

Construction Waste Management Plan

N228

Moore Park Precinct Village and Carpark

5 May 2024





Revision History



Table 1 [Insert Table Caption]

Version	Date	Revision Description	Project/Site Manager Sign off
00	14/02/24	Draft for Review	Nicholas Papanikolaou
01	09/04/24	Revised to address Savills comments	Nicholas Papanikolaou
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1 Compliance Matrix

The following compliance matrix demonstrates the alignment of the BESIX Watpac Construction Waste Management Plan with condition B24 (Table 2) of the SSD 9835, approved on 6 December 2019 and modified thereafter.

Table 2 Compliance Matrix

Construction Waste Management Sub-Plan Requirements	Reference
B24 The Construction Waste Management Sub-Plan (CWMSP) must address, but not limited to, the following:	This Plan
a) detail the quantities of each waste type generated during demolition and the proposed reuse, recycling and disposal locations;	Section 2.6
b) removal of hazardous materials, particularly the method of containment and control of emission of fibres to the air, and disposal at an approved waste disposal facility in accordance with the requirements of the relevant legislation, codes, standards and guidelines;	Section 3
c) measures to conduct electronic monitoring of waste vehicles entering and leaving the development site; and	Section 2.4
d) details of arrangements for the disposal of waste from the premises with evidence that the waste facility is legally able to accept that waste.	Section 4
B38 Details of the proposed truck routes to be followed by trucks transporting waste material from the site, must be submitted to the Sydney Coordination Office and Transport Management Centre and the Planning Secretary, prior to the commencement of the removal of any waste material from the site.	Detailed in Construction Traffic Management Plan
C36 The construction waste must be managed and disposed of in accordance with the CWMSP required by condition B24.	This Plan
C37 Waste must be always secured and maintained within designated waste storage areas within the site until picked up by a waste disposal contractor.	Section 3
C38 All waste generated during construction must be assessed, classified, and managed in accordance with the Waste Classification Guidelines Part 1: Classifying Waste (EPA, 2014).	Section 3
C41 The movement of materials from stockpiles of waste materials for disposal and / or materials for reuse or recycling must be recorded at all times.	Section 3

C42 The waste materials stockpiled for disposal and materials stockpiled for re-use or recycling must be appropriately managed to ensure waste streams reach their intended final destinations, being premises legally able to accept those wastes and materials for re-use or recycling.	Section 3
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2 Purpose

To minimise the amount of construction waste generated on this project by avoiding waste generation and implementing practicable and efficient re-use and recycling procedures for all residual materials.

2.1 Project Goal

The project's target is to re-use or recycle a minimum of 80% of construction waste by weight.

2.1.1 Responsibilities

BESIX Watpac will:

- Allocate clear responsibilities to subcontractors, suppliers and the project Waste Contractor;
- Provide optimum product specification, sizing and packaging information to the Client;
- Select materials with a high recycled content where appropriate;
- Direct materials that can be reused back into off-site manufacturing processes;
- Direct materials that can be recycled to an appropriate facility;
- Provide clear signage of acceptable materials for each bin and monitor contents to prevent contamination; and
- Provide regular waste reports to the Client and site personnel.

Subcontractors will:

- Provide advice to BESIX Watpac on optimum product specification, sizing and packaging;
- Offer alternative products containing recycled materials which conform to specified requirements;
- Order the correct quantity of materials and prefabricate off-site where possible;
- Implement measures to prevent surplus materials and packaging from entering the site;
- Manage wastes resulting from their work to maximise material re-use and recycling; and
- Clean their respective work areas daily and place wastes in the nominated waste bins.

The Project Waste Contractor will:

- Provide advice on optimum resource recovery options;
- Provide waste bins and off-site segregation facilities;
- Coordinate the timely emptying / removal of bins from site;
- Deliver materials to reuse and recycling facilities; and
- Provide receipts, records and Waste Reports for all waste.

2.2 Planning and operation

The BESIX Watpac Project Team will strategically plan waste minimisation measures for each phase of the project based on the timing and sequence of construction activities.

The project will appoint a Waste Management Contractor during the early stage of the project. The Waste Management Contractor will collaborate with BESIX Watpac to ensure effective waste recycling, measurement, recovery and disposal is implemented through each phase of the project.

