MATERIALS RECYCLING FACILITY
600 WOODSTOCK AVENUE, ROOTY HILL

Environmental Impact Statement

SSD-29999239

Prepared for
CHARTER HALL
24 February 2022

URBIS

URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

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Project Code	P0034971
Report Number	SSD-29999239 EIS FINAL – 24.02.2022

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We acknowledge, in each of our offices, the Traditional Owners on whose land we stand.

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SIGNED DECLARATION

Project details		
Project name	Rooty Hill Materials Recycling Facility	
Application number	SSD-29999239	
Address of the land in respect of which the development application is made	600 Woodstock Avenue, Rooty Hill	
Applicant details		
Applicant name	Charter Hall Pty Ltd	
Applicant address	Level 20, No 1 Martin Place Sydney NSW 2000	
Details of people by whom this EIS was prepared		
Names and professional qualifications	Jennifer Cooper, Director Bachelor of Town Planning (UNSW)	Richard Barry, Senior Consultant Bachelor of Planning (UNSW)
Address	Level 8, Angel Place, 123 Pitt Street, Sydney NSW 2000	

Declaration

The undersigned declares that this EIS:

- has been prepared in accordance with Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*;
- contains all available information relevant to the environmental assessment of the development, activity or infrastructure to which the EIS relates;
- does not contain information that is false or misleading;
- addresses the Planning Secretary's environmental assessment requirements (SEARs) for the project;
- identifies and addresses the relevant statutory requirements for the project, including any relevant matters for consideration in environmental planning instruments;
- has been prepared having regard to the Department's *State Significant Development Guidelines - Preparing an Environmental Impact Statement*;
- contains a simple and easy to understand summary of the project as a whole, having regard to the economic, environmental and social impacts of the project and the principles of ecologically sustainable development;
- contains a consolidated description of the project in a single chapter of the EIS;
- contains an accurate summary of the findings of any community engagement; and

▪ contains an accurate summary of the detailed technical assessment of the impacts of the project as a whole.		
Signatures	 Jennifer Cooper, Director	 Richard Barry, Senior Consultant
Date	24 February 2022	

GLOSSARY AND ABBREVIATIONS

Reference	Description
ACHAR	Aboriginal Cultural Heritage Assessment Report
AQIA	Air Quality Impact Assessment
ARI	Average Recurrence Interval
BAM	Biodiversity Assessment Method
BC Act	*Biodiversity Conservation Act 2016*
BC Reg	*Biodiversity Conservation Regulation 2017*
BDAR	Biodiversity Development Assessment Report
CEEC	Critically Endangered Ecological Community
CEMP	Construction Environmental Management Plan
CMP	Construction Management Plan
CTMP	Construction Traffic Environmental Plan
DCP	Development Control Plan
DPE	NSW Department of Planning and Environment
EP&A Act	*Environmental Planning and Assessment Act 1979*
EPA Regulation	*Environmental Planning and Assessment Regulation 2000*
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
EIA	Economic Impact Assessment
EIS	Environmental Impact Statement
EPA	NSW Environment Protection Authority
HIPAP	Hazardous Industry Planning Advisory Paper
LEP	Local Environmental Plan
MDB	Main Distribution Board
MCC	Motor Control Centre
MRF	Materials Recycling Facility
NRAR	Natural Resource Access Regulator
OEMP	Operational Environmental Management Plan

Reference	Description
PCT	Plant Community Type
POM	Plan of Management
PSI	Preliminary Site Investigation
SAII	Serious and Irreversible Impacts
SCADA	Supervisory control and data acquisition
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
Site	600 Woodstock Avenue, Rooty Hill, Lot 67 DP 804292
SRD SEPP	*State Environmental Planning Policy (State and Regional Development) 2009*
SSD	State Significant Development
SSDA	State Significant Development Application
TIA	Traffic Impact Assessment
TPA	Tonnes Per Annum
TPH	Tonnes Per Hour
VIS	Vegetation Integrity Score
WMP	Waste Management Plan
WSC	Water Servicing Coordinator
WSUD	Water Sensitive Urban Design

SUMMARY

The Environmental Impact Statement (**EIS**) has been prepared on behalf of Charter Hall, in support of a State Significant Development Application (**SSDA**) for a Materials Recycling Facility (**MRF**) at 600 Woodstock Avenue, Rooty Hill (**the site**).

The SSDA seeks consent for the construction and operation of a materials recycling facility processing up to 120,000 tonnes per annum (including demolition, earthworks and infrastructure) on the site. The proposed development has an estimated capital investment value of $44,652,514 (ex GST).

Schedule 1, clause 23(3) of *State Environmental Planning Policy (State and Regional Development) 2011* (**SRD SEPP**) identifies that any resource recovery or recycling facility development that handles more than 100,000 tonnes per year of waste as state significant development. The proposed development is designed to accommodate up to 120,000 tonnes of waste per year. Accordingly, the Minister is the consent authority for the proposed development pursuant to section 4.36(1) of the Act.

The proposal forms an important component for the sustainable future of the local area, meaning capacity for recycling of waste materials is significantly enhanced and will contribute to environmental sustainability outcomes in Western Sydney and NSW. The proposed facility will generate significant economic benefits including employment opportunities for Western Sydney. This EIS and supporting documents confirm the site suitability and demonstrates that any potential negative environmental impacts can be appropriately mitigated, minimised or managed.

An aerial photograph of the site detailing the development footprints is provided at **Figure 1**.

Figure 1 Aerial photo of the site

Source: Nettleton Tribe

This EIS has been prepared to support the SSDA and responds to the relevant matters listed within the Secretary's Environmental Assessment Requirements (**SEARs**) issued on 9 November 2021.

Feasible alternatives

The proposed development is being undertaken in partnership with Cleanaway to design, construct, install and operate a purpose built MRF that will process recyclables from the Blacktown LGA by early 2023.

Charter Hall explored multiple site options and design concepts for the proposal. Design concepts have been prepared in consultation with key stakeholders, including Cleanaway (who will operate the facility), the Environment Protection Agency (**EPA**), Transport for NSW (**TfNSW**), NSW Fire Brigade and Blacktown City Council (**BCC**). Project alternatives which were considered in respect to the identified need for the MRF are listed and discussed below:

- **Option 1 - Do Nothing:** The existing development has reached the end of its lifecycle and the existing structure is not fit for the proposed use as a MRF. Primarily as a MRF requires a purpose built facility to facilitate its operation and to ensure it meets strict building standards and EPA standards. The proposed MRF is required as Charter Hall and Cleanaway require a MRF to fulfil its contractual obligations to process recyclables collected from the Blacktown LGA by early 2023.
- **Option 2 - Alternative Location:** Alternative locations within the Blacktown LGA have been explored. However, no other sites were available that met the requirements including size of site, vehicle access and site suitability in relation to compatibility with surrounding properties.
- **Option 3 - Alternative Design:** Alternative options were explored including size of facility, location of car parking, setbacks and retention or deletion of the office building. The submitted design scheme has been developed in consultation with key stakeholders and minimising impacts, plus reusing the existing office building to reduce waste.

The Proposal

The SSDA applies to 600 Woodstock Avenue, Rooty Hill. The legal description of the site is Lot 67 in Deposited Plan DP804292.

The site comprises a large industrial lot. It has an area of 1.97 hectares with the following dimensions - 200.89m (east) x 83m (north and south) x 216.89m (west). The surrounding land generally comprises large industrial lots of a similar scale with varying areas and dimensions.

The site currently accommodates two industrial warehouses which occupy most of the site area. The existing buildings appear to have been developed in phases. An office building adjoins the northern elevation of the warehouse. There are smaller ad-hoc structures within the parking areas. Access is available via Woodstock Avenue (adjacent to the roundabout) and both the western and southern frontages to Kellogg Road.

Broadly, the proposed development involves:

- Demolition and tree removal.
- Site enabling works including cut and fill.
- Construction and operation of a purpose built MRF comprising a total of 7,572m² gross floor area, including:
  - Maximum building height of RL 57.83m.
  - Warehouse space: 6,732m²
  - Office space (across two levels) and amenities: 840m²
  - Capacity to process up to 120,000 tonnes per annum (TPA)
  - Car parking provided on-site: 40 car spaces
- Associated landscaping including on-site tree planting and street tree planting

The proposed development will operate 24 hours a day, seven days per week. It will generate 103 direct and 143 indirect jobs during construction and 69 direct jobs through the ongoing operation of the additional facilities on-site and a further 114 indirect jobs from flow-on effects during the operational phase.

The proposal will be undertaken in accordance with the Architectural Plans prepared by Nettleton Tribe at **Appendix B**. The proposed photomontage is provided at **Figure 2**.

Figure 2 Photomontage of proposal

Source: Nettleton Tribe

Stakeholder Consultation

Community and stakeholder engagement has been undertaken by Urbis in the preparation of the SSDA. This includes direct engagement and consultation with:

- Adjoining landowners and occupants
- Government, agency and utility stakeholders listed within the SEARs

The outcomes of the community and stakeholder engagement are detailed in the Consultation Report submitted with the EIS. The report summarises feedback including:

- Feedback on the design scheme for drainage, traffic and engineering.
- Identification of key environmental impacts to be considered including acoustic, air quality, traffic and fire safety.
- No public feedback has been received at the time of preparing this EIS.

Justification for the Project

This EIS assesses the development as proposed with regard to relevant planning instruments and policies, and outlines the mitigation measures to ensure the project does not result in unreasonable or adverse environmental effects. Additionally, the proposed development satisfies the SEARs for the project.

The key issues for all components of the project identified in the SEARs have been assessed in detail, with specialist reports underpinning the key findings and recommendations identified in the Assessment of Impacts in Section 6. It has been demonstrated that for each of the likely impacts identified in the assessment of the key issues, the impact will either be positive or can be appropriately mitigated.

The proposal represents a positive development outcome for the site and surrounding area for the following reasons:

- **The proposal is consistent with state and local strategic planning policies:**

  The proposal is consistent with the relevant goals and strategies contained in:

  – Premier's Priorities

  – *Greater Sydney Region Plan: A Metropolis of Three Cities*

- Our Greater Sydney 2056: Central City District Plan
- Future Transport Strategy 2056
- Blacktown Local Strategic Planning Statement (**LSPS**)

- **The proposal satisfies the applicable local and state development controls:**

  The proposal is permissible with consent and meets the relevant statutory requirements of the relevant environmental planning instruments, including

  - *Environment Protection and Biodiversity Conservation Act 1999 (Cth)*
  - *Biodiversity Conservation Act 2016*
  - *Environmental Planning and Assessment Act 1979*
  - *State Environmental Planning Policy (State and Regional Development) 2011*
  - *State Environmental Planning Policy (Infrastructure) 2007*
  - *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development*
  - *State Environmental Planning Policy No. 55 – Remediation of Land*
  - *Blacktown Local Environmental Plan 2015*

- **The design responds appropriately to the opportunities and constraints presented by the site:**
  - The site at 600 Woodstock Avenue, Rooty Hill is zoned IN1 – General Industrial and therefore the proposed use is permissible with consent.
  - The site is located well away from sensitive land use activities, including residential development, to avoid unacceptable amenity impacts including noise, air and the like.
  - The proposal is consistent and compatible with the strategic land use and transport policies and will deliver a substantial investment in Western Sydney with significant construction and ongoing employment opportunities close to the growing residential population.
  - The environmental impacts associated with the demolition, construction and operational phases of the development have been comprehensively assessed and can be appropriately mitigated to avoid unacceptable impacts to the site or locality.

- **The proposal is highly suitable for the site:**
  - The site is within an existing industrial area away from sensitive land uses and adjoins compatible land uses. The site meets the specific criteria identified by the Applicant to meet the requirements for the proposed MRF and has good road access.
  - The site is located near to Cleanaway's existing truck depot in Glendenning, meaning that the truck fleet requires less travel between its storage, pick-up route and distribution to the proposed MRF.
  - The proposed facility is deliberately located within the area it will be servicing, meaning that further sustainability outcomes are achieved through the reduction in truck movements over long distances, therefore minimising the supply chain distances and ecological footprint associated with vehicle movements, emissions and noise pollution.

- **The proposal is in the public interest:**
  - The development will provide positive local, regional and national economic impacts through the provision of employment and essential business infrastructure
  - The development can be suitably serviced by essential infrastructure without unreasonable demands on existing networks.
  - Stakeholder consultation has indicated the proposed development is generally supported.
  - The proposal will provide public benefit by delivering a purpose built recycling facility for the local area, meaning capacity for recycling of waste materials is significantly enhanced and will contribute to environmental sustainability outcomes in the local area.

– The proposal will generate significant economic benefits including employment opportunities during construction (103 direct and 143 indirect) and during operation (69 direct jobs through the ongoing operation of the additional facilities on-site and a further 114 indirect jobs from flow-on effects). The project will directly contributing an average of $10.8 million in value added, and indirectly contributing a further $19.5 million in value added, to the New South Wales economy on an annual ongoing basis.

In view of the above, it is considered that this SSD Application has significant merit and should be approved subject to the implementation of the mitigation measures described in this report and supporting documents.

1 INTRODUCTION

This section of the report identifies the applicant for the project and describes the site and proposed development. It outlines the site history and feasible alternatives explored in the development of the proposed concept, including key strategies to avoid or minimise potential impacts.

1.1 APPLICANT DETAILS

The applicant details for the proposed development are listed in the following table.

Table 1 Applicant details

Descriptor	Proponent Details
Full Name(s)	Charter Hall Pty Ltd c/o Urbis Pty Ltd
Postal Address	Level 8, 123 Pitt Street, Sydney 2000
ACN	051 363 547
Nominated Contact	Richard Barry (Urbis)

1.2 PROJECT DESCRIPTION

This EIS is submitted to the Department of Planning and Environment (**DPE**) on behalf of Charter Hall (**the Applicant**) and in support of an application for SSD application number SSD- 29999239 at 600 Woodstock Avenue, Rooty Hill (**the Site**).

The SSDA seeks consent for:

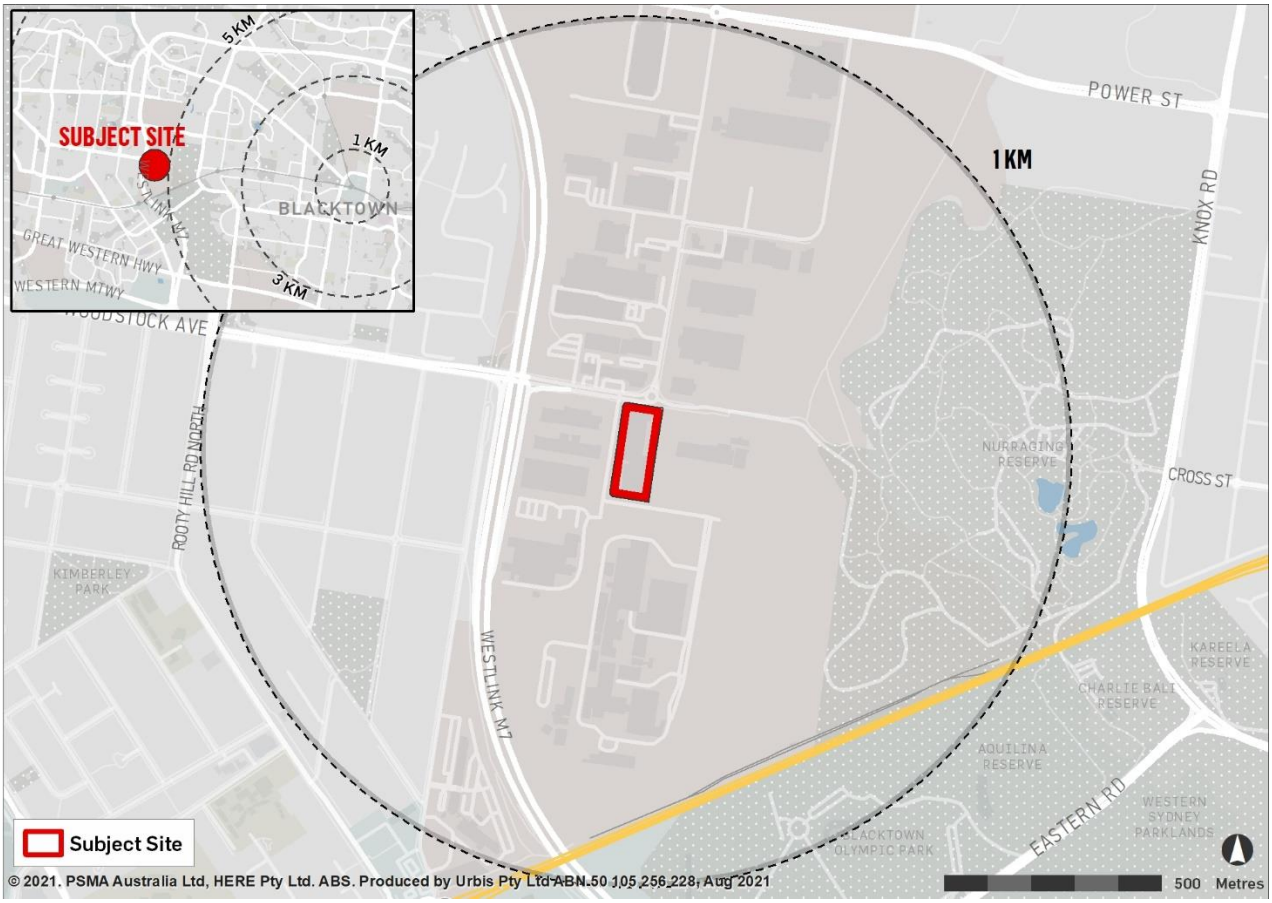
- Demolition and tree removal
- Construction and 24/7 operation of a purpose built Materials Recycling Facility comprising a total of 7,572m² gross floor area, including:
  - Maximum building height of RL 57.83m.
  - Warehouse space: 6,732m²
  - Office space (across two levels) and amenities: 840m²
- Capacity to process up to 120,000 tonnes per annum (TPA)
- Car parking provided on-site: 40 car spaces
- Hard and soft landscaping
- Building identification signage
- Associated civil works.

The proposed development has an estimated capital investment value of $44,652,514 (ex GST) (refer to **Appendix W**). Accordingly, the proposal is classified as SSD under Schedule 1, clause 23(3) of the *State Environmental Planning Policy (State and Regional Development) 2011* (**SRD SEPP**) due to the proposed sorting capacity of the MRF exceeding 100,000 TPA.

The Minister is the consent authority for the proposal in accordance with section 4.5 of the *Environmental Planning and Assessment Act 1979* (**EP&A Act**). Accordingly, this DA is being lodged with the DPE as an SSDA seeking development consent for construction and operation of a materials recycling facility (**MRF**) processing up to 120,000 tonnes per annum of recyclable wastes.

A map of the site in its regional setting is provided as **Figure 3**.

Figure 3 Locality Map



Source: Urbis

Charter Hall are partnering with Cleanaway to design, construct, install and operate a new purpose built MRF that will process recyclables from the Blacktown LGA by early 2023. Cleanaway is Australia's largest waste, recycling, industrial and liquids service provider with a substantial network of state-of-the-art facilities, transfer stations, engineered landfills, liquid treatment plants and refineries.

The site has been purposefully selected following site investigations across Blacktown LGA, to meet strict site criteria for a purpose built MRF that will process materials including paper, cardboard, glass, aluminium, plastic, steel etc.

The objectives of the proposed development are described as follows:

- Construction and operation of a MRF with capacity of sorting 120,000 TPA.
- The MRF will be designed for yellow lidded bins and Container Deposit scheme (**CDS**). Commingle materials to be processed are to include paper, cardboard, glass, aluminium, plastic, steel etc.
- The MRF will be designed with the capability of 24/7 operation with CCTV system, thermal scanners, MDB, MCC, Air room and SCADA control plant.
- The facility will be designed and constructed according to Australian Standards (National Codes, Building codes, Compliance with NSW Fire Rescue guidelines and EPA waste facility environmental management guidelines for waste facilities – Feb 2020
- This plant will be designed to have future capability to accommodate cardboard and recyclables materials from Commercial and Industrial Customers, but this will not result in the facility exceeding 120,000 TPA.

1.3 PROJECT BACKGROUND

1.3.1 Relevant History

The site was previously owned by Insulco Pty Ltd. The site currently accommodates two industrial warehouses encompassing most of the site area that have been used for the manufacturing of insulation material.

A desk-top search was undertaken of the NSW LEP Tracker, the Major Projects Portal and Sydney Planning Panel websites to identify any major proposals within the locality. No previous approvals were found online for the site, however, a summary of relevant matters in the vicinity is provided in **Table 2**.

Table 2 Development Approval History

Planning Reference	Development Description	Determination
MP05_0051 https://www.planningportal.nsw.gov.au/major-projects/project/19921	Rooty Hill Regional Distribution Centre.	26/04/2006
MP05_0051-Mod-1	Rooty Hill Regional Distribution Centre (Mod 1 - Layout Changes)	22/03/2011
MP05_0051-Mod-2	Rooty Hill Regional Distribution Centre (Mod 2 - Design Changes)	29/06/2017
DA-17-01323	Construction of two flour silos and minor associated works at the General Mills site.	Unknown (approved with lodgement date of 10/07/2017)

1.3.2 Key Strategies

The proposal will address the principles of ecologically sustainable development (**ESD**) in accordance with the requirements of the *Environmental Planning and Assessment Regulation 2000* (**EP&A Regulation**) and as outlined below:

Precautionary Principle

The precautionary principle relates to uncertainty around potential environmental impacts and where a threat of serious or irreversible environmental damage exists, lack of scientific certainty should not be a reason for preventing measures to prevent environmental degradation.

Intergenerational Equity

Intergenerational equity ensures the needs of future generations are considered in decision making and that environmental values are maintained or improved for the benefit of future generations.

Conservation of biological diversity and ecological integrity

The conservation of biological diversity and ecological integrity is to be a fundamental ESD consideration.

Improved valuation, pricing and incentive mechanisms

This requires the holistic consideration of environmental resources that may be affected as a result of the development including air, water and the biological realm. It places a high importance on the economic cost to environmental impacts and places a value on waste generation and environmental degradation.

1.4 RELATED DEVELOPMENT

The majority of existing structures on site are to be demolished as complying development, pursuant to Part 7 of the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008* (**Codes SEPP**) as identified in the Demolition Plan in **Appendix B**.

Demolition proposed under the complying development pathway will progress concurrent to the assessment of SSD-29999239 to enable early site clearing and facilitate additional geotechnical site testing.

1.5 RESTRICTIONS AND COVENANTS

The following easements and covenants are applicable to the site:

- L941537 covenant dated 21 July 1970 which relates to the means of access to the site.
- R802611 covenant dated 19 March 1980 affecting the northern part of the site. This covenant relates to the transfer of land from the Minister for Decentralisation to Insulco Pty Ltd.
- I142230 easement for transmission line affecting the land along the northern boundary.

L941537 and R802611 are obsolete covenants that were not removed when the estate was originally subdivided. The Applicant is in the process of arranging for the covenants to be extinguished. I142230 relating to the existing transmission line affecting the site will either remain in-situ if the energy provider requests the overhead transmission line to be maintained. If the energy provider requests for the overhead transmission line to be relocated underground, a new easement or covenant may be required. This will be subject to further consultation with the energy provider following approval of the SSDA.

2 STRATEGIC CONTEXT

This section of the EIS describes the way in which the proposal addresses the strategic planning policies relevant to the site. It identifies the key strategic issues relevant to the assessment and evaluation of the project, each of which are addressed in further detail in Section 7 of this EIS.

2.1 PROJECT JUSTIFICATION

The strategic planning policies and design guidelines identified in the SEARs that need to be addressed include:

- Premier's Priorities
- Greater Sydney Region Plan: A Metropolis of Three Cities
- Our Greater Sydney 2056: Central City District Plan
- Blacktown Local Strategic Planning Statement (**LSPS**)
- Future Transport Strategy 2056

The proposal is consistent with the following planning strategies, district plans and adopted management plans as detailed below.

2.1.1 Premier's Priorities

The NSW Premier has identified 12 priority areas essential for the growth and development of NSW. These include the creation of jobs and delivery of infrastructure. The proposal will contribute to the achievement of these priorities through the provision of new employment and business infrastructure that will contribute to the and the generation of new job, particularly in Western Sydney.

2.1.2 Greater Sydney Region Plan: A Metropolis of Three Cities

The Greater Sydney Region Plan provides the overarching strategic plan for growth and change in Sydney. It is a 20-year plan with a 40-year vision that seeks to transform Greater Sydney into a metropolis of three cities - the Western Parkland City, Central River City and Eastern Harbour City. It identifies key challenges facing Sydney including increasing the population to eight million by 2056, 817,000 new jobs and a requirement of 725,000 new homes by 2036.

The Plan includes objectives and strategies for infrastructure and collaboration, liveability, productivity and sustainability. The following matters are relevant to the proposed development:

- Objective 16 - Freight and logistics network is competitive and efficient
- Objective 23 - Industrial and urban services land is planned, retained and managed
- Objective 35. More waste is re-used and recycled to support the development of a circular economy

The site is located on the border of the Western Parkland City and the Central River City. The Region Plan supports the retention of industrial land and recycling waste, which aligns with the development aspirations for the site.

The 'retain and manage' policy is currently being reviewed by the Greater Sydney Commission (**GSC**) to inform future updates to the Region Plan and District Plan (as discussed in **Section 2.1.3**).

2.1.3 Our Greater Sydney 2056: Central City District Plan

The Central City District Plan is a 20-year plan to manage growth in the context of economic, social and environmental matters to implement the objectives of the Greater Sydney Region Plan. The intent of the District Plan is to inform local strategic planning statements and local environmental plans, guiding the planning and support for growth and change across the district.

The District Plan contains strategic directions, planning priorities and actions that seek to implement the objectives and strategies within the Region Plan at the district-level. The Structure Plan identifies the key

centres, economic and employment locations, land release and urban renewal areas and existing and future transport infrastructure to deliver growth aspirations.

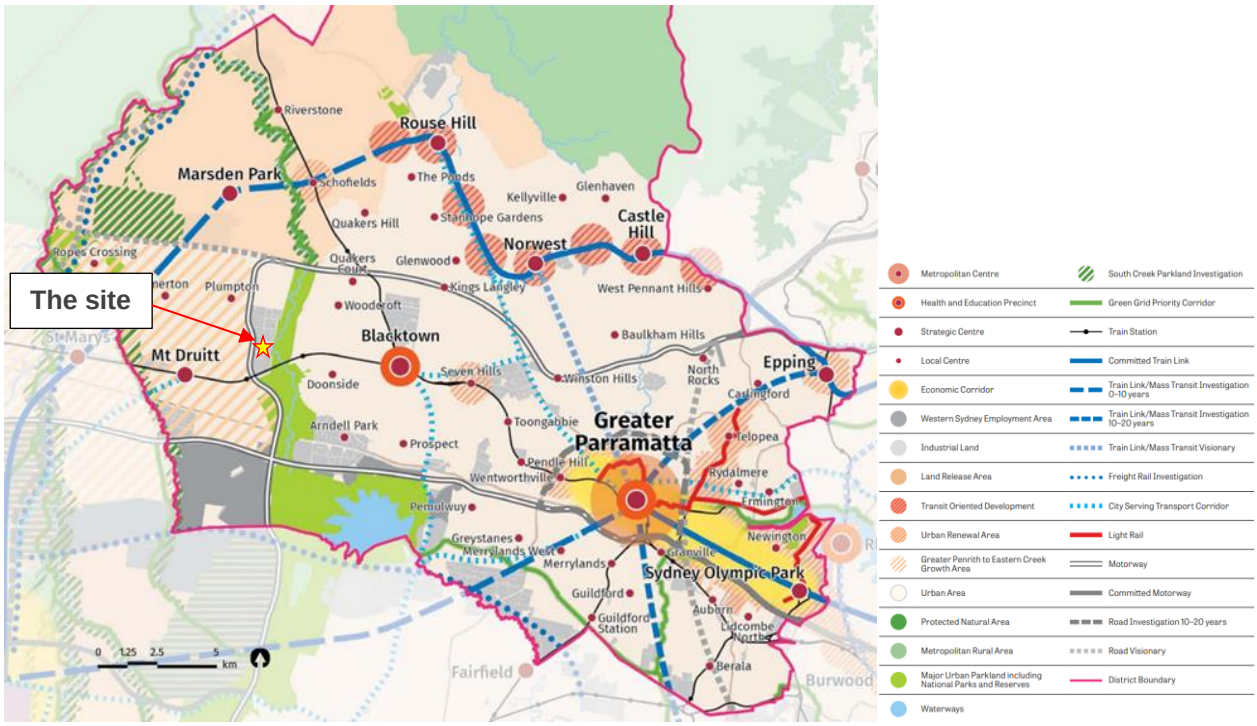
The planning priorities and actions likely to have implications for the proposed development are listed and discussed below:

- Planning Priority C11 Maximising opportunities to attract advanced manufacturing and innovation in industrial and urban services land
- Planning Priority C19 Reducing carbon emissions and managing energy, water and waste efficiently

The District Plan identifies the site as being within an industrial land precinct. The site is adjacent to the M7 Motorway and close to the Greater Penrith to Eastern Creek Growth Area. It is well-placed to generate jobs and services, including advanced manufacturing as indicated in Planning Priority C11. The proposed Cleanaway facility would contribute to the management of waste as provided in Planning Priority C19.

As noted previously, the 'retain and manage' policy is currently being reviewed by the GSC to inform future updates to the District Plan. However, this review is not expected to be completed until 2023. Notwithstanding, the site is located within an industrial precinct in a strategic location with good access to regional roads and so it is logical to consider the current land use is unlikely to change in the near term.

Figure 4 Structure Plan for the Central City District



Source: Central City District Plan

2.1.4 Blacktown Local Strategic Planning Statement 2020

The Blacktown Local Strategic Planning Statement (**LSPS**) was prepared by Blacktown City Council. The LSPS seeks to implement the provisions in the Region Plan and District Plan, setting a 20-year vision for land-use within the LGA in accordance with the EP&A Act.

The site forms part of the Mount Druitt Precinct (refer **Figure 5**) and is within a defined employment area which benefits from proximity to the M7 Motorway. The LSPS seeks to provide improved connectivity between the Western Sydney Employment Area and the Mount Druitt Precinct:

> *The Western Sydney Employment Area to the south provides logistics, distribution and warehousing development and connects to arterial roads and Sydney's motorway network on the M4 and M7. Greater integration between the employment area and the Mount Druitt Precinct is needed. Improved connectivity across the Castlereagh Freeway will enhance equitable access to employment opportunities in the Marsden Park employment area.*

Infrastructure projects which Blacktown City Council proposes to advocate to the State government include the Woodstock Avenue to Luxford Road upgrade to four lanes and a new connection from the M7 Motorway to the Castlereagh Freeway (refer pages 30-31 of the LSPS).

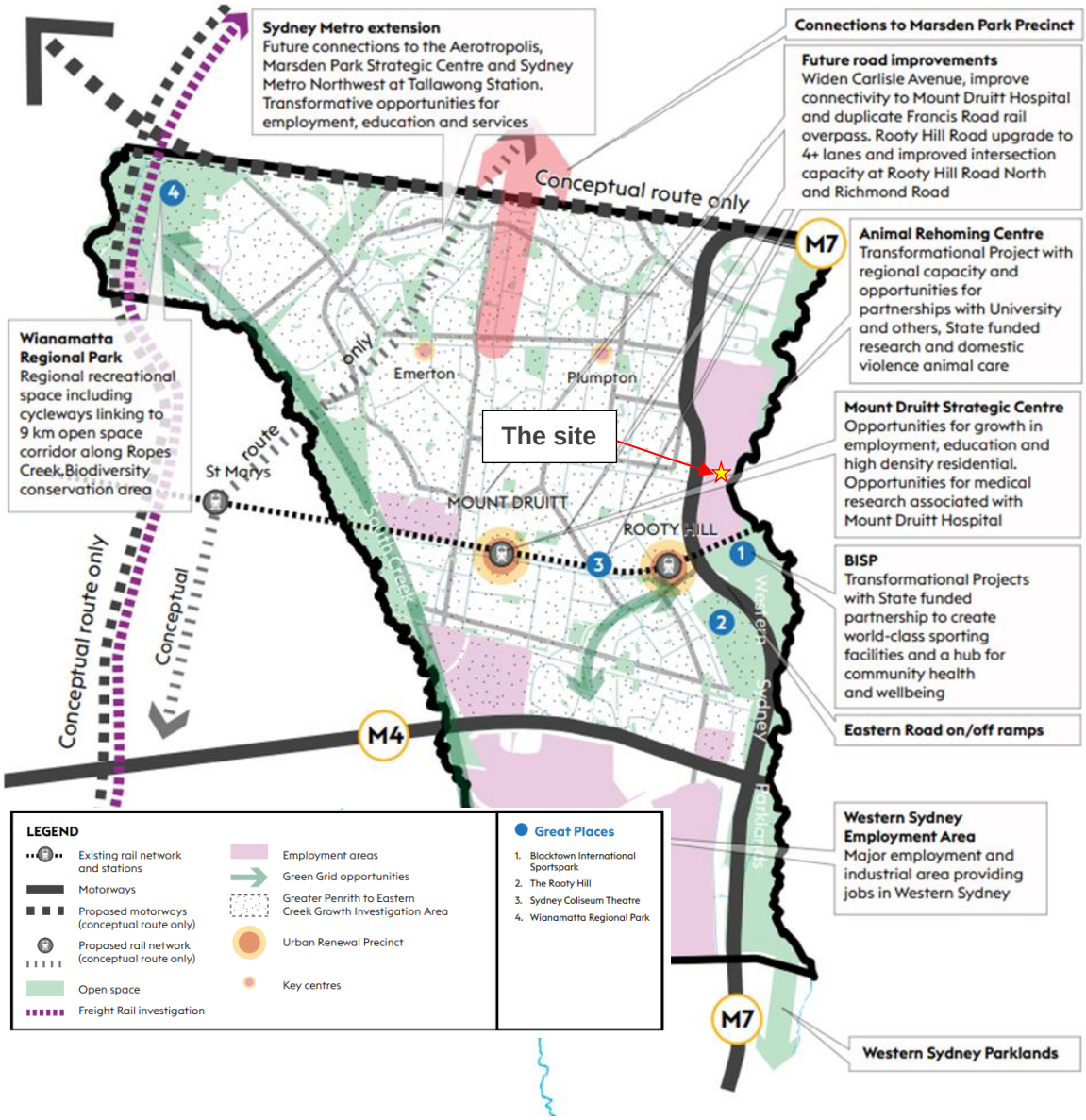
The proposed development aligns with the following Local Planning Priorities:

- Local Planning Priority 9: Maximising opportunities to attract advanced manufacturing to, and innovation in, industrial and urban services land
- Local Planning Priority 16: Reducing carbon emissions and managing energy, water and waste efficiently

While the GSC has recently commenced a review of this policy, the LSPS currently advocates for the retention of the industrial lands as outlined in the following extract.

