Environmental Impact Statement – 50-52 Buffalo Road, Gladesville

March 2023

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Declaration Form	**Submission of Environmental Impact Statement (EIS)** prepared under the *Environmental Planning and Assessment Act 1979* (NSW) Clause 78A(8a) and having regard to Appendix 1 of the Guide to Licensing under the *Protection of the Environment Operations Act 1997* (NSW) prepared by the NSW EPA (2016).
EIS Prepared By	
Name	Matthew O'Donnell – Mod Urban Pty Ltd
Qualifications	Bachelor of Landscape Architecture – University of Canberra Post Graduate Diploma of Town Planning, University of Westminster
Address	PO Box 572 Waverley NSW 2024
In Respect Of	Circular Metals Gladesville Pty Ltd – Designated Development Application
Development Application	
Applicant Name	Circular Metals Gladesville Pty Ltd
Address	50-52 Buffalo Road, Gladesville
Land Application Relates to	50–52 Buffalo Road, Gladesville (Lot 1 in DP 390558 and Lot C in DP 419774)
EIS	An Environmental Impact Statement (EIS) is attached.

Certificate

I certify that I have prepared the contents of this EIS and to the best of my knowledge:

- it is in accordance with Schedule 3 of the *Environmental Planning and Assessment Regulation 2021* (NSW), ,
- contains all available information that is relevant to the environmental assessment of the development, activity or infrastructure to which the statement relates, and
- that the information contained in the statement is neither false nor misleading.

Signature

Name

Matthew O'Donnell

23 March 2023

TABLE OF ABBREVIATIONS

Abbreviation	Term
AHD	Australian Height Datum
AS	Australian Standards
AV	Articulated Vehicle
Circular Metals Gladesville	Circular Metals Gladesville Pty Ltd
Council	City of Ryde Council
DA	Development Application
DPIE	Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
EP&A Act	*Environmental Planning & Assessment Act 1979* (NSW)
EP&A Regulation 2000	*Environmental Planning & Assessment Regulation 2000* (NSW)
EPA	NSW Environment Protection Authority
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (Cth)
EPL	Environment Protection Licence
ERA	Environmental Risk Assessment
ERP	Emergency Response Plan
ESD	Ecologically Sustainable Development
FRA	Fire Risk Assessment
GFA	Gross Floor Area
HRV	Heavy Rigid Vehicle
SEPP Infrastructure	State Environmental Planning Policy (Transport and Infrastructure)

Abbreviation	Term
INP	Industrial Noise Policy
RDCP	Ryde Development Control Plan 2014
LGA	Local Government Area
RLEP	Ryde Local Environmental Plan 2014
LPG	Liquid Petroleum Gas
MUSIC Modelling	Model for Urban Stormwater Improvement Conceptualisation
OEMP	Operational Environmental Management Plan
PHA	Preliminary Hazard Analysis
POEO Act	*Protection of the Environment Operations Act 1997*(NSW)
PoM	Plan of Management
Proposal	The applications that are the subject of this EIS
RMS	NSW Roads and Maritime Services
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SEPP Resilience	State Environmental Planning Policy Resilience and Hazards
Site	50-52 Buffalo Road, Gladesville
TSC Act	*Threatened Species Conservation Act 1995* (NSW)
WARR Act	*Waste Avoidance and Resource Recovery Act 2001* (NSW)
WARR Strategy	NSW Waste Avoidance and Resource Recovery Strategy 2014-21
Waste Regulation	*Protection of the Environment Operations (Waste) Regulation 2014* (NSW)

EXECUTIVE SUMMARY

INTRODUCTION

This Environmental Impact Statement (**EIS**) has been prepared by Mod Urban Pty Ltd, on behalf of the Applicant, on behalf of Circular Metals Gladesville Pty Ltd, and is submitted to the NSW Department of Planning Industry and Environment (DPIE) in support of the proposed designated development application for the premises identified as 50-52 Buffalo Road, Gladesville (**Site**), being legally described as Lot 1 in DP 390558 and Lot C in DP 419774.

The proposed development is considered Designated Development pursuant to Schedule 3 of the *Environmental Planning & Assessment Regulation 2021* (**EP&A Regulation 2021**), as the site is located within 500m of the nearest residential receivers, and 250m of a dwelling not associated with the use and being likely to significantly affect the amenity of the neighbourhood, and therefore triggers designated development thresholds.

As the Proposal is Designated Development, this EIS is prepared pursuant to Section 78A of the EP&A Act 1979 and in accordance with the Secretary's Environmental Assessment Requirements (**SEARs**) issued 27 October 2021.

This designated development application seeks approval for the alterations and additions and use of the Site for the purpose of a '*waste or resource transfer station*' for scrap metals.

THE APPLICANT AND LANDOWNERS

The land is currently owned by Watou Holdings Pty Ltd and DPV Investments Pty Ltd, the registered proprietor of Lot C in DP 419774 (No. 50 Buffalo Road) and Col Phelps Automotive Pty Ltd, proprietor of Lot 1 in DP 390558 (No. 52 Buffalo Road).

This is the only facility that Circular Metals Gladesville Pty Ltd operates from.

PROPOSAL OVERVIEW

The application specifically seeks consent for:

- The use of the Site as a *'waste or resource transfer station'*;
- The current auto related uses at the subject site (subject to an existing Development Consents No. 44/92 and No 1488) are to cease and make way for the proposed resource recovery transfer station.
- Receiving, consolidating and onforwarding of approximately 25,000 tonnes of scrap metal per annum. The subject site has capacity to accommodate up to 500 tonnes per week, which equates to 2,060 tonnes per month and 25,000 tonnes per year.
- The proposed use seeks consent for the receipt of scrap metals, including ferrous, non-ferrous, electronic waste (E-waste), (limited amount of) whitegoods and batteries to be transported by small vehicles, rigid trucks and the occasional semi-trailer.
- No special, liquid, hazardous, restricted solid waste or general solid waste (putrescible), as defined in the Protection of the Environment Operations Act 1997 (NSW) or the EPA's Waste Classification Guidelines Part 1: Classifying Waste (2014), will be accepted at the facility.

- Demolish a warehouse building currently situated on No 50 Buffalo Road and the rear part of the building forward on the site at No 52 Buffalo Road;
- Construct a new (fully enclosed) building addition to the rear warehouse to house metals, machines and for the unloading and loading of trucks;
- Installation of two weighbridges;
- Undertake stormwater drainage works, earthworks and resurface of the ground level to achieve formal vehicle access, create 11 on-site car parking spaces and two designated loading / unloading areas.
- Hours of operation from 7am to 6pm, Monday to Friday and 8am to 3pm Saturday.
- A total of six (6) employees on site at any one time; and
- Product is received by cars, utes and small trucks at the facility according to metal types and unloaded inside the enclosed transfer station building, placed into allocated bays (i.e. steel, aluminum, copper, brass) and then loaded onto trucks for distribution for onward-processing.
- Steel, cooper and aluminum scraps (as separated) will be transferred to other resource recovery facilities lawfully capable of accepting the product for resource recovery processing.

Proposal Objectives

The objectives of the Circular Metals Gladesville facility are:

- Facilitating future waste transfer and recovery needs of Greater Sydney.
- Securing future capacity for receipt of scrap metals, including ferrous, non-ferrous, E-waste, (limited amount of) whitegoods and batteries to complement other resource recovery management options in the Greater Sydney region.
- Facilitating the safety and operation of the facility for future operators and customers.

Waste Types and Processing Per Annum

The facility seeks consent for receiving, consolidating and onforwarding of approximately 25,000 tonnes of scrap metal per annum. The subject site has capacity to accommodate up to 500 tonnes per week, which equates to 2,060 tonnes per month and 25,000 tonnes per year. The following waste types are handled at the proposed facility:

- The proposed use seeks consent for the receipt of scrap metals, including ferrous, non-ferrous, E-waste, (limited amount of) whitegoods and batteries to be transported by small vehicles, rigid trucks and the occasional semi-trailer.
- No special, liquid, hazardous, restricted solid waste or general solid waste (putrescible), as defined in the Protection of the Environment Operations Act 1997 (NSW) or the EPA's Waste Classification Guidelines Part 1: Classifying Waste (2014), will be accepted at the facility.

PROJECT NEED AND ALTERNATIVES

There are a number of strategic drivers to support the project need in the current location of the facility, including that it:

- Facilitates future resource recovery needs of Greater Sydney;

- Secures future capacity for transfer and temporary storage of recoverable resources to complement other resource recovery management options in the Greater Sydney region and internationally;
- Facilitates the safety and operation of the current facility for future operators and customers;
- Allows for the development as a permissible use;
- Is compatible with surrounding development and local context;
- Will result in minimal impact on the environment; and
- Will allow for the implementation of suitable mitigation measures where required.

If the Proposal did not proceed in any form, there would be a high risk of increased demand on other resource recovery transfer stations within the Greater Western Sydney area.

This EIS has considered alternatives including continuing operating as is, and also the potential operation of the facility at an alternative site. The Do-Nothing scenario would result in economic, environmental and social costs that would impact upon local government, local business and the local community and would not be consistent with relevant State legislation or policy. Subsequent consideration of an alternative site location for the facility determined that it would not be a financially viable option or alternative for Circular Metals Gladesville and would have ensuing knock on effects such as loss of employment, and loss of a local facility that services wider Sydney's resource recovery needs.

The current Site is considered appropriate for the proposed development for the following reasons:

- It will be located within a Site zoned for industrial uses;
- The Site achieves appropriate separation from sensitive land activities including residential development;
- All potential environmental impacts of the Proposal can be suitably mitigated through the design of the facility and ongoing management;
- The proximity to the regional road network provides increased economic benefits;
- The Proposal generates further employment opportunities, during the operational phase;
- The Proposal will not affect any area of heritage or archaeological significance; and
- The Proposal has been developed to achieve appropriate visual amenity.

ENVIRONMENTAL RISK AND MANAGEMENT

The EIS includes a comprehensive review of the environmental setting for the Circular Metals Gladesville facility in addition to the Site history, existing infrastructure, environmental management and performance at the facility.

The various components of the biophysical, social, and economic environment have been considered in this EIS. Environmental aspects and associated potential impacts of the Proposal have been identified based upon a risk assessment process, and through the engagement of specialist consultants.

The Environmental Risk Analysis undertaken as part of the preparation of the EIS has identified that no aspects of the Proposal present a high level of residual risk.

There are, 3 aspects of the Proposal which present a medium level of residual risk.

These include:

- Waste Management; and

- Noise;
- Contamination

The residual risk rating of 'medium' suggests that the residual risk can be managed through the application of environmental management measures. These are detailed within this EIS and in Part I (draft) Compilation of Mitigation Measures.

The remaining environmental risks considered for the Proposal have been assessed as having a low level of residual risk once mitigation measures have been applied. Taking into account these environmental risks, the residual risk is of a nature that it can be managed through detailed design controls, conditions of consent, and normal working practices. These include:

- Waste Management;
- Air Quality and Odour;
- Greenhouse Gas Emissions;
- Traffic and Transport;
- Noise and Vibration;
- Soil and Water;
- Hazards and Fire;
- Heritage;
- Flora and Fauna;
- Environmental Sustainable Development (ESD)
- Soil/Site Contamination;
- Visual Amenity; and
- Socio-Economic.

SUMMARY OF ENVIRONMENTAL ISSUES

Land use

- The site is zoned IN2 Light Industrial under the provisions of Ryde Local Environmental Plan 2014 (RLEP) and a waste or resource transfer station for scrap metals and is an innominate permissible use with consent in that zone, being a development not specified as permitted without consent or prohibited.
- The proposed use is compatible with existing uses on the Site and adjacent land. The investigations undertaken as part of this application conclude that no significant cumulative impact is to occur from the proposed use of the facility.

Design and Appearance and Visual Amenity

- The proposed demolition of the existing warehouse structure and provision of a new addition to the rear warehouse will improve the overall appearance of the site when viewed from Buffalo Road.

- The provision of new landscaping and concrete hardstand across the site will also and to visual improvements to the site.
- The scale bulk and massing of the new additions are appropriate to the locality and similar in scale and massing to other warehouse/industrial type buildings in the locality.
- The provision of new weighbridges will not result in a visual impact to the site or neighbouring properties.
- The overall character and appearance of the proposed built form on site is typical of an industrial site.
- No change to the appearance of the office/workshop building that fronts Buffalo Road (No. 52) and therefore no significant changes will occur to the streetscape appearance and the sites interface with the streetscape.
- The visual appearance of the Site will be largely as it currently exists within the streetscape, and is appropriate for the industrial precinct that the Site is contained within.
- Regular maintenance to the hardstand and landscaped areas will be undertaken by the Site operators to ensure the visual appearance of the Site is maintained.

Waste Management

- No liquid waste, hazardous waste, clinical waste or toxic waste is received on Site. A preliminary risk screening in accordance with State Environmental Planning Policy (Resilience and Hazards) 2021(refer **Appendix H**) confirms no hazardous waste is stored or accepted on Site.
- From time to time, it can be expected that other forms of waste (e.g. putrescible materials) may unintentionally enter the waste stream at the facility. This is the same at any waste management facility.
- It is recommended that the facility formulate and abide by its own Plan of Management (**PoM**) that outlines the procedures in force for a range of waste streams to ensure that only the intended waste is collected.

Storage of Materials

- Recyclable materials are stored on Site internally within the warehouse building, or externally within the proposed drop off bin (frontage of No. 52) to ensure the vehicle paths of travel are not obstructed.
- The quantity of materials stored in the facility will vary with the type and amount of recoverable materials in the waste stream. It is estimated that the types of scrap metal that are stored on Site are cleared within a 14 day to 30day period, 30 days being the maximum.

Unacceptable Materials

- Circular Metals Gladesville will not accept asbestos, putrescible waste, garden waste, building and demolition wastes, industrial wastes, toxic waste, hazardous waste, liquid waste or medical waste at the Site. Employees should be trained in accordance with a recommended PoM, to ensure they are qualified ‘Spotters’ of unacceptable material.
- In the event that unacceptable materials arrive on Site, Circular Metals Gladesville employees will follow the procedure for dealing with small quantities of unacceptable materials which should be outlined in as procedure in the recommended PoM.

Loading of Vehicles

- Loading is conducted with the use of a front-end loader or by forklift. The loading of trucks will not take place before 7:00 am.

- All loading and unloading of trucks will occur internally to buildings with doors closed at those times.
- Steel, cooper and aluminum scraps (as separated) will be transferred to other resource recovery facilities lawfully capable of accepting the product for resource recovery processing.

A range of mitigation and management measures are proposed to reduce the level of risk associated with waste management. These are detailed within this EIS and in Part I (draft) Compilation of Mitigation Measures.

Air Quality

An assessment of potential air quality impacts related to the Proposal has been undertaken by Todoroski Air Sciences and is included at **Appendix J.**

Air Quality and Dust

- The dust generating activities associated with operation of the Project are identified as the loading/unloading of material, vehicles travelling on-site and off-site, and windblown dust from exposed areas and stockpiles. The vehicle and plant equipment also have the potential to generate particulate emissions from diesel exhaust.
- Minimal impacts are predicted at residential receptors.

