitigate dust. During the concrete processing stage where concrete is either hammered or pulverized to extract the steel reinforcement from the concrete water will be sprayed over the processing area and stockpiles.

Material stockpiles will be kept to a manageable volume with progressive loading out. Water for will be sourced from both sites adjacent to the location of the site compounds.

3. Recycling Rate

DECC estimate that 90% of the material by weight will be recycled. DECC to keep records of all tipping receipts to confirm and track recycling achieved against initial estimates. Table 1 is to be updated to include real quantities on an ongoing basis throughout the demolition project. DECC will also provide waste reports if the client requires these reports.

Concrete and steel from the demolition of the structure(s) to be transported to a licensed recycling facility. All material that is land-filled to be transported to a licensed EPA approved landfill. DECC to confirm recycling facility and landfill are capable of accepting proposed material.

Note: The Actual Quantity is based on tipping receipts

Statistics Updated by:

Position:

Date of Update:

Materials	Estimated Quantity (Tonnage)	% Recycled	<u>Total tonnage this month</u>	Total to Date (Tonne)	Destination (TBC)
DEMOLITION WORKS					
Green waste	50 t	100%			TBC
Concrete	12,000 t	100%			Concrete Recyclers Boral Recycling
Bricks	3,500	100%			Concrete Recyclers Boral Recycling
Steel	400 t	100%			Sell and Parker SIMMS
Aluminium	50 t	100%			Sell and Parker SIMMS
Copper	5 t	100%			Sell and Parker SIMMS
General Waste Non - Recyclable	500	0%			Kemps Creek, Suez
CIVIL WORKS					
Bulk Excavation (in fill – GSW)	14,000 t	0%			TBC
Bulk earthworks (VENM)	184,000 t	100%			TBC

Table 1 - Waste Management Statistics

Total (Estimated Material) = 214,505 tonnes

Total (Estimated recycled) = 200,005

Total (Estimated Landfilled) = 14,500 tonnes

RECYCLING = 93% (by weight)

4. Site Workers and Management Declaration

My signature which appears below hereby confirms that I have read and understand this Waste Management Plan and I will ensure my work process is carried out and completed according to the above information.

Before signing, I had the opportunity to have input into the contents of this Waste Management Plan and agree to carry out my work on site as per the information contained within this Waste Management Plan.

NAME	COMPANY	SIGNATURE	DATE

5. Waste Plan Review

PROCESS FOR MONITOR AND REVIEW:

The Project Manager and or Site Foreman will conduct regular inspections of the work activities and work environment applicable to monitor the effectiveness of this document. This document will be reviewed regularly where workers, supervisors and managers will be provided with an opportunity to have input into the effectiveness of the processes stipulated in it. A record of all inspections/audits and toolbox talks used in the monitoring and reviewing will be retained on-site.

This document will be reviewed every 30 days.

Foreman / Supervisor, Site Management and Senior Management to review this document								
No.	Print Name	Changed			Toolbox Required		Signature	Date Reviewed
		YES	NO	Page:	YES	NO		
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								