> *The City's 3,000 hectares of industrial land and more than 200 hectares of land for business parks must be safeguarded to provide space for residents in Blacktown and Western Sydney to work, while creating investment opportunities for local, national and multinational companies.*

Figure 5 Mount Druitt Precinct, Blacktown LSPS 2020



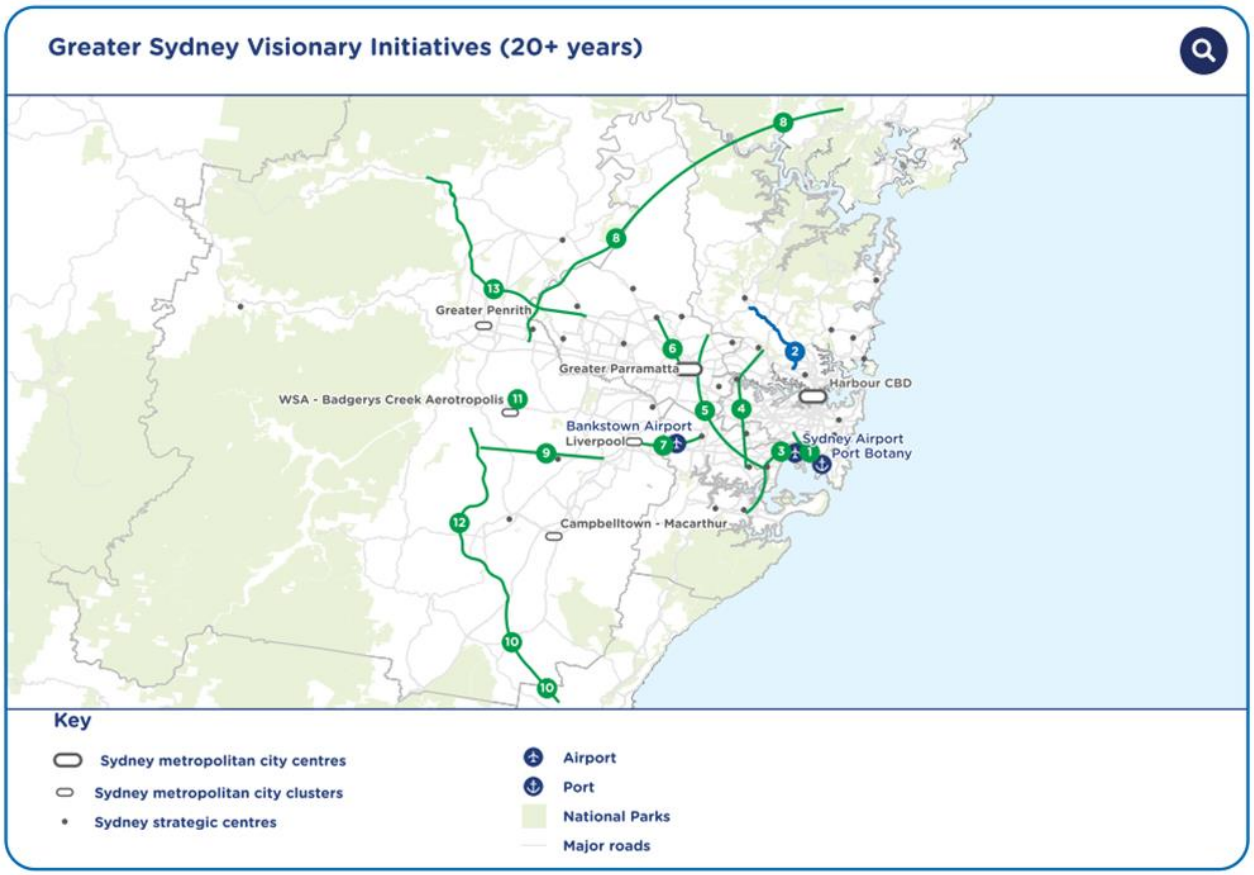
Source: Blacktown LSPS 2020

2.1.5 Future Transport 2056

The Greater Sydney Services and Infrastructure Plan forms part of the suite of documents which support the Future Transport 2056 policy. It outlines the key infrastructure initiatives which are to be delivered over the next 40 years.

Most of the initiatives outlined within this Plan are unlikely to have any direct or substantial impacts on the site. However, the future Outer Sydney Orbital will provide an alternative route for north-south vehicular journeys to the M7 Motorway. This may provide indirect benefits for the site, noting its proximity and connectivity to the motorway and regional road network.

Figure 6 Visionary Transport Initiatives (20+ years)



Source: TFNSW

2.2 KEY FEATURES OF SITE AND SURROUNDS

The site is identified as 600 Woodstock Avenue Rooty Hill within the Blacktown local government area (LGA). The site is legally described as Lot 67 in Deposited Plan DP804292 and is currently owned by Charter Hall Pty Ltd.

The location of the site is illustrated in **Figure 7**. Photographs of the current site condition are provided in **Figure 8**. An aerial photograph of the site and locality context is provided as **Figure 9**. The key features of the site which have the potential to impact or be impacted by the proposed development are summarised in **Table 3**.

A site survey showing the geographic features and contours of the site is provided in **Appendix G**.

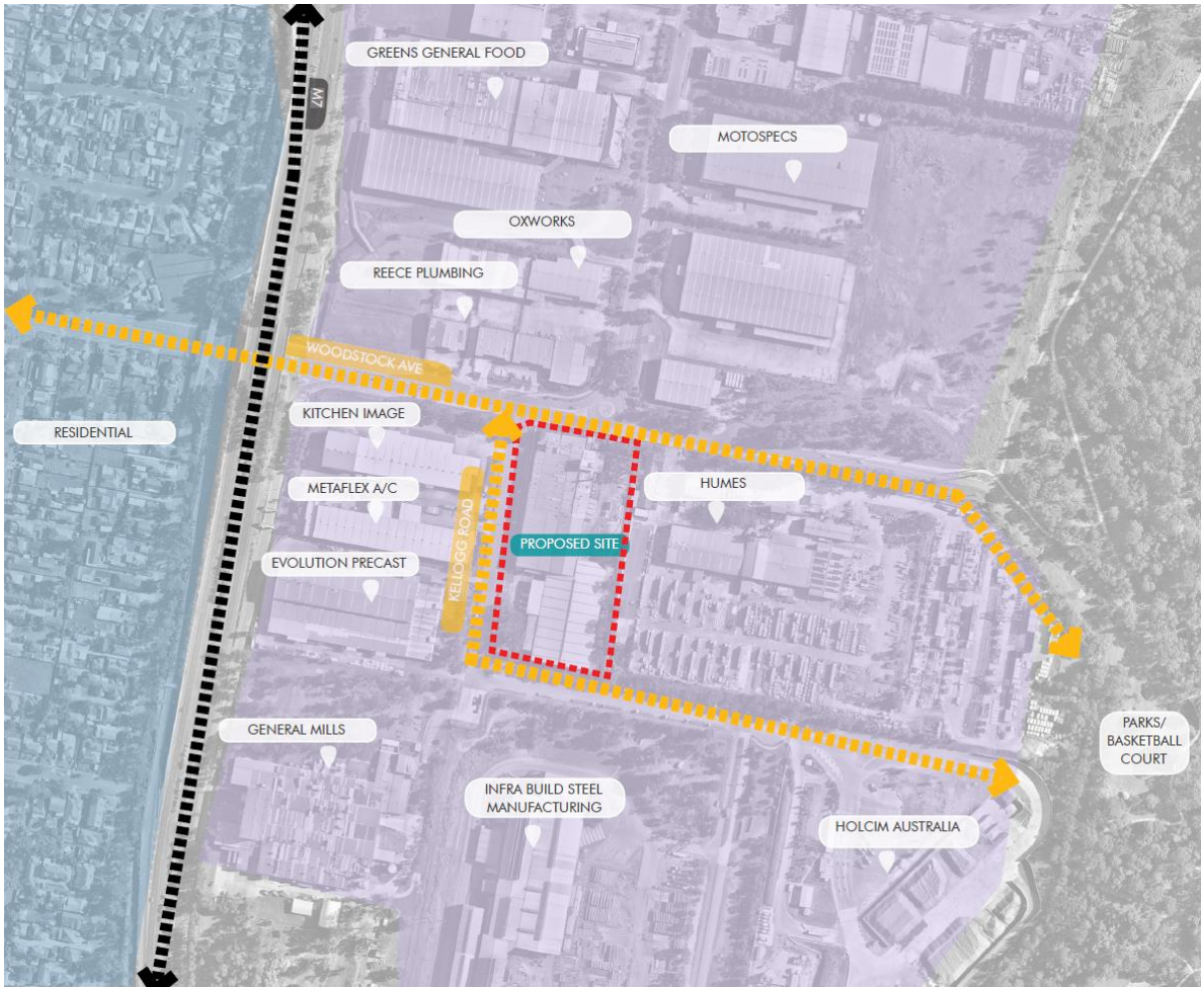
Table 3 Key features of the Site and locality

Descriptor	Site Details
Land Configuration	The site comprises a large industrial lot. It has an area of 1.97 hectares with the following dimensions - 200.89m (east) x 83m (north and south) x 216.89m (west). The surrounding land generally comprises large industrial lots of a similar scale with varying areas and dimensions.
Land Ownership	The site is owned by Charter Hall Pty Ltd. The surrounding industrial properties are owned by a range of land owners, including Fatidin Pty Ltd, Kellogg Rd Superannuation Pty Ltd and Kiddcorp Pty Ltd. The largest land owner appears to be CSR Ltd who owns the property immediately to the east along Woodstock Avenue.
Existing Development	The site currently accommodates two industrial warehouses encompassing most of the site area. The existing buildings appear to have been developed in phases. An office building abuts the northern elevation of the warehouse. There are smaller ad hoc industrial shed structures within the parking areas. The northern and southern boundaries are landscaped. The south-western boundary is partially landscaped and the eastern boundary adjoins a neighbouring site. The site has three vehicular access points, one each on the northern, southern and western boundary.
Local Context	The site is surrounded by industrial developments, with a variety of uses in the wider area as summarised below: ▪ North: Woodstock Avenue connects the site and other surrounding developments directly to the M7 Motorway. The land further north comprises the Glendenning industrial estate which supports large-scale warehouses and industrial uses. ▪ East: A concrete manufacturing facility adjoins to the east. The Western Sydney Parklands are located further to the east, comprising a significant vegetation corridor. ▪ West: Kellogg Road bounds the site to the west. The land on the opposite side of the road contains large-scale industrial buildings. The M7 Motorway separates the industrial development from a low-scale residential area, including Rooty Hill and Plumpton, approximately 310 metres to the west. ▪ South: Kellogg Road bounds the site to the south. A steel manufacturing facility is located on the opposite side of the road, with Angus Creek and the Main Western railway line further south.

Descriptor	Site Details
	Photographs of the surrounding land uses are provided as **Figure 4**.
Regional Context	The site is located within the suburb of Rooty Hill, approximately 5km east of Blacktown CBD. The regional context is shown below in **Figure 3**. The site is within an established industrial precinct in close proximity to regional and metropolitan road infrastructure as outlined further below.
Infrastructure	The site benefits from excellent access to the Westlink M7 Motorway which provides a north-south regional connection between the M5 South-West, the M4 and the Hills M2 Motorways. The site is located approximately 220 metres east of the Westlink M7 Motorway. North-bound access from the Motorway and south-bound access to the Motorway is available via Woodstock Avenue. South bound access from the Motorway and north-bound access to the Motorway is available via Power Street, approximately 900 metres to the north along Glendenning Road. Bus services are available along Woodstock Avenue with bus stops located within walking distance of the site, including bus stops on Power Street to the north and Rooty Hills Road to the west providing access to Mount Druitt and Blacktown and connecting rail services.
Site Access	The site has three existing driveway access points. These being onto Woodstock Avenue at the north eastern corner of the site adjacent to the roundabout, onto Kellogg Road on the south western edge of the site, and onto Kellogg Road on the south eastern corner of the site.
Easements and Covenants	▪ L941537 covenant dated 21 July 1970 was created to restrict access to the M7 from adjoining properties and is obsolete. ▪ R802611 covenant dated 19 March 1980 affecting the northern part of the site. This covenant relates to the transfer of land from the Minister for Decentralisation to Insulco Pty Ltd and is an obsolete fencing covenant that can be released. ▪ I142230 easement for an existing transmission line affecting the land along the northern boundary. L941537 and R802611 are obsolete covenants that were not removed when the estate was originally subdivided. The Applicant is in the process of arranging for the covenants to be extinguished. I142230 relating to the existing transmission line affecting the site will either remain in-situ if the energy provider requests the overhead transmission line to be maintained. If the energy provider requests for the overhead transmission line to be relocated underground, a new easement or covenant may be required. This will be subject to further consultation with the energy provider following approval of the SSDA.
Services	The site is serviced by water, sewer, gas, power and telecommunications.
Acid sulfate soils	The site is suitable for development.
Contamination	The site does not contain contaminants that would preclude the site being developed for its proposed industrial use.

Descriptor	Site Details
Stormwater and Flooding	The site is not mapped as prone to flooding hazards.
Bushfire Prone Land	The site is not mapped as bushfire prone land.
Flora and Fauna	The site contains native vegetation, which occupies approximately 0.16 ha, which represents 8% of the subject land. This includes approximately 0.14 ha of remnant native vegetation and 0.02 ha of planted native vegetation.
Aboriginal Cultural Heritage	No sites were recorded within the study area, however, there are seven registered sites close by which are identified as 'Artefacts'
European Heritage	The site does not contain any heritage item(s).

Figure 7 Site Context Map



Source: Nettleton Tribe

Figure 8 Site Photographs

Picture 1 Northern Elevation (on Woodstock Ave)

Source: Google Street View, image dated Dec 2020

Picture 2 Southern Elevation (on Kellogg Road)

Source: Google Street View, image dated Dec 2020

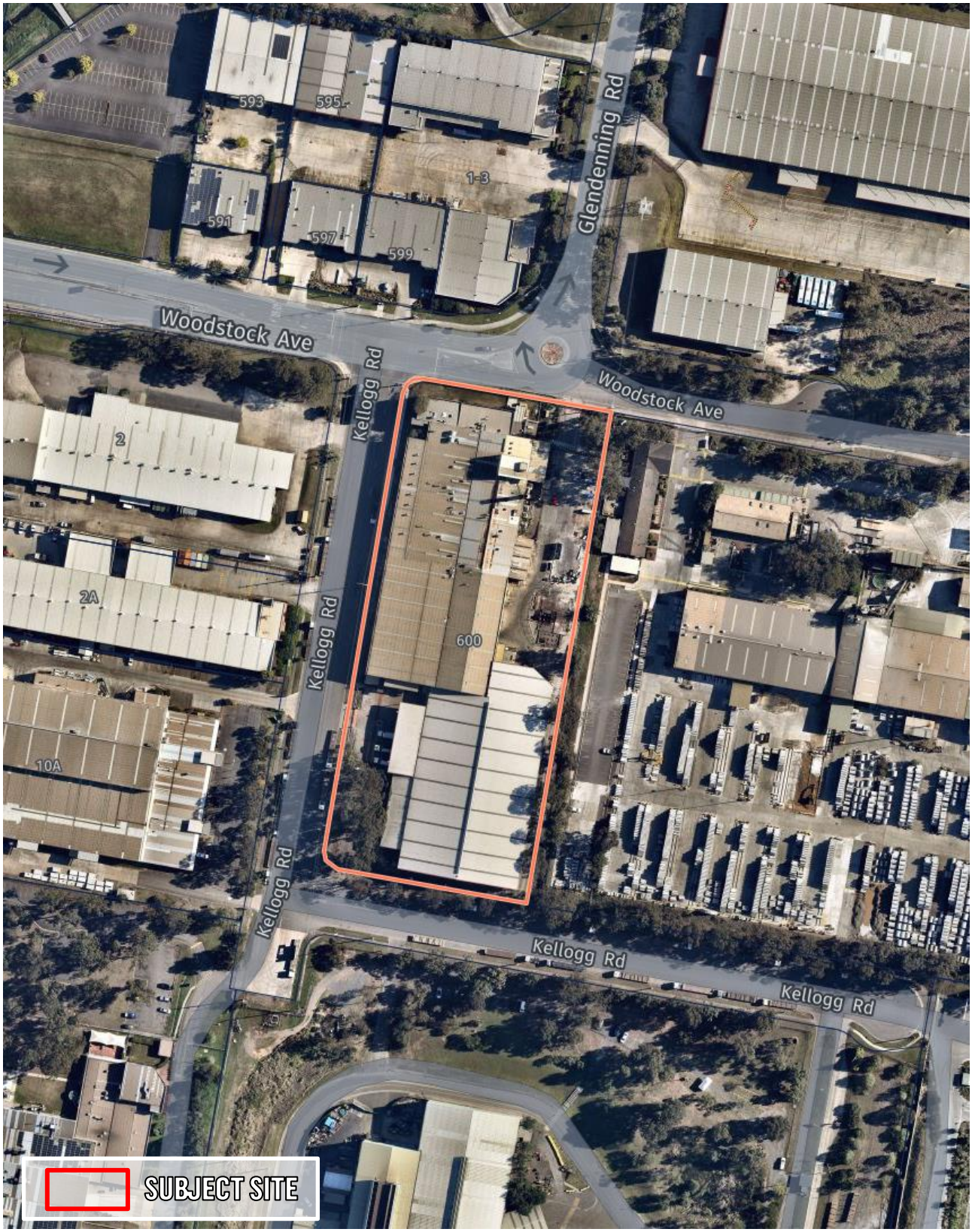
Picture 3 Western Elevation (on Kellogg Road)

Source: Google Street View, image dated May 2017

Picture 4 View along eastern boundary from Kellogg Road

Source: Google Street View, image dated Dec 2020

Figure 9 Site aerial photo



Source: Nearmap, December 2021

2.3 CUMULATIVE IMPACTS WITH FUTURE PROJECTS

The site is located within the industrial precinct at Rooty Hill. The site is surrounded by industrial developments with a variety of uses.

Approved and likely future developments which may be relevant in the cumulative impact assessment of the proposal are summarised in the following table.

Table 4 Approved and Likely Future Developments

Planning Reference	Development Description	Determination
MP05_0051 Kellogg Road, Rooty Hill	Rooty Hill Regional Distribution Centre (receipt of construction material by rail, on-site processing and distribution by road)	26 April 2006
MP05_0051-Mod-1 Kellogg Road, Rooty Hill	Rooty Hill Regional Distribution Centre (Mod 1 - Layout Changes)	22 March 2011
MP05_0051-Mod-2 Kellogg Road, Rooty Hill	Rooty Hill Regional Distribution Centre (Mod 2 - Design Changes)	29 June 2017
SSD-6767 14 Rayben Street, Glendenning	Glendenning Liquid Waste Facility (waste management facility)	11 January 2017
SSD-6767-Mod 1 14 Rayben Street, Glendenning	Glendenning Liquid Waste Facility -Modification 1: Amend Limits of Consent to increase used oil / industrial oily water throughput	9 July 2019
SSD-6767-Mod 2 14 Rayben Street, Glendenning	Glendenning Liquid Waste Facility – Modification 2: Combine total organic and waste oil quantities per annum	25 August 2020
SP-21-00008 201 Power Street, Glendenning	Demolition of existing buildings and hardstand areas, tree removal, construction of 3 warehouse buildings and distribution facilities with a total of 10 tenancies and ancillary offices, landscaping, signage and car parking.	Under assessment (lodged 24 June 2021)
DA-20-00675 56 Glendenning Road, Glendenning	Construction of warehouse and distribution centre development, consisting of 3 warehouses, new roads, 2 lot re-subdivision for road dedication, use for 24	Unknown (approved with lodgement date of 8 May 2020)

Planning Reference	Development Description	Determination
	hours, 7 days a week operation and instillation of solar panels.	
DA20-00675 (MOD-21-00370)	The overall intent of the proposed modifications is to resolve the built form of the approved Warehouse and Distribution Facility to cater for the committed tenants of each warehouse premise. In addition, there are a number of conditions that impact on the construction program for the development, which are sought to be amended as part of this application.	Under assessment (lodged 13 July 2021)
DA20-00675 (MOD-21-00398)	Minor amendment to conditions that impact on the construction program for the development.	Under assessment (lodged 22 July 2021)
DA-17-01323 18 Kellogg Road, Rooty Hill	Construction of two flour silos and minor associated works at the General Mills site	Unknown (approved with lodgement date of 10 July 2017)

The potential cumulative impacts of the project will be addressed in the EIS in accordance with the DPIE *Assessing Cumulative Impacts* guidelines.

2.4 AGREEMENTS WITH OTHER PARTIES

The Applicant intends to enter into a VPA with Blacktown City Council to offset water quality requirements off-site. The Applicant has consulted with Council to negotiate the following rate of $120,119.90 plus fees.

Section 7.11 Contributions Plan No.1 – 1980's Release Areas applies to the site. The plan applies to all developments requiring consent, including the intensification of use of a site involving expansion of area occupied by a development and/or the addition of population.

According to the plan, the following catchments and levies apply to the site:

- Plumpton Major Road Catchment: $33,149 per hectare
- Eastern Creek Overbridge Major Road Catchment: $5,295 per hectare

Based on the fully developed nature of the site, it is expected that additional monetary contributions would not be payable for the redevelopment of the site. A 'credit' would be applied based on the existing development.

2.5 FEASIBLE ALTERNATIVES

Charter Hall explored multiple site options and design concepts for the proposal. Design concepts have been prepared in consultation with key stakeholders, including Cleanaway (who will operate the facility), the Environmental Protection Agency (**EPA**), Transport for NSW (**TfNSW**), NSW Fire Brigade and Blacktown City Council (**BCC**).

Project alternatives which were considered in respect to the identified need for the MRF are listed and discussed in the following table.

Table 5 Project Alternatives

Option	Assessment
Do Nothing	The existing development has reached the end of its lifecycle and the existing structure is not fit for the proposed use as a MRF. Primarily as a MRF requires a purpose built facility to facilitate its operation and to ensure it meets strict building standards and EPA standards. The proposed MRF is required as Charter Hall and Cleanaway require a MRF to fulfil its contractual obligations to process recyclables collected from the Blacktown LGA by early 2023.
Alternative Location	Alternative locations within the Blacktown LGA were identified and have been explored by Cleanaway. However, no other sites were available that met the requirements for the MRF including size of site, vehicle access and site suitability in relation to compatibility with surrounding properties.
Alternative Design	Alternative options were explored including the size of facility, location of car parking, setbacks and retention or deletion of the office building. The submitted design scheme has been developed in consultation with key stakeholders and minimising impacts, plus reusing the existing office building to reduce waste.

Based on the summary in **Table 5**, the design concept and selected site are the most appropriate and suitable option for the required MRF.

The site has been purposefully selected due to its location, vehicle access and site suitability. The design concept has been developed with consideration of key building standards required to facilitate the bespoke nature of the proposed use and incorporate mitigation measures, including related to fire safety, noise, odour and vehicle movement.

Accordingly, the proposed design concept is considered to be the optimal and preferred outcome for the site.

3 PROJECT DESCRIPTION

The following sections of the EIS summarise the key numeric components of the proposed development and describe the demolition, site preparation, construction and operational phases in further detail.

3.1 PROJECT OVERVIEW

The key components of the proposed development are summarised in **Table 6**. A copy of the architectural concept drawings is attached as **Appendix B**.

Table 6 Numeric Overview of Proposal

Descriptor	**Proposed**
Site location	600 Woodstock Avenue, Rooty Hill
Site area	1.97 hectares (source: Deposited Plan)
Land use	IN1 General Industrial
Gross floor area	11,305m^2
Height of building	13.700m
Transport and access	Access is via Woodstock Avenue and Kellogg Road
Parking spaces	40 car parking spaces (including 28 tandem parking spaces)
Bicycle parking	4
End of trip facilities	0
Construction staging	To be determined
Construction hours	Standard hours
Number of construction jobs	103 direct and 143 indirect jobs
Operational details	The facility will be operational 24/7 to facilitate recycling operations, maintenance and cleaning. MRF will typically operate with two shifts (4am to 2.15pm & 2.30pm to 12.30am) up to 7 days per week Office will operate 9am to 5pm 5 days per week
Number of operational jobs	69 direct jobs 114 indirect jobs

The site and proposed development are discussed in further detail within the following sections of the report.

3.2 DETAILED DESCRIPTION

3.2.1 Project Area

The extent of proposed works is contained within the site of 600 Woodstock Avenue and frontages along Woodstock Avenue and Kellogg Road.

3.2.2 Physical Layout and Design

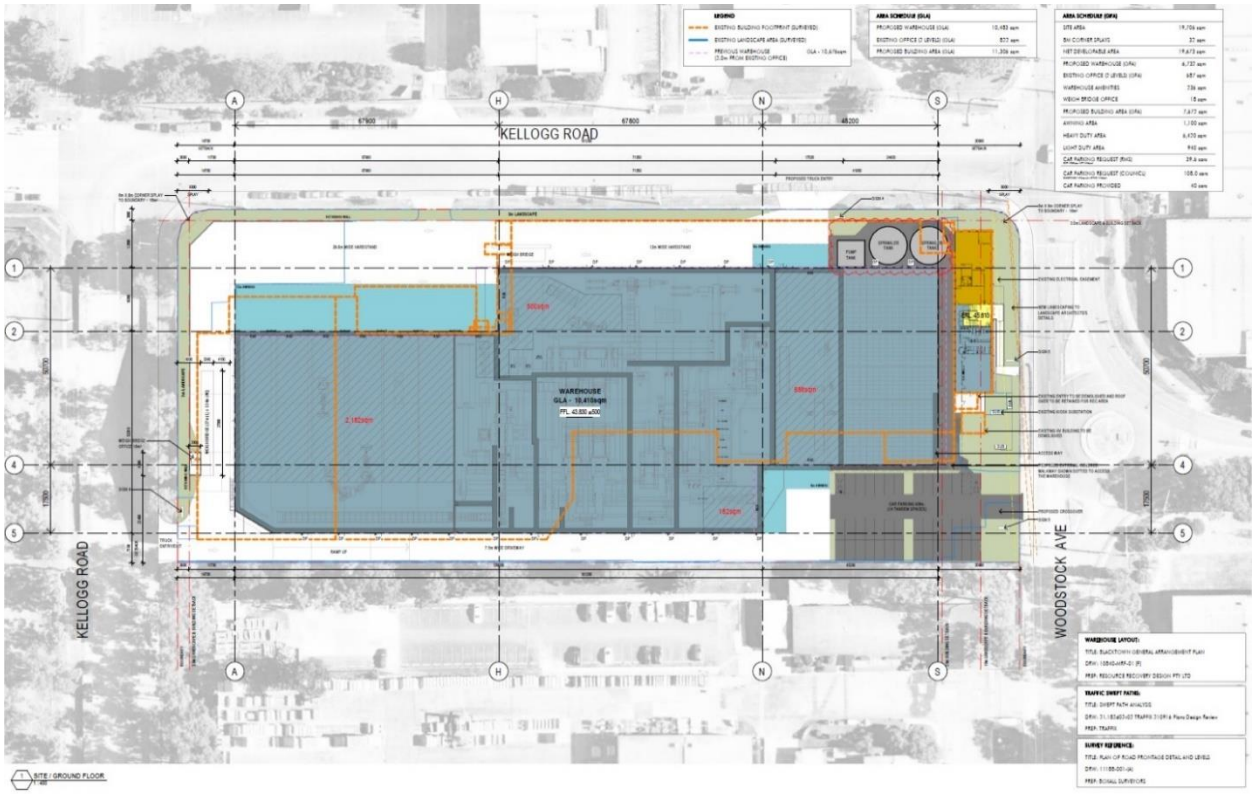
The proposal comprises the redevelopment of the site as outlined:

- Demolition and tree removal
- Site enabling works including cut and fill.
- Construction and 24/7 operation of a purpose built Materials Recycling Facility comprising a total of 7,572m² gross floor area, including:
  - Maximum building height of RL 57.83m.
  - Warehouse space: 6,732m²
  - Office space (across two levels) and amenities: 840m²
  - Capacity to process up to 120,000 tonnes per annum (TPA)
  - Car parking provided on-site: 40 car spaces
- Associated landscaping including on-site tree planting and street tree planting

The proposed development will operate 24 hours a day, seven days per week. It will generate 103 direct and 143 indirect jobs during construction and 69 direct jobs through the ongoing operation of the additional facilities on-site and a further 114 indirect jobs from flow-on effects during the operational phase.

The proposal is described in further detail within the following sections of this report.

Figure 10 Site Plan

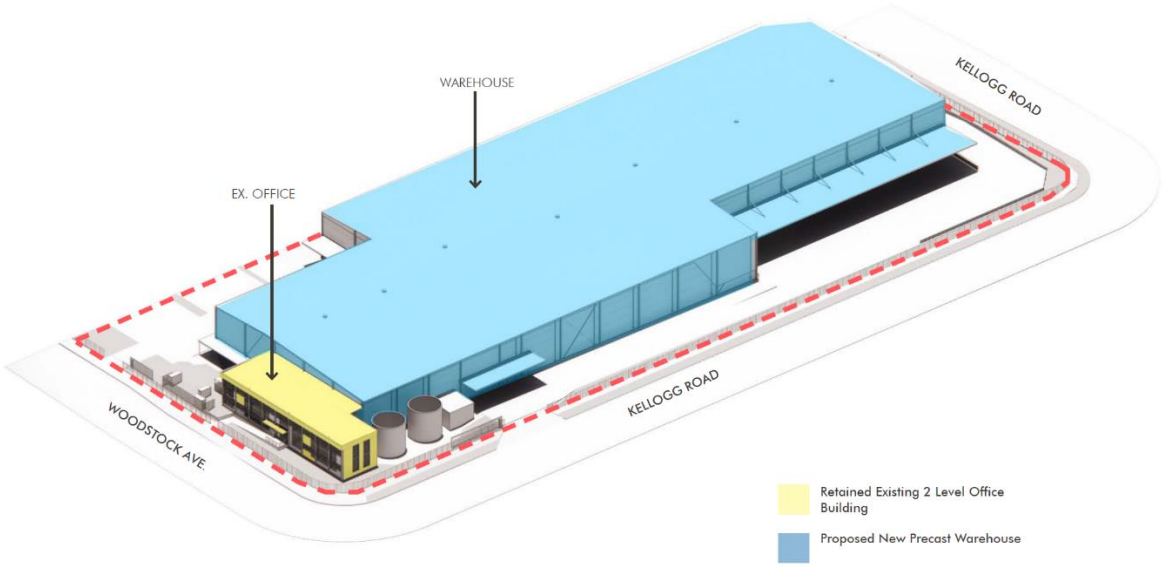


Source: Nettleton Tribe

3.2.3 Design and built form

The proposed development will comprise of two elements, being the existing commercial office and the proposed new purpose built warehouse for waste recycling.

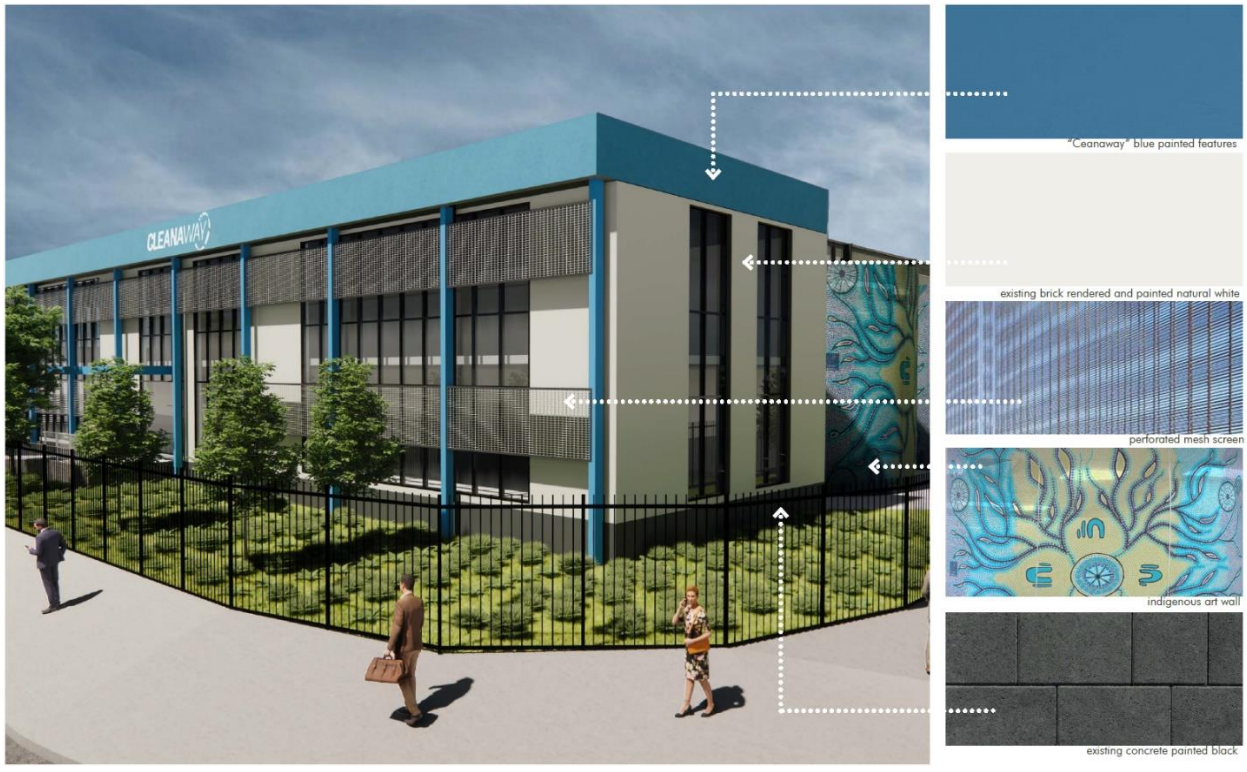
Figure 11 Building elements



Source: Nettleton Tribe

The existing two storey brick commercial office fronting Woodstock Avenue will be retained and refurbished. The existing brick façade will be rendered and painted natural white and new perforated mesh screening will be mounted on the façade to provide passive shading and visual articulation. Existing façade elements and the roof parapet will be painted blue to match the Cleanaway corporate colour palette. The existing concrete bricks at the lower part of the building will be painted black.

Figure 12 Building façade materials



Source: Nettleton Tribe

The commercial office building will contain an open plan office with amenities on Level 1. Open plan office, meeting rooms, amenities and lunch room facilities are to be located on the Ground floor. The office space is designed to accommodate up to 11 office staff.

The proposed development has been designed so the commercial office component is separate to the warehouse to achieve greater fire safety standards. Between the commercial office building and the warehouse is a covered walkway for safety and amenity.

The warehouse component complements the existing two storey brick commercial office, with a full height precast and external steel portal frame with the warehouse stepping at mid site to allow for heavy vehicular movement within the site. Locating the steel frame on the external side of the warehouse walls allows the maximisation of the internal spaces and an improved internal working environment.

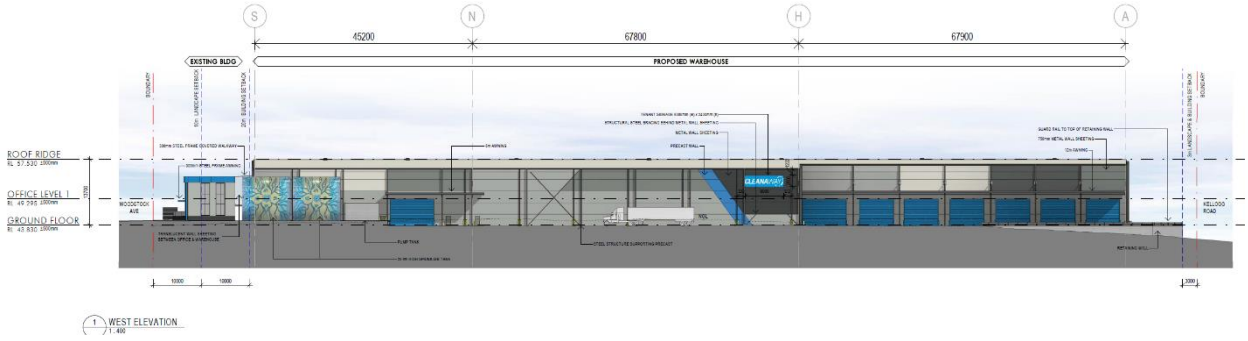
The truck loading area (shown in **Figure 13**) is located at the rear of the site in the south western corner, which minimises visual and acoustic impacts on Woodstock Avenue.

The façade of the warehouse utilises the same colour palette of light and dark greys and blue accents as the commercial office building to provide a consistent aesthetic across the site. The façade will also interchange the colour scheme across the façade to break up the scale of the built form to minimise visual impact.