Construction Emissions

- The establishment of the Project would involve the construction of the associated infrastructure. This construction activity has the potential to generate dust emissions.
- Potential construction dust emissions will be primarily generated due to material handling, vehicle movements, windblown dust generated from exposed areas and stockpiles. Minimal exhaust emissions will be from the operation of construction vehicles and plant.
- The potential dust impacts due to these activities are difficult to accurately quantify on any given day due to the short sporadic periods of dust generating activity which may occur over the construction time frame. The sources of dust are temporary in nature and will only occur during the construction period. The total amount of dust generated from the construction process is unlikely to be significant given the nature of the activities. Also, as the activities would occur for a limited period, no significant or prolonged effect at any off-site receptor is predicted to arise.

Overall, the assessment demonstrates that even using conservative assumptions, the Project can operate without causing any significant air quality impact at receptors in the surrounding environment, and that implementation of mitigation and management measures will limit emissions potential.

These are detailed within this EIS and in Part I (draft) Compilation of Mitigation Measures.

Traffic and Transport

A detailed Transport and Accessibility Impact Assessment undertaken by Traffix is provided in **Appendix D.**

- Application of the Ryde DCP 2014 car parking rate to the proposed 1,308m2 of Industrial GFA results in a requirement for 18-20 parking spaces. However, it is emphasised the above parking rate is generic in nature and unrepresentative of the operational characteristics applicable to the subject development, being a waste transfer facility. In this regard, based on operational experience and future requirements based on experience the applicant proposes a total of eleven (11) spaces.
- It can be seen that all parking demands (staff and visitor) will be readily accommodated onsite based on operational requirements in relation to the subject development, with no reliance on on-street parking.
- The internal car park complies with the requirements of AS 2890.1 (2004), AS2890.2 (2018) and AS 2890.6 (2009).

  One (1) accessible parking space is provided, in compliance with BCA requirements.

  A minimum of two (2) bicycle parking spaces can be accommodated onsite in accordance with RDCP requirements.

  It is noted that motorcycles can park within standard parking spaces and all motorcycle parking requirements are therefore accommodated onsite.

  All service and waste vehicles will enter and exit the subject development in a forward direction using the ingress and egress access driveways via Buffalo Road. Therefore, all waste and servicing requirements will be adequately accommodated onsite in accordance with Council's DCP requirements.

  The following vehicle trips during morning and afternoon peaks based on previous operational experience, as follows:
  - 11 vehicle trips per hour in the morning peak hour (6 in, 5 out)
  - 11 vehicle trips per hour in evening peak hour (5 in, 6 out)

  The above trips are based on the following hourly vehicle types and frequencies:
  - 1 x Semi Trailer (20.0m Articulated Vehicle)
  - Up to 4 x small Utes per hour
  - 1 x light truck per hour
  - Up to 3 x cars/trailer per hour
  - Up to 2 x skip bin trucks per hour
- The net increase in vehicle trips is 2 additional vehicles per hour in the morning and two additional vehicle trips in the evening and is equivalent to an additional vehicle trip every 30 minutes and will have negligible impact to the surrounding network having regard for existing intersection performance.
- The two key intersections that will be impacted by the proposal are Victoria Road and Cressy Road, and Cressy Road and Buffalo Road. In summary, both intersections currently operate at a good level of service with acceptable

  delays and spare capacity. The forecast increase in vehicle trips (+2 vehicles per hour during the morning and evening peaks) is considered minor and will have no noticeable impact to

intersection performance. Therefore, intersection and road upgrades are not required, accordingly.

Proposed truck routes to and from the subject site are via the RMS approved heavy vehicle routes (Cressy Road and Buffalo Road) which run adjacent to the Holy Cross High School. Therefore, it is proposed that truck arrivals are to be managed to ensure AV's do not coincide with school start and finish times. All other vehicle arrivals and departures will occur on an hourly basis for the duration of the subject sites proposed operating hours.

- All service vehicles and trucks are accommodated within the subject site with no requirement to queue on-street.

  A Green Travel Plan for the proposal encourages the use of existing and future sustainable transport services available within the vicinity of the site.

Noise

- The identified noise sources on Site include the following:
  - Construction Noise
  - Mobile Plant - Mobile plant of acoustical significance includes trucks, forklifts, excavator;
  - Onsite car and truck movements; and
  - General operational activity – sorting of materials.
- Potential environmental impacts in relation to noise that are assessed as part of this EIS include:
  - Operational and transport noise from traffic and transfer trucks in and out of the Site, machinery and plant upon sensitive receivers.
  - Site audits undertaken revealed there are minimal activities that would give rise to induced ground vibration.
  - Construction noise.
- Based on the findings from the acoustic assessment, the proposed development can achieve compliance with the operational acoustic criteria required by local authorities, provided the conceptual recommendations discussed in the Acoustic Assessment and outlined in the mitigation and management measures proposed at Part I if this EIS.

Surface Water and Stormwater

- The re-developed site will discharge stormwater to:
  - the kerb at Buffalo Road;
  - the existing drainage easements along the northern boundary; and
  - the existing downstream drainage easement into property to the south.
- Stormwater pipes within the development site will be re-arranged to collect run-off from roof downpipes of the new building. Although roof water discharge is expected to be unpolluted water, it will be treated prior to discharge to reduce the nitrogen levels as present in rainwater.

- Several new surface inlet stormwater pits will collect runoff from the proposed hardstand areas.
- The development will include water management measures which may marginally reduce stormwater runoff volumes and peak flows during rainfall events. These include:
    - Roof water tanks; and
    - A precast StormFilter system including a sedimentation compartment.
- The hydrological impact of the proposed development is considered negligible, and possibly a marginally beneficial reduction in stormwater runoff compared to the existing site.

The following identifies the potential hydrological risks from operations and construction of the facility.

Operational phase – runoff water quality

- Water pollution from driveway and hardstand areas have the potential to adversely affect the water quality of the receiving water environment and in turn adversely impact the health of aquatic flora and animals, reduce the aesthetic amenity of the waterway for residents, increase health risks to people involved in secondary recreational activities such as kayaking, rowing and sailing.
- Higher nutrient loads (phosphorous and nitrogen) promote rapid growth of aquatic plants, and can lead to can lead to algal blooms, or elevated bacteria levels.
- Metals such as copper, zinc and lead can be toxic at elevated levels, and can bio-accumulate in an ecosystem.

Construction Phase

Erosion and Sediment Transport

- Construction activities on land may expose soils to rainfall and result in discolouration of runoff and sediment transport.
- Fine sediments exported into the receiving environment can create turbid water which reduces light penetration and carry additional nutrients which impact on riparian ecology and causse bacterial levels to exceed water quality objectives.
- Coarse sediments exported from site have the potential to build up along creek beds, potentially smothering riparian plants, and reducing water depth in pools.

Construction Site Spills

- Hydrocarbons or other hazardous materials could be spilled during construction activities from a range of events potentially including refuelling of machinery, disruption or spillage of existing containers storing hazardous materials, or leakage from machinery.
- Wash-out from concrete trucks is highly alkaline and can adversely impact marine environments in the immediate shoreline vicinity.

The Project can operate without causing any significant hydrological impacts to the surrounding environment, and the implementation of mitigation and management measures that are detailed within this EIS and in Part I (draft) Compilation of Mitigation Measures will minimize potential impacts.

Flooding

- Sites are affected by localised inundation in the site low point. Depth of inundation is 0 – 0.12m in a 1% AEP event.
- The flooding is Low Risk and Low Hazard
- The existing flooding relates to localised ponding at a low point and flood velocity is therefore very low. The demolition of an existing proposed building along the southern boundary reduces the existing degree of flood obstruction.
- The proposal will meet the requirements of the Department of Planning's 'Floodplain Development Manual' and City of Ryde Council's Flood guidelines.
- Proposed flood storage has been calculated as approximately 10.2m3, based on limiting the depth of inundation in a 1%AEP event to 0.12m at the location of proposed locations of stormwater pits. This would increase to over 17m3 with an increase in inundation of 0.15m depth.
- The site may be subject to shallow inundation during a 100 year flood event, resulting from overland flows from the local catchment.
- Inundation of waste materials causing contamination of stormwater.

Flood mitigation measures are recommended are detailed within this EIS and in Part I (draft) Compilation of Mitigation Measures.

Leachate Management

- The Site operations do not produce leachate requirement management. The principal pollutant is gross pollutants which are managed through the existing/proposed stormwater measures.

Hazards and Fire

- A review of the storage and operations at the site was conducted to determine whether any activities could be deemed hazardous or offensive by the SEPP Resilience and Hazards.
- The site is determined to not pose any hazardous or offensive risks and therefore it is concluded that the site is not considered potentially hazardous and does not pose significant risk to adjacent land uses. As the facility is not classified as potentially hazardous, it is not necessary to prepare a Preliminary Hazard Analysis for the facility.

Greenhouse Gas Emissions

- The Site does not accept types of waste (including putrescible waste) that generate Greenhouse Gas Emissions. The only likely emissions from the Site are from the machinery operated on Site.

Geotechnical

- The 1:100,000 Geological Series sheet of Sydney indicates that the site is underlain by Hawkesbury Sandstone. This subsurface profile does not take into account the fill from previous site earthworks or residual soils derived from in-situ weathering of the sandstone.

- The boreholes disclosed a subsurface profile of pavements over variably compacted fill of variable depths over residual soil transitioning to weathered sandstone bedrock at mostly shallow to moderate depths below existing ground level.
- Prior to commencement of construction consideration should be given to the findings in JK Geotechnical Report (**Appendix L**) for the site by the builder, and civil and structural engineers.

Social and Economic

- In facilitating the operation of the Site, the proposed development will provide employment-generating activity. This has positive impacts on local and regional economies and populations.
- The Proposal provides a supply of employment in an area of high accessibility, and contributes to desirable employment outcomes.
- The operation of the facility would allow for the efficient provision of resource recovery initiatives and infrastructure. Operation of the Site would facilitate the objectives of relevant State and Commonwealth legislation. For instance, the waste management objectives of the WARR Act include establishing the waste hierarchy of avoidance, resource recovery and disposal. It is considered that the facility would have a positive impact upon waste minimisation and resource recovery in the region.

Flora and Fauna

- The Site is identified as not containing threatened species, populations or communities within relevant State or Commonwealth legislation.

European and Aboriginal Heritage

There is no known European or Aboriginal Heritage items on Site, or in the immediate vicinity of the Site that will be impacted upon by the Site. No excavation is proposed, and therefore no Aboriginal artifacts are likely to be found on Site.

Ecologically Sustainable Development

- The Proposal has been assessed with the purpose of reducing the risk of serious and permanent impacts on the environment including an evaluation of the risk-weighted consequences of alternatives and options regarding the Proposal.
- The technical studies provided in the appendices of the EIS did not identify any issues that may cause serious and irreversible environmental damage as a result of the facility.
- The approval of the designated development application would secure an important waste infrastructure need, thereby facilitating future developments within the Ryde LGA, the Western Sydney Area and the wider Sydney metropolitan area.
- The Site would secure waste requirements and have a working life that would extend to future generations, providing benefits for a number of generations without increasing the burden on future generations to deal with waste disposal problems.
- Should the Designated Development Application not proceed, the principle of intergenerational equity may be compromised.

- The Site is located within an established industrial precinct. No threatened flora or fauna listed under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) or Threatened Species Conservation Act 1995 (TSC Act) have been recorded within the Site area. The development is not considered to significantly impact biological diversity or ecological integrity.
- It is recommended that an Operational Environmental Management Plan (OEMP) is prepared prior to construction and operation of the site to address the ongoing development of management and mitigation of issues on-site which will be implemented. Site management will need to be carried out to ensure that best practice methods are being employed wherever possible that facilitate the health, diversity and productivity of the environment are maintained or enhanced for future generations.

Contamination

- No significant excavation is proposed as part of the subject application and historical data indicates that the Site has been used for light industrial purposes previously.
- No significant subsurface disturbance activities are proposed.
- A Detailed Site Investigation (DSI) has recommended that remediation is required to mitigate risks associated with asbestos and to facilitate the removal of the USTs and associated infrastructure.

Consultation

During and prior to the preparation of this EIS, the proponent has extensively consulted with the relevant local and State government authorities, and neighbours, and have addressed any issues they have raised in the EIS.

It has also come to the Proponent's attention that an objector to the current application resides illegally at Unit 13, 46-48 Buffalo Road, Gladesville.

Unit 13, 46-48 Buffalo Road, Gladesville are industrial commercial units with no residential accommodation permitted.

This particular objector has been motivated by personal issues in a bid to undermine the Proponent's application and has installed cameras facing the proposed facility in order to unlawfully film staff and workers at the facility.

The concerns as expressed by this objector, unlawfully living in the Unit 13, 46-48 Buffalo Road complex, should be given little to no weight by the relevant consent authority.

The issues raised are detailed at Part G of this EIS.

CONCLUSION

The assessment has identified potential impacts that may be satisfactorily mitigated and managed through a range of measures that have been identified within this document. The proposed facility is also consistent with the priorities and targets adopted in relevant Government legislation, policies (both State and Local) and strategies as implemented on a local government and EPA stance.

The facility will provide significant benefit in terms of addressing and securing the need for recycling capacity in the local, Sydney metropolitan area, in addition to enabling efficient, safe and productive use of recyclable

resources. The EIS considers the granting of designated development consent is in the public interest for a variety of reasons. It is recommended that designated development application be approved, subject to the imposition of reasonable conditions of development consent.

PART A - PRELIMINARY

1. INTRODUCTION

This Environmental Impact Statement (**EIS**) has been prepared by Mod Urban Pty Ltd, on behalf of the Applicant, on behalf of Circular Metals Gladesville Pty Ltd, and is submitted to the NSW Department of Planning Industry and Environment (DPIE) in support of the proposed designated development application for the premises identified as 50-52 Buffalo Road, Gladesville (**Site**), being legally described as Lot 1 in DP 390558 and Lot C in DP 419774.

The proposed development is considered Designated Development pursuant to Schedule 3 of the *Environmental Planning & Assessment Regulation 2000* (**EP&A Regulation 2000**), as the site is located within 500m of the nearest residential receivers, and 250m of a dwelling not associated with the use and being likely to significantly affect the amenity of the neighbourhood, and therefore triggers designated development thresholds.

As the Proposal is Designated Development, this EIS is prepared pursuant to Section 78A of the EP&A Act 1979 and in accordance with the Secretary's Environmental Assessment Requirements (**SEARs**) issued 27 October 2021.

The applications specifically seek designated development consent related to the following:

- The use of the premises for the purpose of a 'waste or resource transfer station' for scrap metals.
- The current auto related uses at the subject site (subject to an existing Development Consents No. 44/92 and No 1488) are to cease and make way for the proposed resource recovery transfer station.
- Receiving, consolidating and onforwarding of approximately 25,000 tonnes of scrap metal per annum. The subject site has capacity to accommodate up to 500 tonnes per week, which equates to 2,060 tonnes per month and 25,000 tonnes per year.
- The proposed use seeks consent for the receipt of scrap metals, including ferrous, non-ferrous, E-waste, (limited amount of) whitegoods and batteries to be transported by small vehicles, rigid trucks and the occasional semi-trailer.
- No special, liquid, hazardous, restricted solid waste or general solid waste (putrescible), as defined in the Protection of the Environment Operations Act 1997 (NSW) or the EPA's Waste Classification Guidelines Part 1: Classifying Waste (2014), will be accepted at the facility.
- Demolish a warehouse building currently situated on No 50 Buffalo Road and the rear part of the building forward on the site at No 52 Buffalo Road;
- Construct a new (fully enclosed) building addition to the rear warehouse to house metals, machines and for the unloading and loading of trucks;
- Installation of two weighbridges;
- Undertake stormwater drainage works, earthworks and resurface of the ground level to achieve formal vehicle access, create 11 on-site car parking spaces and two designated loading / unloading areas.
- Hours of operation from 7am to 6pm, Monday to Friday and 8am to 3pm Saturday.