BESIX Watpac personnel in conjunction with subcontractors and the Project Waste Contractor will:

- Identify the type, volume and location of construction waste anticipated at each stage of the project

- Investigate the potential use of materials with a high recycled content
- Assess options for material sizing, packaging and off-site fabrication
- Review procedures for on-site segregation, off-site segregation and the return of products and packaging to suppliers

2.3 Training

BESIX Watpac personnel will reinforce waste minimisation responsibilities and awareness during site inductions, tool-box and pre-commencement meetings.

2.4 Monitoring, Measuring and Reporting

The Project Environmental Officer will monitor site waste handling practices and regularly inspect the contents of bins.

The Waste Management Contractor will provide monthly Waste Reports that detail the tonnage and volume of waste generated and the total recycled by waste category.

The Project Manager will provide regular status reports to the Client and Senior Management.

Table 3 Compliance Matrix

Monitoring Required	Staff Responsible	When
Waste management will be monitored daily, with observations entered daily diaries where necessary.	PER, Safety Advisor/Manager, Engineers, Supervisors	Daily
Waste management will be inspected as part of the Monthly Environmental Inspection Checklist, or HSE site inspection.	PER, Safety Advisor/Manager, Engineers, Supervisors	Monthly
All waste storage's locations must be inspected to ensure that there is no risk of unplanned movement of waste around or off site via wind, water, or other means.	PER, Safety Advisor/Manager	Project Delivery

2.5 Corrective Actions

BESIX Watpac personnel will monitor the waste management practices of subcontractors on site. Where a subcontractor fails to comply with the project's waste management procedures, the Site Manager will be advised and a non-conformance raised. Corrective actions taken by the subcontractor shall be reviewed and approved prior to the non-conformance being closed out.

2.6 Waste segregation

Waste reuse and recycling will be achieved through on-site and off-site segregation of materials. Materials segregated for recycling will include:

- Glass
- Concrete

- Bricks and tiles
- Asphalt
- Timber
- Aluminium
- Plastic
- Paper and cardboard
- Plasterboard
- Polystyrene
- Insulation
- Steel and other metals
- Clean Fill
- Green Waste

Table 4 Suspected Waste Streams

Waste Materials	Project activities likely to generate waste stream	Subcontractor Obligations	Management of Waste Stream	Destination of Waste Streams	Estimated quantities for direction of project
Mixed general waste (heavy)	Excavated material Brick/Concrete Light waste	Civil contractor required to stockpile, segregate, and manage waste on-site to avoid cross-contamination and/or incorrect disposal. Manage as per requirements in the RAP.	Segregated	Off-site disposal by civil subcontractor to an appropriately licenced facility legally able to accept the waste or a valid development consent (where material is not contaminated). Where material is trackable, an EPA licensed transporter to dispose at a landfill licensed to receive it.	30,000m3
Mixed general waste (light)	Cardboard, Paper, Plastic Metal, steel, Timber Gyprock board	Subcontractors require to manage waste on-site using existing bins.	Segregated – dedicated cardboard, paper bin, and gyprock board, dedicated metal and steel bin, dedicated timber bin	Off-site recycling by waste subcontractor. License Waste Contractor to be determined.	20m3
Metals	Steel fixing, stud wall construction, structural steel erection, roofing, miscellaneous metal works.	Subcontractors required to manage waste on-site using existing bins.	Segregated – dedicated metals bin.	Off-site recycling by waste subcontractor. Licensed Waste Contractor to be determined.	10m3
Asphalt and Bricks	Demolition and removal of existing car park and footpath areas	Subcontractors required to manage waste on-site using existing bins.	Segregated – dedicated asphalt and masonry bin.	Off-site recycling by waste subcontractor. Licensed Waste Contractor to be determined.	50m3

Waste Materials	Project activities likely to generate waste stream	Subcontractor Obligations	Management of Waste Stream	Destination of Waste Streams	Estimated quantities for direction of project
Concrete	Concrete Pours (Pump washout)	Subcontractors to manage concrete waste at specific dedicated project washout area	Dedicated offsite concrete slurry/washout locations at concrete supplier facility/batch plant.	Off-site reuse by concrete supplier or recycling by waste subcontractor: Intended destination to be provided by successful concrete contractor.	50m3
General Construction Waste	Remaining waste on site.	Subcontractors required to manage waste on-site using existing bins.	Segregated – dedicated general construction waste bin.	Off-site recycling by waste subcontractor. Licensed Waste Contractor to be determined.	50m3
Timber	Formwork from other temporary supports, pallets from building material deliveries	Subcontractors required to manage waste on-site using existing bins and storage locations	Segregated – dedicated timber bin	Off-site recycling by waste subcontractor. Licensed Waste Contractor to be determined.	20m3
Contaminated/Hazardous Substances Waste	General chemical use including curing and jointing compounds, paint, adhesives, and solvents; or waste arising from hydraulic spills/leaks	BESIX Watpac and subcontractors required to manage waste on-site using existing bins.	Segregated – dedicated contaminated/hazardous substances waste bin	Off-site recycling by waste subcontractor. License Waste Contractor to be determined. Waste subcontractor will engage an EPA licensed transporter to dispose at a landfill licensed to receive it.	Not expected
Effluent	Ablution and toilet facilities	Pump out and disposal at licensed facility	Effluent storage tanks	Pump out and off-site disposal by civil subcontractor. Licensed Waste Contractor to be determined.	12,000L