Figure 13 Warehouse and loading area

Source: ***Nettleton Tribe***

Figure 14 Western elevation



Source: ***Nettleton Tribe***

Two large sprinkler water storage tanks will be located on the western frontage to Kellogg Road. Rather than screening the proposed tanks, it is proposed that the tanks will provide for public art. The Applicant is seeking to commission an indigenous artist to complete the public art. The artist is likely be selected through consultation with the Local Aboriginal Lands Council. As such, the final art design will be prepared during detailed design stage of the project.

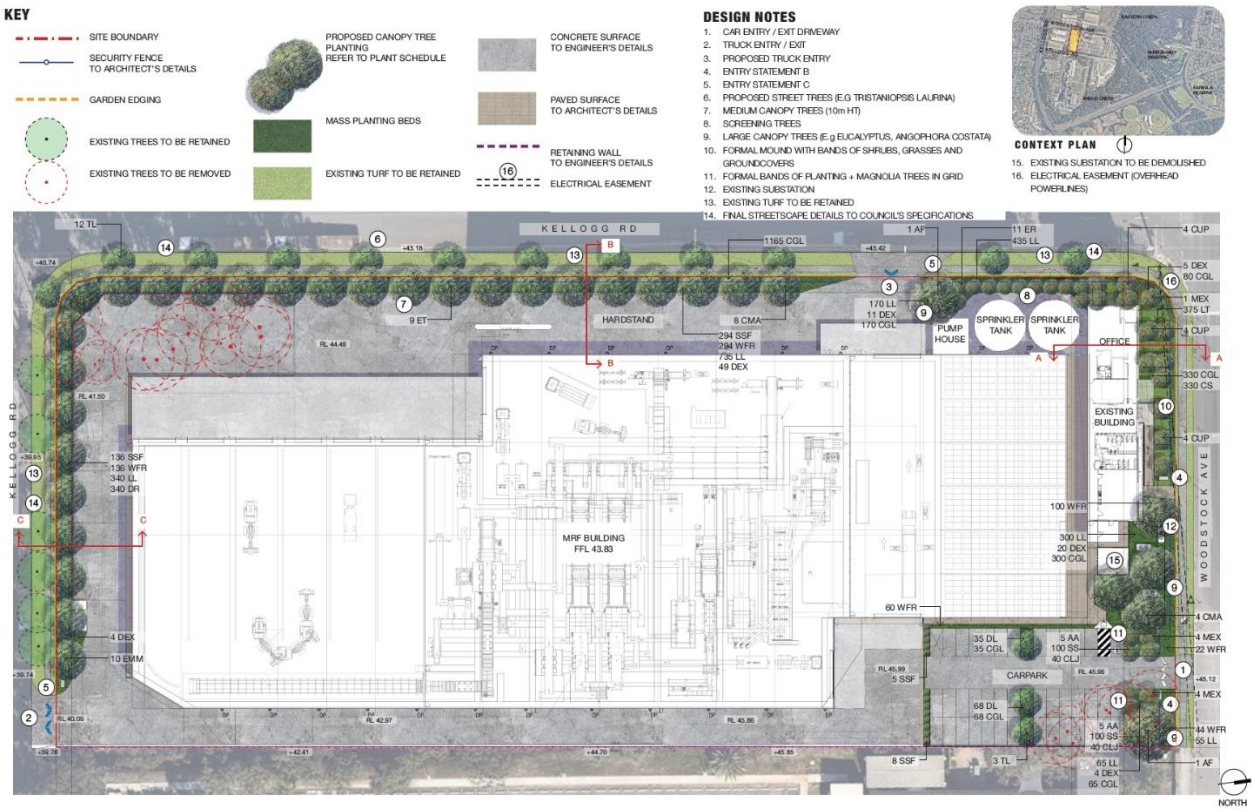
3.2.4 Landscaping

The proposed development will require the removal of existing trees. This includes the clearing of small patches of Cumberland Plain Woodland CEEC (approximately 0.12 ha), which occur as canopy trees over a sparse and degraded understorey, as assessed in **Section 6.14**. This will be offset through the planting of 32 native trees associated with Cumberland Plain Woodland and purchase of 4 PCT ecosystem credits. Street trees on the southern frontage will be retained.

No threatened flora or fauna species that are considered as species credit species were recorded within the subject land and none are considered likely to occur. Therefore, no species credits species are required to be offset.

A landscaping strategy has been developed that will result in a net increase in tree planting across the site within landscape setback zones, designed to provide tree cover and screening. This will be achieved through feature planting fronting in the existing setback between the commercial office building and Woodstock Avenue; and a 3 metre landscape zone along the secondary setbacks along Kellogg Road (western frontage and southern frontage) as shown in **Figure 15** and **Appendix K**.

Figure 15 Landscape Plan

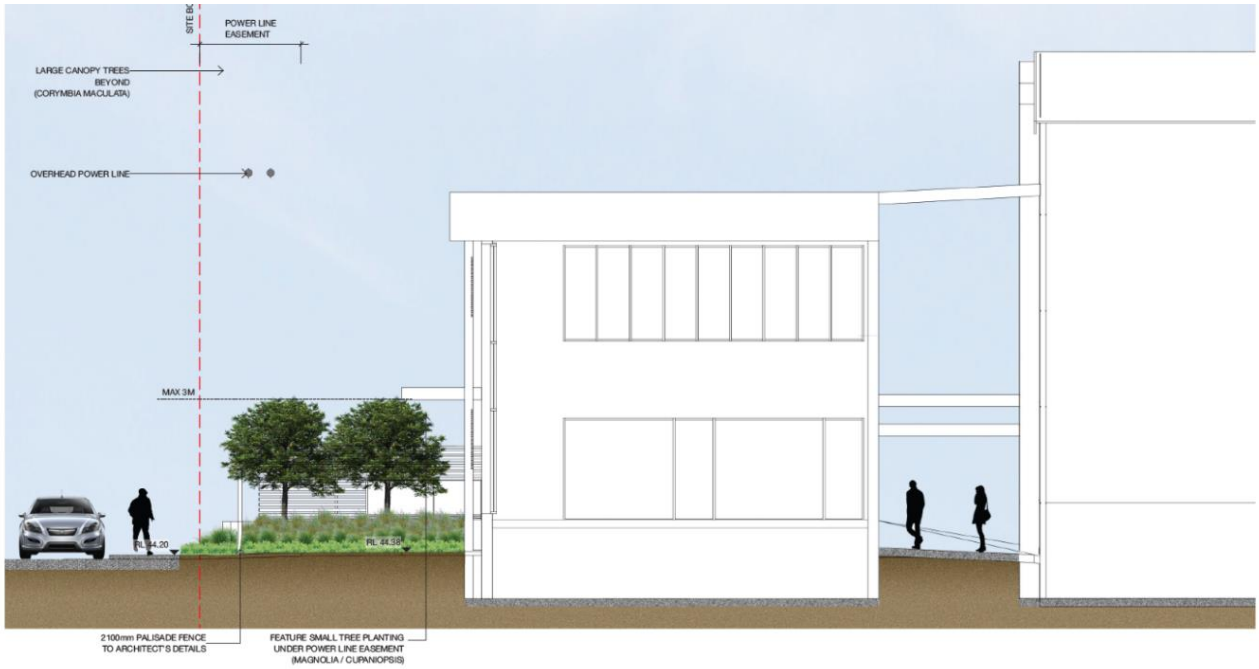


Source: Habit8

The landscaping within the primary frontage to Woodstock Avenue will primarily comprise small feature trees and shrubs to avoid conflict with the existing overhead electricity transmission line as shown in **Figure 16, Picture 5**. Larger trees will be planted along the western and southern frontages to provide screening and tree canopy to minimise urban heat island effect as shown in **Figure 16, Picture 6**. A number of selected trees are Cumberland Plain Woodland species.

The site perimeter will be surrounded by 2.1 metre high palisade fencing.

Figure 16 Landscape zones



Picture 5 Landscape section A-A of landscape zone fronting Woodstock Avenue

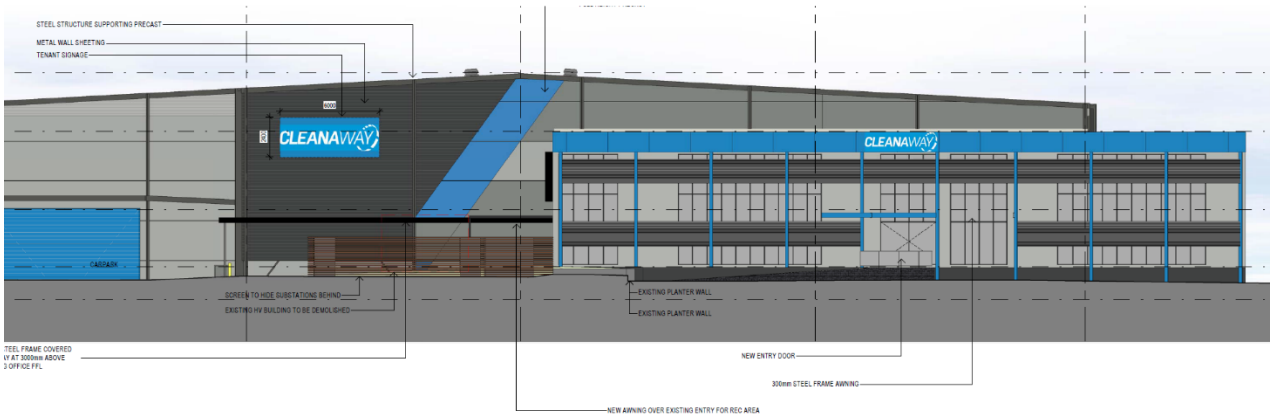
Picture 6 Landscape section C-C of landscape zone fronting Kellogg Road (south)

Source: Habit8

3.2.5 Signage

The proposed development includes building identification (tenant) signage on each façade. This will typically comprise a single sign approximately 6 metres x 2.4 metres or 8 metres x 2.4 metres in blue and white. A building identification sign is also proposed on the façade of the commercial office building as shown in **Figure 17**.

Figure 17 Proposed signage



Source: Nettleton Tribe

3.2.6 Uses and activities

The proposed industrial development is for the operation of a MRF processing up to 120,000 tonnes per annum (including demolition, earthworks and infrastructure) on the site. The MRF will be designed for yellow lidded bins and Container Deposit scheme (CDS). Commingle materials to be processed are to include paper, cardboard, glass, aluminium, plastic, steel etc.

The proposed development will have capability to operate 24 hours, seven days per week. To facilitate this, the MRF will typically operate in shifts as detailed in the following table.

Table 7 Typical staffing and shift patterns

Shift	Hours	Staff
MRF AM shift	4am to 2.15pm	24 MRF staff
MRF PM shift	2.30pm to 12.30am	20 MRF staff
Office staff shift	9am to 5pm	11 office staff

Notwithstanding the typical shift hours identified in **Table 7**, approval is sought for the site to operate 24 hours a day to accommodate peak demands and unexpected delays to processing; and allow for maintenance and cleaning of the facility outside of the typical MRF shifts.

The proposed development will operate in accordance with the Cleanaway Plan of Management (**Appendix X**), which will guide on safe operation procedures; management of car parking operations for staff workers utilising tandem parking; and waste management (**Appendix L**).

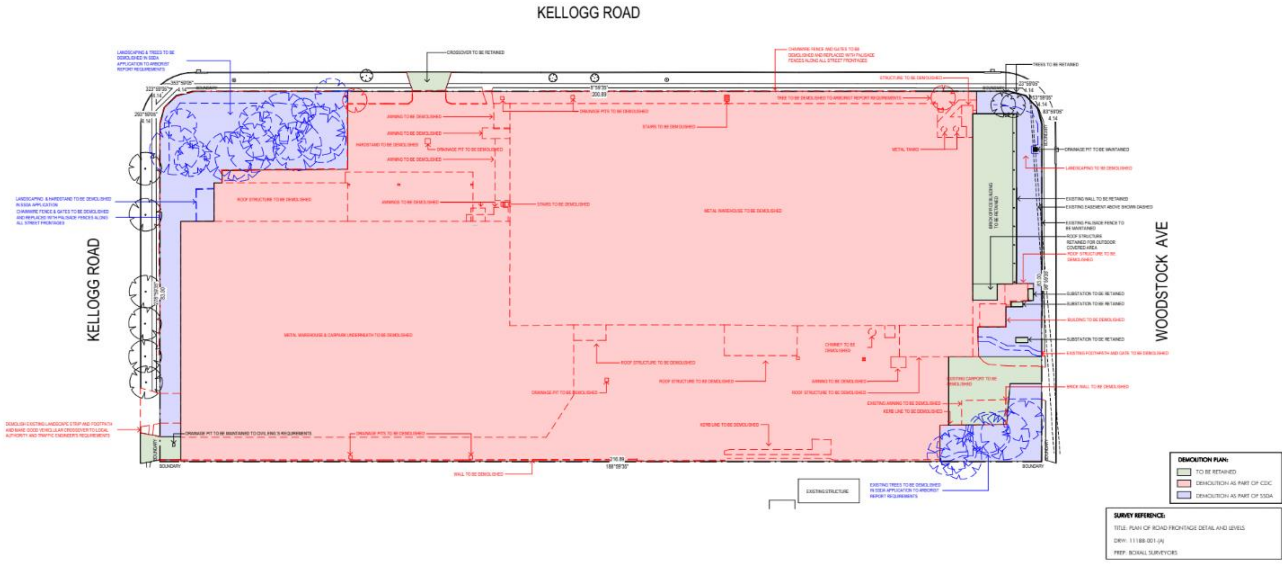
3.2.6.1 Demolition

Most structures are to be demolished as complying development, pursuant to Part 7 of the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008* (**Codes SEPP**) as identified in the Demolition Plan in **Appendix B.** Demolition proposed under the complying development pathway will progress concurrent to the assessment of SSD-29999239 to enable early site clearing and facilitate additional geotechnical site testing.

Additional demolition works will be subject to further approval under this SSD, including removal of remaining structures and clearing of trees and vegetation that are excluded from demolition under the complying development pathway and as identified in the Demolition Plan in **Figure 18.** The proposed clearing of trees requires a BDAR (**Appendix U**) due to trees being identified as remnant native vegetation.

The existing office building at the northern end of the site and existing vehicle crossings onto Kellogg Road will be retained for future reuse.

Figure 18 Demolition plan



Source: Nettleton Tribe

3.2.6.2 Earthworks

The existing site rises from the street level along Kellogg Road and has an elevation range of 41m to 46m, with a crest dissecting the site. Earthworks will be undertaken as shown in **Figure 19** with cut up to a maximum of 5 metres and fill of up to 5 metres to facilitate the proposed development.

The cut and fill will result in approximately 21,105m^3 of soil to be removed from site.

Figure 19 Bulk Earthworks Plan

Source: Northrop

3.2.6.3 Geotechnical and contamination

Preliminary geotechnical and contamination assessment has been undertaken by WSP. Refer to **Appendix P** for assessment.

It is proposed that further geotechnical and contamination assessment will be undertaken following demolition of the existing structures occupying the majority of the site and can be undertaken without consent, pursuant to Clause 14 of SEPP 55.

3.2.6.4 Stormwater and water quality management

The proposed development has been designed to the Blacktown City Council civil engineering design standards, including requirements for On-site Stormwater Detention (**OSD**). The Stormwater Management Plan proposes that the site will drain to the south and connect to Council's existing stormwater infrastructure on Kellogg Road as shown in **Figure 20** and detailed in **Appendix O**. The OSD located in the south west corner of the site will have a capacity of 860.5m^3.

The site is located within the Voluntary Contributions Scheme Boundary. As such, a Voluntary Planning Agreement (**VPA**) may be negotiated with Council to offset water quality requirements off-site. The Applicant proposes to undertake a VPA and has negotiated with Council the following rate:

> *The contribution rate is $62,980 per hectare, subject to CPI indexation as the date of payment plus the administration fee of 1.5%*
>
> *Site area: 1.91ha. Approximate contribution = $120,119.90 plus fees*

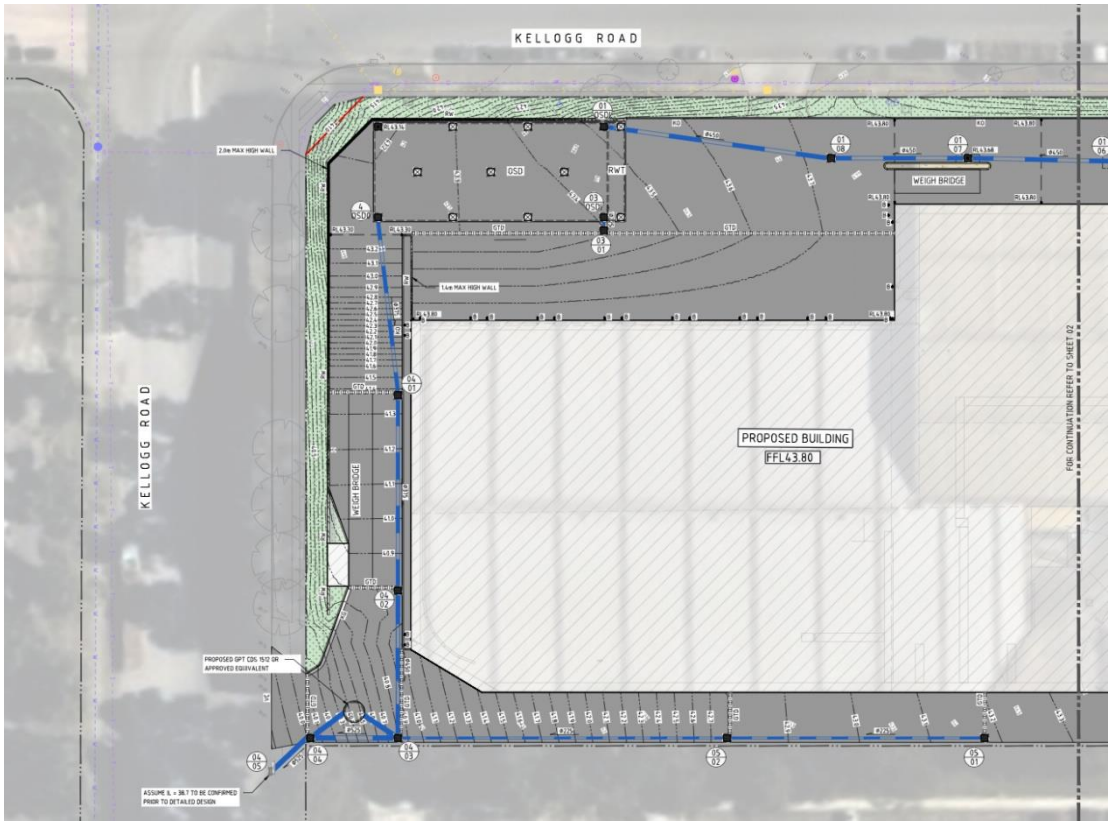
In addition to the above, the development will include the following as part of the stormwater quality system:

- 1 x Gross Pollutant Trap
- 3 x pit inserts (Ocean Guard)
- Rainwater tank (60kL)
- Water Quality Chamber with 65 x filtration cartridges

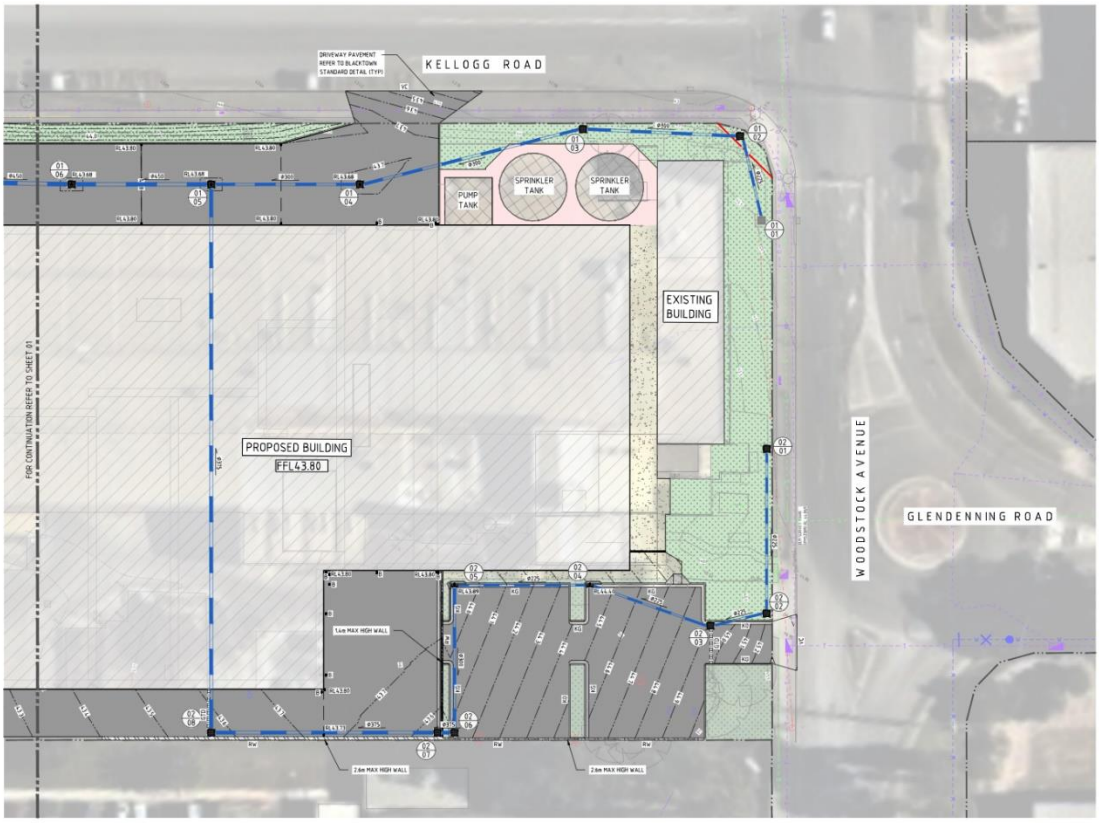
Notwithstanding the above proposed offsite water quality treatment, it is noted that a fire water management system is proposed to capture and store fire water in the event of a fire. This is required to prevent contamination of downstream waters.

In the event of a fire, the stormwater pit and pipe network and OSD tank will be used as a storage for fire water. The last pit prior to discharge to Council's network and the OSD tank will be fitted with a penstock valve that will automatically close when a fire event occurs. Refer to **Section 6.6**.

Figure 20 Stormwater Management Plan



Picture 7 SMP Sheet 01



Picture 8 SMP Sheet 02

Source: Northrop

3.2.6.5 Utilities

The proposed development will utilise existing utility infrastructure including water, sewer, gas, power and telecommunications available within vicinity to the site. The Applicant will consult with the respective utility providers as required to establish exact point of connection.

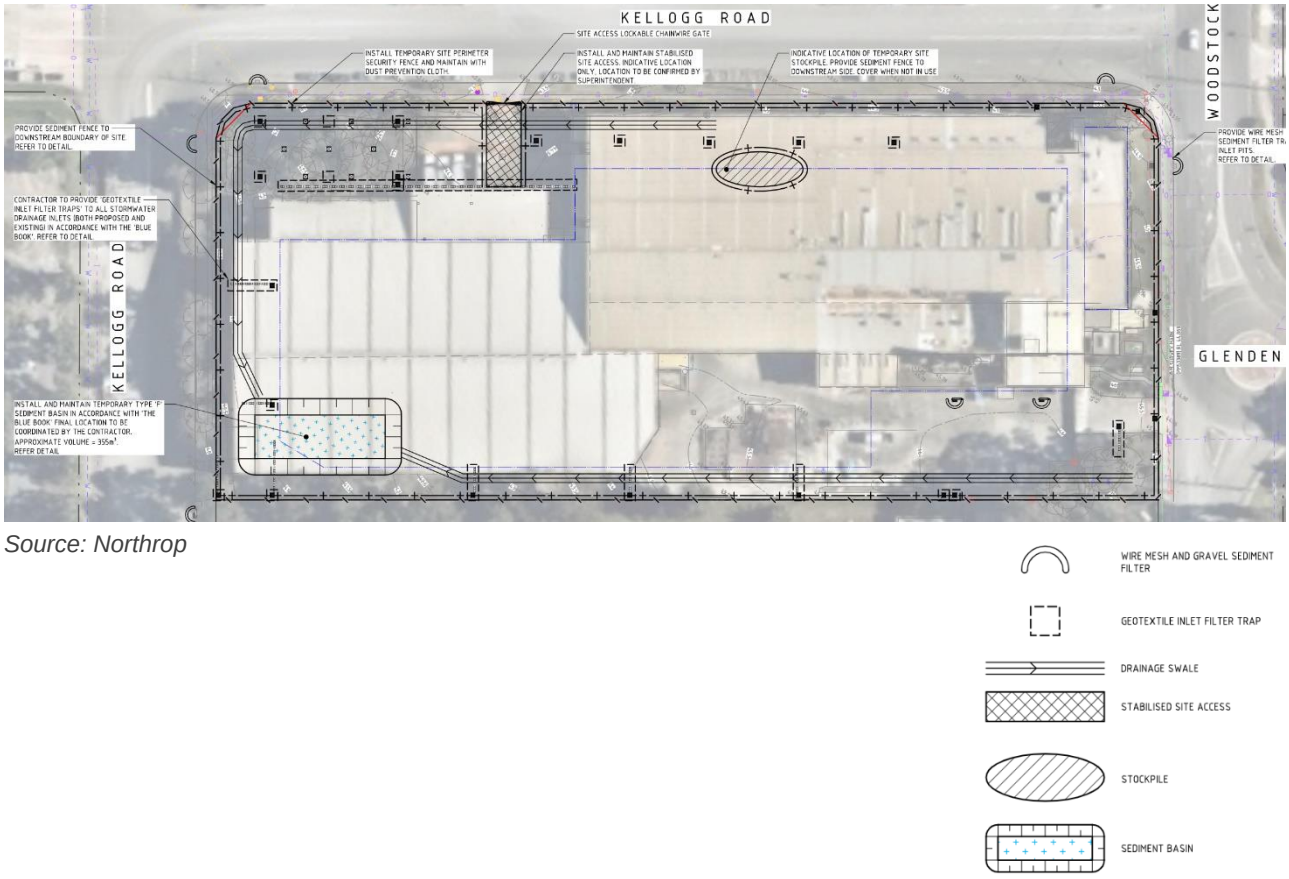
3.2.6.6 Sediment and erosion control

Due to the size of the proposed development, a temporary sediment basin with a total volume of 352.395m^3 will be required to capture site runoff during construction. The construction of the basin may be undertaken in stages to enable the maximum runoff capture assisted by diversion swales and direct runoff to the basin. The design parameters of the temporary sediment basin is detailed in **Appendix O**.

Prior to any earthworks commencing on site, sediment and erosion control measures will be implemented generally in accordance with the engineering drawings shown in and The Blue Book. The measures will include:

- A temporary site security/ safety fence around the site, the site office area and the proposed sediment basin.
- Sediment fencing provided downstream of disturbed areas, including any topsoil stockpiles, as shown in **Figure 21**.
- Dust control measures including covering stockpiles, installing fence hessian and watering exposed areas.
- Placement of hay bales or mesh and gravel inlet filters around and along proposed catch drains and around stormwater inlets pits
- Construction of a temporary sediment basin as noted above.

Figure 21 Sediment and erosion control plan



Source: Northrop

3.2.7 Parking and Access

The development proposes three driveway crossings, including:

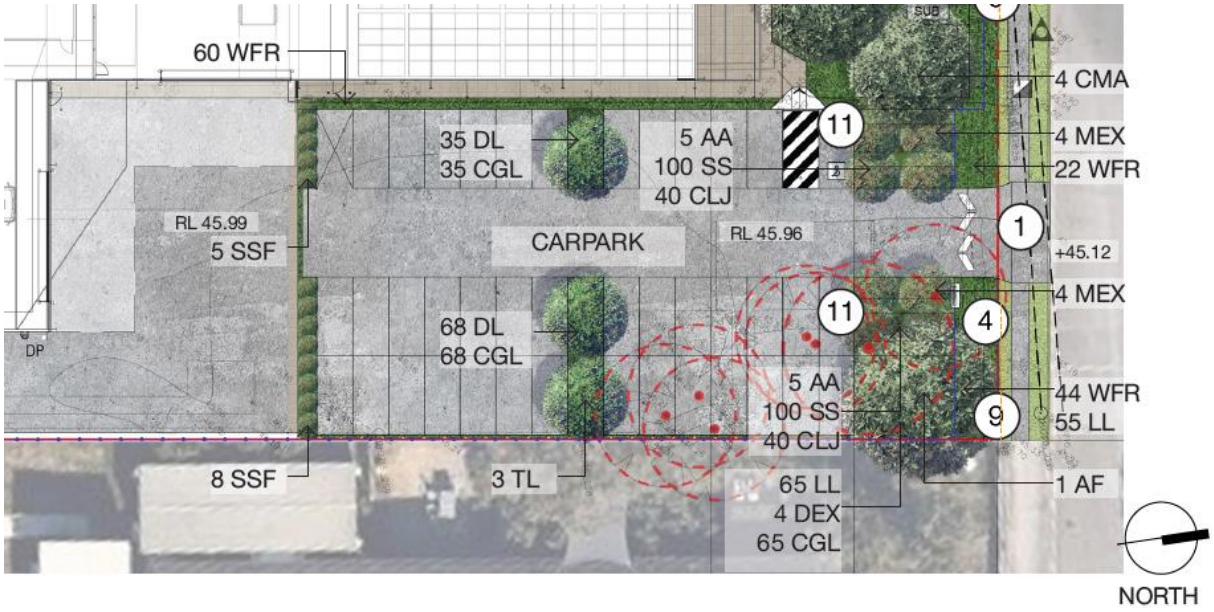
- An existing driveway crossing to Woodstock Avenue to be used by staff and visitors in private vehicles to enter and exit the car parking area only.
- A new driveway crossing to Kellogg Road (western frontage) for truck entries only.
- An existing driveway crossing to Kellogg Road (southern frontage) for truck exits only.

This arrangement will facilitate the separation of light vehicles and trucks on-site, and trucks to manoeuvre around the site in a single direction.

3.2.7.1 Light vehicle parking

The proposed development will provide 40 at-grade parking spaces for staff and visitors in the north eastern corner of the site, off Woodstock Avenue. 28 parking spaces will be in a tandem parking arrangement. These spaces will be allocated to staff based on employee shifts and managed by Cleanaway through a management plan. One car space will be reserved as an accessible parking space.

Figure 22 Light vehicle car park



Source: Habit8

3.2.7.2 Truck movements

The proposed development has been designed to accommodate the following vehicles:

- 26 metre B-doubles
- 20 metre articulated vehicles
- 19.6 metre truck and dogs
- 9.06 metre Hook Lift trucks
- 8.625 metre rigid trucks

The development will provide two weighbridges, including a weighbridge on the western hard stand area that can accommodate vehicles up to 12.5 metres long and a weighbridge on the southern hard stand area that can accommodate vehicles up to 26 metres long. An automated vehicle control system will be utilised, as has been successfully used on other Cleanaway sites and facilitates the easy monitoring of vehicle and materials movement.

Suitable space has been provided for four 12.5 metre heavy rigid trucks to queue on site for the weighbridges, which is significantly more than the expected arrival rate for vehicles utilising the weighbridges.

The proposed development also provides space for the following recycling loading/unloading areas:

- Six commingled receival bays accommodating 8.625 metre rigid trucks
- One glass receival bay accommodating 20 metre articulated vehicles
- Two OCC receival bays accommodating 8.625 metre rigid trucks
- Two wet waste bays accommodating 9.06 metre hook lift trucks
- One finished goods loading bay accommodating 26 metre B-double trucks.

It is noted that no truck parking is provided on the site as all Cleanaway large vehicles are stored at a nearby dedicated vehicle depot, located nearby in Glendenning.

3.2.8 Development Timing

The development will be undertaken in phases of demolition, construction and operation of the site.

As identified in **Section 3.2.6.1**, the Applicant intends to undertake demolition works for most structures as complying development, pursuant to Part 7 of the Codes SEPP. Demolition proposed under the complying development pathway will progress concurrent to the assessment of SSD-29999239 to enable early site clearing and facilitate additional geotechnical site testing. It is the Applicant's intent for these demolition works to commence in the coming months.

It is expected the construction of the proposed development will be completed in a single stage.

4 STATUTORY CONTEXT

Various legislative and statutory planning instruments require consideration in the assessment of the proposal. In accordance with the SEARs, this EIS considers the following applicable to the proposal:

- *Environment Protection and Biodiversity Conservation Act 1999 (Cth)*
- *Biodiversity Conservation Act 2016*
- *Environmental Planning and Assessment Act 1979*
- *State Environmental Planning Policy (State and Regional Development) 2011*
- *State Environmental Planning Policy (Infrastructure) 2007*
- *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development*
- *State Environmental Planning Policy No. 55 – Remediation of Land*
- *Blacktown Local Environmental Plan 2015*

The permissibility of the proposed development and the application of the relevant statutory planning instruments that apply to the site and the proposed development are addressed in detail below.

4.1 STATUTORY OVERVIEW

An overview of the relevant statutory planning requirements is outlined in **Table 8** and discussed in the following subsections.

Table 8 Statutory requirements

Category	Action
Power to grant approval	Schedule 1, clause 23(3) of *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP) identifies that any resource recovery or recycling facility development that handles more than 100,000 tonnes per year of waste as state significant development. The proposed development is designed to accommodate up to 120,000 tonnes of waste per year. Therefore the Minister is the consent authority for the proposed development pursuant to section 4.36(1) of the Act.
Permissibility	The site is zoned IN1 General Industrial in the Blacktown LEP 2015. The proposed development land use is categorised as *waste or resource transfer management facility* and is permissible with consent in the IN1 zone. Refer to **Section 4.3** for further discussion.
Other approvals	The Applicant is seeking to undertake some of the demolition works on the site under the provisions of exempt and complying development. There are no other approvals proposed to carry out the project.
Pre-condition to exercising the power to grant approval	An assessment of the mandatory pre-conditions that must be satisfied before the Minister may grant approval to the project are outlined in **Section 4.4**.

4.2 PERMISSIBILITY

Blacktown Local Environmental Plan 2015 (BLEP) is the primary local environmental planning instrument which applies to the site. The site is zoned IN1 General Industrial as shown in **Figure 23**.

Figure 23 Land Use Zoning Map

Source: Urbis

The proposed development land use is categorised as ***waste or resource management facility*** which is a group term defined in the LEP as follows:

> ***waste or resource management facility*** *means any of the following—*
>
> *(a) a resource recovery facility,*
>
> *(b) a waste disposal facility,*
>
> *(c) a waste or resource transfer station,*
>
> *(d) a building or place that is a combination of any of the things referred to in paragraphs (a)–(c).*

A ***resource recovery facility*** is defined as follows:

> ***resource recovery facility*** *means a building or place used for the recovery of resources from waste, including works or activities such as separating and sorting, processing or treating the waste, composting, temporary storage, transfer or sale of recovered resources, energy generation from gases and water treatment, but not including re-manufacture or disposal of the material by landfill or incineration.*

A ***waste or resource management facility*** is not specified in item 2 of the IN1 General Industrial zone (permitted without consent) or item 4 (prohibited) and accordingly, is permitted with consent.

The development is consistent with the zone objections (as listed below). The proposal comprises an industrial land use that will generate approximately 103 direct and 143 indirect jobs during construction and 69 direct jobs through the ongoing operation of the facilities on-site and a further 114 indirect jobs. The EIS stipulates how the development will implement mitigation measures to minimise adverse effects on other land uses.

- *To provide a wide range of industrial and warehouse land uses.*
- *To encourage employment opportunities.*
- *To minimise any adverse effect of industry on other land uses.*
- *To support and protect industrial land for industrial uses.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of workers in the area*

4.3 PRE-CONDITIONS

The following table outlines the pre-conditions to exercising the power to grant approval which are relevant to the project and the section where these matters are addressed within the EIS.