This EIS describes the Site, provides relevant background information and assesses the application in terms of the applicable matters set out in relevant legislation and policies.

The structure of the EIS is as follows:

Executive Summary

Part A Preliminary

Part B The Development Application details

Part C Location

Part D Identification and Prioritisation of Issues

Part E Legislation Review

Part F Environmental Issues

Part G Consultation

Part H List of Approvals and Licences

Part I Compilation of Mitigation Measures

Part J Justification for the Proposal and Conclusion

Background to this application

The Ryde Local Planning Panel determined Local Development Application No. LDA2021/0124 for: *Alterations and additions to an industrial site to establish a resource recovery transfer station for scrap metals* by way of refusal on 9 September 2021.

Following the refusal of LDA2021/0124 Circular Metals Gladesville representatives met with Council staff 27 September 2021 to discuss their intentions of lodging a SEARs request and subsequent EIS for the proposal that is currently under assessment.

On 6 October 2021, Council wrote to Circular Metals Gladesville and advised of their intentions to commence legal proceedings in relation to the unathorised use of the site as a waste resource facility.

On 13 November 2021, Circular Metals Gladesville wrote to the Mayor of Ryde and other Councillors, expressing their disappointment in Council's actions, and that they intended to seek designated development consent by way of lodging a SEARs request and subsequent EIS for the proposal that is currently under assessment.

On 8 February 2022, a new Development Application was lodged with the Environment Impact Statement (EIS). Part G of that former EIS deals with the consultation requirement.

In summary form, consultation did not occur (with relevantly):

(a) the Environment Protection Authority,

(b) the City of Ryde Council, or / with

(c) the surrounding landowners and occupiers that are likely to be impacted by the Proposal.

Various reasons for the non-consultation were provided for in Part G of that former EIS. Public notification of that DA occurred between 11 February 2022 and 15 March 2022.

On 5 April 2022, the Council received the GTAs from the EPA in relation to the new Development application.

On 13 April 2022, Circular Metals Gladesville commenced Class 1 proceedings in the Land and Environment Court of NSW against the deemed refusal of the new DA. That Class 1 appeal was the subject of a section 34 Conciliation Conference on 1 August 2022, where concerns were raised with respect to consultation.

On 8 August 2022, Circular Metals Gladesville discontinued the Class 1 proceedings and withdrew the DA with Council to consider and re-engage with the consultation requirements outlined in the SEARs and to prepare a new EIS.

PART B – LOCATION

2. Site Description and Surrounds

The site is known as 50-52 Buffalo Road, Gladesville and comprises two allotments with a legal description of Lot 1 in DP 390558 and Lot C in DP 419774.

Figure 1 below identifies the Site and its surrounds.

Figure 1: Subject Site and surrounding development

Figure 2: View of No 50 and 52 Buffalo Road (Source: Google Earth)

2.1 Site Description

- The site is located on the south-western side of Buffalo Road, in proximity to the bus depot.
- The site is an irregular shaped allotment with a frontage to Buffalo Road of 30.48m, an irregular rear boundary dimension of 30.48m, a north-western side boundary dimensions of 106.68m and a south-eastern side boundary which includes a dog leg and has the dimensions of 76.20m and 30.48m, with a total site area of 2,879m2.
- The site falls from the south (rear) to the north (street) by approximately 3m.
- The site is located near the edge of a Light Industrial area that is surrounded by residential and other sensitive users, including a school.
- The subject site also includes a 1.83m easement traversing the site midblock (approval has been obtained to extinguish this easement) and a 1.2m drainage easement running along the north-western side boundary.

50 Buffalo Road

- No. 50 Buffalo Road is currently developed with a rectangular shaped industrial building (see Figure 2) in proximity to the south-eastern boundary and setback approximately 8m from Buffalo Road. The remainder of the property is concreted, with a driveway along the north-western boundary to a parking area at the rear of the site.

Figure 3: View of 50 Buffalo Road

52 Buffalo Road

- No. 52 Buffalo Road is occupied by two industrial buildings.
- The front building is an irregular shape in proximity to the south-eastern boundary and setback approximately 12m from Buffalo Road, which is currently occupied by an automotive repair business.
- The rear building is rectangular in shape and has a minimal setback from the rear and side boundaries and is used as a metal recycler (operated by the applicant).
- The remainder of the property is concreted, with a driveway along the north-western boundary to a concreted area between the buildings and with the front setback used for parking.

Figure 4: View of 52 Buffalo Road

Figure 5: View of the rear warehouse building at No 52 Buffalo Road which is to be retained.

Common Site Attributes

- Access to the Site is achieved via Buffalo Road;
- No native vegetation exists on the Site and no significant trees or shrubs are located on site;
- The site is not a heritage item and is not located within a heritage conservation area.

2.2 Site Surrounds

- The subject site is situated within the centre of an established light industrial precinct characterised by a mix of single and two storey industrial buildings of varying style, age and appearance. Car repair and related industrial uses are prevalent in the precinct.
- Adjoining the subject site to the north-west is a site occupied by Mazda being a Mazda service centre.

Figure 6: Mazda Service Centre adjacent the site to the north at 54 Buffalo Road.

- Further to the north-west is a 2-3 storey industrial unit complex, which is setback behind a landscaped area and has some limited parking forward of the building line. This property is located at the boundary of the industrial area, with the playing fields of Holy Cross College to the north-west and west of this property.
- Situated to the north of the subject site across Buffalo Road is a large site used by Sydney buses as a bus depot. The Sydney Bus depot site is significantly large and maintains a strong presence in the precinct. The bus depot site is the major noise generating source in the precinct.
- Also opposite the site in Buffalo Road are a series of light industrial premises, including car service centre and motor repairs, a glazing firm
- Immediately to the south-east is a 2 storey industrial unit complex at 46-48 Buffalo Road. The building is setback approximately 15m with some car parking provided forward of the building line behind a landscape strip.

Figure 7: Adjoining the site to the south at 46-48 Buffalo Road is a contemporary Strata Titled warehouse complex

- The Site is located in the local government area of City of Ryde.

2.3 Zoning and Permissibility

The site is zoned IN2 Light Industrial under the provisions of Ryde Local Environmental Plan 2014 (**RLEP**) and a 'waste or resource transfer station' for scrap metals is an innominate permissible use with consent in that zone, being a development not specified as permitted without consent or prohibited.

The objectives of the zone are:

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

The Proposal is considered to be consistent with the objectives of the IN2 zone.

Within the dictionary of the RLEP, *'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)."

Therefore, the use of the Site is permitted with development consent.

2.4 Climate and Meteorology

Long-term climatic data from the closest Bureau of Meteorology (BoM) weather station at Sydney Olympic Park (Site No. 066195) were analysed to characterise the local climate in the proximity of the Project. Sydney Olympic Park is located approximately 6.5km southwest of the Project.

Table 7: Monthly climate statistics summary – Sydney Olympic Park

Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann.
Temperature													
Mean max. temp. (ºC)	28.4	28.1	26.6	23.9	20.8	18.3	17.6	19.5	22.5	24.3	25.3	27.4	23.6
Mean min. temp. (ºC)	19.3	19.4	17.8	14.3	11.2	8.9	7.8	8.7	11.6	13.7	15.8	17.9	13.9
Rainfall													
Rainfall (mm)	84.4	109.8	66.0	89.2	88.2	75.8	63.5	56.7	52.7	64.9	76.2	58.0	911.8
No. of rain days (≥1mm)	7.6	7.7	7.6	6.9	7.7	6.9	6.3	4.4	5.5	7.1	7.8	6.8	82.3
9am conditions													
Mean temp. (ºC)	22.3	21.9	20.3	18.0	14.6	12.0	11.2	12.9	16.4	18.7	19.6	21.5	17.4
Mean R.H. (%)	67.0	72.0	72.0	68.0	70.0	71.0	68.0	61.0	57.0	56.0	64.0	64.0	66.0
Mean W.S. (km/h)	9.6	9.3	8.4	9.5	10.5	10.9	11.0	11.6	11.9	11.1	11.4	10.0	10.4
3pm conditions													
Mean temp. (ºC)	26.3	26.1	24.9	22.4	19.5	17.3	16.6	18.1	20.6	22.1	23.2	25.3	21.9
Mean R.H. (%)	53.0	55.0	53.0	51.0	51.0	52.0	48.0	41.0	43.0	45.0	51.0	50.0	49.0
Mean W.S. (km/h)	19.0	17.3	16.0	14.2	12.6	12.5	13.5	15.8	17.6	18.6	19.3	19.4	16.3

Source: **Bureau of Meteorology, 2021 (November 2021)**

R.H. – Relative Humidity, W.S. – wind speed

The data indicate that January is the hottest month with a mean maximum temperature of 28.4 degrees Celsius (ºC) and July is the coldest month with a mean minimum temperature of 7.8ºC.

Rainfall decreases during the cooler months, with an annual average rainfall of 911.8 millimetres (mm) over 82.3 days. The data indicate that February is the wettest month with an average rainfall of 109.8mm over 7.7 days and September is the driest month with an average rainfall of 52.7mm over 5.5 days.

Relative humidity levels exhibit variability over the day and seasonal fluctuations. Mean 9am relative humidity ranges from 56% in October to 72% in February and March. Mean 3pm relative humidity levels range from 41% in August to 55% in February.

Wind speeds exhibit daily and seasonal variations with lower wind speeds at 9am and higher wind speeds at 3pm. Mean 9am wind speeds range from 8.4 kilometres per hour (km/h) in March to 11.9km/h in September. Mean 3pm wind speeds range from 12.5km/h in June to 19.4km/h in December.

2.5 Topography

The site sits slightly above the adjacent road surface along Buffalo Road. The levels between the two lots alternate, with No 52 being between 0.9m to 1.1m higher, and retained by a brick retaining wall along the

length of the workshop on this lot. In the rear of No 50 the ground surface slopes up by approximately 1.5m to the south and in this area the surface levels are between 0.7m to 0.9m above those in No.52 however there is no retaining element between the two lots.

2.6 Soil types and properties

Concrete pavements surround all buildings and appear to be in poor to reasonable condition with cracking evident throughout the site. Beneath the concrete geotechnical investigations uncovered that fill occurs, and then below the fill are natural sandy clays, silty clays and clayey sands of residual origin. Beneath these soils it was found that sandstone bedrock occurs. The depth to sandstone bedrock varied significantly across the site.

2.7 Ecological Information

There is no known flora or fauna on the Site that can be considered to be a threatened or endangered species.

2.8 European and Aboriginal Heritage

The site is not listed as a heritage item, nor is it located in a Heritage Conservation Area as listed by Schedule 5 Parts 1 and 2 of the RLEP.

It is, however, located within the vicinity of a heritage item listed by Schedule 5 Part 1 of the RLEP known as

Holy Cross College', Nos. 499-521 Victoria Road, Ryde

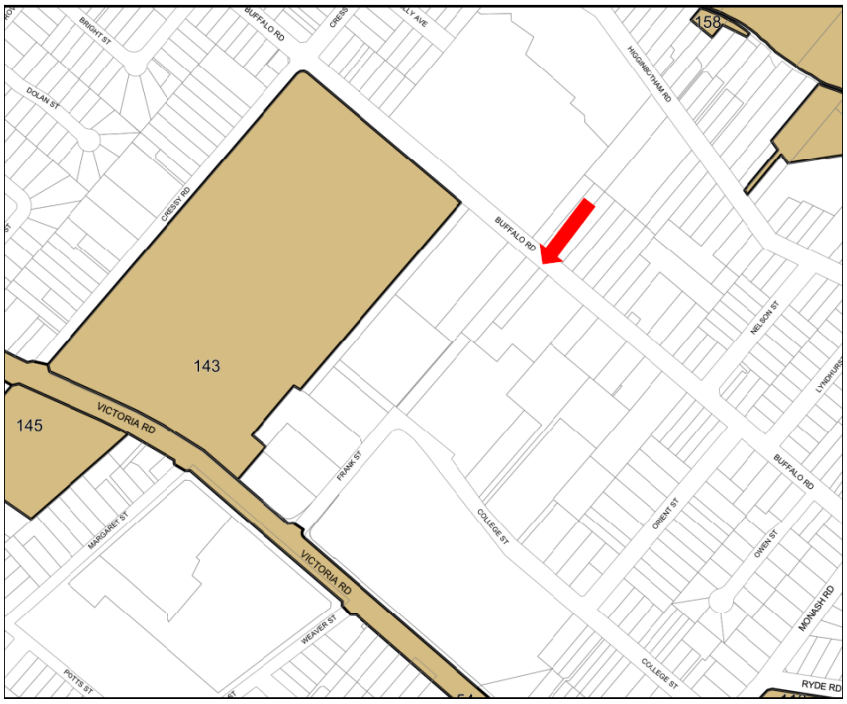

Figure 8: Detail, map showing heritage items in relation to the subject site. Site is shown by red arrow. (Source: Ryde LEP 2014)

Additionally, no known Aboriginal heritage sites of places of significance are known to exist on the Site or adjoining sites.

PART C - THE APPLICATION DETAILS

3. PROPOSAL OVERVIEW

Designated Development Application

The proposed development is considered Designated Development pursuant to Schedule 3 of the *Environmental Planning & Assessment Regulation 2000* (**EP&A Regulation 2021**), as the site is located within 500m of the nearest residential receivers, and 250m of a dwelling not associated with the use and being likely to significantly affect the amenity of the neighbourhood, and therefore triggers designated development thresholds.

There are no other relevant Designated Development triggers that are applicable to this proposal.

3.1 The Objectives of the Proposal and Facility

The objectives of the Circular Metals Gladesville facility are:

- Facilitating future waste transfer and recovery needs of Greater Sydney.
- Securing future capacity for receipt of scrap metals, including ferrous, non-ferrous, E-waste, (limited amount of) whitegoods and batteries to complement other resource recovery management options in the Greater Sydney region.
- Facilitating the safety and operation of the facility for future operators and customers.

To achieve these objectives a number of processes are required. The following outlines these processes.

i. Processing Per Annum

- Receiving, consolidating and onforwarding of approximately 25,000 tonnes of scrap metal per annum.
- The subject site has capacity to accommodate up to 500 tonnes per week, which equates to 2,060 tonnes per month and 25,000 tonnes per year.

ii. Types of Waste Processed

This section outlines the types of waste which is proposed to be accepted at the facility, and which is sought as part of this designated development application.