2.7 Waste Disposal

Waste disposal will be in strict compliance with regulatory requirements. Hazardous wastes will be transported to facilities licensed by NSW Environment Protection Authority (EPA). Records of disposal shall be kept.

Disposal of non-hazardous wastes to landfill will be as a last resort only.

2.8 Material Separation

2.8.1 Concrete, Tiles Glass

Separated on site for dedicated bins to be sent to local resource recovery centre for crushing. Likely to be reused for road base or crusher dust.

2.8.2 Metals

Separated on site for steel and nonferrous varieties in mixed construction bins and redirected via transfer station to be shredded or crushed at a transfer facility and sold into the manufacturing industry for reuse.

2.8.3 Timber

Separated on site and placed in mixed construction bins to be redirected at transfer facilities for further sorting and processing, Timber is then processed into mulch and sold to landscaping yards and local councils.

2.8.4 Plasterboard

Separated on site and directed to special plasterboard bins to be ordered at particular stage of project. Redirected to a dedicated plasterboard facility and materials recovered for use in landscaping products.

2.8.5 Paper/Cardboard

Separated on site for direction to a dedicated wheelie bin. Redirected to a local recycler and mulched for the production of paper and cardboard.

2.8.6 Plastics

Separated on site to be sent to local resource recovery for further reprocessing and separation to PET. HPDE, PVC, and LDPE. All non-PVC plastics baled for overseas processing and recycling, PVC sort for recycling.

3 Waste Management Action Planning

Table 5 includes actions and timing that is associated with CC1 Moore Park Precinct Village and Car Park early works scope and does not extend to future stages.

Table 5 Compliance Matrix Inductions, Training and Awareness	Staff Responsible	When
Site inductions will include the following specific components for waste management: <ul style="list-style-type: none">• Identification of waste types, including non-hazardous waste, hazardous waste, and Listed/Controlled/Regulated wastes.• Key requirements for handling, transportation, and storage, including segregation of wastes.• Waste storage facilities on the Site.	PER, Safety Advisor/Manager	Project Delivery
Personnel who routinely handle hazardous chemicals or hazardous or Listed/Controlled/Regulated waste (e.g., refuelling personnel, pump operators, mechanics, and stores personnel) will receive training in handling, transporting, and storing hazardous chemicals or hazardous Listed/Controlled/Regulated wastes; in reporting	PER, Project Safety Advisor/Manager, First Aiders	Project Delivery

and documentation requirements; and in spill clean-up techniques and practice.		
Communicate best waste minimisation practices with site personnel to ensure employees are aware of project waste procedures, the need to maintain a clean worksite and reduce risk of environmental harm resulting from inappropriate waste handling practices.	PER, Safety Advisor/Manager	At induction, prestart/toolboxes when appropriate

Waste Avoidance and Reduction	Staff Responsible	When
All workplaces must recycle construction and demolition waste, paper, cardboard, electronics, printer cartridges, fluorescent lights, glass, plastics, and batteries, where recycling services are available.	All Personnel	Project Delivery
Waste minimisation measures will be included in tendering, subcontracting and procurement processes wherever practicable.	PER, Engineers, Supervisors	Workplace Planning
<p>All waste, wherever practicable will be either segregated on-site or comingled and separated off-site. Waste will then be reused, recycled, or disposed of in an appropriate manner at licensed facilities. Waste segregation measures will consider separate bins for each waste stream.</p> <ul style="list-style-type: none"> • General Waste (construction and other) • Concrete/masonry waste • Metals • Paper, cardboard etc. • Plastics • Glass • Hazardous wastes • Special waste (asbestos) 	All Personnel	Project Delivery
Recycling bins will be provided in office and crib rooms. (Where practicable)	PER, Engineers	Project Delivery
For building materials imported to site that have excessive packaging, efforts must be undertaken to negotiate alternative packaging arrangements with the supplier.	PER, Contracts	Workplace Planning, Project Delivery
Recycling skips (co-mingled or otherwise) will be provided within the vicinity of on-site works.	PER, Engineers, Supervisors	Project Delivery