Table 9 Review of applicable EPIs

Statutory Reference	Pre-condition	Relevance	Section in EIS
State Environmental Planning Policy No 55 - Remediation of Land (SEPP 55) - clause 7(1)	A consent authority must be satisfied that the land is suitable in its contaminated state - or will be suitable, after remediation - for the purpose for which the development is proposed to be carried out.	Potential sources of contamination exist at the site but are not expected to preclude the proposed development of the site.	**Section 6.7**

4.4 MANDATORY CONSIDERATIONS

Table 10 outlines the relevant mandatory considerations to exercising the power to grant approval and the section where these matters are addressed within the EIS.

Table 10 Mandatory considerations

Statutory Reference	Mandatory Consideration	Section in EIS
Consideration under the EP&A Act and Regulation		
Section 1.3	Relevant objects of the EP&A Act	**Appendix C**
Section 4.15	Relevant environmental planning instruments ▪ SEPP 33 – Hazardous and Offensive Development	**Section 6.10** and **Appendix R**
	▪ SEPP 55 – Remediation of Land	**Section 6.7** and **Appendix P**
	▪ SREP 20 – Hawkesbury-Nepean River	**Section 6.2, 6.6, 6.10, 6.11 and 6.15**
	▪ Blacktown LEP 2015	**Appendix C**
	Relevant draft environmental planning instruments ▪ Draft State Environmental Planning Policy (Remediation of Land) ▪ Draft SEPP – Strategic Transport Corridors	**Appendix C**
	Relevant planning agreement or draft planning agreement ▪ It is proposed to enter a Voluntary Planning Agreement with Blacktown City Council to offset water quality requirements off-site. The Applicant has	**Section 6.6** and **Appendix O**

Statutory Reference	Mandatory Consideration	Section in EIS
	consulted with Council to negotiate the following rate of $120,119.90 plus fees.	
	Development control plans ▪ Blacktown Development Control Plan 2015 (BDCP 2015)	**Appendix C**
	The likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality.	**Section 6**
	The suitability of the site for the development	**Section 7.6**
	The public interest	**Section 7.7**
Mandatory relevant considerations under EPIs		
SEPP 33 - clause 8	Departmental guidelines: ▪ Applying SEPP 33 (identify relevant requirements) ▪ HIPAP No.3 – Risk Assessment (identify relevant requirements) ▪ HIPAP No.12 – Hazards – related Conditions of Consent	**Section 6.10** and **Appendix R**
SEPP 55 - clause 7	As the development will involve a change of use within an investigation area a report specifying the findings of a preliminary investigation of the land concerned carried out in accordance with the contaminated land planning guidelines.	**Section 6.7** and **Appendix P**
BLEP 2015	Objectives and land uses for IN1 – General Industrial Zone ▪ Part 4 – Principal development standards ▪ Part 5 – Miscellaneous provisions ▪ Part 7 – Additional local provisions	**Appendix C**
Considerations under other legislation		
Biodiversity Conservation Act 2016	The likely impact of the proposed development on biodiversity values as assessed in the Biodiversity Development Assessment Report (BDAR). The Minister for Planning may (but is not required to) further consider	**Section 6.14**

Statutory Reference	Mandatory Consideration	Section in EIS
(BC Act) – section 7.14	under that BC Act the likely impact of the proposed development on biodiversity values.	
Development Control Plans		
BDCP 2015	Clause 11 of the SDR SEPP states that development control plans (whether made before or after the commencement of this Policy) do not apply to SSD. As such, there is no requirement for assessment of the proposal against the BDCP 2015 for this SSDA. Notwithstanding this, consideration has been given to the provisions of BDCP 2015.	**Appendix C**

5 COMMUNITY AND STAKEHOLDER ENGAGEMENT

The following sections of the report describe the engagement activities that have been undertaken during the preparation of the EIS and the community engagement which will be carried out if the project is approved.

5.1 ENGAGEMENT CARRIED OUT

Community and stakeholder engagement has been undertaken by the Applicant and Urbis in the preparation of the SSDA. This included direct engagement and consultation with:

- Adjoining landowners and occupants
- Government, agency and utility stakeholders listed within the SEARs

Consultation was also undertaken with the certain stakeholders to inform the detailed assessment of key matters including:

- Blacktown City Council
- Environment, Energy and Science Group (EESG)
- NSW Environment Protection Authority
- NSW Fire and Rescue
- Sydney Water
- Transport for NSW
- Greater Sydney Parklands

This engagement was consistent with the community participation objectives in the Undertaking Engagement Guidelines for State Significant Projects and complied with the community engagement requirements in the SEAR as summarised below:

- Details of the community and stakeholder participation strategy identifying who has been consulted and the justification for the selection, and
- Details of the results of the implementation of the strategy including issues raised and how these have been addressed.

In accordance with the Regulations, the EIS will be placed on formal public exhibition once DPIE has reviewed the EIS and deemed it ‘adequate’ for this purpose. Following this exhibition period, the applicant will respond to any matters raised by notified parties.

5.2 COMMUNITY VIEWS

Details of the outcomes of the community and stakeholder engagement is contained in the Consultation Report submitted in support of the proposal and provided in **Appendix Z**. A summary of the responses to issues raised by stakeholders during the engagement process is provided in the table below.

Table 11 Community and Stakeholder Engagement: Issues and Responses

Stakeholder	How this group was consulted	Feedback	Project response
Council Blacktown City Council	Virtual meeting on 30 August 2021 between Urbis Planning and the following Council departments: ▪ Planning ▪ Drainage ▪ Development engineering ▪ Traffic engineering	Key topics discussed include: ▪ Introduction and description of the works ▪ Operation and requirements of the facility ▪ Odours and emissions ▪ Acoustics ▪ Drainage ▪ Splays ▪ Driveways ▪ Fire systems ▪ Design ▪ Setbacks ▪ Site contamination ▪ Traffic ▪ Water	A carefully considered Landscape Plan (**Appendix K**) has been prepared as part of the proposal, to maximise landscaping on site and provide screening along the street frontages to soften the visual impact of the development. The EIS has assessed potential environmental impacts related to air quality, acoustics, drainage, fire safety, contamination and traffic. The EIS addresses the built form of the proposal, including the primary and secondary setbacks, and the project team is preparing a proposal for Aboriginal artwork as a treatment to the water tanks adjacent to Kellogg Road. Project Strategy on behalf of Charter Hall and Cleanaway will continue to reach out to Blacktown City Council as required throughout the approval process.
Department of Planning,	Meeting held with DPIE on 2 August 21.	Key topics discussed include: **Operational**	The EIS has identified the operational hours for the MRF. Approval is

Stakeholder	How this group was consulted	Feedback	Project response
Industry and Environment Environment, Energy and Science Group	Meeting specifically with: ▪ Chris Ritchie ▪ William Hodgkinson	▪ Operational hours of the facility and activities to be undertaken on site ▪ Workers on site 24/7. **Traffic** ▪ Number of vehicle movements per day ▪ Entering and exiting truck movements and swept paths ▪ Assess impacts on intersection of Woodstock and Kellogg intersections, and queuing space in right-turn lane. ▪ Impacts of potential queuing of trucks entering the site. **Waste Management** ▪ Materials processed in the facility ▪ EPA licence requires closed environment for air, noise and visual management. ▪ Equipment for processing, and for fire safety, including thermal cameras, bunker watering systems and other requirements to meet relevant guidelines. **Building design** ▪ Contemporary industrial building. ▪ Types of materials – must meet Fire Rescue NSW (**NSWFR**) requirements. ▪ Pre-cast building to reduce noise impacts.	sought for 24/7 operation. Typical shift patterns have been detailed in **Section 3.2.6**. The Traffic Impact Assessment (**TIA**) (**Appendix J**) assesses the number of vehicle movements per day, demonstrating that the proposed development will result in a net reduction of vehicles accessing the site compared to existing. Further, the road network has capacity to operate at LoS A now and in the future. The TIA provides swept paths for all vehicle movements entering and exiting the site, and manoeuvring around the facility. Swept paths have also been provided for light vehicles entering and exiting the proposed car park. The Waste Management Plan (**WMP**) (**Appendix L**) identifies the materials that will be processed on site are from yellow lidded bins in the local area and will be processed for recycling. Flow diagrams and indicative floor plans are provided in Section 6.2.3 to show the waste

Stakeholder	How this group was consulted	Feedback	Project response
		▪ Building design enclosed, with rapid shutter doors. ▪ Other stakeholders required to be engaged	processing stream and proposed equipment. The building design has been described in detail in **Section 3.2**. As discussed, the building has been designed to meet EPA and FRNSW requirements for fire safety and minimise environmental impacts on surrounding land uses.
NSW Environment Protection Authority	Meeting held with NSW Environment Protection Authority on 17 August 21. Meeting specifically with: ▪ Cleanaway ▪ Urbis ▪ Charter Hall ▪ EPA – Operations ▪ James Goodwin ▪ Rob Hogan ▪ Project Strategy	Key topics discussed include: ▪ Odour ▪ Vehicular movements ▪ Leachate ▪ Levy ▪ Licensing / Approval	The EIS has assessed potential environmental impacts related to air quality, acoustics, drainage, fire safety, contamination and traffic. The Air Quality Impact Assessment (**AQIA**) (**Appendix N**) assesses the potential impacts during construction and operation. The project is considered to have minimal impact, subject to the implementation of air quality control measures, including the installation of rapid roller doors to prevent odours and emissions escaping the facility. Project Strategy on behalf of Charter Hall and Cleanaway will continue to reach out to NSW Environment Protection Authority as required throughout the approval process.

Stakeholder	How this group was consulted	Feedback	Project response
NSW Fire and Rescue	Meeting held with NSW Fire and Rescue on 26 October 21. The FRNSW representatives were Lachlan Haar and John Dawes.	Key topics discussed include: ▪ FRNSW chief concern, containment of potential contaminants ▪ Important to notify FRNSW even if fire is extinguished by on site staff. This is due to the potential risk of deep-seated fire ▪ FRNSW queried whether the fire monitors could be operated remotely or set to run without someone being present ▪ FRNSW believe a level of smoke exhaust is required – the conditions the proposed system will provide is to be presented and agreed to by FRNSW. Manual clearance not expected to be acceptable due to increased fire ignition risk	A Fire Engineering Brief Questionnaire (**FEBQ**) will be submitted. Project Strategy on behalf of Charter Hall and Cleanaway will continue to reach out to NSW Fire and Rescue as required throughout the approval process.
Sydney Water	Project Strategy on behalf of Charter Hall and Cleanaway has worked closely with Sydney Water to generate tap in reports to support the development of design.	Key topics discussed include: ▪ S73 application will be required ▪ Utility services report is already being commissioned ▪ Sydney Water has confirmed that a Trade Waste Agreement is not required (letter dated 23.02.2022)	Sydney Water provided a pressure flow statement to determine available flows and pressures in the water main. S73 will be submitted post DA approval.
Jemena Gas	Project Strategy on behalf of Charter Hall has sought to confirm available gas utilities.	▪ Existing gas connection identified. ▪ No comments provided.	-
Endeavour Energy	Project Strategy on behalf of Charter Hall has sought to confirm	▪ No comments provided.	-

Stakeholder	How this group was consulted	Feedback	Project response
	existing electrical utilities.	▪ A letter of supply offer has been obtained from Endeavour Energy.	
Telco	Project Strategy on behalf of Charter Hall has sought to confirm available telco.	▪ No comments provided. Will require consultation following DA approval.	-
Transport for NSW (including Road and Maritime Services)	Email correspondence on 23 August and 2 December 2021 between Traffix and TfNSW.	▪ TfNSW noted if further details regarding trip generation rates and distribution on the classified road network are to be reviewed, further comments regarding traffic analysis can be made. ▪ Request for meeting with TfNSW on 2 December 2021.	The TIA recommends a Green Travel Plan be prepared to encourage alternative modes of travel other than private cars. Project Strategy on behalf of Charter Hall and Cleanaway will continue to reach out to Transport for NSW as required throughout the approval process.
Greater Sydney Parklands	Direct contact between GSP and Charter Hall.	▪ Plans issued to GSP for review and comment.	Waiting to hear response from GSP.
Community (people or groups likely to be impacted by the project): Power Street Belfast Place Glendenning Road Kilto Crescent Woodstock Avenue Kellogg Road	Fact sheet sent on 14 December 2021 to 146 residents and business located nearby the proposed site. The fact sheet included details of the project, enquiry line and invitation to attend a briefing with the project team.	▪ No feedback received to date.	Charter Hall and Cleanaway will continue to reach out to the community throughout the approval process to keep them informed of any updates and changes to the proposal.

6 ASSESSMENT OF IMPACTS

This section describes the way in which the key issues identified in the SEARs have been assessed. It provides a comprehensive description of the specialist technical studies undertaken regarding the potential impacts of the proposed development and recommended mitigation, minimisation and management measures to avoid unacceptable impacts. Further detailed information is appended to the EIS, including:

- SEARs compliance table identifying where the SEARs have been addressed in the EIS (**Appendix A**).
- Statutory compliance table identifying where the relevant statutory requirements have been addressed (**Appendix C**).
- Proposed mitigation measures for the project which are additional to the measures built into the physical layout and design of the project (**Appendix D**).
- Community engagement table identifying where the issues raised by the community during engagement have been addressed (**Appendix E**).

The detailed technical reports and plans prepared by specialists and appended to the EIS are individually referenced within the following sections.

6.1 DETAILED ASSESSMENT IMPACTS

The following sections of the EIS provides a detailed assessment of the key issues which could have a significant impact on the site and locality. It provides a comprehensive assessment of the relevant issues and the mitigation measures required to avoid, mitigate and/or offset the impacts of the project.

6.2 WASTE MANAGEMENT

SLR was engaged to assess the waste storage and management requirements to facilitate the safe construction and operation of the proposed MRF, and prepare a Waste Management Plan (**WMP**) to satisfy the SEARs. This includes consideration and assessment of the following streams of waste:

- A waste management strategy for demolition and construction (refer to **Section 6.2.1**).
- The waste management of ongoing day to day operation of the site (refer to **Section 6.2.2**).
- The processing of waste streams accepted at the MRF including throughputs, stockpiling, etc (refer to **Section 6.2.3**).

SLR has prepared a WMP in **Appendix L** to detail the waste management strategy in accordance with:

- SEARS issued by the DPE
- Blacktown Development Control Plan 2015 (**DCP**)
- *Waste Avoidance and Resource Recovery Strategy*
- *EPA's Waste Classification Guidelines (DECC, 2009)*
- *Environmental Guidelines: Solid Waste Landfills (EPA, Second edition 2016)*
- *Environmental Guidelines: Use and Disposal of Biosolids Products (EPA, 1997)*
- *Environmental Guidelines: Composting and Related Organics Processing Facilities (EPA, 2004)*
- *NSW Energy from Waste Policy Statement (EPA, 2015)*
- *Standards for managing construction waste in NSW (EPA, 2018)*

SLR has also prepared a letter (**Appendix L**) to assess the waste quantities generated through day to day operations and strategies to minimise waste generated in accordance with Section 3 of the Blacktown DCP 2015.

6.2.1 Potential impacts – Demolition and Construction

6.2.1.1 Demolition Waste Types and Quantities

SLR has identified likely waste types generated from demolition and construction activities, along with their waste classifications and proposed management methods in Table 4 of **Appendix L**. This includes various building material waste, including general solid waste (non-putrescible), hazardous waste (i.e asbestos, paint), packaging and work compound and associated office waste.

In the absence of demolition waste generation rates or guides in the Blacktown DCP, SLR adopted the waste generation rates for 'factory' from The Hills DCP Appendix A for estimating the type and quantities of waste generated for demolition of the existing building. These rates are shown below in **Table 12**. The area for demolition and estimates of the associated waste quantities are shown in **Table 13**. The quantity of excavated soil has been calculated and shown in **Table 14**.

Table 12 Waste generation rates applied to existing buildings

Rate Type	Area (m^2)	Waste types and quantities (m^3)				
		Timber/Gyprock	Concrete	Bricks	Metal	Other
Factory	1,000	124	7,410	1,485	29	155

Source: SLR

Table 13 Existing building demolition areas and quantities

Section	Area for Demolition (m^2)	Timber/Gyprock	Concrete	Bricks	Metal	Other
MRF	11,878	48	5,321	2,435	273	214

Source: SLR

Table 14 Cut and fill quantities

Excavation	Area (m^2)	Depth (m)	Volume (m^3)
Cut	8,000	2.0	16,000
Cut	3,500	0.8	2,800
Fill	1,800	3.5	6,300
Fill	1,000	1.8	1,750
Fill	2,000	2.0	4,000
Net			**6,750**

Source: SLR

6.2.1.2 Construction Waste Types and Quantities

In the absence of construction waste generation rates or guides in the Blacktown DCP, SLR has adopted the waste generation rates for 'factory' and 'offices' from The Hills' DCP Appendix A for estimating the type and quantities of waste generated for construction of the MRF. SLR has also modified the waste generation rates to estimate the quantity of waste from handstand construction. These waste generation rates used are shown in **Table 15** below and estimates of waste generated are provided in **Table 16**.

Table 15 Waste generation rates applied to construction of MRF

Rate Type	Floor Area (m^2)	Waste types and quantities (m^3)						
		Timber	Concrete	Bricks	Gyprock	Sand or Soil	Metal	Other
Office	1,000	5.1	18.8	8.5	8.6	8.8	2.75	5
Factory	1,000	0.25	2.1	1.65	.45	4.8	0.6	0.5
Hardstand	1,000	0.25	2.1			4.8	0.6	0.5

Source: SLR

Table 16 Estimated types and quantities of construction waste

Development Component	Area (m²)	Waste types and quantities (m³)						
		Timber	Concrete	Bricks	Gyprock	Sand or Soil	Metal	Other
Office	10,575[9]	3	22	17	5	51	6	5
Factory	6,211[10]	2	13			30	4	3
Hardstand	730[11]	4	14	6	6	6	2	4
Total	**17,516**	**8**	**49**	**24**	**11**	**87**	**12**	**12**

Source: SLR

6.2.2 Potential impacts – Ongoing Waste and Recycling

The operation of the MRF is anticipated to generate the following broad waste streams:

- General waste and commingled recycling
- Food and organic waste
- Amenity wastes
- E-waste
- Bulky waste items such as furniture
- Plant and general maintenance wastes.

SLR assessed the potential waste streams, their associated waste classifications, and management methods in Table 11 of **Appendix L**, in accordance with the NSW EPA (2014) *Waste Classification Guidelines*.

The WMP has been prepared based on the operational waste generated from staff activities and includes office and lunchroom waste. This assessment excludes waste and recyclables generated from MRF processing (refer to **Section 6.2.4**).

In the absence of waste generation rates in the Blacktown DCP, SLR has adopted waste generation rates for 'offices' published in the NSW EPA's Better Practice Guidelines for Waste Management and Recycling in Commercial Facilities.

These have been used for estimating the type and quantities of waste generated from office activities. Lunchroom waste has been estimated on the assumption that each person will generate 0.5 L of waste and 0.5 L of recyclable containers per shift. These waste generation rates are shown in Table 12 below.

Table 17 Waste generation rates applied to staff activities

Type of Premises	Measure	Garbage Generation	Recycling Generation
Office	L/100 m²/day	6	8
Lunchroom	Per person per shift	0.5	0.5

Source: SLR

Using the waste generation rates in **Table 17** above, the approximate weekly waste quantities for staff activities at the MRF have been calculated. The operational waste quantities were also calculated based on the following assumptions:

- The office areas shown in **Appendix B**
- Offices will operate five days per week

- The MRF will operate seven days per week so the lunchroom will be in use every day
- Two MRF operational shifts per day
- A maximum of 40 people on site per shift.
- There will be no separation of food for recovery
- The office recycling stream is comprised of 98% paper and cardboard and 2% recyclable containers
- The lunchroom recycling stream is 100% recyclable containers.

The estimated quantities of staff waste generated at the MRF are shown in **Table 18** below.

Table 18 Estimated staff waste quantities

Area	Measure	Number of Shifts	Number of Days Operation per Week	Quantities per week (L)		
				Garbage	Recyclable Containers	Paper and Cardboard
Offices	730 m²	1	5	29.1	7.1	285
Lunchroom	40 people	2	7	280	280	0
Total				**499**	**287**	**285**

Source: SLR

6.2.3 Potential impacts – MRF Processing Waste Management

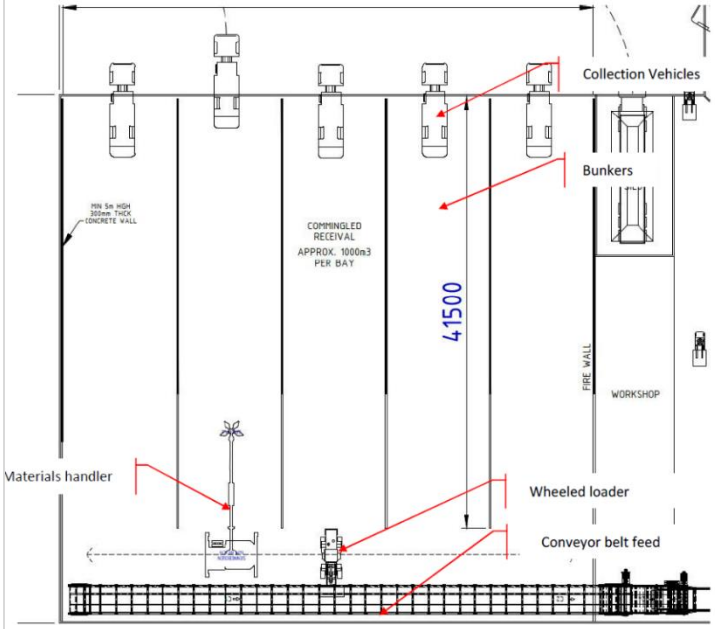
The material to be processed at the MRF will include, paper, cardboard, glass, aluminium, plastics, steel and other recyclables collected from kerbside recycling bins, those with yellow lids, in Blacktown Council area as well as materials collected under the NSW container deposit scheme for which Cleanaway has the contract to collect and recycle.

Details of the MRF processing is provided in response to SEARs below in **Table 19**.

Table 19 MRF Processing Waste Management

SEARS	Response
a description of each of the waste streams that would be accepted at the facility including maximum daily, weekly, and annual throughputs and the maximum size and heights of individual stockpiles	The MRF has a maximum capacity is 120,000 tonnes per year (TPA). The daily incoming quantity of material is approximately 400 tonnes or about 2,800 tonnes per week. This assumes about 300 days of operation per year. Incoming feedstock will be contained in six separate bunkers divided by 5 metre high masonry walls. No other stockpiles are proposed. The height of the feedstock stockpiles will not exceed 4 metres. Each bunker will hold 1,000m^3 of feedstock.
details of the source of the waste streams to justify the need for the proposed processing capacity	The material to be processed at the MRF originates primarily from the contents of the domestic kerbside recycling bins in Blacktown City Council area. Council has awarded Cleanaway the contract for the development and operation of the new MRF for this purpose. The MRF will also accept recyclable product generated through the NSW Container Deposit Scheme. The MRF will also be designed to be able to accommodate additional cardboard and recyclables materials from Cleanaway's commercial customers increasing recycling processing capacity in Sydney.

SEARS	Response
a description of waste processing operations (including flow diagrams for each waste stream), including a description of the technology to be installed, resource outputs, and the quality control measures that would be implemented	The MRF will be designed to be capable of operating 24 hours per day seven days per week. Co-mingled material will be delivered to site by Cleanaway's kerbside collection vehicles under contract to Blacktown City Council. The contents of the vehicles will be discharged into one of six bunkers on the southern side of the facility. A grab arm will remove any hazardous or undesirable items before a wheeled loader pushes the stockpiles onto a conveyor that leads into the sorting and processing facility. The recyclables will be divided into its component materials using a combination of physical separation processes, including: ▪ Ballistic and bounce screens ▪ Magnetic separators ▪ Optical sorting units ▪ Air separators. Solid waste materials that have no value will separated, placed in a compactor and sent to landfill. Liquid filled containers will be drained into stainless steel tanks. Valuable material such as paper, plastic, and metal will be stored in hoppers and then baled. Forklifts will transport bins and bales around the facility as required. Baled product will be sent to the storage warehouse from where it will be loaded into articulated heavy vehicles for transport to markets. Recovered glass will be stored in a silo bunker. A list of the sorting equipment proposed for the facility is as follows: ▪ Five fibre and four plastic optical sorting units ▪ Two ballistic separators ▪ Two air separators ▪ One OCC screen ▪ Two magnets ▪ Three air compressors dryers and receiver ▪ Primary vibratory louver screen ▪ Mega bounce network system ▪ Three-deck glass breaker screens ▪ 3 m glass breaker distribution screen feed to bounce network ▪ Commercial recyclables sorting conveyor system ▪ Plastic film venturi system

SEARS	Response
	▪ SCADA electrical control system. A key feature of the design is a move away from traditional high-maintenance rubber disc screens to the low maintenance, safe and easy to clean efficiency of ballistic separators. The system design and quality of the optical technology will ensure the finished product has less than 1% 'prohibitive' and less than 2% 'outthrows' before material presentation to the final manual quality control stations. Refer to Section **6.2.3.1** for flow charts and diagrams showing the waste processing stream in greater detail. Refer to **Appendix L** for further detail and justification for selection of the proposed technologies.
details of how waste would be stored (including the maximum daily storage capacity of the site) and handled on site, and transported to and from the site including details of how the receipt of non-conforming waste would be dealt with	Kerbside recyclables will be delivered by collection vehicles and deposited in one of six commingled receival bays. Each of these has 1000m^3 capacity. A materials handling machine will remove gross contamination and hazardous materials before a wheeled loader will move recyclables from these bays to a conveyor which will feed the material into the MRF separation equipment. Figure 24 Kerbside receivals bay  *Source: SLR* The below **Figure 24** provides details of the quantities of each material recovered, the bins, the bunkers and balers used to store material and their final dispatch location.

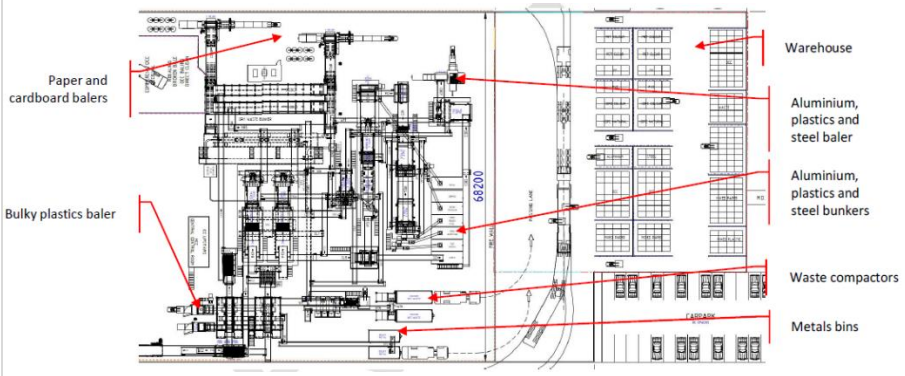
SEARS	Response
	Figure 25 Materials quantities, dispatch locations and storage details

Material	Quantity Recovered	Storage Bin and Bunker Details		Balers
		Number	Capacity (m^3)[33]	
Bulky plastics				Two
Bulky metal		Two bins	Each 10	
Waste for landfilling		Two compactors	Each 30	
Steel		One bunker	138	One shared
Clear PET		One bunker	345	
Natural HDPE		One bunker	186	

Material	Quantity Recovered	Storage Bin and Bunker Details		Balers
		Number	Capacity (m^3)[33]	
Coloured HDPE		One bunker	345	
Mixed plastics		One bunker	186	
Aluminium		One bunker	138	
Glass		Silo	138	
Mixed paper and cardboard			531	Two shared
Old corrugated cardboard			531	

Source: SLR

Figure 26 Location of bunkers, balers and storage areas



Source: SLR

detail the facility's waste tracking system for incoming and outgoing waste	Because loads will be sorted into their components, it is not possible to track materials on a truck-in-truck-out basis. However, the recording of data in the weighbridge software, and associated databases, will allow reports to be produced that show a mass balance of material, net in and gross out, less contamination and losses such as fluid and water, by hour, by shift, by day or any other time period.
detail the quantity of each type of materials recovered from processing operations and final dispatch locations	Recovered commodities will go to other Cleanaway facilities or clients to be used to manufacture new products domestically and nationally. Waste produced on site will be separated into two streams, details of which are shown in **Figure 27**. Figure 27 Waste streams for disposal

Stream	Composition	Proportion	On-site Storage	Off-site Destination	Approximate Quantity per Day
'Dry' waste	Film, food trays, plastic bags, textiles, lost small recyclable fibre and plastics	90%	Baled	ResourceCo PEF[36] plant where Cleanaway is an invested partner	25 t
'Wet' waste	Nappies, organics and bags garbage	10%	Stored in compactors	Disposed of to landfill	2 t

Source: SLR

SEARS	Response
detail the quantity of residual wastes from processing operations and final dispatch locations	Refer to above. Indicative MRF output quantities are provided in **Section 6.2.3.1**.

In summary of the above, the WMP prepared by SLR identifies the level of waste generated from the demolition, construction and operation of the proposed MRF, and the waste management process once the development is completed. This includes waste storage areas, waste collection and distribution.

The WMP includes provisions for managing and minimising waste as detailed in **Section 6.2.4**. Subject to the implementation of the WMP, the provisions within the WMP are considered adequate to manage waste during the demolition, construction and operation of the proposed MRF. Overall, the proposed facility will provide significant benefits for the minimisation of waste across the LGA and a significant net benefit to the public and the environment.

6.2.3.1 Detail of MRF waste processing

The following section provides an indicative floor plan and series of flow diagrams to describe the proposed waste processing operations, in accordance with the SEARS:

> *a description of waste processing operations (including flow diagrams for each waste stream), including a description of the technology to be installed, resource outputs, and the quality control measures that would be implemented*

It is recommended that the following figures be reviewed concurrently with **Appendix BB** for greater detail.

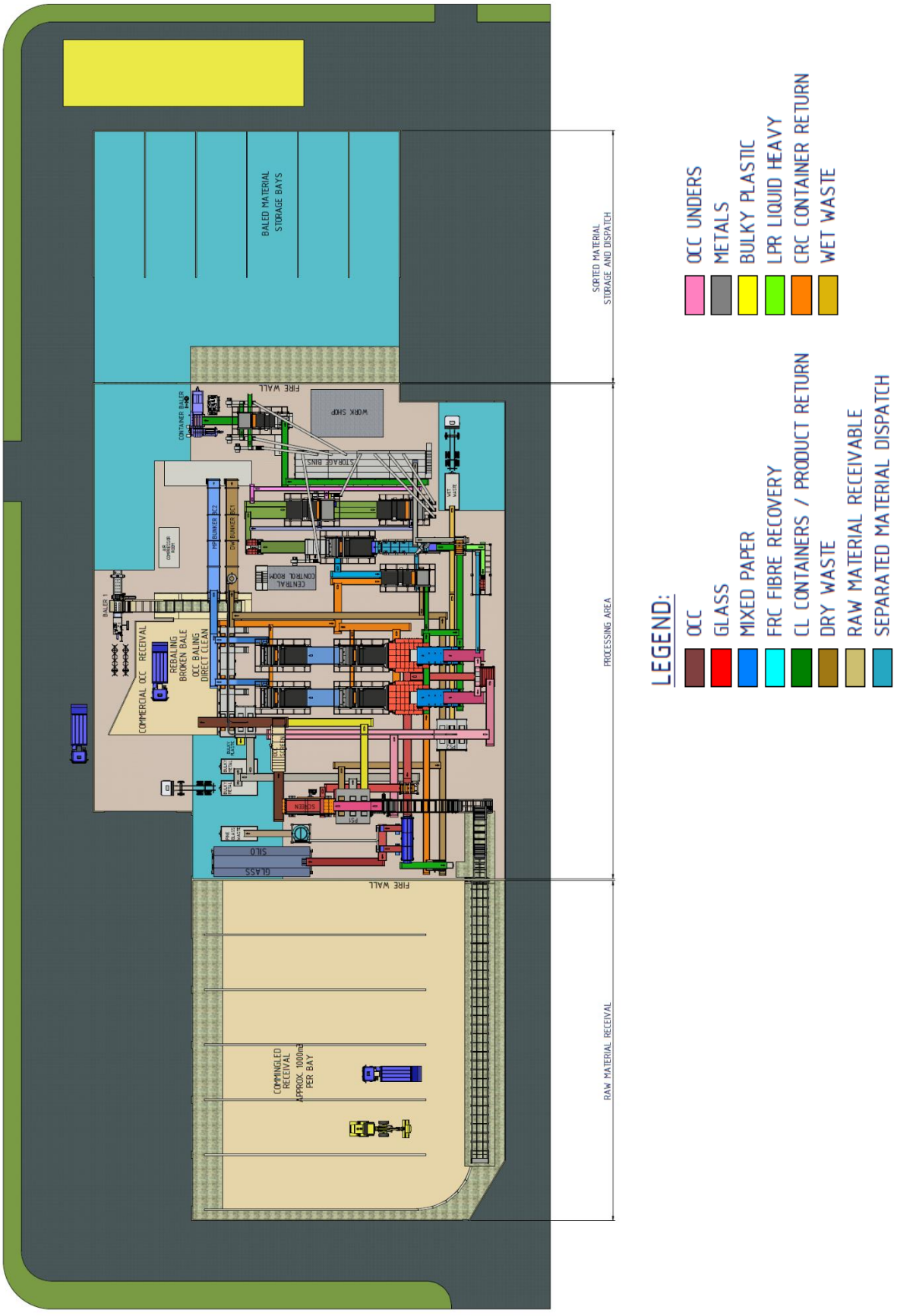
Figure 28 shows a general arrangement of the waste unloading, storing, processing and loading areas. **Figure 29** shows an indicative floor plan layout of the proposed waste processing equipment, which is to include:

- Five fibre and four plastic optical sorting units
- Two ballistic separators
- Two air separators
- One OCC screen
- Two magnets
- Three air compressors dryers and receiver
- Primary vibratory louver screen
- Mega bounce network system
- Three-deck glass breaker screens
- 3 m glass breaker distribution screen feed to bounce network
- Commercial recyclables sorting conveyor system
- Plastic film venturi system
- SCADA electrical control system.

Figure 30 provides a simplified flow diagram of the proposed waste processing stream, which shows that commingled waste will be sorted into separate streams. All waste and sorted materials will be removed from site.