Table 1: Waste Streams and Quantity

Type of Material	Processing or Storage	Location on Site for Storage	Bins on Site or Stacked	Volume Per Annum Tonnes	Maximum Daily Volume Tonnes	Maximum Weekly Tonnes
Ferrous Steel	Storage	Refer plans	Stacked	20,000	80	400
Copper	Storage	Refer plans	Bins	1,000	4	20
Brass	Storage	Refer plans	Bins	250	1	5
Aluminium	Storage	Refer plans	Stacked	2,000	10	50

Zinc	Storage	Refer plans	Bins	150	0.6	3
Lead	Storage	Refer plans	Bins	75	0.3	1.5
Stainless Steel	Storage	Refer plans	Bins	1,000	4	20
E Waste	Storage	Refer to plans	Bins	500		
Batteries	Storage	Refer plans	Pallets Bunded	250	0.1	0.5
Total				**25,000**	**100**	**500**

There will be no importation of organic materials, food, household liquids, asbestos, chemicals, hazardous materials, building waste or concrete.

The batteries collected and stored will be Lead / Acid only. No Lithium batteries will be brought to the site. The batteries will be kept on pallets within the building and with a maximum of 5 pallets at a time. A maximum of 200 batteries will be stored on-site. No loads exceeding 200 kg of waste lead acid batteries will be transported to or from the site.

These waste streams typically arrive from small vehicles, rigid trucks and the occasional semi-trailer.

No special, liquid, hazardous, restricted solid waste or general solid waste (putrescible), as defined in the Protection of the Environment Operations Act 1997 (NSW) or the EPA's Waste Classification Guidelines Part 1: Classifying Waste (2014), will be accepted at the facility.

iii. Resource Recovery Process and Disposal

The following highlights the cradle to grave waste processing at the facility as proposed.

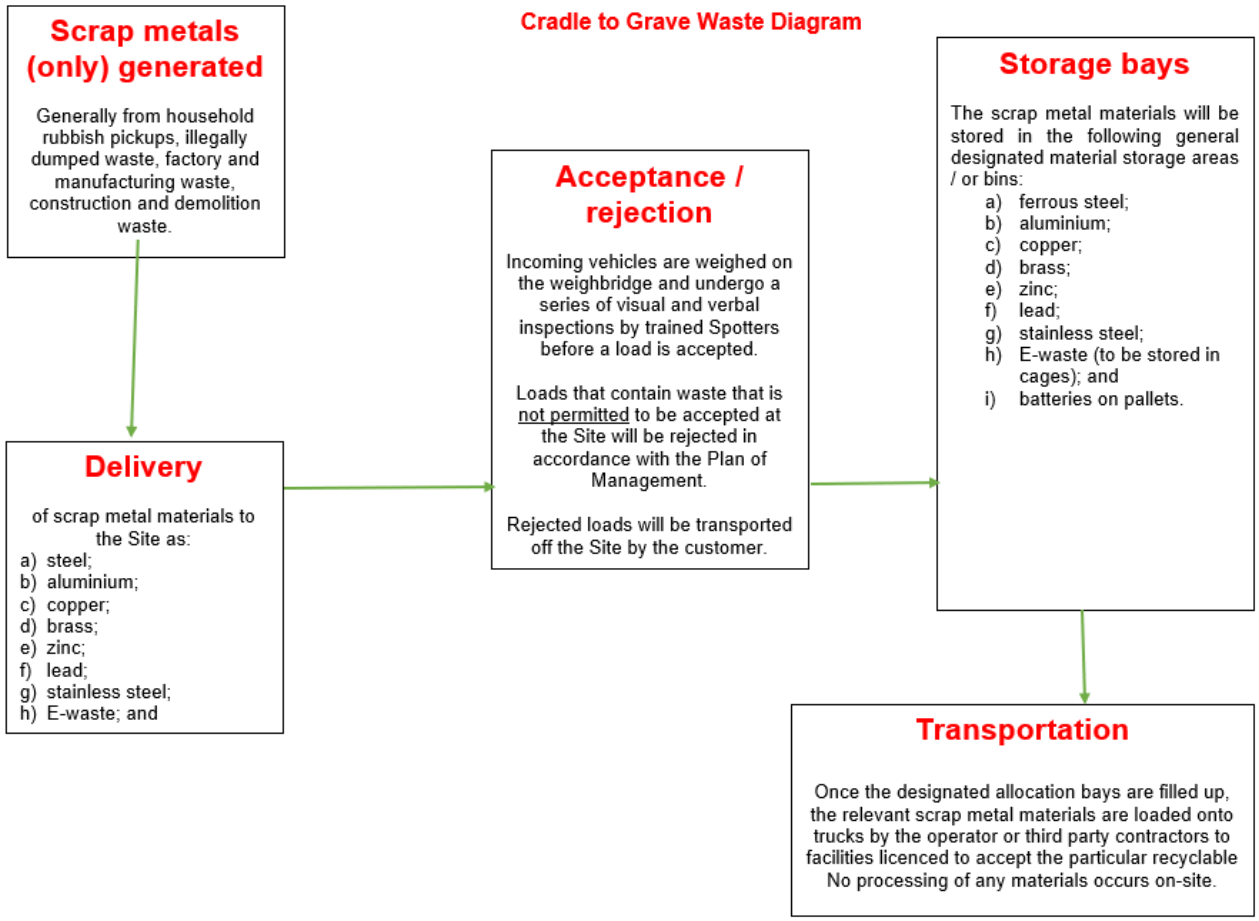

Figure 9: Cradle to Grave Diagram

Figure 9 above provides a step by step process of what occurs when materials arrive at the Site. This process is typical for all types of material arriving at the site.

The process is also described as follows:

- The truck enters the site, is visually checked and weighed on the weighbridge.
- The truck enters the rear building and occupies the loading area, the doors are then shut and the truck is unloaded.
- The doors to the building are opened and the truck leaves, via the weighbridge.
- The material unloaded is sorted in the building and placed into defined stockpiles based on the metal type.
- Once sufficient material of a particular metal is stored, it is collected and transferred to a processing centre, using the same process as for deliveries.
- A similar process occurs for small vehicles in the front building, with the scrap metal then transferred by forklift to the rear building to be sorted.

iv. Level of performance and Operating Standards

To ensure that environmental standards set by the EPA and government authorities are met, Circular Metals Gladesville employees will trained in accordance with their own site specific PoM to be developed post approval of this proposal. Circular Metals Gladesville keep a record of all training, which is updated annually for every employee.

In addition, the PoM that Circular Metals Gladesville will operate under will be reviewed and updated annually, or when required to ensure that it aligns with any changes in legislative requirements or regulations.

A High Level of Performance against environmental standards is anticipated by Circular Metals Gladesville and the level of performance proposed for the facility aligns with the following objectives.

- Encouraging the most efficient use of resources;
- Reducing environmental harm;
- Ensuring that resources are managed against the waste hierarchy of avoidance, resource recovery then disposal; and
- Diversion of waste from landfill.

v. Built Form and Building Works

- The application seeks to demolish the rear pitched roof portion of the front building on 52 Buffalo Road and the building on 50 Buffalo Road.
- The application seeks to construct a new building to straddle the boundaries of the two allotments and connect to the existing rear building on 52 Buffalo Road.
- The new building is to be built in close proximity to the south-eastern boundary and the rear boundary of 50 Buffalo Road.
- The building is proposed to have a setback from Buffalo Road of approximately 42-46m and of approximately 8m from the north-western boundary.
- The building is to be constructed of Colorbond, having a height of 8.19m-9.28m, with a shallow sloping roof.
- The proposed building is to have a roller door facing Buffalo Road to allow vehicles to enter and a wide stacked door on the north-western side to allow vehicles to exit the building (See Figure 10).
- Large weighbridges are to be constructed (to be installed flush with the concrete slab) near the entrance and exit driveways and parking for 11 vehicles is proposed adjacent to the weighbridge at the entrance driveway.
- A landscaped area is to be provided at the front of 52 Buffalo Road.
- No signage is proposed as part of the designated development application. Existing signage on site is to be removed. Any future signage will be subject of future development applications.

vi. Timing of Proposal

The works associated with the use of the premises for the purpose of a ‘waste or resource transfer station’ for scrap metals will commence upon receipt of a Designated Development Consent as sought in this proposal.

As a result of the environmental assessments that have been required to be undertaken, a number of recommendations have been made to Circular Metals Gladesville in order to ensure the facility will minimise environmental impacts. Some of these proposed mitigation measures will be implemented immediately by Circular Metals Gladesville, whilst other measures will be implemented in the medium term subject to the outcomes of further testing and sampling.

Refer to Part I for a list of recommendations, mitigation and management measures to be implemented by Circular Metals Gladesville.

3.2 Description of the Proposal

The following outlines the proposed processes to undertaken by Circular Metals Gladesville at the facility and that form part of the Designated Development application.

a. General

The application seeks development consent for the use of the premises for the purpose of a 'waste or resource transfer station' for scrap metals. The particulars of the operation are as follows:

Table 2: General Proposal Summary

Primary Land Use	***waste or resource transfer station*** The proposal ceases the current car repair and panel beating businesses currently operating on site.
Operational Detail	The receipt of scrap metals, including ferrous, non-ferrous, electronic waste, (limited amount of) whitegoods and batteries and by small vehicles, rigid trucks. There will be no importation of organic materials, food, household liquids, asbestos, chemicals, hazardous materials, building waste or concrete. Scrap metals delivered by metal types only will be unloaded inside the transfer station, placed into allocated bays (i.e. steel, aluminium, copper, brass etc), and then reloaded (by metal types only) onto semi trailers and trucks for distribution, meaning that it which will then transport the loads off site to appropriately licensed facilities for processing and remelting. Steel scrap will be sent by truck to other resource recovery facilities lawfully capable of accepting that material, for shredding and then 100% recycled and melted at steel mills at other third party facilities. Aluminium scrap will be sent by truck to other resource recovery facilities lawfully capable of accepting that material for melting and 100% recycled into products for steelmaking at other third party facilities. Other non-ferrous scraps will be sold in smaller quantities to specialised recyclers. There will be no shredding, oxy cutting or grinding works proposed as part of the resource recovery transfer station use. Scrap metals are simply unloaded, placed into collection bays and then when there is enough product, reloaded onto trucks for distribution and transportation to other facilities for processing. The site will operate as a collection facility for metal/wastes.

Hours of Use	Hours of operation from 7am to 6pm, Monday to Friday and 8am to 3pm Saturday.
Operational Jobs	Approximately six (6) full time equivalent jobs.
Storage/Processing Capacity	The subject site has capacity to accommodate up to 500 tonnes per week, which equates to 2,060 tonnes per month and 25,000 tonnes per year. The scrap metals brought to the site will be stored as follows: **Ferrous Steel** and **Non Ferrous** 1) Aluminium 2) Copper 3) Brass 4) Zinc 5) Lead 6) Stainless Steel The Ferrous (Steel) and aluminium streams will be stored in bays. The metals will then be baled and stacked in bays inside the warehouse building. The smaller metal products will be stored in bins, drums and pallets on-site stored within the warehouse building. The batteries collected and stored will be Lead / Acid only. No Lithium batteries will be brought to the site. The batteries will be kept on pallets within the building and with a maximum of 5 pallets at a time. A maximum of 200 batteries will be stored on-site. E waste will be stored in cages. Maximum 5 tonnes at any time. The E waste is not Hazardous and will be limited to products such as computers, printers, photocopiers, televisions and & sound systems
Operational Machinery	Provision of two weighbridges. x1 excavator

	x2 forklift
Demolition	Demolish a warehouse building currently situated on No 50 Buffalo Road and the rear part of the building forward on the site at No 52 Buffalo Road.
Groundworks	Undertake stormwater drainage works, earthworks and resurface of the ground level to achieve formal vehicle access, create 11 on-site car parking spaces and two designated loading / unloading areas. Earthworks are limited to the internal grading of the site to achieve a one-way vehicle access movement and for the provision of drainage services.
New Built Form	Construct a new (fully enclosed) building addition to the rear warehouse to house metals, machines and for the unloading and loading of trucks
Landscape	New landscaping towards the front of the site.
Onsite car parking and vehicle access	Provision of onsite car parking for eleven (11) staff parking spaces. The applicant proposes to provide a separate entry and exit on-site with an inbound and outbound weighbridge, so as to allow vehicles and trucks to enter and leave the site in a forward direction. To complement the one-way in/out traffic flow system, the applicant proposes to provide a separate dedicated drop off point for smaller retail customers/home owners to that of the larger trucks. Vehicle access is proposed by existing vehicle cross overs to Buffalo Road. Clear access to the weighbridge will be provided at all times to allow ingress and egress from the site. The proposed car parking on site is for staff only, so when they arrive early in the day they will park their vehicles until when they exit in the evenings. Therefore, no conflict with the weighbridge operation is likely to occur as the car parking is not available to the public visiting to the site. When the public do visit in cars for drop off of materials they will go directly onto the weighbridge and be directed to the relevant building for unloading of materials. They will not be able to park their cars at any time.

The processes for dealing with each waste or resource stream is outlined in Section 2.1 of this report

i. Construction works

Pending approval, design and construction activities are expected to start in 2024. The proposal would likely be built in five phases to reflect contractor requirements, material and equipment availability, and program and delivery schedules. Constructing in phases would also allow for effective site and environmental management.

The main phases of construction comprise:

- Phase 1: Demolition
- Phase 2: Site establishment and enabling works
- Phase 3: Main construction works
- Phase 4: Testing and commissioning works
- Phase 5: Finishing and landscaping works.

Although construction works are likely to occur in phases, the operational phase of the proposal would not be staged. Full operations will begin once construction (along with testing and commissioning) is complete.

A Construction Traffic Management Plan is provided at **Appendix N**.

b. Air

Due to the nature of the operations conducted by Circular Metals Gladesville and the streams of materials, fugitive dust air emissions will be generated onsite by the following means:

- Movement of trucks into and out of the Site;
- The unloading of waste within the facility;
- Movement of materials with forklifts and excavator within the facility;
- Storage of materials.

Pollutants which may potentially be emitted may include combustion gases and particulate from fuel combustion in vehicle engines, particulate matter resulting from the movement of vehicles and from the movement and storage of waste.

In addition to the Circular Metals activities, a number of other environmental factors will also affect air quality emissions including:

- Construction Emissions - Potential construction dust emissions will be primarily generated due to material handling, vehicle movements, windblown dust generated from exposed areas and stockpiles. Exhaust emissions will be from the operation of construction vehicles and plant.
- Odour Emissions - Odour emissions have some potential to arise from the exhaust emissions of passing traffic and other industrial and commercial operations in the area.
- Wind direction – determines whether materials or air pollutants (from vehicles) from the Site are transported in the direction of the sensitive receivers;
- Wind speed – governs the potential suspension and drift resistance of materials;

- Waste type - loose paper or cardboard have an increased potential to be transported through the air in high wind events. Scrap metal is less likely to be affected by wind events.

Dust can be generated by vehicles, specifically from trucks entering and leaving the Site by dust particles being picked up from the road by tyres and from air flowing over the truck body.