General Waste Handling, Housekeeping and Storage	Staff Responsible	When
Details of the proposed waste haulage truck routes are documented within the CTMP and are to be followed by trucks transporting construction waste material from the site. The CTMP has been developed in consultation with the Sydney Coordination Office and Transport Management Centre prior to the commencement of the removal of any waste material from the site.	PER, Safety Advisor/Manager, Community and Stakeholder Manager	Prior to Project Commencement
All trucks transporting construction waste material from the Project site must follow the approved routes documented within the CTMP throughout Project Delivery.	PER, Safety Advisor/Manager, Community and Stakeholder Manager	Project Delivery
All waste trucks leaving the site are to have their loads secured and covered where applicable. This includes all skip and hook bins (or other waste receptacles).	All Personnel	Project Delivery
Waste must be always secured and maintained within designated waste storage areas within the site until picked up by a waste disposal contractor. These areas must be clearly defined and well signed.	All Personnel	Project Delivery
Splatter, dust, and other material likely to fall from or be cast off the wheels, underside or body of any vehicle, trailer or motorised plant leaving the site must be removed before leaving the premises	All Personnel	Project Delivery
Concrete waste and rinse water are not to be disposed of on the site and will be prevented from entering any natural or artificial watercourse or waterbody.	All Personnel	Project Delivery
The waste materials stockpiled for disposal, re-use or recycling must be appropriately classified and managed to ensure waste streams reach their intended final destinations, being premises legally able to accept those wastes and materials for re-use or recycling.	All Personnel	Project Delivery
<p>Ensure provision of correctly signed bins or skips for collection and storage of all wastes. Locations and bin type shall be determined by the following:</p> <ul style="list-style-type: none"> • Type of waste. • Proximity to watercourses and drainage lines • Proximity to sensitive or protected flora and fauna. • Accessibility for removal • Protection from weather • Proximity to work areas; and • Available space 	PER, Supervisors, Safety Advisor/Manager	Project Delivery

<p>If Spoil is to be reused off-site, the following must be provided prior to transporting the material:</p> <ul style="list-style-type: none"> Name of waste subcontractor 	<p>PER, Safety Advisor/Manager, Supervisors</p>	<p>Project Delivery</p>
<ul style="list-style-type: none"> Address of source destination Material to be supplied (e.g., VENM/ENM) Evidence that facility is legally able to accept the waste (such as DA, exemption or EPL). The consent must be viewed and confirmed as covering all intended material. Signed Section 143 Notice under the POEO Act 1997. A spoil permit must be completed prior to the removal of the spoil. All exported material must meet the criteria in Table 11 of the Remediation Action Plan. All truck movements will be recorded on tracking sheets. 	<p>Environmental Consultant</p>	
<p>Waste bins and skips will be provided for all office and crib facilities. Wastes will be separated into recyclable waste, non-recyclable waste, and Listed/Controlled/Regulated waste.</p>	<p>All Personnel</p>	<p>Project Delivery</p>
<p>Waste skips/bins will meet the following provisions:</p> <ul style="list-style-type: none"> Adequate number for waste segregation (recycling, re-use, and disposal) and sufficient volume. Labelled to clearly identify the contents. Appropriate for the waste being contained – be compatible, leak-proof, and fit for purpose. Be accessible and appropriately located. Be covered (where necessary) to prevent ingress of rain and prevent animals from entering. 	<p>PER, Safety Advisor/Manager, Engineers, Supervisors</p>	<p>Project Delivery</p>
<p>Sanitary waste facilities will be provided for all female ablutions.</p>	<p>All Personnel</p>	<p>Project Delivery</p>
<p>Waste will be removed by an appropriately licensed waste subcontractor and taken to an appropriately licensed recovery, recycling, or disposal facility. The subcontractor is to provide monthly reports detailing:</p> <ul style="list-style-type: none"> Date(s) of waste collection Description of waste Cross reference to relevant waste transport documentation Quantity of waste collection Origin of waste Destination of waste (for listed/controlled/regulated wastes) 	<p>PER, Safety Advisor/Manager</p>	<p>Project Delivery</p>