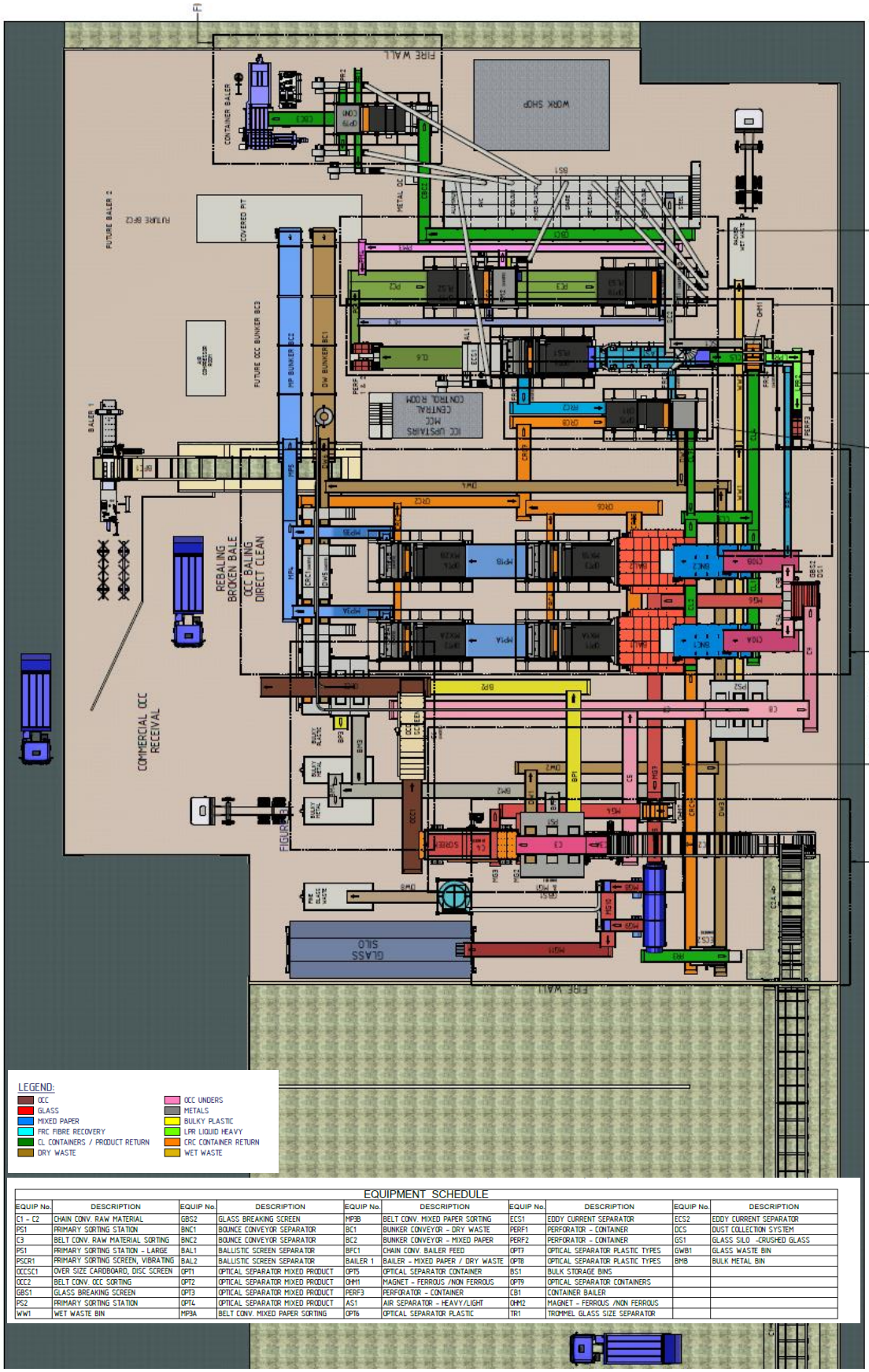
Figure 31 provides a more detailed overview of the waste processing stream, followed by **Figures 32**, **33** and **34** which provide further detail of the processes for glass sorting, fibre sorting and plastic sorting. The flow diagrams show how waste is passed through the system multiple times between each stream to ensure a high quality of sorting and minimal waste to landfill. These flow diagrams have been prepared in accordance with the detailed flow diagram provided in the Waste Management Plan (**Appendix L**).

Figure 28 General arrangement of waste processing stream



Source: Cleanaway

Figure 29 Indicative floor plan of waste processing equipment

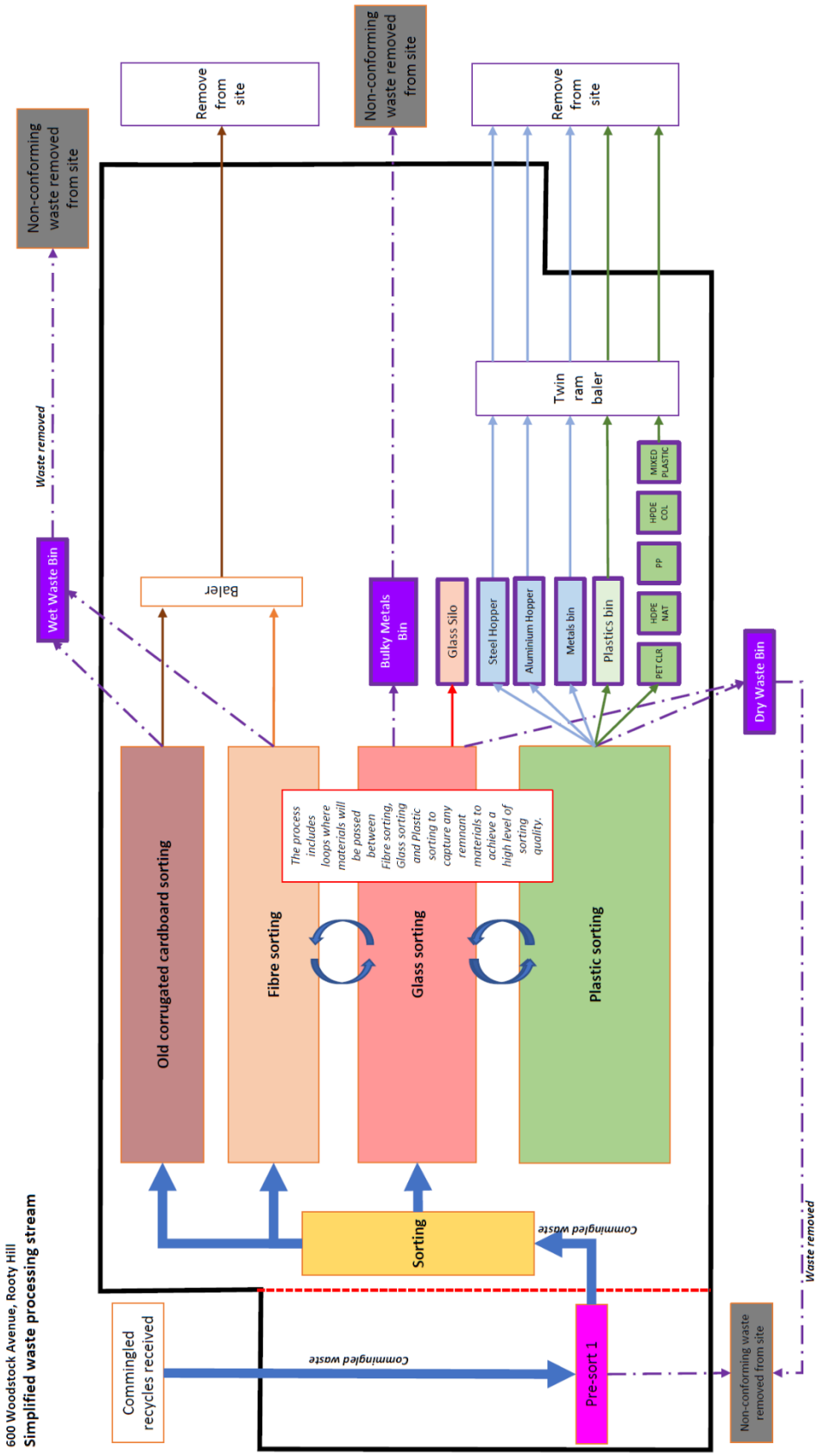


EQUIPMENT SCHEDULE

EQUIP No.	DESCRIPTION	EQUIP No.	DESCRIPTION	EQUIP No.	DESCRIPTION	EQUIP No.	DESCRIPTION	EQUIP No.	DESCRIPTION
C1 - C2	CHAIN CONV. RAW MATERIAL	GBS2	GLASS BREAKING SCREEN	MP3B	BELT CONV. MIXED PAPER SORTING	ECS1	EDDY CURRENT SEPARATOR	ECS2	EDDY CURRENT SEPARATOR
PS1	PRIMARY SORTING STATION	BNC1	BOUNCE CONVEYOR SEPARATOR	BC1	BUNKER CONVEYOR - DRY WASTE	PERF1	PERFORATOR - CONTAINER	DCS	DUST COLLECTION SYSTEM
C3	BELT CONV. RAW MATERIAL SORTING	BNC2	BOUNCE CONVEYOR SEPARATOR	BC2	BUNKER CONVEYOR - MIXED PAPER	PERF2	PERFORATOR - CONTAINER	GS1	GLASS SILO -CRUSHED GLASS
PS1	PRIMARY SORTING STATION - LARGE	BAL1	BALLISTIC SCREEN SEPARATOR	BFC1	CHAIN CONV. BAILER FEED	OPT7	OPTICAL SEPARATOR PLASTIC TYPES	GWB1	GLASS WASTE BIN
PSCR1	PRIMARY SORTING SCREEN, VIBRATING	BAL2	BALLISTIC SCREEN SEPARATOR	BAILER 1	BAILER - MIXED PAPER / DRY WASTE	OPT8	OPTICAL SEPARATOR PLASTIC TYPES	BMB	BULK METAL BIN
OCCSC1	OVER SIZE CARDBOARD, DISC SCREEN	OPT1	OPTICAL SEPARATOR MIXED PRODUCT	OPT5	OPTICAL SEPARATOR CONTAINER	BS1	BULK STORAGE BINS		
OCC2	BELT CONV. OCC SORTING	OPT2	OPTICAL SEPARATOR MIXED PRODUCT	OHM1	MAGNET - FERROUS /NON FERROUS	OPT9	OPTICAL SEPARATOR CONTAINERS		
GBS1	GLASS BREAKING SCREEN	OPT3	OPTICAL SEPARATOR MIXED PRODUCT	PERF3	PERFORATOR - CONTAINER	CB1	CONTAINER BAILER		
PS2	PRIMARY SORTING STATION	OPT4	OPTICAL SEPARATOR MIXED PRODUCT	AS1	AIR SEPARATOR - HEAVY/LIGHT	OHM2	MAGNET - FERROUS /NON FERROUS		
WW1	WET WASTE BIN	MP3A	BELT CONV. MIXED PAPER SORTING	OPT6	OPTICAL SEPARATOR PLASTIC	TR1	TROMMEL GLASS SIZE SEPARATOR		

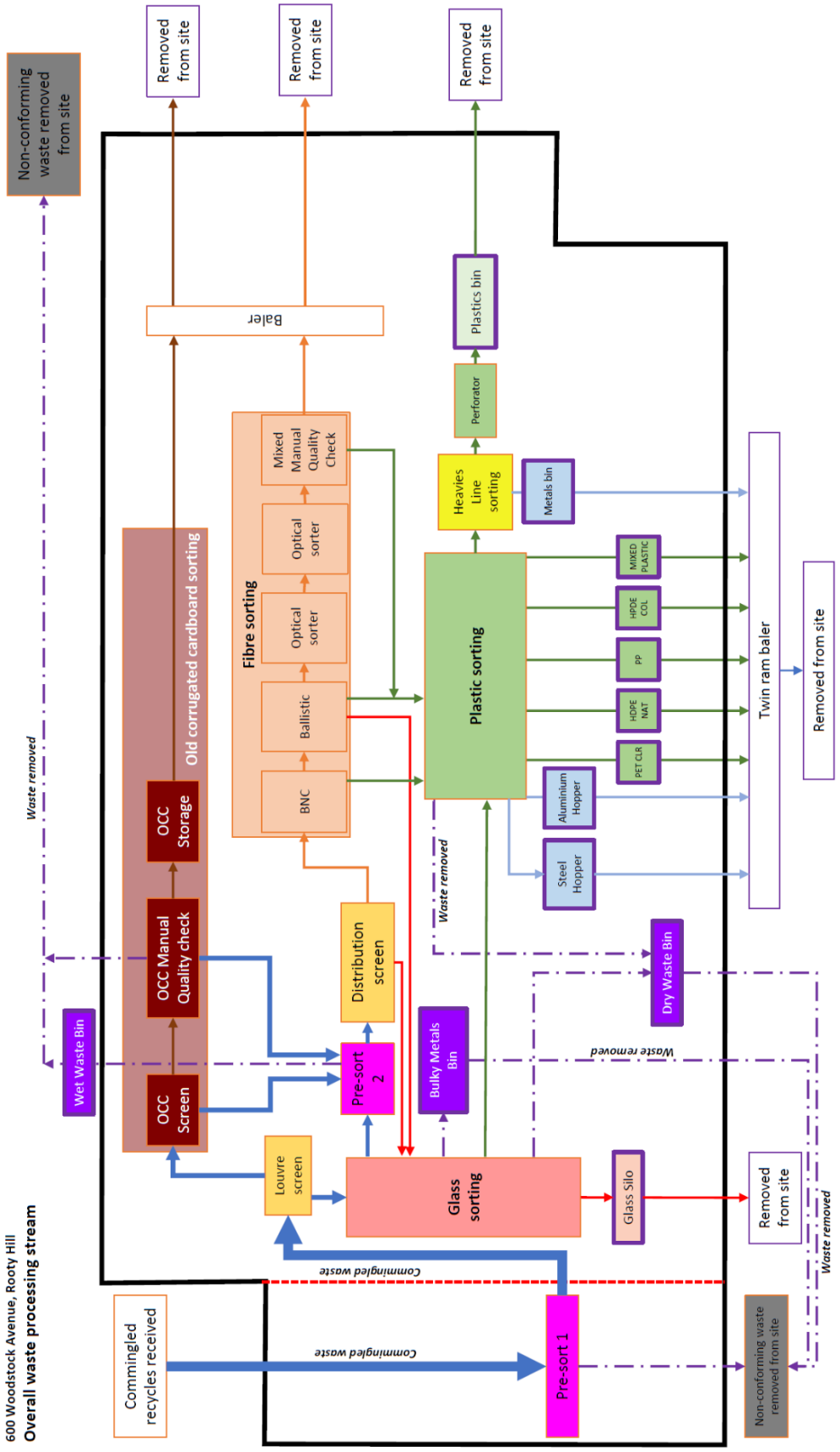
Source: Cleanaway

Figure 30 Simplified waste processing stream



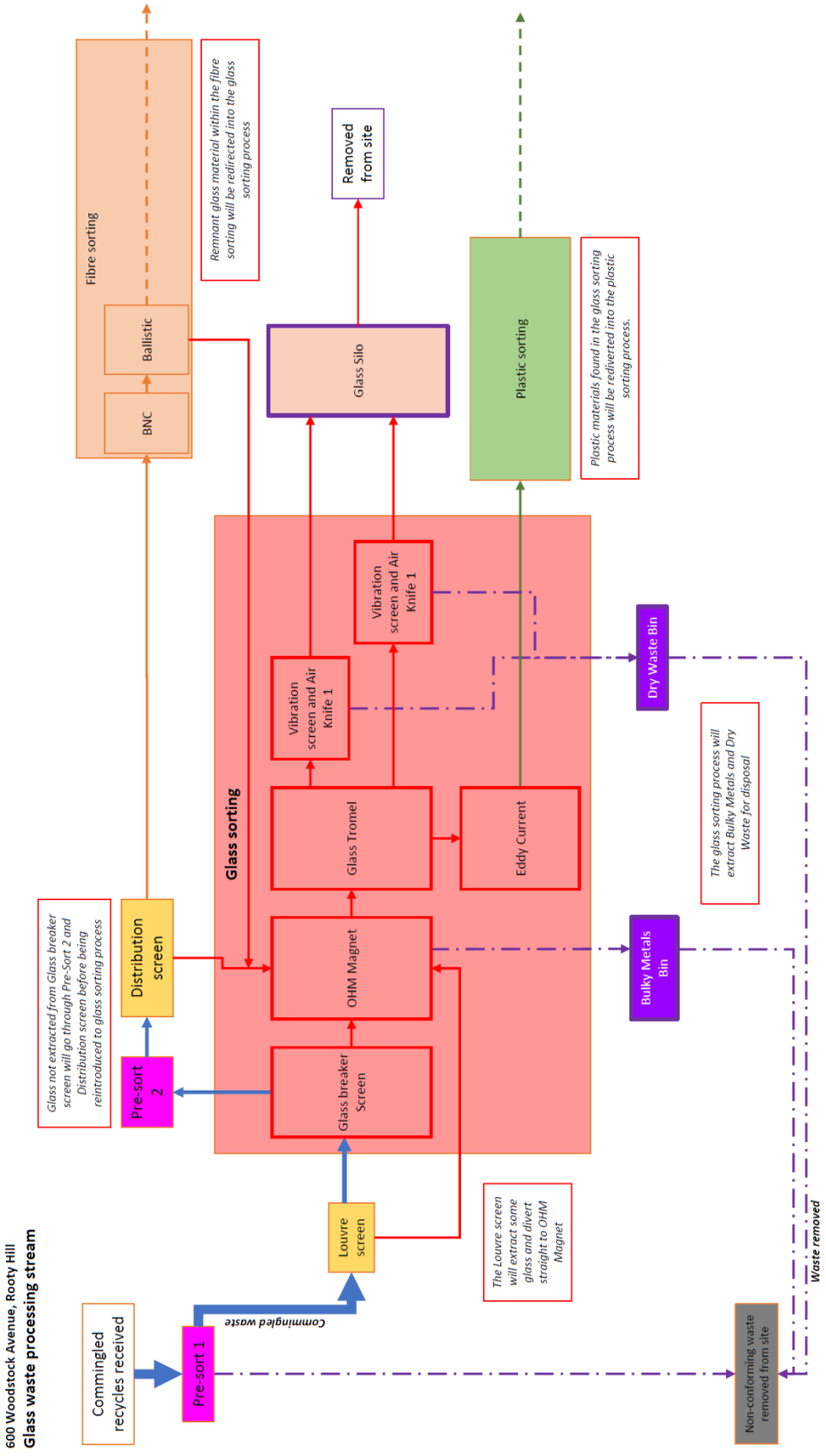
Source: Urbis

Figure 31 Overall waste processing stream



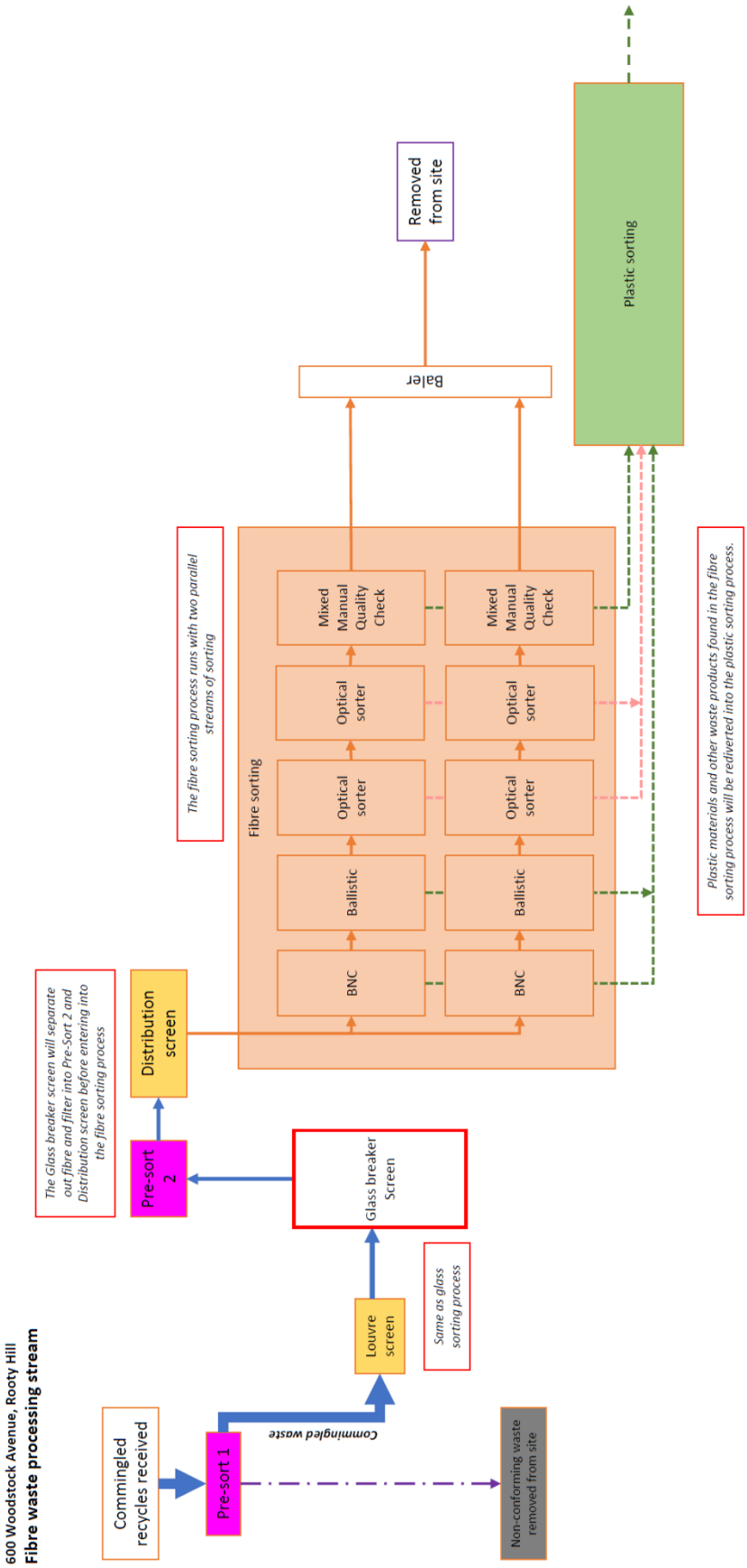
Source: Urbis

Figure 32 Glass waste processing stream



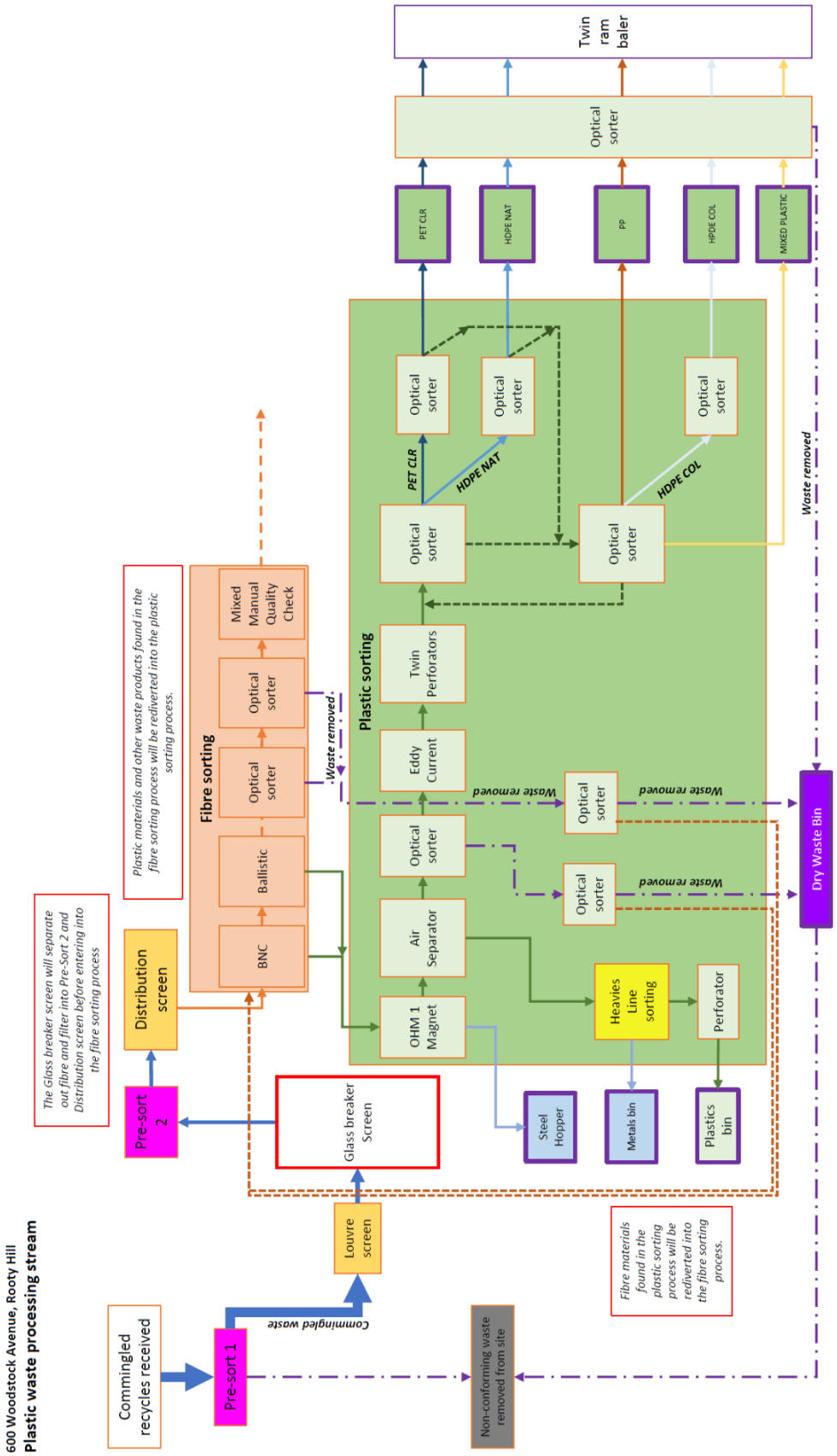
Source: Urbis

Figure 33 Fibre waste processing stream



Source: Urbis

Figure 34 Plastic waste processing stream



Source: Urbis

The following provides detail on the quantity of each type of materials recovered from processing operations and residual wastes, in accordance with the SEARS:

> *detail the quantity of each type of materials recovered from processing operations and final dispatch locations*
>
> *detail the quantity of residual wastes from processing operations and final dispatch locations*

To summarise the above requirements, the following **Table 20** shows projected output tonnes per annum from the MRF under four scenarios between 75,000 TPA to 105,000 TPA. This is modelled based on a consistent design capacity of 22 tonnes per hour (**TPH**) and adjusting the number of operating hours per day, with a typical 260 working days in a calendar year. This is calculated using the below equation:

TPA = (22TPH x operating hours) x 260 days

Notwithstanding the above assumptions of capacity and number of working days, development approval is still sought for up to 120,000 TPA and 24/7 operation. This facilitates future increase in demand, or peak periods of operation and accommodate capacity for seven days per week operation on an as needs basis.

Table 20 MRF Outputs capacity tonnes per annum

COMMINGLED TPA			**75K**	**85K**	**95K**	**105K**
TONNES/ DAY PROCESSED (260)			288	327	365	404
OPERATING HRS			13.1	14.9	16.6	18.4
PRODUCT	**INPUT %**	**OUTPUT %**				
CARDBOARD	12.0%	11.6%	8,672	9,828	10,984	12,141
ONP	4.0%	0.0%	-	-	-	-
MIXED PAPER	29.9%	33.9%	25,453	28,847	32,241	35,634
PET Clear	1.5%	1.4%	1,065	1,206	1,348	1,490
PET Color	0.2%	0.0%	-	-	-	-
HDPE NATURAL	1.3%	1.2%	920	1,043	1,166	1,288
HDPE COLOR	0.8%	0.8%	588	666	745	823
MIXED PLASTIC	0.4%	0.8%	578	655	732	809
PP	0.8%	0.7%	552	626	699	773
PVC	0.0%	0.0%	-	-	-	-
OTHER	0.0%	0.0%	-	-	-	-
FERROUS METAL	2.1%	1.9%	1,437	1,628	1,820	2,011
NON-FERROUS METAL	0.4%	0.4%	280	317	355	392
GLASS	24.5%	24.5%	18,365	20,814	23,263	25,711
BULKY PLASTICS	0.3%	0.3%	217	246	275	304
BULKY METALS	0.9%	0.9%	675	765	855	945
FILM	1.25%	0.0%				
DRY WASTE	17.7%	19.6%	14,713	16,675	18,637	20,599
WET WASTE	2.0%	2.0%	1,485	1,683	1,881	2,079
TOTAL	100.0%	100.0%	75,000	85,000	95,000	105,000

Source: Cleanaway

6.2.3.2 Quality control for non-conforming waste

Incoming materials will be inspected in the six bays in the main receival hall. Loads suspected to contain hazardous material will be isolated to a single receival bay until they can be inspected and photographed.

The inbound kerbside delivery and inspection process for non-conforming waste is described below.

All trucks delivering kerbside material to the main receival hall will be directed to unload at the front of the main pile of a specific bay no closer than 4 m. The loader driver will inspect the load once the truck has departed. The loader driver will look for the following

1. Smoke or flames indicating a hot load. If smoke or flames are observed, Cleanaway fire procedures will be followed to isolate and contain the hot load.
2. Excessive contamination. If excessive contamination is observed Cleanaway's procedure for contaminated loads will be followed. The MRF Manager will be informed, photos taken, and the occurrence documented. The load will be removed from the main receival hall and disposed of appropriately off-site in accordance with EPA regulations.

Inbound commercial cardboard loads will be deposited at the commercial OCC receival area, well away from other cardboard, so the load can be inspected for contamination or signs of a hot load, prior to being pushed onto the baler feed conveyor. Cleanaway's policies for hot loads and contaminated loads will be followed if an incident occurs.

Dry waste will be held in a bunker conveyor and baled for distribution to the PEF35 Plant. Wet (putrescible) waste will be contained in sealed 30 m^3 compactor bin for delivery to landfill.

6.2.4 Mitigation Measures

Mitigation measures are generally prepared in alignment with better practice for waste management and recycling and in line with the waste management hierarchy in the *Waste Avoidance and Resource Recovery Act 2001.* As such, the WMP has identified that waste streams are to be re-used, recycled or recovered, with disposal being the last resort.

The WMP identifies waste avoidance strategies, waste segregation and storage strategies and monitoring and reporting of waste materials during the construction of the proposed MRF.

The WMP identifies better practice waste management for the daily operation of the facility, including waste from the office space. Strategies include waste avoidance, reuse, recycling, litter management and communication strategies for staff and visitor awareness, and monitoring and reporting.

During the MRF processing, the WMP contains guidelines for dealing with non-conforming waste through quality control, waste tracking through measuring the weight of vehicles entering and exiting the site and utilising Cleanaway's offsite facilities to minimise and manage recyclable materials transported, generated and received for processing.

The implementation of the WMP prepared by SLR will facilitate the operation of the facility with minimised environmental impacts.

6.3 TRAFFIC AND TRANSPORT

Traffix was engaged to prepare a Traffic Impact Assessment (**TIA**) to identify and analyse the potential traffic-related impacts associated with the proposed development. The report has been prepared in accordance with the SEARs issued for the SSDA, including the appended submissions from relevant transport authorities, as well as legislative requirements and relevant guidelines, including Council's DCP.

6.3.1 Existing Environment

The TIA includes a review of the existing and future road network, including a description of regional and local roads, public transport and pedestrian and cycle access. Traffic surveys were undertaken to quantify the existing and future traffic flows along key roads and performance of key intersections, including:

- Westlink M7 Motorway
- Woodstock Avenue
- Glendenning Road
- Kellogg Road

Figure 35 Road Hierarchy

Source: Traffix

6.3.2 Potential impacts

The report assesses the potential traffic generation and distribution of traffic for the future development and the adequacy of the proposed internal access, parking and service provisions.

6.3.2.1 Existing Site Generation

The subject site currently accommodates an industrial/warehouse facility development with an approximate gross floor area (GFA) of 11,610m^2. Traffix calculates an estimated existing traffic generation as follows:

- 58 vehicle trips per hour during the morning peak period.
- 58 vehicle trips per hour during the evening peak period.

6.3.2.2 Development Trip Generation

The impacts of the proposed development on the external road network have been assessed using a first principles approach, as the *TfNSW Guide 2002* and *TfNSW Technical Direction* (TDT 2013) do not accurately reflect the anticipated trip generation for a materials recycling facility.

The below **Table 21** summarises the proposed heavy vehicle movements.

Table 21 Heavy vehicle trips

Vehicle type	**Vehicle trips**	
26m B-Doubles / 20m Articulated Vehicles / 19.6m Truck and Dogs	4 vehicle trips in the morning peak period	(2 in, 2 out)
	4 vehicle trips in the evening peak period	(2 in, 2 out)
Rigid vehicles	8 vehicle trips in the morning peak period	(4 in, 4 out)
	0 vehicle trips in the evening peak period	(0 in, 0 out)
Combined Heavy Vehicle Trips	**12 vehicle trips in the morning peak period**	**(6 in, 6 out)**
	4 vehicle trips in the evening peak period	**(2 in, 2 out)**

The proposed MRF will operate with a total of two MRF shifts, and a single office staff shift, noting that the above truck numbers are in reference to the full capacity of the site. The shifts proposed are outlined below in **Table 22**.

Table 22 Heavy vehicle trips

Shift	**Hours**	**Staff numbers**
MRF AM shift	4:00am – 2.15pm	24
MRF PM shift	2:30pm – 12.30am	20
Office shift	9:00am – 5.00pm	11

As shown in **Table 22**, the MRF shifts are staggered to ensure that a maximum of 40 staff will be on-site at any one-time. The shift changes are also outside of the morning and evening network peak periods. Accordingly, only the office staff will coincide with the morning and evening network peak periods and this is the staff scenario that Traffix has assessed.

Therefore, the combined traffic generation of the site can be summarised as follows in **Table 23**.

Table 23 Combined traffic generation

Vehicle type	**Vehicle trips**	
Heavy vehicle trips	12 vehicle trips per hour in the morning peak period	(6 in, 6 out)
	4 vehicle trips in the evening peak period	(2 in, 2 out)
Light vehicle trips	10 vehicle trips in the morning peak period	(10 in, 0 out)
	10 vehicle trips in the evening peak period	(0 in, 10 out)
Combined Vehicle Trips	**22 vehicle trips in the morning peak period**	**(16 in, 6 out)**
	14 vehicle trips in the evening peak period	**(2 in, 12 out)**

Traffix has assessed the above traffic generation against the existing traffic generation on the site. It concludes the proposed development will result in a net reduction in the number of vehicle trips in morning and evening network peak periods as summarised below:

-36 vehicle trips per hour during the morning peak period (-30 in, -6 out) and
-44 vehicle trips per hour during the morning peak period (-10 in, -34 out)

Notwithstanding, in response to the SEARs and the request from TfNSW, SIDRA 9 Intersection modelling has been conducted for the intersections identified below in **Figure 36**, showing a comparison of level of service between the 2019 Base scenario, the 2019 Base Case + Development scenario and the 2029 Base scenario with consideration of the impact of the proposed development.

Figure 36 SIDRA 9 Intersection modelling analysis

Intersection	Control Type	Scenario	Period	Degree of Saturation (DoS)	Average Delay	Level of Service
Glendenning Road Signal	Signalised	2019 Base	AM	0.286	11.0	A
			PM	0.350	11.4	A
		Base + Development	AM	0.290	11.0	A
			PM	0.351	11.5	A
Woodstock Avenue and Glendenning Road	Roundabout	2019 Base	AM	0.230	10.5	A
			PM	0.334	10.3	A
		Base + Development	AM	0.234	10.5	A
			PM	0.344	10.3	A
Woodstock Avenue and Kellogg Road	Signalised	2019 Base	AM	0.294	9.7	A
			PM	0.355	11.6	A
		Base + Development	AM	0.295	9.9	A
			PM	0.360	11.7	A
Woodstock Avenue and M7 On-ramp	Signalised	2019 Base	AM	0.321	10.4	A
			PM	0.253	8.5	A
		Base + Development	AM	0.322	10.3	A
			PM	0.255	8.5	A
Woodstock Avenue and M7 Off-ramp	Signalised	2019 Base	AM	0.570	12.4	A
			PM	0.342	11.2	A
		Base + Development	AM	0.572	12.5	A
			PM	0.342	11.2	A

Intersection	Control Type	Scenario	Period	Degree of Saturation (DoS)	Average Delay	Level of Service
Glendenning Road Signal	Signalised	2029 Base	AM	0.349	11.5	A
			PM	0.468	12.4	A
Woodstock Avenue and Glendenning Road	Roundabout	2029 Base	AM	0.373	10.8	A
			PM	0.477	10.8	A
Woodstock Avenue and Kellogg Road	Signalised	2029 Base	AM	0.382	11.1	A
			PM	0.459	12.9	A
Woodstock Avenue and M7 On-ramp	Signalised	2029 Base	AM	0.391	10.7	A
			PM	0.309	8.6	A
Woodstock Avenue and M7 Off-ramp	Signalised	2029 Base	AM	0.765	13.6	A
			PM	0.417	11.5	A

Source: Traffix

The assessment was conducted using the SIDRA Intersection 9 computer program to determine the intersection performance characteristics. It can be seen in **Figure 36** that all intersections operate at a LoS A during both the base and development scenarios.