Based on the findings of the air quality impact assessment, and even using conservative assumptions, the Project can operate without causing any significant air quality impact at receptors in the surrounding environment.

c. Noise and Vibration

The proposed resource recovery transfer station at 50 – 52 Buffalo Road in Gladesville is surrounded by the following noise sensitive receivers:

- Residences at 77-89 Buffalo Road, ranging from approximately 224m to 330m north-west from the project site.
- Residence at 13 Buffalo Road, located approximately 239m north-east from the project site.
- Residences at 50-52 Cressy Road, located approximately 348m north-west from the project site.
- Residences at Patrician Brothers Monastery located approximately 338m south-west from the project site.
- Industrial sites located adjacent and opposite the site of interest are within a 198m radius.
- Recreational playground area belonging to Holy Cross College is approximately 100m in the north-west direction at the closest distance. This ranges to 405m at the furthest point.
- Educational site in the form of Holy Cross College is located 307m south-west from the project site.

The identified noise sources on Site include the following:

- Construction Noise
- Mobile Plant - Mobile plant of acoustical significance includes trucks, forklifts, front-end loader;
- Onsite truck movements; and
- General operational activity – sorting of materials.

Potential environmental impacts in relation to noise that are assessed as part of this EIS include:

- Operational and transport noise from traffic and transfer trucks in and out of the Site, machinery and plant upon sensitive receivers.
- Site audits undertaken revealed there are minimal activities that would give rise to induced ground vibration.

An Acoustic Impact assessment is included at **Appendix F.**

d. Hours of Operation

The hours of operation for the Site are from 7am - 6pm Monday to Friday, and 8am – 3pm Saturday.

e. Water Management Systems

Stormwater Collection and Drainage

The re-developed site will discharge stormwater to:

- The kerb at Buffalo Road;
- The existing drainage easements along the northern boundary; and
- The existing downstream drainage easement into property to the south.

Stormwater pipes within the development site will be re-arranged to collect run-off from roof downpipes of the new building. Although roof water discharge is expected to be unpolluted water, it will be treated prior to discharge to reduce the nitrogen levels as present in rainwater.

Several new surface inlet stormwater pits will collect runoff from the proposed hardstand areas.

There is no development on the Site requiring measures to prevent sediment and erosion impacts. The Site is almost entirely paved surface at present, and this will continue as part of the proposal.

An onsite detention tank (OSD) will be provided at the front of the property underground.

Flooding

- A summary of the flood behavior of the Site is as follows:
  - Sites are affected by localised inundation in the site low point. Depth of inundation is 0 – 0.12m in a 1% AEP event.
  - The flooding is Low Risk and Low Hazard
  - The existing flooding relates to localised ponding at a low point and flood velocity is therefore very low. The demolition of an existing proposed building along the southern boundary reduces the existing degree of flood obstruction.
  - The proposal will meet the requirements of the Department of Planning's 'Floodplain Development Manual' and City of Ryde Council's Flood guidelines.
  - Proposed flood storage has been calculated as approximately 10.2m^3, based on limiting the depth of inundation in a 1%AEP event to 0.12m at the location of proposed locations of stormwater pits. This would increase to over 17m^3 with an increase in inundation of 0.15m depth.

An assessment of Stormwater Matters and Flooding has been prepared for the Site by SLR (**Appendix G**).

In addition to the assessment, a number of control measures are proposed to be put in place and implemented on Site to ensure a minimal impact on the environment. These control/mitigation measures are outlined further in this report at Part F and I of the EIS.

f. Soil and Contamination

The application does not propose any works or new built form that would impact on soil and drainage across the Site.

No significant excavation is proposed as part of the application and historical data indicates that the Site has been used for light industrial purposes. The application does not involve any significant disturbance to the ground surface, thus further consideration in respect of contamination is not required. Sub-surface

disturbance is thus likely to be limited to the extent necessary for the installation of foundations and services. On this basis, it is considered that the Site is suitable for the proposed development.

The site is located in an area of no known occurrences of acid sulfate soil materials. The site is within a Class 5 risk area according to the Ryde Local Environmental Plan 2014.

Class 5 risk areas are those within 500m of adjacent Class 1, 2, 3 or 4 land that is below 5m Australian Height Datum (AHD). Development consent is required to carry out works by which the water table is likely to be lowered below 1m AHD on adjacent Class 1, 2, 3 or 4 land. The proposed development is not expected to do this.

g. Waste Management and Hazardous Materials

The following types of recyclable material and quantities listed in Table 3 are received at the Site.

Table 3: Volume/Quantities of Waste Received

Type of Material	Processing or Storage	Location on Site for Storage	Bins on Site or Stacked	Volume Per Annum Tonnes
Ferrous Steel	Storage	Refer plans	Stacked	20,000
Copper	Storage	Refer plans	Bins	1,000
Brass	Storage	Refer plans	Bins	250
Aluminium	Storage	Refer plans	Stacked	2,000
Zinc	Storage	Refer plans	Bins	150
Lead	Storage	Refer plans	Bins	75
Stainless Steel	Storage	Refer plans	Bins	1,000
E Waste	Storage	Refer plans	Bins	500
Batteries	Storage	Refer plans	Pallets Bunded	250
Total				**25,000**

The facility is designed to receive and store the above listed waste types only. All other wastes are excluded.

The site is determined to not pose any hazardous or offensive risks and therefore it is concluded that the site is not considered potentially hazardous and does not pose significant risk to adjacent land uses.

Each type of waste is stored on Site for recovery/recycling and is stockpiled/stored separately.

The processes for dealing with each waste or resource stream is outlined in Section 3.1 of this report and within the Plan of Management.

No liquid waste, hazardous waste, clinical waste or toxic waste is received on Site. A preliminary risk screening in accordance with State Environmental Planning Policy (Resilience and Hazards) (refer **Appendix H**) confirms no hazardous waste is stored or accepted on Site.

h. Traffic and Transport

The Site is subject to the existing traffic conditions which the Proposal seeks to maintain.

- Vehicular access is currently provided to the subject site comprising 50 and 52 Buffalo Road via two (2) existing access driveways to Buffalo Road.
- Buffalo Road is local collector road that generally traverses northwest southeast between Lane Cove Road in the northwest and Monash Road in the southeast.
- It is evident that the development benefits from good bus services with bus stops located within walking distance (400 metres) of the subject site along both sides of Buffalo Road.
- The combined vehicle trip generation of the existing Vehicle Service Centre and existing Waste Transfer Facility can be summarised as follows:
  - 9 vehicle trips per hour (5 in, 4 out) during the morning peak hour; and
  - 9 vehicle trips per hour (4 in, 5 out) during the evening peak hour.

A Traffic and Parking Impact Assessment has also been prepared for the Site by Traffix (**Appendix D**). In addition to the assessment, a number of control measures are proposed to be implemented on Site to ensure a minimal impact on the environment. These control/mitigation measures are outlined further in this report at Part F and I of the EIS.

3.3 Rehabilitation and Maintenance

i. Site Maintenance

It is proposed that Circular Metals Gladesville will be responsible for ongoing Site maintenance.

ii. Final condition of Site

Circular Metals Gladesville intends to implement the mitigation measures and management controls outlined in this EIS and the POM to ensure the final condition of the Site is to the satisfaction of the relevant authorities**.**

3.4 Consideration of Alternatives and Justification for the Proposal

The intention and objectives of the Proposal is to provide a waste and resource transfer facility at a location that:

- Facilitates future waste and resource recovery transfer needs of Greater Sydney.

- Secures future capacity for resource transfer and temporary storage to complement other resource recovery management options in the Greater Sydney region and internationally.
- Facilitates the safety and operation of the current facility for future operators and customers.
- Allows for the development as a permissible use;
- Has appropriate access to the regional road network;
- Is compatible with surrounding development and local context;
- Will result in minimal impact on the environment; and
- Will allow for the implementation of suitable mitigation measures where required.

The Site is considered to be appropriate for the project as it allows for the use of the Site in an established industrial precinct. The proposed Site design and layout of the building maintain consistency with the objectives of the zone and enhance the underlying industrial character intended for the locality.

The options considered, and subsequently dismissed, in arriving to the current Proposal included:

(a) 'Do Nothing' Scenario

This option was dismissed as the objectives of the project would not be met. Further, Circular Metals Gladesville is required to obtain Designated Development Consent for the use and operations of the Site. The Site currently contains facilities suitable for operations which are capable of accommodating the use without any unacceptable impacts on the surrounding locality.

If the Proposal did not proceed in any form, there would be a high risk of increased demand on other waste and resource recovery facilities within the Greater Western Sydney area.

The Do-Nothing scenario would result in economic, environmental and social costs that would impact upon local government, local business and the local community and would not be consistent with relevant State legislation or policy.

For the above-listed reasons, not proceeding with the Proposal in some form would not achieve the Proposal objectives.

(b) Development on an Alternative Site

Having given consideration to the construction of a new facility on an alternative site that addresses the Proposal objectives, it is understood that a new facility would be required to be located within the western Sydney region and meet future resource recovery transfer needs of the surrounding area.

Consideration was given to alternative sites; however, these were dismissed as the subject Site resulted in the most beneficial outcomes for the Proposal as:

- It will continue the long-standing occupation of the Site by industrial type uses;
- It will be located within a Site zoned for industrial uses;
- Other sites present unsuitable zonings and/or constraining surrounding land use issues (i.e. residential/ potential for impact upon amenity);
- Other sites were considered unsuitable for access to the site;
- Utilising existing infrastructure on Site reduces the need to develop new waste management infrastructure at other facilities/ new sites and subsequent impact to the environment.

- The high capital costs associated with design, construction and operation of a new facility on an alternative site were deemed unrealistic;
- The Site achieves appropriate separation from sensitive land activities including residential development;
- All potential environmental impacts of the Proposal can be suitably mitigated through the proposed mitigation and management measures outlined in this EIS;
- The proximity to the regional road network provides increased economic benefits;
- The Proposal generates further employment opportunities, during both the operational and maintenance phase for up to 6 full time equivalent employees;
- The Proposal will not affect any area of heritage or archaeological significance; and
- The Proposal has been developed to achieve appropriate visual amenity.

The Proposal is justified on the basis that it is compatible with the locality in which it is proposed whilst having no unacceptable economic, environmental or social impact.

Economic Consideration

The provision of an additional waste and resource transfer facility with sufficient capacity to accept the proposed amounts of material is needed in Sydney and as per the current site minimal change to existing infrastructure is required. Allowing the facility to accept the proposed quantity of materials will also enable the existing infrastructure on site to be upgraded and utilised to a greater level. This is much more economically desirable and efficient than developing a brand new facility to accommodate the use.

Social considerations

Located within an existing industrial area within proximity to residential or further sensitive receivers, the Proposal will not require significant mitigation measures and consequently the potential negative social impacts of the Proposal will be minimal. The proposed facility provides an important service to domestic and commercial clientele within the Sydney metropolitan area, and internationally, and the Site is located within a well-established industrial precinct.

Should the Proposal not be approved, this service would be restricted in terms of provision to potential clientele. This could result in increased illegal dumping of materials as limited alternatives are available.

Environmental considerations

As outlined in this EIS, the Proposal will implement some minor changes to the infrastructure and operation of the facility, which aim to limit potential environmental impacts associated with the operation of the facility.

Overall Conclusion

The Proposal is justified on the basis it is compatible with the locality while having no unacceptable economic, environmental or social impact. The discontinued use of the Site for industrial type uses would not be a financially viable option and would have subsequent knock on effects such as loss of employment, and the loss of a local facility that services wider Sydney's waste disposal needs. It is therefore considered that the Site is the most appropriate locality for the facility and that its continued use should be supported.

3.5 Secretary's Environmental Assessment Requirements (SEARs)

Formal SEARs were issued (SEAR 1086) on 27 October 2021 for the Proposal and are outlined as follows and in **Appendix O**. A comprehensive table of responses to the SEARs and correspondence from the relevant agencies is included at **Appendix O**.

Table 4: SEARs

SEARs Key Issues	Response Reference
The EIS must include an assessment of all potential impacts of the proposed development on the existing environment (including cumulative impacts if necessary) and develop appropriate measures to avoid, minimise, mitigate and/or manage these potential impacts. As part of the EIS assessment, the following matters must also be addressed:	Refer Part C, E, F and I
• **strategic context** - including: - a detailed justification for the Proposal and suitability of the Site for the development; - a demonstration that the Proposal is consistent with all relevant planning strategies, environmental planning instruments, development control plans (DCPs), or justification for any inconsistencies; and - a list of any approvals that must be obtained under any other Act or law before the development may lawfully be carried out.	Refer Section 3.4 and Part F, H and I
• **suitability of the site** – including: - a detailed justification that the site can accommodate the proposed processing capacity, having regard to the scope of the operations and its environmental impacts and relevant mitigation measures - floor plans depicting the proposed internal layout, including the location of machinery, equipment and stockpiles.	Refer Part B, and F.
• **waste management-** including: - a description of each of the waste streams that would be accepted at the site including maximum daily, weekly and annual throughputs and the maximum size for stockpiles - details of the source of the waste streams - details of how and where waste would be stored and handled on site, including the maximum daily storage capacity of the site - details of the resource outputs and any additional processes for residual waste - details of waste handling including, transport, identification, receipt, stockpiling and quality control the measures that would be implemented to ensure that the proposed development is consistent with the aims, objectives and guidelines in the *NSW Waste Avoidance and Resource Recovery Strategy 2014-21.*	Refer to Sections 3.1 and 6.3. Refer mitigation measures at Part I.