<ul style="list-style-type: none"> Intended fate of waste, e.g., re-use, recycling, or disposal. 		
<p>The following licence records are to be obtained from any licensed waste subcontractor engaged, prior to transporting any waste from site:</p> <ul style="list-style-type: none"> Name of waste subcontractor Address Waste streams to be handled, transported, stored and/or disposed of by the waste subcontractor EPL number (EPL must cover all intended waste streams each contractor intends to transport) Landfill(s) used by waste subcontractor Landfill(s) EPL number 	PER/ Waste Subcontractor(s)	Prior to commencement of works, project delivery
<p>Upon Project completion all temporary materials and wastes will be removed from site unless otherwise instructed.</p>	Safety Manager/Project Manager	Project Completion
<p>Spoil import permits will be completed to ensure only VENM, ENM or other material approved in writing by the EPA are imported to site. The site auditor will also approve all material being imported. Material brought to site must be verified prior to acceptance with dockets supplied during material movement. All truck movements will be recorded on tracking sheets.</p>	PER Site Auditor Site Manager Environmental Consultant	Project Delivery

Listed/Controlled/Regulated/Hazardous Waste Management	Staff Responsible	When
<p>Listed/controlled/regulated/hazardous waste which will require segregation typically include, but are not limited to:</p> <ul style="list-style-type: none"> Waste Oil Oil Filters Grease Coolant Solvents Oil water mixtures Empty hydrocarbon drums Absorbent materials contaminated with hydrocarbons. Contaminated soil Tyres Sanitary and clinical wastes Sewage Special waste (asbestos) 	PER, Safety Advisor/Manager, Community and Stakeholder Manager	Prior to Project Commencement

Dedicated waste receptacles suitable for storage and segregation of Listed/controlled/regulated/hazardous wastes will be provided as necessary. Containers and storage areas will comply with storage requirements as per SDS and relevant Australian Standards. Refer Storage and Control of Hazardous Chemicals (refer to Hazardous Chemical Management Procedure) and Hazardous Chemical Disposal Requirements (refer to Hazardous Chemical Management Procedure).	PER, Safety Advisor/Manager	Project Delivery
<p>All listed/controlled/regulated/hazardous waste removed from the site, both solid and liquid wastes, must be removed by a licenced waste contractor who holds a current licence to transport such waste under the respective provisions of the POEO Act and Regulations and disposed of at facility licensed to receive that waste.</p> <p>EPL's for both the receiving facility and the transport company must be obtained prior to any hazardous waste being removed from site. These licenses must be held on site.</p> <p>Records for all listed/controlled/regulated/hazardous waste must be maintained by BESIX Watpac, the Transporter and Receiver of wastes.</p> <p>Waste transport and disposal documentation to be provided by the licensed waste contractor for each load (within 14 days)</p> <p>If waste transport involves movement across state jurisdiction, consignment authorisation must be obtained from an agency (or designated facility) to move controlled waste into the jurisdiction.</p>	PER, Safety Advisor/Manager	Project Delivery
Soil contaminated with hydrocarbons will be managed as Listed/Controlled/Regulated waste. Depending on the size of contamination appropriate protection, storage, testing, and remediation are to occur.	PER, Safety Advisor/Manager	Project Delivery
All listed/controlled/regulated/hazardous wastes must be stored appropriately such that there is no stormwater runoff does not come into contact with the wastes.	PER, Safety Advisor/Manager	Project Delivery
A detailed unexpected finds protocol for contamination (including asbestos containing material) and associated communications procedure must be developed and always followed. The Plan has been developed to be consistent with the Unexpected Contamination Finds Protocol_V2.1 prepared by Lendlease dated June 2019 and including a chain of responsibilities for undertaking the unexpected finds protocol	PER, Safety Advisor/Manager, Community and Stakeholder Manager	Project Delivery

Where any hazardous materials are required to be removed from site, suitable measures must be implemented in consultation with the contamination consultant (where required) to contain and control the emission of fibres to the air (if potential exists). This may include wetting down surfaces.	PER, Safety Advisor/Manager	Project Delivery
All waste generated during construction must be assessed, classified, and managed in accordance with the Waste Classification Guidelines Part 1: Classifying Waste (EPA, 2014).	PER	Project Delivery



4 Licenses

Waste Contractor	License No.	Waste Facility (s)	Waste Facility License No.
BINGO Recycling	20392	Environmental Treatment Solutions PTY LTD	13230