To satisfy Council and TfNSW requirements, an assessment of the 2029 scenario was completed reflecting changing traffic conditions arising from 10 years of 'background' traffic growth at a rate of 2% per annum, which is a cumulative increase of 22% on all movements at all intersections. The modelling indicates that all intersections would operate with spare capacity in the future in all scenarios. Based on the above assessment, the proposed development will have minimal impact on the road network and no external

infrastructure improvements (intersection upgrades, etc) are required to accommodate the proposed development.

6.3.2.3 Pedestrian Safety and Connectivity

The Woodstock Avenue frontage and Kellogg Road frontages provide pedestrian footpaths that traverses the length of the site. Signalised pedestrian crossings are provided at key pedestrian desire lines between the subject site and the residential land zoning west of the M7 Motorway. An off-road shared path is also provided on the northern side of Woodstock Avenue, providing viable bicycle connections between the site and residential areas.

It is noted that the 756 bus service (Mount Druitt to Blacktown) operates along Glendenning Road with two bus stops located approximately 560 metres north of the site. Currently there is no pedestrian infrastructure located between the western bus stop and the subject site along Glendenning Road. This missing link may already be scheduled on Council's capital works program and further discussions with Council will be required to determine the need for any infrastructure improvements in the vicinity of the site.

6.3.2.4 Public Transport

The site is approximately 870 metres south of a bus stop located on the corner of Power Street and Glendenning Road that services the 756 bus service. The 756 provides connections to Plumpton, Doonside, Woodcroft and Blacktown and passes along Power Street. In addition, the Rooty Hill Railway Station is located 1.8 kilometres from the site. Based on the 2016 Census Data, Traffix identifies that potentially only one staff member would utilise public transport to commute to the site. However, the use of public transport will likely increase through the implementation of a Workplace Travel Plan.

6.3.2.5 Preliminary Construction Traffic Management Plan

A preliminary Construction Traffic Management Plan (**CTMP**) has been prepared by Traffix in Section 12 of **Appendix J**. The preliminary CTMP contains guidelines on the following that will be refined in a detailed CTMP prior to issue of a construction certificate:

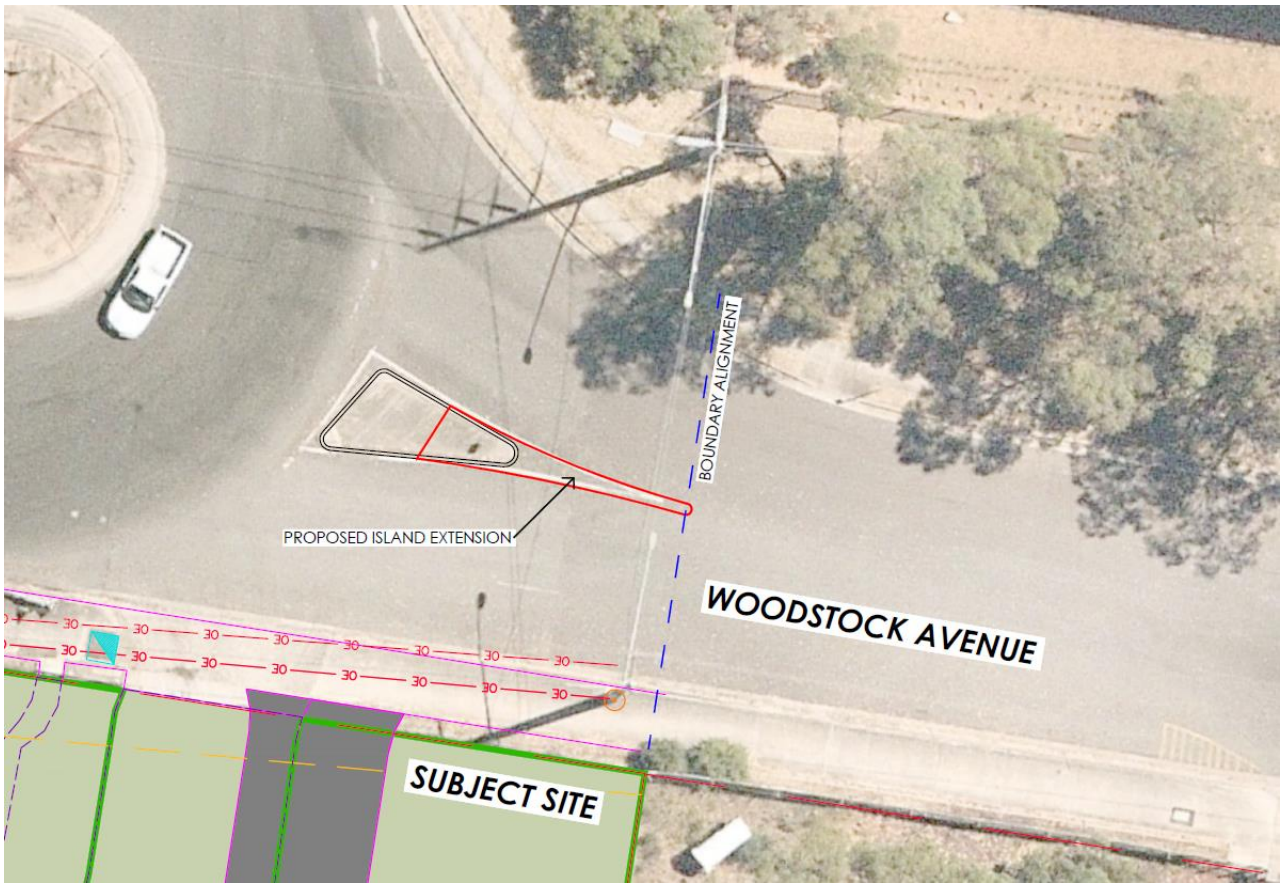
- Vehicular access to cater for heavy vehicles on the western and southern boundary.
- Approximately 10-50 heavy vehicle movements are expected per day (to be confirmed in the final CTMP).
- Truck routes for construction of the development would utilise the main arterial roads serving the region, noting that all truck routes will begin and end at the M7 motorway (to be confirmed in the final CTMP).
- Road safety at each intersection will be assessed once construction truck volumes and routes are finalised. This will be managed through the implementation of Traffic Control Plans at key intersections or conflict points in the vicinity of the site by SafeWork NSW certified Traffic Controllers.
- Trucks arriving to site will be linked via CB radio and/or hands free mobile and only called to site when required and when there is capacity within the site to accommodate the truck.
- All site staff related with the works are to park in designated off-street areas or be encouraged to use public transport.
- Hoarding will be provided around the perimeter of the site to provide pedestrian control and safety.
- Temporary bicycle parking and end of trip facilities are expected to be provided on-site within the site's compound.
- Emergency vehicle access will be maintained adjacent to the work site at all times.

6.3.3 Mitigation Measures

Overall, the assessment has identified that the proposed development will result in a reduced trip generation in comparison to the existing site conditions and minimal impact on the existing road network. Notwithstanding, Traffix has identified the following mitigation measures:

- A comprehensive Green Travel Plan is to be prepared to encourage the use of public transport and alternative modes of transportation to reduce traffic generation and pollution. This would be supported by a Transport Access Guide to encourage travel by alternative means other than private cars.
- Carpark access (northern boundary) is for staff and visitor vehicles only and therefore separates light and heavy vehicle movements (western and southern boundary).
- The development is to be designed in accordance with AS2890.1 (2004), AS2890.2 (2018) and AS2890.6 (2009) including parking modules, clear head heights, loading bays and other considerations.
- A detailed construction traffic management plan will be prepared in response to a suitable condition of consent for the SSDA.
- A proposed traffic management plan provided by Cleanaway in **Appendix X**, proposes the installation of a Traffic Light system on site and the use of two-way radios to manage vehicle movements on site, to mitigate any potential conflict of movements. A detailed traffic management plan should be prepared in response to a suitable condition of consent for the SSDA.
- The existing splitter island on the eastern leg of the Woodstock Avenue and Glendenning Road intersection be extended by approximately 6 metres to encourage drivers to turn around within the existing cul-de-sac, as shown in **Figure 37**.

Figure 37 Concept design for proposed splitter island on Woodstock Avenue



Source: Traffix

6.4 NOISE AND VIBRATION

Acoustic Works was engaged to prepare a Noise and Vibration Impact Assessment (**NVIA**) for the proposed development (refer to **Appendix M**). The assessment report addresses the SEARs requirements, and considers the cumulative impacts of all stages of the proposed development to sensitive receivers in the vicinity of the site.

The relevant noise criteria for the assessment was determined in accordance with the issued SEARs, NSW DECC's *Assessing Vibration: A Technical Guideline 2006* and the NSW Noise Policy for Industry 2017.

Acoustic Works used the following equipment to record noise levels:

- 2x Rion NL42 Environmental Noise Monitors (SN# 00509258 and SN# 01259207)
- Pulsar Model 105 Ltd Sound Calibrator (SN # 57417)

The Environmental Noise Monitors hold current NATA Laboratory Certification and were field calibrated before. Rion NL42 environmental noise monitors were placed at 2 Wolseley Street (Monitor A) and 540 Woodstock Avenue (Monitor B) as shown in **Figure 38** to measure ambient and traffic noise levels respectively. These locations were chosen as they were considered representative of the nearest residential receivers. The monitors were located in free field positions with the microphones approximately 1.4 metres above ground surface level. The monitors were set to record noise levels between the 5th to 13th of October 2021.

The environmental noise monitors were set to record noise levels in "A" weighting, Fast response using 15 minute statistical intervals. Ambient noise monitoring was conducted in accordance with Australian Standard AS1055:2018 Acoustics – Description and measurement of environmental noise. For the unattended noise monitoring locations refer to Figure 3.

6.4.1 Existing Environment

The NVIA establishes the locality context for the proposed development, including the surrounding land uses and proximity to the closest residential receivers. The nearest sensitive receiver locations were identified as follows:

1. The Westlink M7 Motorway separates the site from single and two storey residential dwellings to the north west.

2. The Westlink M7 Motorway separates the site from single and two storey residential dwellings to the west.

3. The Westlink M7 Motorway separates the site from single and two storey residential dwellings to the south west.

A. Woodstock Avenue separates the site from industrial premises to the north.

B. Kellogg Road separates the site from industrial premises to the west.

C. Kellogg Road separates the site from industrial premises to the south.

D. Industrial premises are located adjacent the eastern site boundary.

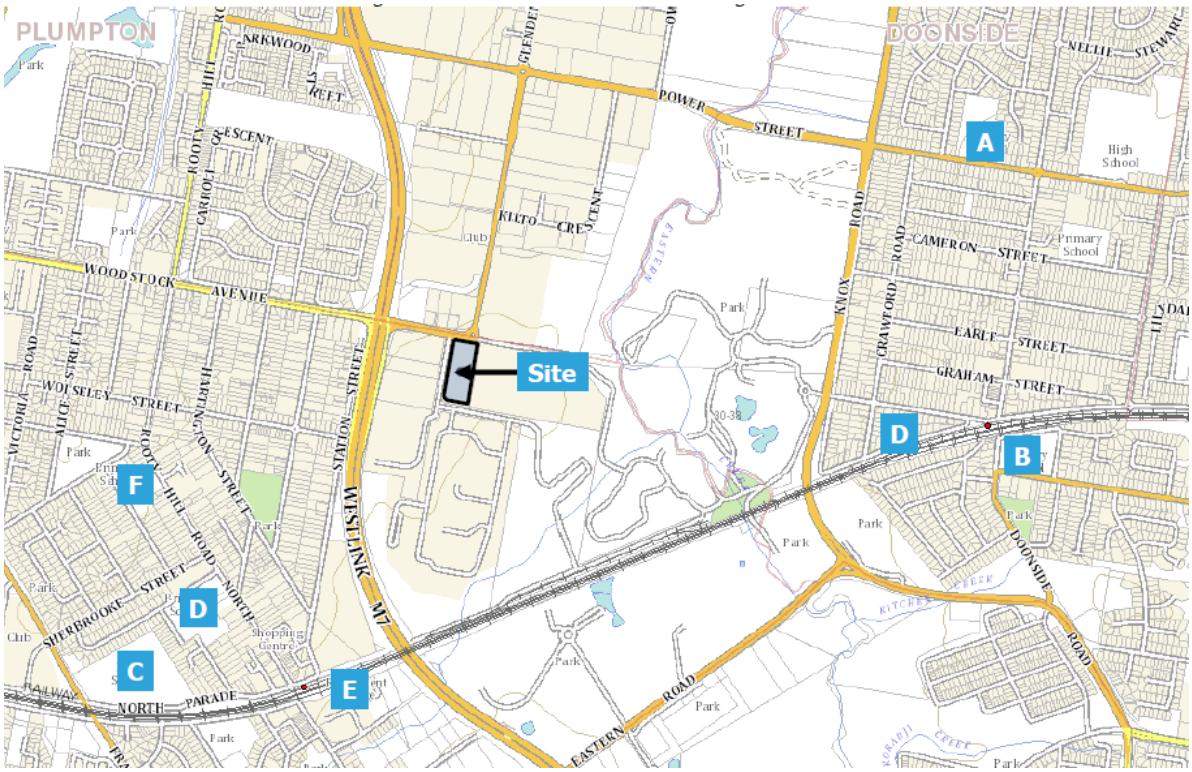
These locations were chosen as they are the nearest sensitive receivers to the proposed development as shown in **Figure 38**.

Although multiple dwellings are grouped for receivers 1, 2 and 3, to ensure a conservative assessment all calculation of noise impacts were assessed to the nearest dwelling within the nominated area. The receivers nominated in **Figure 38** are the nearest and potentially worst-affected sensitive receivers to the site.

Figure 38 Nearby receiver and noise monitoring locations

Source: Acoustic Works

Figure 39 Distant receivers



Source: Acoustic Works

The NVIA identified distant sensitive receivers with the potential to be affected by cumulative noise from the site were identified as follows:

A. Crawford Public School is located to the north east of the site.

B. Doonside Public School is located to the east of the site.

C. Rooty Hill High School is located to the south west of the site.

D. Rooty Hill Public School is located to the south west of the site.

E. Melva McDonald Lodge, a retirement village, is located to south of the site.

F. St Aidan's Primary School is located to the west of the site.

G. Doonside Christadelphian Church is located to the east of the site.

The above receivers (as shown in **Figure 39**) were nominated as the distant receivers with the most potential to be adversely affected by noise impacts from the site. Other receivers not mentioned are predicted to be less affected than those nominated.

6.4.2 Potential impacts

The potential noise and vibration impacts were assessed in accordance with the SEARs for the SSDA, relevant construction noise guidelines, construction road traffic noise guidelines, construction ground-borne noise guidelines, construction vibration guidelines and operational noise guidelines. The assessment was prepared based on assumptions regarding the type and location of equipment and construction activities, including operating hours.

The assessment considered noise and vibration impacts, including:

- Operational noise
- Traffic noise
- Onsite mechanical plant
- Vibration

Noise associated with the development was assessed using 3D SoundPLAN modelling, showing the predicted worst-case 15 minute noise impacts associated with typical onsite activities such as trucks, forklifts, reverse alarms, mechanical plant and carpark activities. As SoundPLAN calculations return results in LAeq,period format, a +3dB correction was applied to all results to convert them to LAeq,15min in accordance with Section 2.2 of the Noise Policy for Industry (2017).

The noise assessment identifies compliance with the cumulative impact criteria is predicted for all onsite activities at the nearby receiver locations and distant receivers during the proposed operating hours with no need for further treatment.

Compliance with sleep disturbance criteria is predicted for all onsite activities at the receiver locations during the proposed operating hours on the condition the recommendations detailed in **Section 6.4.3** and **Appendix J** are implemented.

Potential vibration and acceleration impacts were assessed to determine typical levels within a set distance of the activity to the receiver with a maximum combined Peak Particle Velocity of level less than 1mm/s predicted based on the equipment in operation. The level of impact may change depending on the ground composition, example stone/rock or concrete will allow higher levels of ground vibration than soft soil. It is recommended a strict management plan is implemented to allow a proactive approach to addressing complaints including vibration monitoring of activities if complaints are received.

Traffic generated by the development is predicted to comply with the NSW Road Noise Policy criteria at all nearby residences except for those where the criteria are exceeded by existing traffic noise levels. Compliance is predicted with the Relative increase criteria for residential land uses.

6.4.3 Mitigation Measures

The NVIA identifies that the proposed development is predicted to comply with the noise and vibration assessment criteria without the need for further treatment. To provide further mitigation of any potential impacts, the NVIA recommends the following:

- Once mechanical plant selection is finalised at the detailed design phase following approval, an assessment by a qualified acoustic consultant should be conducted prior to installation to determine any requirements for acoustic treatment.
- Vibration associated with truck activity and onsite activities is predicted to comply with the relevant NSW guidelines at the nearest sensitive receivers. Acoustic Works recommends that any vibrating equipment used onsite is adequately isolated to prevent vibration issues to nearby receivers and is reviewed by a qualified acoustic consultant. If complaints are received for vibration, the NVIA nominates management controls to be implemented.
- The NVIA nominates vibration monitoring procedures to warn of any vibration impacts on sensitive receivers.
- A Noise Management Plan is recommended to determine additional suitable mitigation strategies and or acoustic treatments in the event that noise complaints are received.

Each of the above measures can be implemented during construction and operation. Accordingly, the potential noise and vibration impacts arising from the proposed development are considered acceptable and can be appropriately managed.

6.5 AIR QUALITY

Northstar was engaged to prepare an Air Quality Impact Assessment (**AQIA**) for the proposed development (see **Appendix N**). The assessment report addresses the SEARs requirements, and considers the cumulative impacts of all stages of the proposed development to sensitive receivers in the vicinity of the site

A construction dust risk assessment has been performed to determine the potential air quality impacts on surrounding receptor locations, and mitigation measures required to manage that risk. Given the size of the Proposal site, the distance to sensitive receptors and the activities to be performed, residual impacts associated with fugitive dust emissions from the construction of the Proposal would be anticipated to be negligible, should the implementation of the mitigation measures be performed appropriately.

A dispersion modelling assessment conducted in accordance with the relevant NSW Environment Protection Authority guidance has been performed to determine the likely air quality impacts upon surrounding receptor locations. Activity rates associated with average operational conditions have been used to determine the potential impact and compared against annual average criteria. To determine the potential maximum 24-hour impact of the Proposal, the materials haulage, handling and processing rates have been assumed to be 1.4 times that of the daily average rates. This is considered to represent a conservative assumption.

6.5.1 Existing Environment

Northstar has identified that the elevation of the Proposal site is approximately 45 metres Australian Height Datum (**AHD**). The topography between the Proposal site and nearest sensitive receptor locations is uncomplicated, from an air quality modelling perspective.

A desk-top mapping study has been undertaken to identify ‘discrete receptor locations’, which are intended to represent a selection of locations that may be susceptible to changes in air quality. The site is located in an area of very low/ low population density which would be expected given the industrial nature of the surrounding area. Medium population densities are observed to the west and north-west of the site. The locations of selected discrete receptor locations is shown in **Figure 40**. Using ABS data in GIS, the population density of the area surrounding the site is also shown in **Figure 40.**

Figure 40 Population density and sensitive receptors surrounding the site

Source: Northstar

6.5.2 Potential impacts – Construction Air Quality Impact

The assessment conducted considers the sensitivity of the identified receptors is classified as low for dust soiling, and medium for health effects, and the dust emission magnitudes for the various construction phase activities. The resulting risk of air quality impacts (without mitigation) is presented below in **Figure 41**.

Figure 41 Risk of air quality impacts (unmitigated) from construction activities

Impact	Sensitivity of Area	Dust Emission Magnitude					Preliminary Risk				
		Demolition	Earthworks	Construction	Track-out	Const. Traffic	Demolition	Earthworks	Construction	Track-out	Const. Traffic
Dust Soiling	low	large	large	large	med	large	high	med	med	low	med
Human Health	med	large	large	large	med	large	high	med	med	low	med

Source: Northstar

The risks summarised in **Figure 41** show that there is a high risk of adverse dust soiling and high risk of human health impacts at sensitive receptors, if no mitigation measures were to be applied to control emissions associated with demolition. Earthworks, construction and construction traffic activities are associated with a medium risk of dust soiling impacts and human health impacts while track-out activities correspondingly have a low risk.

Mitigation measures are proposed in the AQIA and summarised in **Section 6.5.4.** The AQIA concludes that given the size of the Proposal site, the distance to sensitive receptors and the activities to be performed, residual impacts associated with fugitive dust emissions from the Proposal would be anticipated to be 'negligible, should the implementation of the mitigation measures outlined above be performed appropriately.

Accordingly, the potential air quality impacts arising from the proposed development during construction are considered minimal and can be appropriately managed.

6.5.3 Potential impacts – Operational Air Quality Impact

The Northstar report identifies that the proposal has incorporated a range of emissions control measures into the design. These measures are summarised as follows:

- All materials receival, handling, processing and loading activities will occur in an enclosed building, with fast acting roller doors operated. The use of an enclosed building will act to reduce wind shear, and wind speeds within that building, resulting in significantly lower generation of particulate matter, and reduce the potential for that material to be transported offsite. In accordance with (NPI, 2012), an emission control factor of 70 % has been applied to particulate emissions generation due to the operation of all activities within the enclosed building.
- The fast-acting roller shutter doors will be closed at all times except to allow the ingress and egress of vehicles. The control factor applied to account for the effect of enclosure on the propagation of articulate emissions assumes that 70 % of particulates would be controlled and correspondingly, 30% may be emitted. This control factor accounts for the potential emission during periodic door openings for vehicle access.
- A range of dust collection equipment will be included on the materials sorting lines, and for the purposes of this assessment, that equipment is assumed to be included on all conveyor transfer points, the air separator, the glass breaker, ballistic separator, plastic separator, and metals magnet. Although a particulate control efficiency for such equipment is not provided in the literature, an efficiency of 50 % has been adopted and is considered reasonable. The specific design of the dust collector/suppressor units will be determined during detailed design in consultation with a qualified air quality specialist.

- External roadways at the Proposal site would all be constructed of hardstand/paved surface which would be regularly swept to ensure that silt loadings are minimised. In addition, vehicle speeds within the Proposal site will be limited to 15 km·hr-1, which would also ensure that any resuspension of deposited material is reduced.

The following assessment has been completed with the assumption these control measures are implemented.

6.5.3.1 Particulate Matter

The assessment predicts the annual average particulate matter concentrations (as TSP, PM_{10} and $PM_{2.5}$) resulting from the proposed operations. The results indicate that predicted incremental concentrations of TSP, PM_{10} and $PM_{2.5}$ at all receptor locations are low (< 2.6% of the annual average TSP criterion, < 2.8% of the annual average PM_{10} and < 1.9% of the $PM_{2.5}$ criterion.

The addition of existing background concentrations, results in predicted concentrations of annual average TSP being < 53 % and annual average PM_{10} being ≤ 91 % of the relevant criteria at the nearest receptors.

The existing adopted annual average $PM_{2.5}$ background concentration is shown to be in exceedance of the relevant criterion, even without the operation of the Proposal added.

Examination of the predicted $PM_{2.5}$ impacts which would result from the operation of the Proposal indicates that these concentrations are predicted to be < 0.2 µg·m-3 at all surrounding receptors (essentially an immeasurable change to background).

The inclusion of the best practice management dust control measures is shown to minimise offsite annual average $PM_{2.5}$ impacts to the maximum extent possible.

In summary, the AGIA identifies that the performance of the Proposal does not in itself result in any exceedances of the annual average particulate matter impact assessment criteria. The analysis indicates that no additional exceedances of the 24-hour average impact assessment criterion for PM_{10} or $PM_{2.5}$ are likely to occur as a result of the operation of the Proposal. Examination of the results for all receptors indicates that no additional exceedances of the PM_{10} and $PM_{2.5}$ criterion are predicted at any receptor location (including at all industrial receptors). The implementation of best practice emission controls at the Proposal site results in the minimisation of PM_{10} and $PM_{2.5}$ concentrations at surrounding receptors.

6.5.3.2 Dust

Annual average dust deposition is predicted to meet the criteria at all receptors surrounding the Proposal site where the predicted impacts are < 9 % of the incremental criterion at receptor locations.

The performance of the Proposal does not result in any exceedances of the annual average dust deposition impact assessment criteria.

6.5.3.3 Odour

The results presented in the AQIA indicate that the operation of the Proposal would not likely result in any exceedance of the assessment criterion for odour at all receptor locations. Accordingly, it would be anticipated that the odour environment currently experienced in the area would not significantly change because of the Proposal.

The potential for cumulative odour impacts associated with the Proposal and other, similar activities in the area is considered low.

6.5.4 Mitigation Measures

Based on the findings of the air quality impact assessment, it is considered that the current Proposal layout and operation will be sufficiently controlled to ensure that exceedances (or additional exceedances in the case of 24-hour PM_{10} and $PM_{2.5}$) would not be experienced because of the Proposal operation.

The Proposal has been designed to incorporate best practice particulate matter and odour control, which includes the performance of all activities within an enclosed building on hardstand, as described in **Section 6.5.4** of this EIS.

The mitigation measures are proposed to be included as part of the proposal operation and the control efficiencies.

In relation to the construction phase, the mitigation measures proposed, which represent the anticipated level of risk associated with that construction in the AQIA.

Further to the above mitigation, it is recommended that the proponent implements and maintains an Air Quality Management Plan (**AQMP**), including procedures for the recording, evaluation and actioning of complaints arising from the proposed activities. The AQMP should also include some air quality monitoring to confirm the findings of this AQIA and demonstrate compliance with the air quality impact assessment criteria and any other conditions of consent.

Accordingly, the potential air quality impacts arising from the proposed development are considered minimal and can be appropriately managed.

6.6 SOILS AND WATERS

WSP was engaged to complete an Environmental Due Diligence Assessment (**EDD**) Phase 1 and Phase 2, to assess the site surface and groundwater and confirm the suitability of the site to accommodate the proposed industrial development (refer to **Appendix P**). The objectives of this assessment are stated in the report as follows:

- *potential contamination and salinity hazard of soil and groundwater*
- *the site's suitability for ongoing commercial/ industrial land use, inclusive of the proposed development.*
- *any other environmental matters of potential concern relating to soil quality.*

The site investigations included:

- drilling of 13 boreholes in accessible areas across the site of approximately 1.5m below ground level.
- Installation of groundwater monitoring wells (MW10 to MW04) in four of the boreholes.
- Collection of soil samples from each borehole for subsequent selective laboratory analysis.
- Collection of groundwater samples from each monitoring wells for subsequent selective laboratory analysis.

Northrop was engaged to prepare a Civil Engineering Report (refer to **Appendix O**) which addresses the civil engineering matters to support the proposed development, including the required site works, stormwater management and sediment and erosion control. The report should be read in association with the attached Civil Engineering Drawings which show the proposed infrastructure design (also held as **Appendix O**).

6.6.1 Existing Environment

The following relate to environmental sensitivity for the area:

- The Site is within a predominantly industrial area. Low density residential properties are located approximately 315 m west of the Site.
- The nearest natural water body, a small tributary of Eastern Creek (Angus Creek), is located approximately 530 m south-west of the Site. Eastern Creek is located approximately 600 m to the east of the Site.
- Nurragingy Reserve, a small National Reserve is located approximately 400 m to the east of the Site.
- There is no registered beneficial use of groundwater within a 500 m radius of the Site.
- The Site is located within an area of extremely low probability of occurrence of ASS.
- The Site is located in an area of high probability for widespread land salinity (eSpade) or moderate salinity (Department for Infrastructure, Planning and Natural Resources (2002)).

6.6.2 Potential impacts – Soil and groundwater

The EDD prepared by WSP identified the following findings:

- No contaminants of concern in soil were at concentrations above the human health adopted investigation criteria for commercial/industrial land use. Concentrations of nickel were above the ecological adopted investigation criteria for commercial/industrial land use, however, these concentrations are not considered to present a risk as no stressed vegetation was noted on Site and the Site will continue to be used as a commercial/industrial facility with minor areas of vegetation.
- Minor concentrations of TRH, total creosol, total phenol fenitrothion and methyl parathion were detected during laboratory analysis. These could be attributed to the former or current site activities, however, they are not considered to present a risk to future site users as they will not come into contact with the subsurface soil due to the presence of hardstand across the Site. Contact with soil during construction can be managed by implementation of a CEMP.
- Shallow soils are generally non- to moderately saline. Salinity on the Site appears to generally increase with depth. During intrusive investigation no evidence of shallow groundwater (<1m) was observed. Deeper structures (including footings, piles and service trenches) extending into the shale lithology should have salinity resistant materials incorporated into their design. Based on the results from this preliminary investigation salinity does not present a significant risk of corrosion to shallow structures. To minimise the impact of the water and salt processes on the development, possible management options may include careful installation of damp-proof courses and good site drainage.
- No asbestos or potentially asbestos-containing material was observed on site at the surface or during drilling. No asbestos was identified by laboratory analysis.
- No contaminants of concern in groundwater were at concentrations above the adopted assessment criteria for freshwater with the exception of concentrations of cadmium, copper, nickel and zinc. Concentrations of copper, nickel and zinc above the adopted assessment criteria for the protection of freshwater are likely reflective of background concentrations. Concentration of cadmium above the adopted assessment criteria for the protection of freshwater are potentially related to the industrial nature of the larger area that the Site is located within.
- Sulfate concentrations are non-aggressive to concrete.
- Chloride concentrations are non-aggressive to mild towards steel piles.
- The soil is slightly acidic to neutral, and have low level of aggressiveness towards concrete and non aggressive towards steel piles.
- Soil samples indicate highly sodic soils. This suggests that soils will be prone to erosion if not appropriately stabilised during construction.
- The proposed development does not require a detailed flood impact assessment as it is not located in a flood affected area.

6.6.3 Potential impacts – Contamination avoidance

Without integrated design solutions and operational protocols, there would be potential water runoff leaving the site during operations that may contain contaminants, including from:

- Particles from materials that are being sorted on site.
- Fire water in the event of a fire on site.

However, these risks are low for the following reasons:

- The MRF is design to be a dry site meaning there is no sources of water required for processing waste or for the purposes of sorting
  - This site has been intentionally designed to be a dry site to reduce the use of water and mitigate contamination and contaminated wastewater
- There will be a misting system in the middle compartment of the processing facility

  - The misting will assist in dust suppression and is a very minor amount of water required to achieve this.
  - The volume of water generated by misting will not be enough to pool or create a flow of water on site.
  - The misting will occur in an enclosed compartment of the processing facility, meaning that the misting cannot escape the site.
- A part of the system as shown in the waste processing flow chart is a liquid removal process which collects the wet waste and seals in a container for processing at a liquid waste processing plant (off site). As such, there is no opportunity for contaminated water to pool or flow off site.
- Water sources in the facility can be associated with fire fighting only and they will be managed through the onsite detention system as detailed in the civil engineering drawings (refer to **Section 6.6.4**).

6.6.4 Mitigation Measures

- **Stormwater works:** the proposed stormwater management system has been designed to accommodate the future industrial development in accordance with relevant policies and guidelines, including:
  - Blacktown Development Control Plan (2015) (the DCP)
  - Blacktown City Council Engineering Guide for Development (2005)
  - AS 3500:2018.
  - Managing Urban Stormwater Soil & Construction (2004) by Landcom (The Blue Book);
  - Blacktown City Council WSUD developer handbook (2020)
  - Blacktown City Council WSUD Inspection and maintenance guidelines (2019)

The major/minor approach to stormwater drainage is the recognised drainage concept for urban catchments within the Blacktown City Council Local Government Area.

As described in **Section 3.2.6.4**, the proposed development has been designed to the Blacktown City Council civil engineering design standards, including requirements for OSD. The Stormwater Management Plan proposes that the site will drain to the south and connect to Council's existing stormwater infrastructure on Kellogg Road. The OSD located in the south west corner of the site will have a capacity of 860.5m3.

The requirement for water quality management will be achieved through a VPA to offset water quality requirements off-site. In addition to the above, the development will incorporate stormwater quality system items including a Gross Pollutant Trap, rainwater tank and filtration cartridges as described in **Section 3.2.6.4**.

The minor drainage system is comprised of below ground pit and pipe network and is designed to control nuisance flooding and enable effective stormwater management for the site. Council requires the minor drainage system to be designed for the critical 5% Annual Exceedance Probability (**AEP**) with overland flow safely catering for the 1% AEP storm.

This incorporates suitably designed overland flow paths and drainage to direct flows into the OSD system for all events up to the critical 1% AEP storm event. In accordance with Council's requirements, overland flow paths are designed to contain a 1% AEP storm. Overland flow paths are to be provided over all pipelines that are not designed to cater for this flow. The design of these overland flow paths must consider the velocity-depth hazard of 0.4m/s.

- **Sediment and erosion control:** appropriate sediment and erosion control measures have been included in the engineering drawings and described in **Section 3.2.6.4** to ensure downstream receiving waters are not adversely impacted by construction activities. These measures have been designed in accordance with relevant State and local requirements and will be implemented as part of the CEMP.

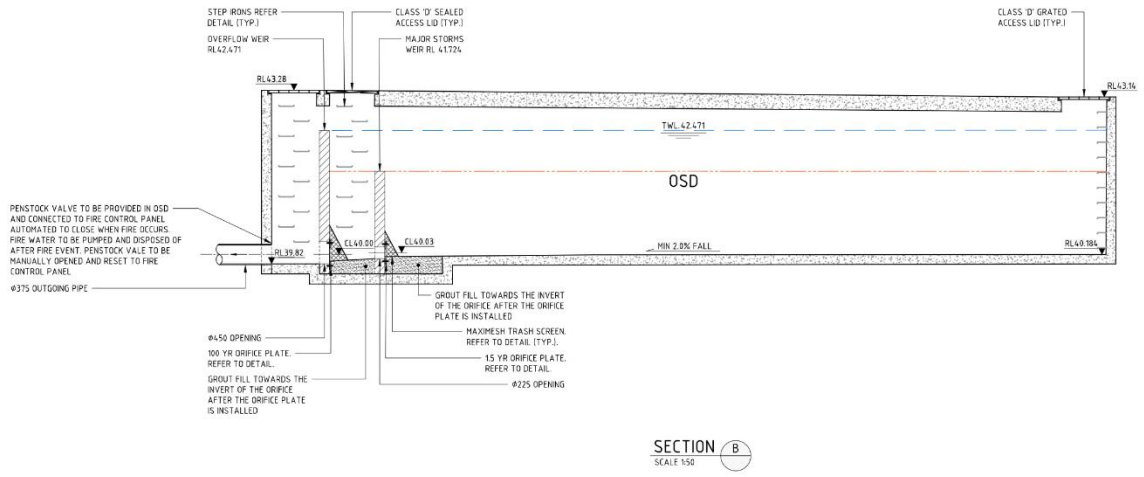
The Civil Engineering Report also confirms that adequate utility services are available to service the proposed future industrial development, including potable water, as outlined in detail within **Section 6.8** of this report.

It is considered that the potential impacts of the proposal can be satisfactorily mitigated, minimised or managed through the measures identified within the Civil Engineering Report and associated engineering

drawings. These documents can form part of the approval to enable their implementation during the demolition, construction and operational phases.