SEARs Key Issues	Response Reference
• **noise and vibration** – including: - a description of all potential noise and vibration sources during construction and operation, including road traffic noise - a noise and vibration assessment in accordance with the relevant Environment Protection Authority guidelines - a description and appraisal of noise and vibration mitigation and monitoring measures.	Refer Sections 3.1 and 6.6. Refer mitigation measures at Part I. Refer to Acoustic and Vibration Assessment at Appendix F.
• **hazards and risk** – including: - a preliminary risk screening completed in accordance with State Environmental Planning Policy Resilience and Hazards, with a clear indication of class, quantity and location of all dangerous goods and hazardous materials associated with the development. Should preliminary screening indicate that the project is "potentially hazardous" a Preliminary Hazard Analysis (PHA) must be prepared in accordance with Hazardous Industry Planning Advisory Paper No. 6 - Guidelines for Hazard Analysis (DoP, 2011) and Multi-Level Risk Assessment (DoP, 2011).	Refer Sections 3.1 and 6.8. Refer mitigation measures at Part I. Refer to State Environmental Planning Policy Resilience and Hazards Assessment at Appendix H
• **fire and incident management** – including: - technical information on the environmental protection equipment to be installed on the premises such as air, water and noise controls, spill clean-up equipment, fire management (including the location of fire hydrants and water flow rates at the hydrants) and containment measures - details of the size and volume of stockpiles and their arrangements to minimise fire spread and facilitate emergency vehicle access - the measures that would be implemented to ensure that the proposed development is consistent with the aims, objectives and guidelines in the NSW Fire and Rescue guideline Fire Safety in Waste Facilities dated 27 February 2020.	Refer Sections 3.1 and 6.8 Refer mitigation measures at Part I. Refer to Fire Risk Assessment at Appendix I.
• **air quality and odour** - including: - a description of all potential sources of air and odour emissions during construction and operation - an air quality impact assessment in accordance with relevant Environment Protection Authority guidelines - a description and appraisal of air quality impact mitigation and monitoring measures..	Refer to Air Quality Assessment at Appendix J and Sections 3.1 and 6.4. Refer mitigation measures at Part I
• **soil and water** - including: - a description of local soils, topography, drainage and landscapes - details of water usage for the proposal including existing and proposed water licencing requirements in accordance with the Water Act 1912 and/or the Water Management Act 2000 - an assessment of potential impacts stormwater management - details of sediment and erosion controls	Refer to Stormwater and Flooding Assessment at Appendix G and Sections 3.1 and 6.7. Refer mitigation measures at Part I

SEARs Key Issues	Response Reference
- a detailed site water balance - an assessment in accordance with ASSMAC Guidelines for the presence and extent of acid sulfate soils (ASS) and potential acid sulfate soils (PASS) on the site and, where relevant, appropriate mitigation measures - an assessment of potential impacts on the quality and quantity of surface and groundwater resources - details of the proposed stormwater and wastewater management systems (including sewage), water monitoring program and other measures to mitigate surface and groundwater impacts - characterisation of the nature and extent of any contamination of soil and groundwater within the site and surrounding area including an assessment against the provisions of SEPP 55 - a description and appraisal of impact mitigation and monitoring measures.	
• **traffic and transport** – including: - details of road transport routes and access to the site - road traffic predictions for the development during construction and operation - swept path diagrams depicting vehicles entering, exiting and manoeuvring throughout the site - an assessment of impacts to the safety and function of the road network and the details of any road upgrades required for the development - details of the parking provisions associated with the proposed development including compliance with the requirements of the relevant Australian carparking standards.	Refer to Traffic Assessment at Appendix D and Sections 3.1 and 6.5. Refer mitigation measures at Part I
• **visual** - including an impact assessment at private receptors and public vantage points.	Refer to Section 6.2 and Appendix P
• **biodiversity** - including a description of any potential vegetation clearing needed to undertake the Proposal and any impacts to flora and fauna.	Refer Section 6.12 and 6.14.
• **heritage** - including Aboriginal and non-Aboriginal cultural heritage.	Refer Section 5.17 and 6.12
• The EIS must assess the Proposal against the relevant Environmental Planning Instruments, including but not limited to: - State Environmental Planning Policy (Infrastructure) 2007; - State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017 - State Environmental Planning Policy No. 33 Hazardous and Offensive Development; - State Environmental Planning Policy No. 55 Remediation of Land; - Ryde Local Environmental Plan 2014; and	Refer Part D Note the listed -State Environmental Planning Policy has been repealed. The EIS addresses the most current adopted State Environmental Planning Policy that replaces each repealed SEPP.

SEARs Key Issues	Response Reference
- relevant development control plans and section 7.11 plans.	
• **Consultation** During the preparation of the EIS, you must consult the relevant local, State and Commonwealth government authorities, service providers and community groups, and address any issues they may raise in the EIS. In particular, you should consult with the: - Environment Protection Authority; - City of Ryde Council; - the surrounding landowners and occupiers that are likely to be impacted by the Proposal. Details of the consultation carried out and issues raised must be included in the EIS.	Refer Part G

3.6 Project Team

Mod Urban Pty Ltd has prepared this EIS on behalf of Circular Metals Gladesville. Further organisations have contributed specialist studies as part of the environmental assessment process. These include:

- MOD Urban Pty Ltd – Town Planning
- ATS Land & Engineering Surveyors Pty Ltd – Survey
- Place Studio - Architecture and Design
- Greenspace Planning – Landscape Design
- Pulse White Noise Acoustics – Noise and Vibration Impact Assessment
- SLR Consulting – Water and Stormwater Management
- SLR Consulting – Flood Assessment
- Todoroski Air Sciences – Air Quality and Odour Assessment
- Riskcon Engineering – State Environmental Planning Policy No. 33 Assessment
- Riskcon – Fire Risk Assessment
- Traffix -Traffic and Transport
- JK Environments - Acid Sulfate Soils Assessment –
- JK Environments – Geotechnical Assessment
- Weir Phillips – Heritage Impact Assessment
- JK Environments - Contamination

PART D LEGISLATION

4. Legislation Overview

The following current and State, Regional and Local planning controls and policies have been considered in the preparation of this application.

4.1 Environmental Planning and Assessment Regulation 2021

Clause 7 – Designated Development

Clause 7 of the *Environmental Planning and Assessment Regulation 2021* (**the Regulations**) states that development described in Part 2 of Schedule 3 is declared to be Designated Development.

Pursuant to Clause 45(2) of Schedule 3 of the Regulation states:

(2) Development for the purposes of a waste management facility or works is designated development if—

(a) the facility or works sorts, consolidates or temporarily stores waste at a transfer station or material recycling facility for transfer to another site for final disposal, permanent storage, reprocessing, recycling, use or reuse, and

(b) the facility or works—

(i) handle substances classified in the ADG Code or medical, cytotoxic or quarantine waste, or

(ii) have an intended handling capacity of more than 10,000 tonnes per year of waste containing food or livestock, agricultural or food processing industries waste or similar substances, or

(iii) have an intended handling capacity of more than 30,000 tonnes per year of waste such as glass, plastic, paper, wood, metal, rubber or building demolition material.

Assessment:

Pursuant to Clause 45(2)(b) of Schedule 3 of the Environmental Planning and Assessment Regulation, the proposed development does not constitute a designated development as the application does not have an intended handling capacity of more than 30,000 tonnes per year, with an intended handling capacity of up to 25,000 tonnes per year.

However, under Clause 45(4)(f) of Schedule 3 of the Regulation this provides that the development will be designated development if the facility or works are located:

"(a) in or within 100 metres of a natural waterbody, wetland, coastal dune field or environmentally sensitive area of State significance, or

(b) in an area of high watertable, highly permeable soils, acid sulfate, sodic or saline soils, or

(c) in a drinking water catchment, or

(d) in a catchment of an estuary where the entrance to the sea is intermittently open, or

(e) on a floodplain, or

(f) within 500 metres of a residential zone or 250 metres of a dwelling not associated with the development and, in the consent authority's opinion, considering topography and local

meteorological conditions, are likely to significantly affect the amenity of the neighbourhood because of noise, visual impacts, vermin, traffic or air pollution, including odour, smoke, fumes or dust."

The proposed use of the premises as a waste or resource transfer station pursuant to Clause 45(4)(f) of Schedule 3 of the Environmental Planning and Assessment Regulation constitutes a designated development as it is located within 500m of the nearest residential receivers, and 250m of a dwelling not associated with the use and being likely to significantly affect the amenity of the neighbourhood, and therefore triggers the designated development threshold.

There are no other relevant Designated Development triggers that are applicable.

4.2 Environmental Planning and Assessment Act 1979

The EP&A Act is the overarching governing legislation for all development in NSW.

Section 4.10 of the Environmental Planning and Assessment Act indicates that designated development is development that is declared to be designated development by an environmental planning instrument or the regulations.

Section 4.15 of the Environmental Planning and Assessment Act 1979, requires that in determining a development application, a consent authority is to take into consideration the following matters as are of relevance to the development:

Table 5: Section 4.15 Matters for Consideration

Section 4.15 Matters for Consideration	**Comment**
(a) the provisions of: *(i) any environmental planning instrument, and*	See relevant sections of this report.
(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Director-General has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and	Nil
(iii) any development control plan, and	The proposal generally satisfies the objectives and controls of the Ryde DCP 2015. See table below and where necessary key issues section of this report.

Section 4.15 Matters for Consideration	Comment
(iiia) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and	Not applicable
(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph), and	The relevant clauses of the Regulations have been satisfied.
(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,	The environmental impacts of the proposed development on the natural and built environment have been addressed in this report. The proposal will not result in detrimental social or economic impacts on the locality.
(c) the suitability of the site for the development,	The proposed development is suitable for the site.
(d) any submissions made in accordance with this Act or the regulations,	No submissions have been raised at this stage, and the applicant has notified each adjoining neighbor of this proposal.
(e) the public interest.	The proposal is in the public interest as it provides waste management facility which is in demand, and will not impact upon the streetscape character and not result in detrimental amenity impacts to neighbours. The proposal also provides for the public the processing scrap metal waste that would otherwise be sent to landfill thus supporting the NSW Government targets for landfill diversion and responsible waste management and reducing the burden of landfills on the environment and communities.

The legislation and policies addressed hereunder have been addressed in accordance with the Act.

4.3 Protection of the Environment Operations Act 1997

- The proposed use will also trigger an Integrated Development authorisation under the Protection of the Environment Operations Act 1997 (**POEO Act**).

- Integrated Development is development (not being State Significant Development or Complying Development) that, in order for it to be carried out, requires a licence, approval or authorisation.
- Under the POEO Act, the operator will be required to obtain an Environment Protection Licence (**EPL**) from the NSW EPA (pursuant to nominated scheduled activities).
- At this stage, the nominated 'Schedule Activity' to be requested from the NSW EPA for inclusion in the EPL will be Clause 34 'Resource Recovery' activity (Schedule 1 of the POEO Act).

EPA's MINIMUM ENVIRONMENTAL STANDARDS FOR SCRAP METAL

In 2017, the EPA released the draft Proposal for minimum environmental standards in the scrap metal industry in an effort to improve the operation and management practices of the scrap metal waste / resource recovery industry.

The applicant has reviewed the proposed minimum environmental standards and can readily address and comply with all proposed standards, referred to below.

1. **Storage and dismantling of end-of-life vehicles, white goods and other scrap metal:**

- There will be zero dismantling of any end of life vehicles at the proposed facility.
- Only already dismantled products (metals) will arrive onsite. All whitegoods or E-waste will remain whole.
- All storage of metals and E-waste and whitegoods will be on hardstand and under cover.

2. **Clean and dirty water systems:**

- Stormwater pipes within the development site will be re-arranged to collect run-off from roof downpipes of the new building. Although roof water discharge is expected to be unpolluted water, it will be treated prior to discharge to reduce the nitrogen levels as present in rainwater.
- Several new surface inlet stormwater pits will collect runoff from the proposed hardstand areas.
- Refer to Stormwater Plans at **Appendix G**.

3. **Liquid and chemical controls:**

- Accessible spill-kits will be available on-site and the various locations, notated on the proposed DA plans.
- A liquid and chemical control procedure will be drafted for onsite use and reviewed annually.
- A liquids and chemicals register of all liquids and chemicals kept on site will be prepared and kept onsite and reviewed quarterly.
- All fuels and other liquids will have to be drained from any whitegoods or E-waste before being accepted by the facility, this will be done at the first checkpoint at the weighbridge prior to entering the site.
- No dismantled car parts containing any fuels or liquids will be accepted onsite.

4. **Battery handling and storage areas:**

- All batteries will be stored on bunded pallets and on hardstand and fully covered and stored inside the facility.
- The facility will only accept a maximum of 5 bunded pallets at any one time.
- All batteries will be transferred to a lawful facility for final disposal with an appropriate battery register retained onsite.
- The batteries collected and stored will be Lead / Acid only. No Lithium batteries will be brought to the site. A maximum of 200 batteries will be stored on-site.
- No loads exceeding 200 kg of waste lead acid batteries will be transported to or from the site.

5. **End-of-life vehicles, white goods and other scrap metals to be free of other waste:**

- Only whole whitegoods (that have not been dismantled) will be accepted by the facility. This will ensure that there is no contamination or liquid spills onsite.
- All incoming materials will be spot checked at the weighbridge to verify that no unauthorised waste is entering the facility.

6. **No burning of waste:**

- Under no circumstances will any materials, waste or metals of any kind be burnt onsite.
- The burning of anything is strictly prohibited.
- Any incoming material (already loaded in vehicles) which appear to be smoking or smell of smoke will be immediately rejected and the relevant fire authorities called.

7. **Noise vibration and controls:**

- All loading and reloading activities will occur inside the facility and within a controlled and enclosed warehouse, therefore no noise of vibration emissions will be generated causing amenity issues.

8. **Construction of bunds:**

- A bunded area is provided within the ware house for batteries and use in the event any unauthorised materials enter the site.

4.4 Protection of the Environment Operations (Waste) Regulation 2014

The Protection of the Environment (Waste) Regulation 2014 (NSW) (**Waste Regulation**) contains provisions for:

- contributions for occupiers of scheduled waste facilities;
- records, measurements and monitoring at waste management facilities; and
- Reporting requirements.

Circular Metals Gladesville will manage any waste received at the Site, in accordance with the requirements of the POEO Act and POEO Waste Regulation.

4.5 Waste Avoidance and Resource Recovery Act 2001

The *Waste Avoidance and Resource Recovery Act 2001* (**WARR Act**) seeks to encourage the reuse and recycling of waste as a priority over disposal of waste.

The WARR Act does this through highlighting the importance of responsible resource management, including maximization of the utility of resources and associated minimisation of disposal to landfill. The objectives of the WARR Act which is the principal piece of legislation governing waste and resource management in New South Wales, includes:

- Encouraging the most efficient use of resources;
- Reducing environmental harm;
- Ensuring that resources are managed against the waste hierarchy of avoidance, resource recovery then disposal;
- Diversion of waste from landfill;
- Ensuring industry takes part in reducing and dealing with waste; and
- Achieving integrated, state-wide waste and resource management planning and service delivery.

As a waste and resource transfer facility, the Circular Metals facility provides sorting and transfer of scrap metal waste and recovered materials to maximise reuse and recycling of resources in accordance with the WARR Act. The operation of Circular Metals Gladesville facility will also ensure the ongoing diversion of non-putrescible waste from landfill for reprocessing in accordance with existing operations.

4.6 Waste Avoidance and Resource Recovery Strategy 2014-21

The NSW Waste Avoidance and Resource Recovery Strategy 2014-21 (**WARR Strategy**) provides the principles to address the achievement of WARR Act objectives, essentially as a state-wide waste strategy. The WARR Strategy names six key result areas to be achieved for 2021-2022:

- Avoiding and reducing the amount of waste generated per person in NSW;
- Increasing recycling rates to:
  - 70% for municipal solid waste
  - 70% for commercial and industrial waste
  - 80% for construction and demolition waste

- Increasing waste diverted from landfill to 75%;
- Managing problem wastes better, establishing 86 drop-off facilities and services across NSW;
- Reducing litter, with 40% fewer items (compared to 2012) by 2017; and
- Combatting illegal dumping, with 30% fewer incidents (compared to 2011) by 2017.

The grant of Designated Development Consent will enable the Circular Metals Gladesville facility to be a critical component of the resource recovery network and assist to achieve the relevant recycling rates and diversion from landfill as set by the WARR Strategy. The Site will also contribute to reducing illegal dumping by providing for waste capacity at an appropriate and convenient drop-off location for this type of waste.

4.7 Premier Priorities

In the NSW Government's NSW 2021 A Plan to Make NSW Number One (**NSW 2021**), Goal 22 is to 'Protect Premiers Priorities

The Project aligns with the NSW Government's Premier's Priorities which include 12 key areas including economic growth, provision of infrastructure, protection of vulnerable communities, improving education and environmental protection. The proposed development aligns with the following key priorities as they relate to the proposed development as discussed below.

Creating Jobs

The NSW Government identifies NSW as leading the nation on key economic indicators, whilst also acknowledging that more can be done to attract new jobs and businesses to the State. The State Government had targeted the creation of 150,000 new jobs in NSW by 2019, aiming to make the NSW economy as competitive as possible and therefore help create employment opportunities across the state.

Whilst this jobs target was achieved in May 2016, the NSW Government is continuing to develop key initiatives that assist in the creation of jobs, such as creating jobs and apprenticeships for the construction sector to promote the strength and continued growth of the economy.

The Project directly benefits job creation and more widely provides an integrated approach to waste management. The Project will create approximately 50 new full-time equivalent jobs during the construction of the facility and a further 6 new full-time equivalent jobs once the facility is in operation.

Keeping our Environment Clean

The NSW Government has further committed to the reduction in volume of litter by 40% in NSW by 2020, identifying that up to $180 million is spent annually in the cleaning up of litter, on top of the environmental and social costs associated with it. The results of the 2017-2018 National Litter Index noted the Government had achieved a 37% reduction on the volume of litter in the state by 2018 and was on track to meet the target two years ahead of schedule.

Whilst the achieving of the 40% reduction is inevitable given the progress made through various government sponsored initiatives and programs, the government continues to push the agenda of reduction in waste with specific changes to the recycling and waste industry in NSW.

With its 2018 change in domestic Policy, China, which accepted 1.25 million tonnes of recycled material from Australia in 2016-2017, has begun to enforce restrictions on the importation of recycled materials under its National Sword policy. This policy has impacted the global market for recyclable material, including the recyclable material that is currently collected in NSW. The NSW Government's response saw the establishment of an inter-government taskforce which has recommended of a number of long and short-term solutions to not only reduce waste in the State, but how it is treated and processed. This includes the encouragement of development applications for waste processing and recycling facilities to address the growing issue of recycling and waste treatment in NSW.

The proposed facility will result in job creation and contribute to the agenda for reducing waste.

4.8 State Environmental Planning Policy (Transport and Infrastructure) 2021

Pursuant to *State Environmental Planning Policy (Transport and Infrastructure) 2021* (**SEPP Infrastructure**), Division 23, Clause 2.153, development for the purpose of a waste or resource management facility, as defined below, is permitted with consent in the IN2 Light Industrial zone.

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).

Further, the Standard Instrument defines a waste or resource transfer station as follows.

waste or resource transfer station *means a building or place used for the collection and transfer of waste material or resources, including the receipt, sorting, compacting, temporary storage and distribution of waste or resources and the loading or unloading of waste or resources onto or from road or rail transport.*

Note—

Waste or resource transfer stations are a type of ***waste or resource management facility****—see the definition of that term in this Dictionary.*

The proposed use is consistent with this definition and as such is permissible in the IN2 Light Industrial zone with consent pursuant to SEPP (Infrastructure).

Schedule 3 of the SEPP Infrastructure lists the types of development that are defined as Traffic Generating Development to be referred to TfNSW. The referral thresholds for '*Waste or resource management facilities*' development are:

- Any size or capacity

Accordingly, the EIS is accompanied by a Traffic Impact Assessment, at **Appendix D**.

4.9 State Environmental Planning Policy (Biodiversity and Conservation) 2021

The Biodiversity SEPP aims to protect the biodiversity values of trees and other vegetation in non-rural areas of the State, and to preserve the amenity of non-rural areas of the State through the preservation of trees and other vegetation.

Vegetation must not be cleared from non-rural areas without first getting authorisation to do so. However, such an authorisation is not required if the vegetation clearing is authorised under another approval as identified in section 60O of the Local Land Services Act 2013.

The proposal does not seek the removal of any vegetation on site, and therefore the Biodiversity SEPP does not apply to the proposal.

The site is located within the designated hydrological catchment of Sydney Harbour and therefore is subject to the provisions of the above planning instrument. However, the site is not located on the foreshore or adjacent to the waterway and therefore, with the exception of the objective of improved water quality, the objectives of the planning instrument are not applicable to the proposed development.

No flora or fauna habitats or water catchments will be affected by the proposal.

4.10 State Environmental Planning Policy (Resilience and Hazards) 2021

Hazardous and Offensive Development

State Environmental Planning Policy Resilience and Hazards 2021 repeals State Environmental Planning Policy No. 33 (**SEPP33**) and applies to any development of potentially hazardous industry. It will require the consent authority to consider whether a waste or resource recovery facility is a development that is a potentially hazardous industry or a potentially offensive industry.

Potentially hazardous or offensive development is defined by SEPP as development which poses a significant risk to, or which would have a significant adverse impact on, human health, life, property or the biophysical environment, if it were to operate without employing any control measures. This includes developments for the handling, storing or processing of hazardous materials.

A SEPP Assessment in accordance with Chapter 3 of the SEPP has been undertaken for the proposal by Riskcon and is included at **Appendix H**. The assessment concludes:

> *A review of the storage and operations at the site was conducted to determine whether any activities could be deemed hazardous or offensive by the Department of Planning SEPP (Resilience and Hazards).*
>
> *The site is determined to not pose any hazardous or offensive risks and therefore it is concluded that the site is not considered potentially hazardous and does not pose significant risk to adjacent land uses. As the facility is not classified as potentially hazardous, it is not necessary to prepare a Preliminary Hazard Analysis for the facility.*

The site will not store or handle any materials classified as Dangerous Goods by the ADG Code.

Remediation of Land

Under the provisions of State Environmental Planning Policy (Resilience and Hazards) 2021 (formerly known as SEPP55), under Chapter 4, Clause 4.6 (1) where a development application is made concerning land that is contaminated, the consent authority must not grant consent unless:

(a) *it has considered whether the land is contaminated, and*

(b) if the land is contaminated, it is 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, and

*(c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.*The consent authority must consider a report specifying the findings of a preliminary investigation of the land concerned carried out in accordance with the contaminated land planning guidelines.

Preliminary Site Investigation

JK Environments at **Appendix R** undertook a Preliminary Site Investigation (PSI) of potential contamination of the site. The review concluded:

> *The site was historically used for agricultural/market garden purposes prior to the 1950s, prior to the site being developed for commercial/industrial-type use. Historical business records show that the site was used for a range of commercial/industrial purposes including a motor garage, motor wreckers, service station, broom manufacturing, carrier and cartage contracting and earthmoving contractor yard. SafeWork NSW records indicated that there had been at least four USTs installed at the site and the site had been used for fuel storage and distribution purposes between the late 1950s and early 1990s.*
>
> *Based on the scope of work undertaken for this PSI, JKE identified the following potential contamination sources/AEC:*
>
> - *Fill material (i.e. material historically imported to the site for earthworks/levelling);*
> - *Fuel/oil storage;*
> - *Motor mechanic and wreckers;*
> - *Historical agricultural use;*
> - *Use of pesticides beneath the buildings and around the site;*
> - *Hazardous building materials within the existing buildings/structures;*
> - *Nearby off-site commercial and industrial land uses including a current motor mechanics (Ryde Mazda Service*

Centre) and general historical industrial land uses including a plastic moulder, motor engineers, plastics manufactures, motor painters, motor panel beaters, electroplaters, electric motors manufacturers, electric switch and control gear manufacturers and engine manufacturers.

Based on the potential contamination sources/AEC identified, and the potential for contamination, further investigation of the contamination conditions is considered to be required.

The site has been used for agricultural activities, service station (oil/fuel storage and distribution) and waste storage (i.e. scrap metal/waste transfer) which are listed in Table 1 of the SEPP55 Planning Guidelines as activities that may cause contamination. On this basis, a DSI is required.

*Detailed Site Investigation (**DSI**)*

JK Environments at **Appendix S** undertook a Detailed Site Investigation (DSI) of potential contamination of the site. The review concluded:

The investigation included a review of site information, a site inspection, soil sampling from 11 boreholes (BH101 to BH111 inclusive), groundwater sampling from five groundwater monitoring wells (MW2, MW3, MW101A, MW110 and MW111) and soil vapour sampling from four sub-slab vapour pins (SV1 to SV4 inclusive). The review of site information identified the following potential contamination sources:

- *imported fill material;*
- *fuel/oil storage in Underground Storage Tanks (USTs);*
- *motor mechanic workshops/motor wreckers;*
- *historical agricultural use, use of pesticides;*
- *hazardous building materials; and*
- *adjacent off-site commercial/industrial land uses*

The site inspection found that the site conditions were relative unchanged since the inspection undertaken by JKE during the PSI.

Fill was encountered at the surface or beneath the pavement in all boreholes and extended to depths of approximately 0.17mBGL to 1.2mBGL. We note that building waste was generally encountered in the fill within BH105. Hydrocarbon odour was observed in the fill within BH104, BH109 and BH111 during sampling. Hydrocarbon odours were also observed in the natural soil profiles in BH109 and BH110 at a depth of approximately 1.5mBGL during sampling. We note that BH109 and BH110 were located down-gradient of the onsite USTs (i.e. to the east).

Fibre Cement Fragments (FCF) potentially containing asbestos were encountered at the ground surface during the PSI and Asbestos Containing Material (ACM) was encountered within the fill at one location during the DSI at a concentration that exceeded the human health-based Site Assessment Criteria (SAC). Total Recoverable Hydrocarbon (TRH) F2 was reported to be above the ecological based SAC in two soil samples located within the eastern corner of the site, down-gradient of the USTs.

Copper and zinc were encountered above the ecological SAC in groundwater, however these heavy metals were considered to be associated with wider regional conditions and were not assessed to pose an unacceptable risk to receptors.

The groundwater was found to be impacted by TRH F2, benzene, ethylbenzene, xylenes, naphthalene. The hydrocarbon impacts to groundwater were considered to be from site activities, notably the storage and dispensing of petroleum and diesel from USTs. TRH F1 and naphthalene were detected above the human health (HSL) SAC in two sub-slab soil vapour samples located beneath existing buildings.

Remediation is required to mitigate risks associated with asbestos and to facilitate the removal of the USTs and associated infrastructure.

Based on the findings of the DSI, JKE is of the opinion that the site can be made suitable for the proposed development described in Section 1.1, via remediation.

A discussion of the anticipated remediation requirements is provided at Part I of this EIS, and at Appendix S within the DSI.

Remediation Action Plan (RAP)

JK Environments at Appendix W prepared a Remediation Action Plan (RAP) of to remediate contamination of the site. The plan concluded:

The objectives of this RAP are to:

- *Document the requirements for pre-remediation investigation;*
- *Provide a rationale to support the extent of the proposed remediation and the remedial/site validation approach based on the current dataset;*
- *Document a methodology that is to be implemented to remediate and validate the site; and*
- *Document a strategy that can be implemented in the event of uncovering any unexpected, contaminationrelated finds, and provide other relevant contingency plans.*

The proposed remediation strategy includes decommissioning and removal of the USTs, and excavation and off-site disposal of hydrocarbon-impacted material around the tanks, and excavation and off-site disposal of asbestos contaminated fill behind the retaining wall, to a suitably licensed landfill. A contingency has been included for capping contaminated material and managing the site via a long-term Environmental Management Plan (EMP), only where it is appropriate to do so and where it is impracticable to excavate and remove all of the contaminated material.

We are of the opinion that the site can be made suitable for the proposed development via remediation and the implementation of this RAP. A site validation report is to be prepared on completion of remediation activities and submitted to the consent authority to demonstrate that the site is suitable for the proposed development following completion of remediation/validation. If contaminated material is capped on site, a long-term EMP will also be prepared as part of the validation documentation.

The RAP recommends the appropriate remediation actions for the site, and should be implemented prior to construction.

4.11 State Environmental Planning Policy (Industry and Employment)

The provisions of State Environmental Planning Policy (Industry and Employment) 2021 do not apply to the Proposal as no new signage is proposed as part of the designated development application. Any future signage requirements for the Site will be subject of a separate development application.

4.12 Greater Sydney Region Plan: A Metropolis of Three Cities

The Greater Sydney Region Plan: A Metropolis of Three Cities (**the 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. In the same vein as the former *A Plan for Growing Sydney*, the Region Plan provides 10 high level policy directions supported by 40 objectives that inform the District Plans, local strategic planning statements and future comprehensive local environmental plans.

Under the Region Plan, the Site is identified as being within the Central River City which is envisioned to grow substantially capitalising on its location close to the geographic centre of Greater Sydney. Unprecedented public and private investment is contributing to new transport and other infrastructure leading to a major transformation of the Central River City. Similar to the adjoining Western Parkland City, the Central River City will be established on the strength of the new international Western Sydney Airport and Badgerys Creek Aerotropolis. A key objective of the Central River City is to optimise infrastructure and business investment, employment and liveability outcomes.

The Project is consistent with the liveable cities vision of the Region Plan which supports compatible land use development and sustainability outcomes. The proposed facility would divert waste from landfill (and increase the design life of landfills), and provide employment within the Central River City.

The following Directions from the Plan are relevant

<u>A city supported by infrastructure</u>

The proposal will create infrastructure that is significant to the effective working of a city – infrastructure to manage the waste of a growing population. In a context of limited space for waste management infrastructure, the proposal is using a site that is located in an area with other industrial infrastructure.

This proposal's location also means that waste management infrastructure is close to the point of waste generation sources, reducing the economic and environmental costs of waste transportation in line with the proximity principle.

<u>An Efficient City</u>

The proposal will create infrastructure that will reduce landfill waste and promote recycling, subsequently reducing greenhouse gas emissions through reuse of materials as opposed to manufacturing more materials.

4.13 North District Plan

The Central City District Plan (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 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 Central City 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 District 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 Project is considered consistent with several of the Planning Priorities set out in the District Plan, specifically those outlined within the Direction for Building an efficient City. The proposed facility addresses the following objectives of the District Plan:

- Planning Priority N11 - Retaining and managing industrial and urban services land
- Planning Priority N21 – Reducing carbon emissions and managing energy, water and waste efficiently

The proposed facility will contribute to these objectives by reducing landfill, and emphasizing the importance of receiving residual material from higher order reuse and recycling facilities and activities.

4.14 Ryde Local Environmental Plan 2014

The relevant provisions of the Ryde Local Environmental Plan 2008 (R**LEP**) are listed below.

The relevant provisions of the Ryde LEP 2014 are listed below.

Zoning and Permissibility

The site is zoned IN2 Light Industrial under the provisions of Ryde Local Environmental Plan 2014 (RLEP 2014) and a *waste or resource transfer station* for scrap metals and is an innominate permissible use with consent in that zone, being a development not specified as permitted without consent or prohibited.

The objectives of the IN2 Zone are as follows:

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

The proposed land use and operations are considered compatible with the objectives of the IN2 zone as follows:

- The use is permissible in the zone, and is not out of charter within an industrial land use zone or surrounding land uses.
- The site is zoned IN2 Light Industrial under the provisions of Ryde Local Environmental Plan 2014 (RLEP) and a waste or resource transfer station for scrap metals is an innominate permissible use with consent in that zone, being a development not specified as permitted without consent or prohibited.
- The site is sufficiently separated from nearby residential development.
- The proposal will give provision of the equivalent of 6 full time employees on site, along with contributing to wider indirect employment across Sydney.
- The historic use of the site as a car wreckers would have had more of an impact on surrounding land uses, than the one proposed which is essentially assuming the role of a transfer station.
- The use of the land as propose will contribute to the viability and vitality of the industrial precinct, and protect this type of land for the future.
- The range of specialist environmental and consultant reports accompanying this EIS are supportive of the proposed use on the site, and indicate a range of mitigation measures to minimize the environmental impacts to surrounding land sues.