- **Fire water management:** The Fire Incident Management Plan prepared by Core Engineering Group (**Appendix Q**) outlines a requirement for fire water to be stored on site in the event of a fire. To prevent contamination of downstream waters, Core Engineering Group indicated that a total of 1,450m^3 of fire water is to be bunded on site. Northrop has proposed the following measures in Appendix O to store water in the event of a fire:
  - The stormwater pit and pipe network and OSD tank will be used as storage for fire water. The last pit prior to discharge to Council's network and the OSD tank are to be fitted with a penstock valve as shown in **Figure 42**. The penstock valve should be connected to the Fire Control Panel automated to close when fire event occurs. Fire water should be pumped and disposed of after a fire event. The Penstock valve should be manually opened and reset to fire control panel.
  - The Mechanical Conveyor Sump is also to be used for firewater bunding within the building, including a series of pipes connected to the mechanical conveyor sump for each fire compartment. A high-level overflow pipe to the OSD tank is to be provided to interconnect the two storage areas.
  - All doors' thresholds to be provided with 50mm bunding / transition to FFL to allow fire water to be directed to Mechanical Conveyor Sump.
  - The proposed design provides a total of 1,457m^3 capacity for fire water and therefore meets the required capacity.

Figure 42 Section of OSD basin to be used for fire water bunding



Source: Northrop

Based on the above solution to prevent fire water flowing downstream and the site being designed as a dry-site, there will be no requirement for the MRF to be connected to the sewer (aside from the existing office building amenities) and all stormwater conveyed from the site will be free of contaminants. As such, it is considered that a Trade Waste Agreement with Sydney Water is not required. Sydney Water has confirmed a Trade Waste Agreement is not required, as per the letter sent to DPE on 23 February 2022.

6.7 CONTAMINATION

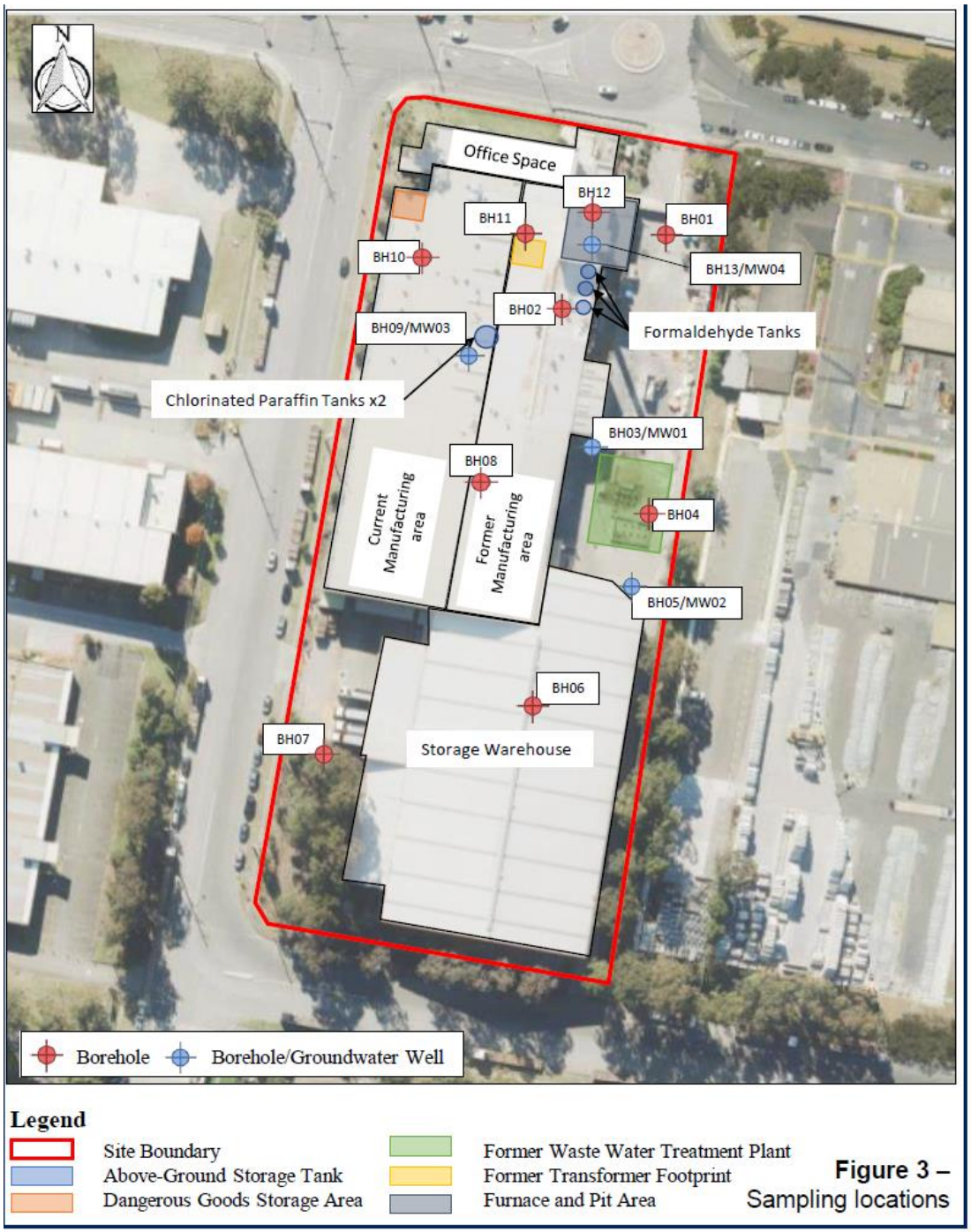
WSP was engaged to complete a Environmental Due Diligence Assessment (**EDD**) Phase 1 and Phase 2, to assess the site for any potential contamination and confirm the suitability of the site to accommodate the proposed industrial development (refer to **Appendix P**). **Appendix P** provides specific assessment of site contamination to satisfy the SEARS, including:

- Assessment in accordance with SEPP 55 – Remediation of Land
- Blacktown City Council require submission of a stage 2 site contamination report.
- Assess the site's suitability based on a review of the Phase 1 and Phase 2 EDD prepared by EDD.

The site investigations as shown in **Figure 43** included:

- drilling of 13 boreholes in accessible areas across the site of approximately 1.5m below ground level.
- Installation of groundwater monitoring wells (MW10 to MW04) in four of the boreholes.
- Collection of soil samples from each borehole for subsequent selective laboratory analysis.
- Collection of groundwater samples from each monitoring wells for subsequent selective laboratory analysis.

Figure 43 Sampling locations



Source: WSP

6.7.1 Potential impacts

Based on the findings of the EDD (**Appendix P**), WSP concluded:

- No contaminants of concern in soil were identified at concentrations above the adopted human health investigation criteria for commercial/industrial land use. Concentrations of nickel were above the adopted ecological investigation criteria for commercial/industrial land use, however, these concentrations were not considered to present a risk as no stressed vegetation was noted on site and the site will continue to be used as a commercial/industrial facility with minor areas of vegetation.
- Minor concentrations of total recoverable hydrocarbons (TRH), total creosol, total phenol fenitrothion and methyl parathion were detected during laboratory analysis. These were attributed to the former or current site activities. However, these contaminants were not considered to present a risk to future site users as they will not come into contact with the subsurface soil due to the presence of hardstand across the site. Contact with soil during construction can be managed by implementation of a construction environment management plan (CEMP).
- No contaminants of concern in groundwater were reported at concentrations above the adopted assessment criteria for freshwater except for concentrations of cadmium, copper, nickel and zinc. Concentrations of copper, nickel and zinc above the adopted assessment criteria for the protection of freshwater are likely reflective of background concentrations. Concentration of cadmium above the adopted assessment criteria for the protection of freshwater are potentially related to the broader industrial precinct surrounding the site.
- MEK, MIBK, acetone, bis(2-ethylhexyl) phthalate and di-n-butyl phthalate were detected in the groundwater at the site. The former or current operations of the site are potentially the source of these contaminants. There is the potential for higher concentrations of these contaminants to be located elsewhere on site in areas that were not accessible for investigation (i.e. inside the building footprints). A further contaminated land assessment, including soil vapour assessment, was recommended to be undertaken after site demolition and removal of the potential contamination sources and prior to site redevelopment.
- The EDD undertaken at the site identified contaminants of concern in the groundwater at the site above the adopted assessment criteria. A source could not be identified based on the contamination distribution however, former or current operations within inaccessible areas of the site (i.e. inside the building footprints) which could not be targeted for investigation were considered to potentially be the source of these contaminants.
- As such, there is the potential for higher concentrations of these contaminants to be elsewhere on site and so a further contaminated land assessment, including soil vapour assessment, is recommended to be undertaken after site demolition and removal of the potential contamination sources and prior to site redevelopment.

With consideration of potential impacts of elevated nickel levels on biodiversity (Cumberland Plain Woodland) on site, Cumberland Ecology assessed the proposal and concluded:

- The present nickel concentrations are not considered to present a risk to current vegetation and proposed landscape plantings within the subject land (WSP 2022).
- The area of nickel contamination is located within the centre of the subject land under the current buildings and within the footprint of proposed buildings. The nickel contamination occurs down to a depth of approximately 1m (WSP 2022). Whilst there have been no nickel testing locations within the proposed landscaping areas, testing locations closer to the proposed landscaping areas have returned results below the adopted assessment criteria (WSP 2022). The proposed landscape plantings, including the Cumberland Plain Woodland Characteristic trees are located along the outer boundary of the subject land and do not occur within areas of identified nickel contamination. Additionally, **the nickel contaminated soil is proposed to be removed via earthwork during the construction phase.**
- Subsequently, the identified nickel contamination is considered unlikely to result in negative impacts to the proposed landscape plantings within the subject site, including the Cumberland Plain Woodland characteristic trees. Nevertheless, it is recommended that further testing be undertaken throughout the proposed landscaping areas as part of future proposed staged contamination testing following demolition (WSP 2022). At the time of planting, soil within the landscaping area must have nickel concentrations below the adopted ecological investigation criteria. If nickel concentrations exceed the adopted ecological investigation criteria, appropriate ameliorative measures must be implemented under the guidance of a qualified contamination consultant. Additionally, the project landscape plan recommends monitoring of landscape plantings with replacement of any missing unhealthy or dead plants throughout

the life of the development which must be undertaken with consideration of the results of future nickel testing undertaken following demolition (Habit8 2022).

Based on the above assessment, the site is suitable for the proposed industrial use. Any requirements for additional investigation can be suitably required as a condition of consent and in accordance with the proposed mitigation measures.

6.7.2 Mitigation Measures

The following mitigation measures are recommended:

- Data gaps, including areas of potential concern, exist in the current site assessment in the locations of the current buildings and site infrastructure. After demolition of the current site structures and prior to construction of the proposal, further contamination assessments would be undertaken to identify potential contamination allowing for management of contamination risks to ensure there is no unacceptable risk to human health or the environment. The known areas of contamination will need to be documented and a management framework developed for addressing soil, sediment, ground gas and groundwater contamination during construction.
- The potential contamination and soil impacts should be minimised by:
  - Managing contamination in accordance with relevant legislative and policy requirements.
  - Implementing further staged investigation/assessment to ensure that the available information is sufficient to enable effective site management strategies to be devised.
  - Designing, constructing and operating the project to minimise impacts from soil and groundwater issues.
  - Implementation of an unexpected finds protocol (**UFP**) to address any additional contamination identified during site works.
  - Implementing the contamination mitigation measures described in Table 5.1 of **Appendix P**.

The recommendation for further intrusive investigations following the demolition of existing structures can be managed through suitable conditions of consent and should not preclude the approval of the proposed development. It is expected that any further intrusive works and/or remediation can be undertaken without consent under the provisions of SEPP 55.

It is considered that the potential impacts of the proposal can be satisfactorily mitigated, minimised or managed through the measures identified within the Site contamination assessment.

6.8 INFRASTRUCTURE REQUIREMENTS

Northrop was engaged to prepare a Civil Engineering Report which also addresses infrastructure requirements for the proposal (refer **Appendix O**). The report assesses the potential utility service infrastructure requirements associated with the future industrial development as outlined below:

- **Water:** A 300mm diameter cast iron cement lined (**CICL**) watermain is present within the verge on the western side of Kellogg Road and a 200mm diameter ductile iron cement lined (**DICL**) main is located on the southern side of Kellogg Road. A 150mm diameter CICL is located on the northern side of Woodstock Avenue.
- **Sewer:** A 225mm diameter vitrified clay (**VC**) sewer main is located on the eastern side of Kellogg Road with a stub end at a depth of 1.9m. This main appears to be of adequate size but it should be noted the south eastern portion of the site may not be able to drain to this existing connection point.
- **Gas:** A 10mm diameter 1050 kPa gas main is located with the verge of the Woodstock Avenue frontage and has an existing connection to the site.
- **Power:** Three pad mount (PM) electrical sub-stations are located adjacent to the northern boundary. The size of the sub stations could not be ascertained at this stage. Easement for right of way and allocation of land will be associated with the substations, supported covenants restricting land usage in this area.
- **Telecommunications:** NBN services are connected to the site via the northern of Woodstock Avenue boundary.

Based on the above assessment, the site can be adequately serviced with existing utility infrastructure.

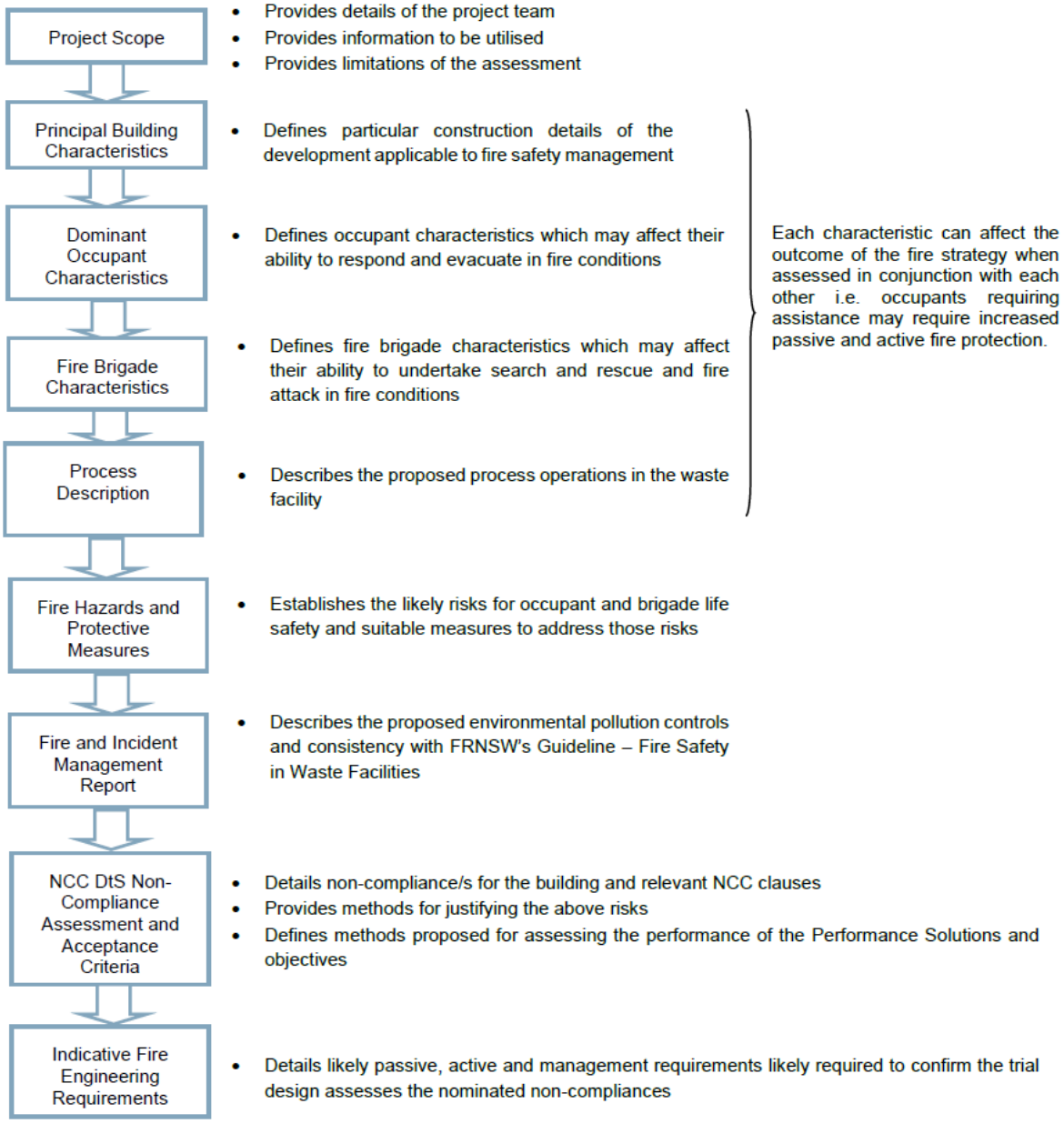
6.9 FIRE AND INCIDENT MANAGEMENT

Core Engineering Group (**Core**) was engaged to prepare a Fire and Incident Management Report (**FIMR**) for the proposed development (see **Appendix Q**). The assessment report addresses the SEARs requirements, and considers the cumulative impacts of all stages of the proposed development including:

- Identification of the aggregate quantities of combustible waste products to be stockpiled at any one time.
- Technical information on the environmental protection equipment to be installed on the premises such as air, water and noise controls, spill clean-up equipment and fire (including location of fire hydrants and water flow rates at the hydrant) management and containment measures.
- Details regarding the fire hydrant system and its minimum water supply capabilities appropriate to the site's largest stockpile fire load
- Detailed information relating to the proposed structures addressing relevant levels of compliance with Volume One of the National Construction Code (**NCC**).

In developing the preliminary Fire and Incident Management Report, the process shown in **Figure 44** has been adopted.

Figure 44 Fire incident and management process



Source: Core

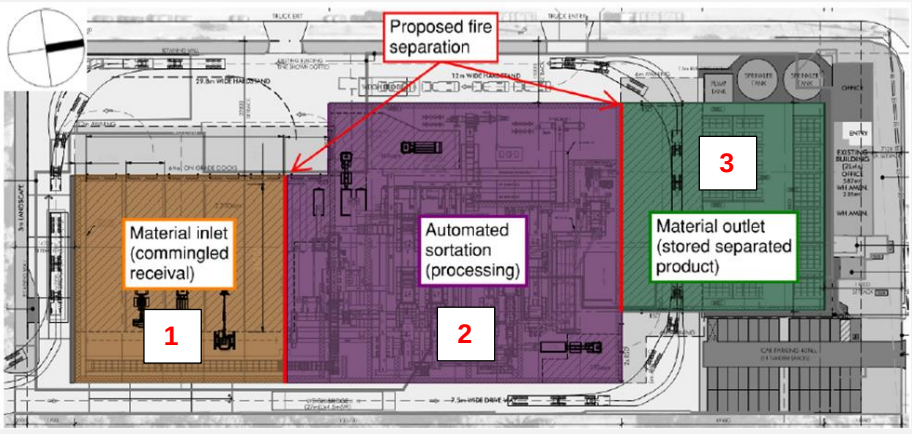
6.9.1 Existing Environment

Core has assessed the proposed development's site location in relation to fire brigade intervention times, with the two nearest fire brigade stations provided with permanent staff located at Mount Druitt and St Marys, approximately 2.4km and 8.2km from the site respectively when considering actual driving routes.

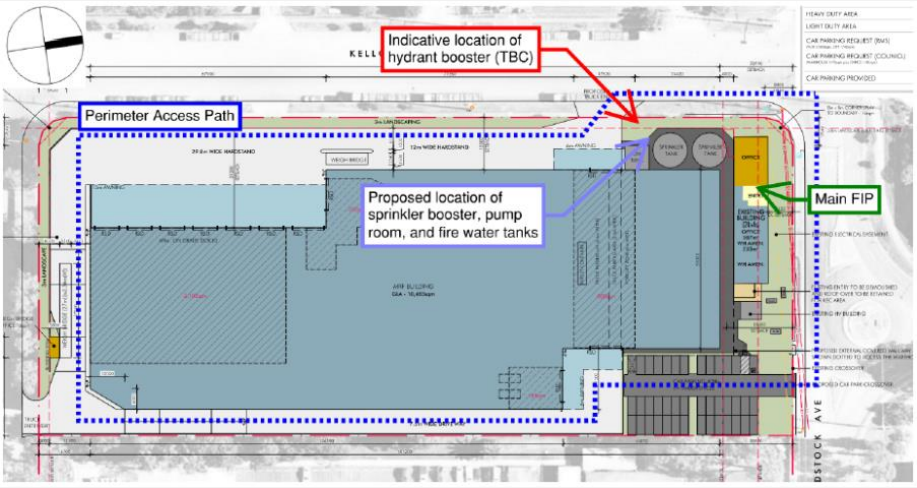
6.9.2 Potential impacts

Assessment in response to SEARs is provided below in **Table 24**.

Table 24 Fire and Incident Management assessment

SEARS	Response
identification of the aggregate quantities of combustible materials to be stockpiled at any given time	The proposed waste facility is intended to treat up to 120,000 t/y of co-mingled municipal recyclable waste, which may include: ▪ Plastic ▪ Cardboard ▪ Paper ▪ Glass ▪ Aluminium ▪ Steel Commingled material is brought to site and discharged into bunkers on the southern side of the (Compartment 1). Stockpiles are then pushed onto a conveyor that leads into the sortation/processing facility (Compartment 2) by mobile plant such as a wheel loader as shown in **Figure 45**. Figure 45 Proposed equipment layout  *Source: Core* The waste is then separated through a combination of physical separation processes, including: ▪ Ballistic/bounce screens ▪ Magnetic separators ▪ Optical sorting units ▪ Air separators Solid waste materials that have no value are separated and stockpiled to send to landfill. Liquid filled containers are drained into stainless steel tanks.

SEARS	Response
	Valuable material such as paper, plastic, and metal are then sent to balers which compact and bind the product with forklifts subsequently transporting the product to the storage area in Compartment 3 on the northern side of the building. Recovered glass is stored in a container within Compartment 2. It is noted that each fire compartment is proposed to be separated (as shown in **Figure 45**) from one another by full height pre-cast concrete walls. Openings in the walls are proposed to be protected through either a fire shutter (in the case between Compartment 1 and Compartment 2) or sliding fire doors (in the case between Compartment 2 and 3).
technical information on the environmental protection equipment to be installed on the premises such as air, water, and noise controls, spill clean- up equipment and fire (including location of fire hydrants and water flow rates at the hydrant) management and containment measures	▪ Rapid roller doors are used at all vehicle entries to ensure operations occur within a sealed building to prevent fugitive dust emissions. The air quality consultant was of the view that new further air quality protection equipment was required for the operations. ▪ No specific measures were considered necessary by the acoustic consultant to mitigate the noise generated from the site, given the location and separation to sensitive receivers a. The acoustic consultant has recommended that onsite mechanical plant be reviewed by an acoustic consultant when available b. Any vibrating equipment are appropriately isolated c. Provide ongoing vibration monitoring, with warnings sent to nominated key personnel ▪ The primary fire water containment shall be achieved through the mechanical conveyor sump in combination with the onsite stormwater detention tank to achieve the design volume determined by the fire services engineer, over the design operational period. The conveyor sump and stormwater tank are connected, should the sump overflow. a. Bunding shall be provided at all doorways and entry points to the building to utilise the floorplate for secondary firewater containment. ▪ Indicative locations of fire hydrants to satisfy fire brigade operations and provide coverage are documented in Figure 10-4, with a minimum flowrate of at least 30 L/s ▪ Fire water from hydrants, sprinklers, fire monitors, and drenchers shall be retained through a combination of internal bunding, both from the mechanical conveyor sump and the general warehouse floorplate, and via the existing stormwater retention system.
details regarding the fire hydrant system and its minimum water supply capabilities appropriate to	▪ The fire hydrant system shall be capable of simultaneously providing 30 L/s of water. This is estimated to be suitable for an internal fire up to 43 MW in size which is not anticipated to be exceeded in the subject building which is sprinkler protected.

SEARS	Response
the site's largest stockpile fire load	▪ **Figure 46** illustrates the site plan with fire services provided on the site. The Main FIP is proposed to be located at the entry in the office on Ground Floor in the office (TBC in detailed design) whilst the new sprinkler booster assembly, fire pump room, and fire water tanks shall be located on the north-western corner of the site. The location of the hydrant booster shall be located at the truck entry point of Kellogg Rd. Figure 46 Fire Brigade access and site facilities  *Source: Core*
details of size and volume of stockpiles and their management and separation to minimise fire spread and facilitate emergency vehicle access	▪ The size and volume of stockpiles shall comply with the requirements of FRNSW's Guideline – Fire Safety in Waste Facilities. ▪ Specifically, stockpile heights must not exceed 4 m and all stockpiles not separated by a masonry wall shall be separated by at least 6 m. ▪ The volume of each stockpile shall not be greater than 1,000 m3.
assessment of the development's consistency with NSW Fire and Rescue Fire Safety Guideline – Fire Safety in Waste Facilities (February 2020) and justifications for any inconsistencies	**Hydrant systems:** ▪ The hydrant system shall comply with AS2419.1:2005 with the exception that the required flowrate shall be as per AS2419.1:2017 i.e. 30 L/s. ▪ There are no open yard stockpiled storage areas proposed and all hydrants are proposed to be located externally for accessibility. **Sprinkler systems:** ▪ The building shall be fully sprinkler protected with High Hazard sprinkler system in the warehouse areas. ▪ With the exception of the drenchers for the fire shutters, the information available does not appear to warrant dedicated drencher, deluge, mist, or foam systems. **Fire detection and alarm system:** ▪ A roof level aspirating smoke detection system (e.g. VESDA) is proposed to provide early warning of a smouldering or developing fire.

SEARS	Response
	The system shall be divided into multiple detection zones to facilitate identification of the area of smouldering. ▪ Infra-red cameras shall be provided at high level throughout the warehouse and interfaced to the central control room. These shall be used to facilitate staff intervention only and will not be interfaced to the fire systems. ▪ The alarm system shall activate simultaneously throughout the building on sprinkler activation, drencher activation, or Fire 1 alarm signal on the VESDA. ▪ Manual call points must be located adjacent to every exit point, as well as adjacent the exit door of the central control room, to facilitate initiation of an early fire alarm. ▪ Visual alarms shall be provided where noisy equipment such as mobile plant is utilized. These shall activate on 'Action' phase of the VESDA system. **Smoke hazard management:** ▪ Smoke exhaust shall be provided to each compartment within the warehouse with the specific rates to be determined through detailed design and agreed with FRNSW. ▪ Makeup air shall be from roller shutter doors that can be manually openable in the event of a power failure or electrical isolation. Roller shutters, including rapid roller doors, shall automatically open on fire trip. **Fire water run-off containment:** ▪ As discussed above, containment shall be through a combination of the onsite bunding, mechanical conveyor sump, and stormwater detention system.
detailed information relating to the proposed structures addressing relevant levels of compliance with Volume One of the National Construction Code (NCC).	Core identifies that the proposed warehouse shall generally be of Type C fire resisting construction and be treated as a Large Isolated Building with an approximate floor area of 10,500 m2 and ridge height of 13.7 m. The office shall be located on the northern side of the site with an on-grade carpark in the north-eastern corner and fire services infrastructure in the north-western corner. The building is proposed to be used as a materials recycling facility which takes in co-mingled municipal waste from the Blacktown area, processing 120,000 t/y of waste and separating it into a final concentrated product. The building is therefore proposed to contain equipment appurtenant to the separation processes as well as stockpiles of the separated waste material. A central control tower is located in the middle of the building. The existing two storey office is constructed from masonry whilst the warehouse shall be a combination of pre-cast concrete walls and metal wall sheeting, complying with the requirements of Type C construction as a

<table>
<tr><th>SEARS</th><th>Response</th></tr>
<tr><td></td><td>
Large Isolated Building. It is noted that the portal frame columns of the building are proposed to be located externally to minimise accumulation of dust.

Table 25 below summarises the NCC Building Characteristics.

Table 25 NCC Building Characteristics assessment
<table>
<tr><th>Characteristic</th><th>Description</th></tr>
<tr><td>Classification</td><td>Class 5 (Office), Class 7b (Storage), Class 8 (Process)</td></tr>
<tr><td>Construction type</td><td>Type C Construction (Large Isolated Building)</td></tr>
<tr><td>Rise in storeys</td><td>Two (2)</td></tr>
<tr><td>Effective height</td><td>< 12 m</td></tr>
<tr><td>Floor area</td><td>~ 11,300 m^2</td></tr>
<tr><td>Fire compartment areas</td><td>▪ Compartment 1: 2,900 m^2
▪ Compartment 2: 5,400 m^2
▪ Compartment 3 (Including Office): 3,000 m^2</td></tr>
</table>
The building shall comply with the Performance Requirements of the NCC through a combination of DtS Provisions and Performance Solutions. The following Performance Solutions are proposed:
▪ C2.4 – Perimeter Access
▪ C3.5 – Fire shutter in firewall
▪ D1.4, D1.5 – Extended travel distances
▪ D1.9 – Extended distance between discharge of non-fire isolated stair and exit
▪ E2.2 – Rationalised smoke exhaust
▪ E1.5 – Omission of sprinklers from existing office, location of sprinkler booster assembly
▪ E1.10, E2.3 – Assessment of special hazards
</td></tr>
</table>

6.9.3 Mitigation Measures

Each of the provisions in the Fire and Incident Management Report can be incorporated into a condition for the approval to facilitate the mitigation, minimisation and management of potential risks associated with the proposed development.

6.10 HAZARDS AND RISKS

Riskcon Engineering (**Riskcon**) was engaged to prepare a Hazards and Risk Assessment (see **Appendix R**) that addresses each of the matters listed within the SEARs. In particular, the SEARs requires an assessment of the proposed development in accordance with *State Environmental Planning Policy No. 33 – Hazardous and Offensive Developments* (**SEPP 33**), to determine whether the risk profile is acceptable for the location.

The methodology used in this assessment is as follows:

- Review the types and proposed quantities of Dangerous Goods (**DG**) to be stored at the site.
- Compare the quantities of DGs the threshold quantities listed in *"Applying SEPP 33 – Hazardous and Offensive Development"* to identify whether the storage location or quantity triggers SEPP 33.
- Review the likely vehicular movements involving DGs and compare against the applicable thresholds detailed in Applying SEPP 33 (Ref. [1]).
- Report on the findings of the SEPP 33 assessment.

SEPP 33 has been developed under the EP&A Act to control potentially hazardous and offensive developments and to ensure appropriate safety features are installed at a facility to ensure the risks to surrounding land uses is minimised.

The policy includes a guideline that assists government and industry alike in determining whether SEPP 33 applies to a specific development. The guideline, *"Applying SEPP 33 - Hazardous and Offensive Developments"* provides a list of threshold levels, for the storage of DGs, above which the regulator considers the DG storage to be potentially hazardous. In the event the threshold levels are exceeded, SEPP 33 applies and a Preliminary Hazard Analysis (**PHA**) is required, followed by a series of hazard analysis studies stipulated by the Department of Planning and Environment in the conditions of consent.

6.10.1 Potential impacts

Riskcon identifies the following DGs will be stored and handled within the facility as shown in **Table 26**.

Table 26 Proposed dangerous goods stored and handled

Class	Description	Packing Group	Quantity (kg)	Class subject to SEPP 33
2.1	Liquefied Petroleum Gas (LPG) – Forklift cylinders	n/a	540	Yes

Source: Riskcon

Table 27 Quantities stored and SEPP 33 Threshold

Class	Description	Packing Group	Quantity (kg)	SEPP Threshold (kg)	Does SEPP 33 apply
2.1	LPG	n/a	540	10,000	No

Source: Riskcon

Table 27 shows the proposed amount of DG stored on site falls below the threshold for consideration under SEPP 33. As such, no further assessment is required. The DG stored and handled on site for the proposed facility would not require high turnover. As such, the transportation limits under SEPP 33 would not apply to the transport of DG at the site.

SEPP 33 also contains a requirement for review of operations that may cause offense in the form of odour, environmental impact, nuisance (noise), etc. An indication of whether "offensiveness" may occur at the facility is whether an EPA licence is required for specific operations at the site. A review of the facilities operations indicates that there are no processes that would result in the manufacture, production, or transfer of materials in a form that may result in the release of bulk materials at the site or that could result in odour generation or excessive noise. An EPA licence would not be required for this site.

Further, there would be no unusual operations that would cause potential odours, or noise at the closest residential area which is approximately 300 m away on the other side of the M7 motorway. Therefore, it is considered that noise generated from the site operations would not exceed the background noise already exposed at residential areas.

In summary, there is no potential for 'offensive' operations at the site and accordingly, SEPP 33 does not apply in this case.

Due to the proposed DG on site not exceeding the threshold for SEPP 33, there is no requirement for a Preliminary Hazard Analysis. Accordingly, the potential for hazards and risk impacts arising from the proposed development are considered acceptable.

6.11 ABORIGINAL CULTURAL HERITAGE

Artefact was engaged to prepare an Aboriginal Cultural Heritage Assessment report (**ACHAR**) (see **Appendix Y**) that addresses each of the matters listed within the SEARs. The assessment has been undertaken based on considerations of:

- The requirements of Aboriginal heritage guidelines including:
  - *The Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010a) – known as *The Code of Practice*
  - Guide to investigating and assessing and reporting on Aboriginal Cultural Heritage in New South Wales (OEH 2011) – known as ACHAR guidelines.
  - *The Aboriginal Cultural Heritage consultation requirements for proponents 2010* (OEH 2010b)- known as Consultation Guidelines)
- SEARs (Department of Planning, Industry and Environment in December 2020).
- The results of the Due Diligence assessment completed by Artefact in April 2021 which included background research and an archaeological survey
- Legislative context including:
  - NSW National Parks and Wildlife Act 1974
  - National Parks and Wildlife Regulation 2019
  - NSW Environmental Planning and Assessment Act 1979
  - NSW Aboriginal Land Rights Act 1983
  - NSW Native Title Act 1994
  - Commonwealth Environment Protection and Biodiversity Conservation Act 1999

The methodology for the ACHAR consisted of both primary and secondary research. A desktop study was undertaken including an analysis of the Aboriginal Heritage Information Management System (**AHIMS**) as detailed in **Section 6.11.2**.

Aboriginal community consultation is being conducted in accordance with the Consultation Requirements. A consultation log is being maintained which details all correspondence with the registered Aboriginal parties (**RAPs**) for the proposal. The consultation for the ACHAR commenced on 8 December 2021. Documentation of the consultation process is detailed in **Appendix Y**.

A site inspection was conducted on the 19 January 2022. Representatives of the RAPs were invited to attend the site inspection. Unfortunately, the representatives were unable to attend on the day.

The aims of the archaeological survey were to:

- Inspect the perimeter of the site and car park, with focus on the latter as the central location for the proposed works
- Record any surface or potential subsurface Aboriginal sites that have not been recorded in AHIMS
- Identify areas of PAD that may be present in areas that have had no or minimal disturbance

- Engage with Deerubbin LALC regarding the proposed works and the archaeological potential of the study area
- Collect information to ascertain whether further archaeological investigation is required.

An assessment of the cultural heritage significance of an item or place is required to form the basis of its management. The Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH 2011) provides guidelines for heritage assessment with reference to the Burra Charter (Australia ICOMOS 2013).

6.11.1 Existing Environment

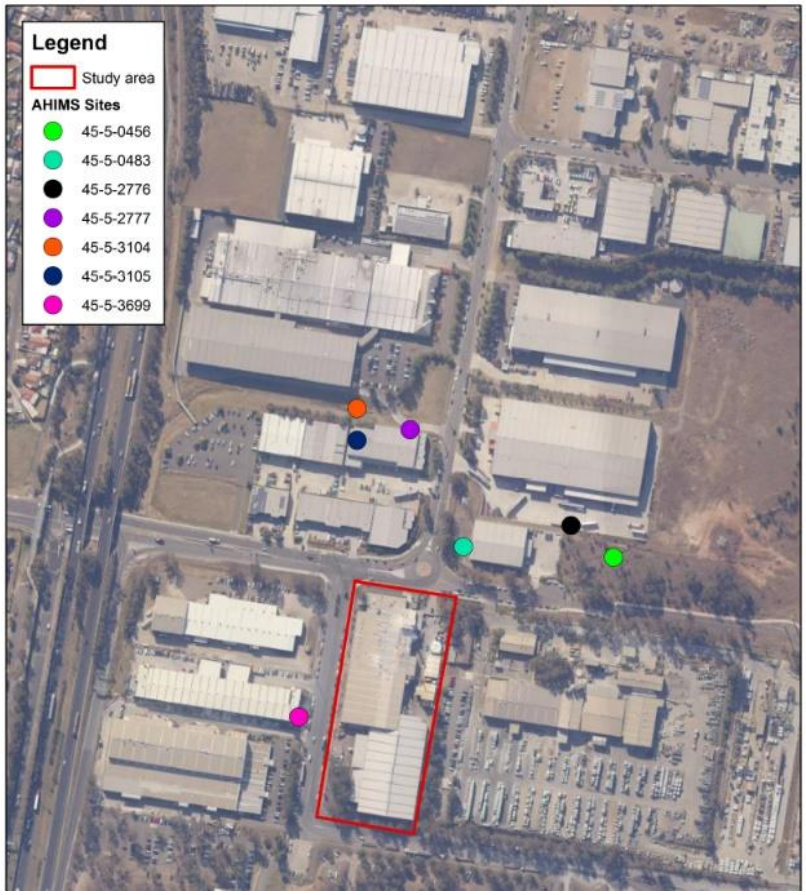
An extensive search of the AHIMS database was undertaken on 5 August 2021 (AHIMS Search ID: 610979).

An area of approximately 4 kilometres (east-west) by 4 kilometres (north-south) was included in the search. The AHIMS search provides archaeological context for the area and identifies whether any previously recorded Aboriginal sites are located within or near the study area. The parameters of the search were as follows:

GDA 1994 MGA 56	300750 – 3300990 m E 6262090 – 6262230 m N
Buffer	0 m
Number of sites	7
AHIMS Search ID	611034

No sites were recorded within the study area, but there are seven registered sites close by, identified as ‘Artefacts’ and shown in **Figure 47** below.

Figure 47 Results of the AHIMS search



Source: Artefact

6.11.2 Potential impacts

The ACHAR has been submitted in draft form and with information redacted whilst the Aboriginal consultation is completed. The following details the results of the site inspection carried out on 19 January 2022.

Archaeological potential is closely related to levels of ground disturbance in the area. Other factors are also taken into account, such as whether artefacts were located on the surface, and whether the area is within a sensitive landform unit according to the predictive statements for the area.

In summary, the study area was assessed as having nil-low archaeological potential based on the following:

- there were no previously recorded sites in the study area
- the predictive model for the area suggests that artefacts might occur on upper slopes and ridgelines
- the predictive model for the area suggests that artefacts might occur within 100 meters of a creek. The study area is located more than 450m from the Eastern Creek.
- The study area was lies outside of area of archaeological sensitivity identified by Knight and Kohen 2001 (Figure 13)
- the study area was disturbed through the construction of a current facility and associated infrastructure including carparks and landscaping
- there was fill present across the study area indicating that the soil had been previously excavated or disturbed
- no artefacts were found in the study area.

The results of the site survey concluded that, due to the disturbed nature of the study area, it is unlikely that Aboriginal objects would be present as any intact landforms would have been impacted by previous landscape modification.

Therefore the study area is assessed as having nil to low potential and no further archaeological investigation is recommended.

Consultation with RAPs are ongoing and the final ACHAR will be submitted to DPE during the Response to Submissions.

6.11.3 Mitigation Measures

Based on the results of this assessment and in accordance with Aboriginal heritage guidelines mandated in the SEARs for the proposal, the following recommendations are made by Artefact:

- As the study area was found to be disturbed and to have a nil-low potential for Aboriginal objects to be located within it, it is recommended that further archaeological assessment is not required.
- If changes are made to the proposal that may result in impacts to areas not assessed by this ACHAR further assessment would be required.
- Unexpected Aboriginal objects remain protected by the *National Parks and Wildlife Act 1974*.
- If any such objects, or potential objects, are uncovered in the course of the activity, all work in the vicinity should cease immediately. A qualified archaeologist should be contacted to assess the find and Heritage NSW and Metropolitan LALC must be notified.
- If human remains, or suspected human remains, are found in the course of the activity, all work in the vicinity should cease, the site should be secured, and the NSW Police and Heritage NSW should be notified.

Additional mitigation measures may be identified in the final ACHAR as a result of consultation with RAPs and will be implemented in accordance with the relevant recommendations.

6.12 URBAN DESIGN AND VISUAL

Habit8 was engaged to prepare a Landscape and Visual Impact Assessment (**LVIA**) (see **Appendix I**) for the proposed development of the site as required by the SEARs. Habit8 has also prepared the Landscape Plans for the proposal. The plans detail mitigation and design responses which were formed as a result of this LVIA.

The following best practice guidance has been used as the basis for the LVIA:

- Guidelines for Landscape and Visual Impact Assessment (GLVIA) – Third Edition (LI/IEMA 2013)

Photomontages have been prepared to create 'simulated' views of the proposed development. These have presented in the LVIA as before and after images for comparison. The computer-generated images also include landscape mitigation at a mature age of 10 years. The assessment undertaken at Year 10 assumes that landscaping will grow and become effective.

For the purposes of most LVIAs, Year 10 effects are also taken to be the 'residual effects' of the development. Residual effects are those which are likely to remain on completion of the development and are to be given the greatest weight in planning terms.

A preliminary review of the site has identified key views and receptor locations. The symbols and numbering on the following map indicate the locations from viewpoints close to nearby sensitive receptors and significant vantage points within the surrounding public domain. The most visual sensitive receptors are those properties along Woodstock Avenue. Photomontages from eye level, car level and 4m high level have been generated to represent as closely as possible views from these receptor locations. Refer to the visual impact assessment at Section 8.0 of the LVIA and the corresponding viewpoints A to C.

Figure 48 Visual receptor locations and photo montage location views

Source: Habit8

6.12.1 Existing Environment

The development site's baseline can be described as a general industrial area. The existing site has a vehicular entry/exit point along Woodstock Avenue, a truck entry at the west side along Kellogg Road, and a truck entry / exit at the south side along Kellogg Road.

There are no current statutory designations within the LEP which attribute Landscape or Environmental value to the site, but the site is near the WSEA area (Western Sydney employment lands area) which provides business in the region with land for industry and employment.

A local value may be held by some visual receptors with high sensitivity to the site along Woodstock Ave and passing pedestrians and motorists of medium sensitivity. These views are likely to be based on perceptual aspects such as wildness, tranquillity, land use and green open space. The site is privately owned and therefore does not add any recreational benefit to the community. The character of the adjacent sites is generally IN1 – General Industrial.

The conclusion drawn from the analysis above suggests the sensitivity of the landscape to be low.

6.12.2 Potential impacts

The of visual impact assessment based on the photomontages generated for the identified Viewpoint locations is provided in **Table 28** to **Table 34** on the following pages.

In summary:

- It has been concluded that the significance of the impact upon the landscape at this project development to be low. This is in part due to the surrounding industrial uses and industrial zoning designation in the WSEA SEPP.
- Through the LVIA, it is concluded that the proposed development will cause a change in the view for a very small minority of properties. Road users, pedestrians, and cyclists have been identified as being impacted at a low-medium level. The horizon line and regional views are unaffected.
- Views from adjacent industrial properties to the north, west and south of the site shall have views to the proposed development but are to be mitigated with tall native canopy trees, screening shrubs and groundcovers are planted. Following maturity, these planted buffers will provide a dense screen to help to soften and screen the development.
- The development proposes substantial landscape planting to offset the visual impact in the form of setbacks with dense tree and shrub planting. This will be most effective after 15 years for those receptors who experience direct views.
- Passing motorists, cyclists and pedestrians will also experience a medium change in view. However, Woodstock Avenue and Kellogg Road are not streets where walking is encouraged due to industrial truck movements. Views from the M7 will be mitigated by the large canopy trees from adjacent properties and the landscape setback of the site.
- As previously discussed within sections of this report, the development will be heavily landscaped in setbacks surrounding the site helping to soften and screen views for these users.
- Wider reaching views to the site from residential areas located in the greater landscape (around Rooty Hill) have also been considered, however the site is too far and blocked by the M7 that makes viewing the site negligible.

Accordingly, the potential for visual impacts arising from the proposed development are considered acceptable.

Table 28 Viewpoint A – Glendenning Road (looking south)

Visual description	**Approx. Viewing Distance from Site Boundary**: 80m **Prominence of the development:** View from car level towards the site
Visual sensitivity	Motorist and pedestrians are considered to have low sensitivity.
Magnitude of change	The proposed development will be a new and recognizable element within the view and there will be a noticeable change in the baseline. The magnitude of change is high/medium
Significance of Impact	The significance of the impact for motorists, cyclists and pedestrians would be moderate/minor.

Baseline photo	**10 years**
	

Table 29 Viewpoint B – Westlink M7 above Woodstock Avenue (looking east)

Visual description	**Approx. Viewing Distance from Site Boundary**: 240m **Prominence of the development**: Viewed from car level approx. 4m high from Woodstock Ave below, looking towards the site.
Visual sensitivity	Motorists are considered to have low sensitivity. People with views from their place of work are considered with low sensitivity.
Magnitude of change	The proposed development will be a new and recognizable element within the view but there will bee minor change in the baseline. The magnitude of change will be considered low/medium.
Significance of Impact	The significance of the impact for motorists, would be minor. Receptors with views from Westlink M7 will have minor significance of impact

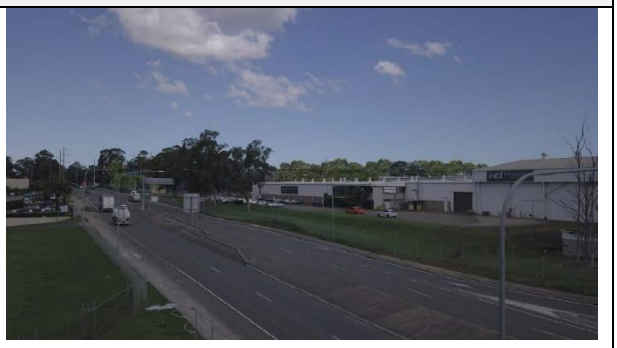
Baseline photo	**10 years**
	

Table 30 Viewpoint C – Westlink M7 exit (looking east)

Visual description	**Approx. Viewing Distance from Site Boundary**: 250m **Prominence of the development**: This view is from car level looking east towards the site through the property at 18 Kellogg Road
Visual sensitivity	Motorists, cyclists and pedestrians are considered to have low sensitivity due to significant landscape setbacks and scattered large canopy trees in this area. People at their place of work near this view are considered with low sensitivity.
Magnitude of change	The proposed development will not be a recognizable element within the view and there will be a minimal change in the baseline. This landscape open area will form a dense landscape character together with the proposed site setback of large canopy trees along Kellogg Road therefore the magnitude of change is low.
Significance of Impact	The significance of the impact for motorists, cyclists and pedestrians would be minor / negligible and minor significance of impact from the adjacent industrial building due to large setbacks and canopy tree planting.

Baseline photo	**10 years**
	

Table 31 Viewpoint D – Woodstock Avenue cnr Kellogg Road (looking east)

Visual description	**Approx. Viewing Distance from Site Boundary**: 40m **Prominence of the development**: This view is from car level looking east towards the site. The development will be seen in the background view but will be screened with proposed vegetation.
Visual sensitivity	Motorists, cyclists and pedestrians are considered to have low sensitivity due to significant landscape setbacks with large canopy trees and small feature trees in this area. People at their place of work near this view are considered with low sensitivity.
Magnitude of change	The proposed development will be clearly noticeable, and the view will be altered by its presence. There will be a noticeable change in the baseline therefore the magnitude of change is high.
Significance of Impact	The significance of the impact for motorists, cyclists, and pedestrians and from people at their place work near this view would be moderate / minor. The development will be significantly screened by new vegetation on eye level views for each of those road user groups.

Baseline photo	**10 years**
	

Table 32 Viewpoint E – Blacktown International Sportspark (looking northeast)

Visual description	**Approx. Viewing Distance from Site Boundary**: 810m **Prominence of the development**: This view is from car level looking east towards the site. There is no impact as it is too far from the development, and it is not seen from this view.

Table 33 Viewpoint F – Knox Road above T1 Westlink Line (looking northwest)

Visual description	**Approx. Viewing Distance from Site Boundary**: 1.12km **Prominence of the development**: This view is from car level looking northwest towards the site. There is no impact from the development. The view too far and is screened by the dense trees from the Eastern Creek and nearby park.

Table 34 Viewpoint G – In front of 53 Knox Road, Doonside (looking southwest)

Visual description	**Approx. Viewing Distance from Site Boundary**: 1.2km **Prominence of the development**: This view is from car level looking southwest towards the site. There is no impact from the development. The view too far and is screened by the dense large canopy trees from the Eastern Creek and Nurrangingy Reserve.

6.13 SOCIO-ECONOMIC

Urbis was engaged to prepare a Social Impact Assessment report (**SIA**) (**Appendix S**) for the proposed development of the site as required by the SEARs. The SIA identifies and analyses the potential positive and negative social impacts associated with a proposal. It involves a detailed and independent study to scope potential social impacts, identify appropriate mitigation measures and provide recommendations aligned with professional standards and statutory obligations.

The methodology of the SIA is informed by the DPE SIA Guideline for State Significant Projects (2021). According to the Guideline, social impacts are the consequences that people experience when a new project brings change. For the purposes of an SIA, 'people' can be individuals, households, groups, communities, businesses or organisations.

Urbis was also engaged to prepare an Economic Impact Assessment report (**EIA**) (**Appendix T**) for the proposed development of the site as required by the SEARs. The EIA used REMPLAN software to model and quantify the potential economic benefits associated with the proposed development. REMPLAN is an Input Output model that captures inter-industry relationships within an economy. It can assess the area specific direct and flow on implications across industry sectors in terms of employment, wages and salaries, output and value added (Gross State Product).

The potential economic benefits of the proposed development have been quantified in terms of value added expenditure generation and employment generation:

- Expenditure Generation – Estimation of the direct and indirect expenditure impacts resulting from the proposed development. This estimates value added expenditure impacts to the regional and state economies during both the development and operational phases
- Employment Creation – Estimation of the direct and indirect employment impacts resulting from the proposed developments. This estimates employment impacts using standard industry jobs per sq.m benchmarks and regional employment multipliers for New South Wales.

6.13.1 Existing Environment

The SIA prepared a community profile for the Rooty Hill area based on demographic data from the ABS Census data 2016. In 2016, there were 14,704 people living in Rooty Hill. Some key characteristics identified include:

- An older adult population
- Culturally and linguistically diverse
- Low density living is common
- Large family households
- Higher unemployment rate
- Mix of employment industries
- More economically advantaged than the LGA
- High projected population growth in the LGA

The EIA identifies the site is situated within the Glendenning industrial precinct (**the precinct**). The majority of industrial and urban services uses throughout the precinct include manufacturing facilities, wholesalers, and trade supplies centres.

Other industrial and urban uses that feature throughout the precinct include construction equipment hire, automotive parts, repair workshops and logistics departments, in addition to large format retail uses. Approximately 88% of the 196-hectare precinct is currently developed, accommodating around 613,700 sq.m of gross floor area and ~6,030 jobs.

As a major industrial hub, employment within the Glendenning industrial precinct is primarily concentrated in five industry sectors (as per the ABS 2016 Census):

- Manufacturing: 1,670 jobs (27.6% of total jobs in the precinct)
- Construction: 1,340 jobs (22.2% of total jobs in the precinct)
- Transport, Postal and Warehousing: 840 jobs (13.9% of total jobs in the precinct)
- Wholesale Trade: 560 jobs (9.4% of total jobs in the precinct)
- Electricity, Gas, Water and Waste Services: 370 jobs (6.1% of total jobs in the precinct).

Together, these five sectors account for 4,780 jobs, or almost 80% of all jobs in the precinct. The proposed development is expected to contribute to and leverage these key sectors during both its construction (e.g. supporting local construction businesses directly or indirectly) and ongoing operations (e.g. the operations of new recycling facility).

6.13.2 Potential impacts – Social impact

The SIA identified the proposal will result in a range of neutral – low social impacts on the community. These impacts are not considered significant and therefore have not required a higher level of assessment.

Based on the assessment in this report, the key social impacts of this proposal are:

- Increased local employment opportunities: the proposal is expected to have a high positive impact on the Rooty Hill and Blacktown LGA community by creating new, local employment opportunities in an area of identified need.
- Potential for longer travel times: based on the Transport Impact Assessment, the proposal is unlikely to increase traffic congestion on the surrounding road network, with all key intersections expected to operate at the same level of service with remaining capacity. Additional traffic on the local road network is therefore unlikely to create a significant impact on the community's ability to travel and access services.

Overall, it is expected the proposal will have a low–medium positive impact on the local community. This is largely influenced by the creation of new local jobs and the incremental improvement to site amenity and urban cooling.

The proposal is largely consistent with the existing environment and is unlikely to generate significant changes to the community. The community and businesses immediately surrounding the site are also familiar with living near industrial uses and accordingly, have a higher capacity to adapt to changes which may arise from the proposal. The impacts, recommendations and management measures provided within this SIA are therefore limited to reflect the low scale and social impact of this proposal.

6.13.3 Potential impacts – Economic impact

There are a range of economic benefits associated with the proposed development:

- Delivering 103 direct and 143 indirect construction jobs, and contributing $36.1 million in direct and indirect value added, to New South Wales over the one-year development phase
- Delivering 69 direct jobs through the ongoing operation of the additional facilities on-site and a further 114 indirect jobs from flow-on effects
- Directly contributing an average of $10.8 million in value added, and indirectly contributing a further $19.5 million in value added, to the New South Wales economy on an annual ongoing basis.

In addition to supporting additional employment and economic growth, the proposed development will provide a range of other economic benefits for Sydney and New South Wales more broadly, including:

- Reducing the state's dependency on international markets for the export of waste commodities. By contributing critical recycling infrastructure to the local economy, the facility will help to meet future growth in domestic demand as a result of domestic and international trade policies.
- Contributing to achieving Australia's recycling target of 80% across all waste streams. By adding 120,000 tonnes of additional annual processing capacity, valuable materials will be diverted from landfill, relieving pressure on Greater Sydney's landfills.

The proposed development should therefore be supported from an economic perspective.

6.14 BIODIVERSITY

Cumberland Ecology was engaged to prepare a Biodiversity Development Assessment Report (**BDAR**) (see **Appendix U**) that addresses each of the matters listed within the SEARs. In particular, the SEARs requires an assessment of the proposed development in accordance with the *Biodiversity Conservation Act 2016* (**BC Act**).

The methodology used in this assessment is as follows:

- Review of existing data on biodiversity values within the assessment area, including species data held in the BioNet Atlas and vegetation mapping contained within the remnant vegetation of the western Cumberland subregion, 2013 Update. VIS_ID 4207 (OEH 2013).
- Field surveys undertaken on 5 August 2021 to verify landscape features
- Identify native vegetation cover using existing vegetation mapping, review of aerial imagery and field surveys.
- A plot-based vegetation survey and vegetation integrity assessment was undertaken concurrently within the subject land in accordance with the Biodiversity Assessment Method 2020 (**BAM**).
- Threatened Flora species survey
- Threatened Fauna species survey

6.14.1 Existing Environment

The BDAR analysed the existing environment of the site and identified the following:

- The subject land and assessment area occur within the Sydney Basin Interim Biogeographic Regionalisation for Australia Bioregion and within the Cumberland Subregion.
- No mapped watercourses occur within the subject land.
- No important wetlands listed in the Directory of Important Wetlands in Australia or wetlands mapped under the *State Environmental Planning Policy (Coastal Management) 2018* are present in the subject land and/or assessment area.
- The subject land does not form part of a regional biodiversity corridor, flyway for migratory species, riparian buffer or estuary, or a local corridor.
- No Areas of Outstanding Biodiversity Value have been mapped within the subject land and assessment area.
- The native vegetation extent within the subject land was determined through a combination of aerial photograph interpretation and field surveys. The native vegetation extent is shown in Figure 5 and occupies approximately 0.16 ha, which represents 8% of the subject land. This includes approximately 0.14 ha of remnant native vegetation and 0.02 ha of planted native vegetation.
- The remaining land within the subject land comprises cleared land (1.75 ha) and exotic vegetation (0.08 ha), totalling an area of approximately 1.84 ha.

Figure 49 Extent of Cumberland Plain Woodland

Source: Cumberland Ecology

6.14.2 Potential impacts

The BDAR identifies that native vegetation occurring within the subject land includes small patches of Cumberland Plain Woodland CEEC (approximately 0.12 ha), which occur as canopy trees over a sparse and degraded understorey. The remainder of the subject land comprises scattered small patches of planted native and exotic vegetation and lawns as part of the existing landscaping. No threatened flora or fauna species that are considered as species credit species were recorded within the subject land and none are considered likely to occur. Therefore, no species credits species are required to be offset.

6.14.3 Mitigation Measures

As the project includes the removal of a small area of remnant native vegetation, offsets are required in the form of ecosystem credits. This assessment indicates that the removal of the native vegetation within the subject land requires a total of four (4) PCT 849 ecosystem credits.

The BAM sets a standard that will result in no net loss of biodiversity values where the impacts on biodiversity values are avoided, minimised and mitigated, and all residual impacts are offset by retirement of the required number of biodiversity credits.

Avoidance of impacts to extant native vegetation within the subject land is not feasible for the project and subsequently a suite of mitigation measures will be implemented for the project to minimise impacts on biodiversity including weed management, delineation of clearing limits, pre-clearance surveys, staging of clearing, sedimentation control measures, and landscaping and replacement plantings including 32 trees associated with Cumberland Plain Woodland. The total credit liability for the project comprises four PCT 849 ecosystem credits. The project will satisfy the credit obligation through the offset rules identified in the BC Regulation.

6.15 ECOLOGICALLY SUSTAINABLE DEVELOPMENT

Northrop was engaged to prepare an Ecologically Sustainable Design (**ESD**) report (see **Appendix V**) that addresses each of the matters listed within the SEARs. ESD principals (as defined in clause 7(4) of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*) are considered in the design, construction, and operation phases of the project. These initiatives guide how the project has been designed to deliver ESD outcomes:

- The precautionary principle
- Inter-generational
- Conservation of biological diversity and ecological integrity
- Improved valuation, pricing and incentive mechanisms

6.15.1 Potential impacts

Specific sustainability initiatives proposed for the facility include, but are not limited to:

- Space efficient building layout.
- Water sensitive urban design principles.
- High efficiency equipment and lighting.
- On-site renewable energy generation in the form of a rooftop solar array.
- Incorporation of good daylighting to reduce lighting power usage.
- Installation of a rainwater capture and reuse systems.
- Natural ventilation to open spaces.
- Waste storage spaces to promote recycling and sortation.

Through the implementation of the initiatives noted in this report, the project addresses, and endeavours to mitigate against negative environmental, social, and economic impacts associated with the project. Overall, the project will also exceed the targets set out in the SEARs having set a five (5) star (Australian Excellence) Green Star Design and As Built rating target for the project.

7 JUSTIFICATION OF THE PROJECT

This section of the report provides a comprehensive evaluation of the project having regard to its economic, environmental and social impacts, including the principles of ecologically sustainable development.

It assesses the potential benefits and impacts of the proposed development, considering the interaction between the findings in the detailed assessments and the compliance of the proposal within the relevant controls and policies.

7.1 PROJECT DESIGN

The site of the proposed development has been carefully selected in an existing industrial precinct, close to the M7 Motorway. The site is also located close to industrial/warehouse precincts similar to the development proposed. The site is located well away from sensitive residential land uses.

The proposed development will comprise of two elements, being the existing commercial office and the purpose built warehouse for waste recycling to maximise fire safety. The proposal has been designed so heavy vehicles can enter, manoeuvre and exit the site in a forward motion. Loading docks are located internally within the site to maintain a consistent street frontage and minimise acoustic and visual impacts.

The design has incorporated specific design solutions to minimise noise and air quality impacts, including rapid roller doors at all vehicle entries to ensure operations occur within a sealed building so as to prevent fugitive dust emissions. The proposed MRF also incorporates a range of ESD initiatives to increase efficiency and minimise the impacts on the environment.

7.2 STRATEGIC CONTEXT

The proposed development is consistent with the strategic directions provided in *A Metropolis of Three Cities, Central City District Plan* and the Blacktown LSPS.

The site is identified as being within an industrial land precinct. The site is adjacent to the M7 Motorway and close to the Greater Penrith to Eastern Creek Growth Area. It is well-placed to generate jobs and services, including advanced manufacturing as indicated in Planning Priority C11. The proposed Cleanaway facility would contribute to the management of waste as provided in Planning Priority C19.

Industrial land is identified as an important employment generating land use and is protected under the 'retain and manage' policy. The 'retain and manage' policy is currently being reviewed by the GSC to inform future updates to the District Plan. However, this review is not expected to be completed until 2023. Notwithstanding, the site is located within an industrial precinct in a strategic location with good access to regional roads and so it is logical to consider the current land use is unlikely to change in the near term.

7.3 STATUTORY CONTEXT

The relevant State and local environmental planning instruments are listed in **Section 4** and assessed in **Section 6**. The assessment concludes that the proposal complies with the relevant provisions within the relevant instruments as summarised below:

- The proposed development has been assessed and designed in respect to the relevant objects of the EP&A Act as defined in Section 1.3 the Act and addressed in **Appendix C**.
- This EIS has been prepared in accordance with the SEARs as required by Schedule 2 of the EP&A Regulations.
- Consideration is given to the relevant matters for consideration as required under the BC Act and the SSD is supported by a BDAR accordingly.
- This SSDA pathway has been undertaken in accordance with the SRD SEPP as the proposed development is classified as SSD.
- Concurrence from TfNSW will be required as per the ISEPP for 'traffic generating development'.
- The proposal complies with all of the relevant provisions under the BLEP 2015 as detailed in **Appendix C**.

- The proposed development is consistent with the objectives of the IN1 – General Industrial zone.
- The proposed development has been assessed in accordance with SEPP 33 and SEPP 55. The proposed development complies with the relevant clauses of these SEPPs.
- The proposal generally accords with the relevant provisions of the BDCP 2015 outlined in **Appendix C**.

7.4 COMMUNITY VIEWS

Community and stakeholder engagement has been undertaken by the Applicant and Urbis in the preparation of the SSDA. This included direct engagement and consultation with:

- Adjoining landowners and occupants
- Government, agency and utility stakeholders listed within the SEARs

This engagement was consistent with the community participation objectives in the *Undertaking Engagement Guidelines* for State Significant Projects and complied with the community engagement requirements.

Feedback obtained by Government, agencies and utility stakeholders have been incorporated into the design and assessment in the EIS. There has been no community feedback provided at the time of preparing the EIS.

In accordance with the Regulations, the EIS will be placed on formal public exhibition once DPIE has reviewed the EIS and deemed it 'adequate' for this purpose. Following this exhibition period, the applicant will respond to any matters raised by notified parties.

7.5 LIKELY IMPACTS OF THE PROPOSAL

The proposed development has been assessed considering the potential environmental, economic and social impacts as outlined below:

- **Natural Environment:** the proposal addresses the principles of ecologically sustainable development (ESD) in accordance with the requirements of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation) and as outlined below:
  - Precautionary principle: the precautionary principle relates to uncertainty around potential environmental impacts and where a threat of serious or irreversible environmental damage exists, lack of scientific certainty should not be a reason for preventing measures to prevent environmental degradation.

    The EIS identifies the existing conditions of the site and considers the environmental assessment undertaken by technical specialists, including geotechnical and contamination, noise and vibration, air quality and biodiversity. Mitigation measures have been recommended in the event of potential impacts.
  - Intergenerational equity: the needs of future generations are considered in decision making and that environmental values are maintained or improved for the benefit of future generations.

    The proposed facility processes materials for recycling, which provides significant environmental benefits for future generations.
  - Conservation of biological diversity and ecological integrity: a BDAR has been completed to assess the impacts on biodiversity existing on the site. Whilst the proposal will result in the removal of trees, significant effort has been made to provide a net biodiversity benefit once the project is completed. This will be achieved through significant landscaping and planting of Cumberland Plain Woodland trees and purchase of ecosystem credits.

– Improved valuation, pricing and incentive mechanisms: this requires the holistic consideration of environmental resources that may be affected as a result of the development including air, water and the biological realm. It places a high importance on the economic cost to environmental impacts and places a value on waste generation and environmental degradation.

  The proposal is for the recycling of waste materials, which will provide an increased value on waste generation and prevent environmental degradation through valuable materials being disposed in landfill.

- **Built Environment:** The proposal has been designed having regard for the site's constraints and to minimise the environmental impact of the proposal. The built form is consistent with the existing industrial development within the precinct. Adequate space is allocated in the design for building clearance, landscaping and infrastructure provision. The site has been designed with sufficient access points to enable the safe manoeuvring of heavy vehicles separated from light vehicles for staff and visitor parking. The proposal will have low visual impact on its surroundings.
- **Social:** The proposal is expected to result in positive social impacts in the locality and the wider Western Sydney area through the provision of additional industrial/warehousing infrastructure.
- **Economic:** Positive economic impacts and contributions to the economic health of Western Sydney and NSW is expected through the provision of jobs and industrial employment in an area of high growth and demand for this infrastructure.

  In addition to supporting additional employment and economic growth, the proposed development will provide a range of other economic benefits for Sydney and New South Wales more broadly, including:

  – Reducing the state's dependency on international markets for the export of waste commodities. By contributing critical recycling infrastructure to the local economy, the facility will help to meet future growth in domestic demand as a result of domestic and international trade policies.

  – Contributing to achieving Australia's recycling target of 80% across all waste streams. By adding 120,000 tonnes of additional annual processing capacity, valuable materials will be diverted from landfill, relieving pressure on Greater Sydney's landfills.

7.6 SUITABILITY OF THE SITE

Preliminary investigations were undertaken early in the planning process for the proposal, to identify sites within the Blacktown LGA which could be suitable to accommodate the proposed materials recycling facility. The site location in the Blacktown LGA is important to meet the contractual and operational requirements by the Applicant and Cleanaway to process recyclables collected in the local area by early 2023 and minimise travel distances for the fleet of trucks.

Cleanaway has been operating from the existing site at 9 Bessemer Street, Blacktown for over 25 years in differing capacities. Cleanaway entered preliminary discussions with the land owner regarding the potential for the existing site to accommodate the MRF. However, this was found to not be a feasible option as the site is zoned B7 Business Park and the proposed recycling facility land use is prohibited.

Subsequently, Cleanaway commenced the search for a new site for the proposed land use in 2020 based on the following requirements:

- The site must be zoned IN1 General Industrial for the MRF to be a permitted use.
- The site must support the building requirements for a MRF, which are unique and not necessarily consistent with a contemporary industrial facility.
- The site must support a variety of inbound and outbound traffic movements with differing types of vehicles requiring unique hardstand configuration with full drive around and access on all sides.
- The proposed land use can be perceived as a negative to adjacent tenants, and institutional investors do not typically want this land use on multi-tenant estates. As such, the site must be standalone.
- The proposed land use requires avoidance from residential development and potential acoustic impacts also dictates the suitability of options.

Finding a site to support a standalone facility with the relevant attributes has proven to be highly challenging. Cleanaway investigated 17 sites in the Blacktown LGA most of which were unsuitable and dismissed based

on the site configuration not supporting the proposed development, the site being too close to sensitive receivers, and/or the existing landowner/developer not wishing to accommodate the proposed development.

Cleanaway's site investigation narrowed to five sites, located in Smithfield, Windsor, St Marys and Rooty Hill (the site at 600 Woodstock Avenue). Upon further due diligence and negotiation with landowners, only the subject site was deemed suitable due to fitting all criteria as summarised below:

- The site at 600 Woodstock Avenue, Rooty Hill is zoned IN1 General Industrial and accordingly, the proposed use is permissible with consent. The proposed use is also consistent with the strategic policy framework as identified in Section 3 of this EIS.
- The site is suitably sized to accommodate a purpose built facility to meet the building requirements of a MRF, which includes achieving the required fire safety ratings, separated spaces for sorting of different materials and heavy vehicles to enter the facility to achieve acoustic and air quality management measures.
- The site has street frontage along three boundaries which fulfils the vehicle movement and traffic safety management requirements. This includes accommodating a variety of heavy vehicles to enter the site through one access point, allow vehicles to manoeuvre around the perimeter of the site in a single direction and exit the site through a separate access point. There is suitable space to accommodate the required hardstand areas for unloading and loading of various sized trucks. The site also benefits from access to the M7 Motorway being within approximately 200 metres.
- The site is a standalone lot and so the Applicant and Cleanaway can manage the site independently. Adjoining developments are of similar industrial nature, minimising the likelihood of land use conflict. The proposed development is consistent and compatible with the industrial uses within the immediate vicinity of the site.
- The site is located well away from sensitive land use activities, including residential development, to avoid unacceptable amenity impacts including noise, air and the like.
- The site is located near to Cleanaway's existing truck depot in Glendenning so the truck fleet requires less travel distances between the storage, pick-up route and distribution to the proposed MRF.
- Utility services required to service the future use are available within the immediate vicinity to the site.
- The contamination assessment has identified the site is unlikely to be contaminated and is suitable for the proposed industrial use.

Overall, it is considered that the proposed development is consistent with the strategic and statutory planning provisions which apply to the site. The potential environmental impacts of the development have been comprehensively assessed and can be mitigated, minimised and/or managed to avoid unacceptable impacts to the site or the locality. Accordingly, the site is considered suitable for the proposed use.

The site is considered suitable for the proposed development for the reasons outlined in this EIS and summarised below:

- The proposed use is permissible with consent in the IN1 General Industrial zone.
- The proposal complies with the relevant planning controls applicable to the site.
- The site is within an existing industrial area away from sensitive land. The proposed built form design, bulk and scale is consistent and compatible with the surrounding industrial land uses.
- The proposal is consistent and compatible with the strategic land use and transport policies and will deliver a substantial investment in Western Sydney with significant construction and ongoing employment opportunities close to the growing residential population
- The site has excellent vehicle access, including to the M7 Motorway.
- The site meets the specific criteria identified by the Applicant to meet the requirements for the proposed MRF and has good road access.

7.7 PUBLIC INTEREST

The proposed development is considered in the public interest for the following reasons:

- The proposal is consistent with relevant State and local strategic plans and complies with the relevant State and local planning controls.
- No adverse environmental, social or economic impacts will result from the proposal.
- The proposal will provide public benefit by delivering a purpose built recycling facility for the local area, meaning capacity for recycling of waste materials is significantly enhanced and will contribute to environmental sustainability outcomes in the local area.
- The site is located near to Cleanaway's existing truck depot in Glendenning, meaning that the truck fleet requires less travel between its storage, pick-up route and distribution to the proposed MRF.
- The proposed facility is deliberately located within the area it will be servicing, meaning that further sustainability outcomes are achieved through the reduction in truck movements over long distances, therefore minimising the supply chain distances and ecological footprint associated with vehicle movements, emissions and noise pollution.
- The proposal will generate significant economic benefits including employment opportunities during construction (103 direct and 143 indirect) and during operation (69 direct jobs through the ongoing operation of the additional facilities on-site and a further 114 indirect jobs from flow-on effects). The project will directly contributing an average of $10.8 million in value added, and indirectly contributing a further $19.5 million in value added, to the New South Wales economy on an annual ongoing basis.
- The issues identified during the stakeholder engagement have been addressed by design of the project and the assessment of the impacts of the project.

Having considered all relevant matters, we conclude that the proposed development is appropriate for the site and approval is recommended, subject to appropriate conditions of consent.

DISCLAIMER

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This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

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