Clause 4.3 Heights of Buildings

Clause 4.3 sets a maximum height control for the site of 10m. The proposal satisfies this control with a maximum height of 9.28m.

Clause 4.4 Floor Space Ratio

Clause 4.4 sets a maximum FSR for the site of 1:1. The site has an area of 2,879m^2 which would permit a maximum gross floor area (GFA) of 2,879m^2. The maximum gross floor area for the site is 1,308m^2 and complies with the site FSR provisions.

Clause 5.10 Heritage Provisions

The site is not within a conservation area and is not identified as an item of heritage. The site is within the vicinity of an item of heritage, Holy Cross College, however the proposed works do not result in any detrimental impact upon the heritage significance of that property.

A Heritage Impact Statement prepared by Weir Phillips accompanies the proposal at **Appendix M.** The proposal concludes:

> *The proposed works will have no impact on the heritage item at Nos. 499-521 Victoria Road, Ryde as the subject site is sufficiently separated so as to have no impact on the fabric of the item. There will be no impact on significant view corridors towards the item, specifically the c. 1896 school building as the focus of the listing, which are obtained from Victoria Road. The site is located well outside these view corridors. The proposed waste management facility is consistent with the existing industrial and commercial uses which characterise the wider setting of the item. The proposed waste management facility will have no visibility from any part of the item due to the fall of Buffalo Road to*

the east and intervening buildings which are consistent with the scale of the proposed building. The proposed works will, overall, have no impact on the ability of the public to understand and appreciate the historic and aesthetic significance of the item as a c. 1896 school building.

The proposed works fulfil the aims and objectives of the Ryde LEP 2014 and the Ryde DCP 2014 by improving the quality and diversity of industrial options in Gladesville while respecting the heritage significance of the area in which it lies.

Clause 5.21 Flood Planning

- A summary of the flood behavior of the Site is as follows:
  - Sites are affected by localised inundation in the site low point. Depth of inundation is 0 – 0.12m in a 1% AEP event.
  - The flooding is Low Risk and Low Hazard
  - The existing flooding relates to localised ponding at a low point and flood velocity is therefore very low. The demolition of an existing proposed building along the southern boundary reduces the existing degree of flood obstruction.
  - The proposal will meet the requirements of the Department of Planning's 'Floodplain Development Manual' and City of Ryde Council's Flood guidelines.
  - Proposed flood storage has been calculated as approximately 10.2m^3, based on limiting the depth of inundation in a 1%AEP event to 0.12m at the location of proposed locations of stormwater pits. This would increase to over 17m^3 with an increase in inundation of 0.15m depth.
  - The estimated depth of flooding within the subject sites during a Probable Maximum Flood (PMF) event is in the order of 0.2m and restricted to part of the site only. This will not impede safe egress from site during extreme flooding events, and there are areas within the site which provide safe refuge in a PMF event.
  - Habitable areas of the front building will be provided with freeboard of 0.5m above the flood levels.
  - The rear building is non-habitable and will not be flooded during a 100 year flood (overland flow) event. This building will not contain any materials which will be adversely affected by flooding, and none of the materials stored have potential to pollute.

An assessment of Flooding has been prepared for the Site by SLR (**Appendix G**).

This EIS demonstrates consistency with the specific matters for consideration of the RLEP through the provision of an Assessment of Flooding (**Appendix G).**

Clause 6.1 Acid Sulfate Soils

Clause 6.1 addresses acid sulfate soils and the subject site is classified as Class 5 land. The proposed excavation works are relatively minor and are not works within 500m of Class 1-4 land that is below 5m AHD and by which the water table is likely to be lowered below 1m AHD on that land.

Clause 6.2 Earthworks

Clause 6.2 requires consideration of the impact of earthworks in relation to environmental functions, processes, neighbouring uses, cultural and heritage items and features of the surrounding land.

The proposed earthworks are minor and relate to building footings.

Clause 6.4 Stormwater Management

Clause 6.4 addresses Stormwater management. The applicant provides a stormwater management plan as part of the proposal.

An assessment of Stormwater including provision of plans has been prepared for the Site by SLR (**Appendix G**).

This EIS demonstrates consistency with the specific matters for consideration of the RLEP through the provision of a Stormwater Management Plan (**Appendix G).**

4.15 Draft Environmental Planning Instruments

No draft Environmental Planning Instruments apply to the Site.

4.16 Ryde Development Control Plan 2014

The Ryde Development Control Plan 2014 (**RDCP**) applies to the Site.

The provisions of RDCP as they apply to the existing facility are summarised below.

The *Environmental Planning and Assessment Amendment Act 2012*, which commenced on 1 March 2013, has clarified the purpose and status of development control plans, being to '**provide guidance**' to proponents and Councils in achieving land use zone objectives and facilitating permissible development under an environmental planning instrument.

Furthermore, to assist in the assessment of development applications, the amended legislation states that where a proposal does not comply with DCP controls, the consent authority is to be '**flexible in applying those provisions**' and allow for '**reasonable alternative solutions**' that achieve the objectives of those standards for dealing with that aspect of the development.

It is important to recall these revisions to the status and application of DCPs in development assessment.

Section 4.15, subsection (3A) of the EP&A Act provides the following:

> *"(3A)* ***Development control plans***
> *If a development control plan contains provisions that relate to the development that is the subject of a development application, the consent authority:*
>
> > *(a) if those provisions set standards with respect to an aspect of the development and the development application complies with those standards—is not to require more onerous standards with respect to that aspect of the development, and*
> >
> > *(b) if those provisions set standards with respect to an aspect of the development and the development application does not comply with those standards—is to be flexible in applying*

those provisions and allow reasonable alternative solutions that achieve the objects of those standards for dealing with that aspect of the development, and

(c) may consider those provisions only in connection with the assessment of that development application.

*In this subsection, **standards** include performance criteria."*

The following table includes the relevant RDCP considerations and the Proposal's compliance with the RDCP controls.

Table 6: Ryde DCP 2014 Compliance Table

Clause	*Comment*	*Compliance*
Part: 7.2 Waste Minimisation and Management		
2.3 All Developments	The proposal gives provision of sufficient space on site for sorting and storage of waste within the existing and proposed buildings. This EIS outlines clearly the Waste Management Procedures and Operational Procedures on site. It is anticipated that any granting of designated development consent will require a Site Waste Minimisation and Management Plan to be provided for the site, along with an accompanying Operational Management Plan. The proposed facility will be visible from the street, however the existing and proposed buildings will largely screen any waste being sorted or stored on site.	Yes
2.4 Demolition and Construction	It is anticipated that any granting of designated development consent will require a Demolition and Construction Plan. A Traffic Management Plan during Construction is provided with this proposal.	Yes
2.10 Industrial	No hazardous wastes are proposed to be transferred or stored on site. All drop off and pick up of waste streams will occur on site. The waste process is identified clearly in Section C of this EIS.	Yes
Part: 8.1 Construction Activities		
2.1 Sediment & Other Pollution Controls	SLR Consulting at **Appendix G** addresses the 'soil and water' requirements listed in the Secretary's Environmental Assessment Requirements, and specifically Sediment and Erosion, including	Yes

Clause	*Comment*	*Compliance*
	providing multiple potential mitigation measures and recommendations to be implemented.	
2.4 Treating Sediment Laden	SLR Consulting at **Appendix G** addresses the 'soil and water' requirements listed in the Secretary's Environmental Assessment Requirements, and specifically Sediment and Erosion, including providing multiple potential mitigation measures and recommendations to be implemented.	Yes
Part: 8.2 Stormwater and Floodplain Management		
Flooding Risk	• A summary of the flood behavior of the Site is as follows: - Sites are affected by localised inundation in the site low point. Depth of inundation is 0 – 0.12m in a 1% AEP event. - The flooding is Low Risk and Low Hazard - The existing flooding relates to localised ponding at a low point and flood velocity is therefore very low. The demolition of an existing proposed building along the southern boundary reduces the existing degree of flood obstruction. - The proposal will meet the requirements of the Department of Planning's 'Floodplain Development Manual' and City of Ryde Council's Flood guidelines. - Proposed flood storage has been calculated as approximately 10.2m^3, based on limiting the depth of inundation in a 1%AEP event to 0.12m at the location of proposed locations of stormwater pits. This would increase to over 17m^3 with an increase in inundation of 0.15m depth. - The estimated depth of flooding within the subject sites during a Probable Maximum Flood (PMF) event is in the order of 0.2m and restricted to part of the site only. This will not impede safe egress from site during extreme flooding events, and there are areas within the site which provide safe refuge in a PMF event. - Habitable areas of the front building will be provided with freeboard of 0.5m above the flood levels. - The rear building is non-habitable and will not be flooded	Yes

Clause	*Comment*	*Compliance*
	during a 100 year flood (overland flow) event. This building will not contain any materials which will be adversely affected by flooding, and none of the materials stored have potential to pollute. An assessment of Flooding has been prepared for the Site by SLR (**Appendix G**).	
Stormwater	The re-developed site will discharge stormwater to: • The kerb at Buffalo Road; • The existing drainage easements along the northern boundary; and • The existing downstream drainage easement into property to the south. Stormwater pipes within the development site will be re-arranged to collect run-off from roof downpipes of the new building. Although roof water discharge is expected to be unpolluted water, it will be treated prior to discharge to reduce the nitrogen levels as present in rainwater. Several new surface inlet stormwater pits will collect runoff from the proposed hardstand areas. There is no development on the Site requiring measures to prevent sediment and erosion impacts, other than during construction. The Site is almost entirely paved surface at present, and this will continue as part of the proposal. Details of the MUSIC modelling is included in **Appendix G.**	Yes
Part: 9.2 Access for People With Disabilities		
It is noted that there is only a single portion of the new works which is required to be accessible as it is serving a building that is required to be accessible and this is the new stairway. It would be required that the stairway is constructed to achieve compliance in accordance with AS1428.1-2009 and contain two handrails, handrails extensions and termination. Based on the current plans it is considered that the handrail will require a 300mm extension at the top landing which will impact on the required clear width of 1000mm. It would be required to update the plans to allow for handrails with handrail extensions that will maintain a 1m clearance between the handrail and a 1m clear egress path from the building.		

Clause	*Comment*	*Compliance*
Part: 9.3 Parking Controls		
Car Parking	Application of the Ryde DCP 2014 car parking rate to the proposed 1,308m2 of Industrial GFA results in a requirement for 18-20 parking spaces. However, it is emphasised the above parking rate is generic in nature and unrepresentative of the operational characteristics applicable to the subject development, being a waste transfer facility. In this regard, based on operational experience and future requirements based on experience the applicant proposes a total of eleven (11) spaces. It can be seen that all parking demands (staff and visitor) will be readily accommodated onsite based on operational requirements in relation to the subject development, with no reliance on on-street parking. The internal car park complies with the requirements of AS 2890.1 (2004), AS2890.2 (2018) and AS 2890.6 (2009). One (1) accessible parking space is provided, in compliance with BCA requirements. A minimum of two (2) bicycle parking spaces can be accommodated onsite in accordance with RDCP requirements.	Yes
Disabled Parking	The RDCP requires 1 space per 100 spaces to be allocated for accessible parking. In response the proposal gives provision of 1 accessible space.	Yes
Bicycle Parking	The RDCP requires 2 bicycle spaces to be allocated on site. In response the proposal can provide 2 spaces.	Can comply
Motorcycle Parking	No motorcycle rate is provided I the RDCP for industrial developments. Motorcycles can however park within standard parking spaces.	
Refuse and Servicing	Add	

Ryde Section 7.11 & 7.12– Development Contributions Plan – 2020

In the event approval is granted to the development, the following contributions would be payable and enforced by condition of consent:

Non-Residential	Value of Development	% Rate	Contribution Amount
S7.12 Contribution Calculation	$500,000.00	1%	$5,058.63

PART E – IDENTIFICATION AND PRIORITISATION OF ISSUES/SCOPING OF IMPACT ASSESSMENT

5. Methodology Overview

This EIS has adopted an Environmental Risk Assessment (**ERA**) process for the Proposal. The risk assessment process is used to scope the environmental investigations and guide project design. The ERA enables the EIS to:

- Identify and address the environmental issues identified as key issues in the Proposal. This includes consideration of the significance of the potential environmental impacts and the effectiveness of the proposed management measures in minimizing degradation or deterioration of the biophysical, economic or social environment.
- Identify those potential environmental impacts that are not key issues, including those that would be expected to respond well to appropriate mitigation measures and management.
- Identify residual environmental impacts likely to remain after the application of the mitigation measures. Where significant residual impacts remain, this may require greater commitment to management strategies to mitigate the effect or, in some instances, appropriate modifications to the design of the Proposal.

A qualitative determination has been made to identify which environmental issues are considered as “key” environmental aspects. Key environmental issues include those areas of the environment in which there are inherent risks before mitigation measures have been implemented. In addition, any environmental aspect which requires a complex level of assessment to prove an environmental outcome, either beneficial or adverse, has been included as a key environmental aspect.

The project team has Identified the following potential environmental impacts that should be assessed:

- Waste Management;
- Air Quality and Odour;
- Greenhouse Gas Emissions;
- Traffic and Transport;
- Noise and Vibration;
- Soil and Water;
- Hazards and Fire;
- Heritage;
- Flora and Fauna;
- Environmental Sustainable Development (ESD)
- Soil/Site Contamination;
- Visual Amenity; and
- Socio-Economic.

5.1 Risk Analysis Methodology

The ERA has been undertaken in accordance with the principles of the Australian and New Zealand Standard AS/NZS 4360:2004 – Risk Management. The analysis involves ranking the risk of each identified potential impact by identifying the consequences of the impact and the likelihood of the impact occurring.

5.2 Evaluating Consequences

The first steps involve identification of the consequence levels should a particular impact occur. Definitions of the consequence levels used are provided in Table 7.

Table 7: Risk Analysis-Definition of Consequences

Consequence Level	Definition
Catastrophic	• Would cause long-term and irreversible impacts. • Would result in a major prosecution under relevant environmental legislation.
Major	• Would cause medium-term, potentially irreversible impacts. • Would result in a fine or equivalent under relevant environmental legislation.
Moderate	• Would result in medium-term, reversible impacts.
Minor	• Would result in short-term, reversible impacts.
Insignificant	• Would result in minor, negligible impacts.

5.3 Evaluating Likelihood

The next step involves identifying the likelihood of an impact through the consideration of the frequency of activities that may cause an impact and the probability of the impact occurring during that activity. The levels of likelihood have been classed as:

- **Very likely** – the event is almost certain to occur in the course of normal or abnormal operating circumstances.
- **Likely** – the event is likely to occur in the course of normal operations.
- **Possible** – the event may occur in course of normal operations.
- **Unlikely** – the event is unlikely to occur in the course of normal or abnormal operating circumstances.
- **Very unlikely** – the event may occur in exceptional circumstances only.

5.4 Risk Assessment Rating

A qualitative risk assessment to identify key environmental aspects was undertaken to provide a risk ranking based on the likelihood of occurrence of an event and the consequence of the event occurring. Risk rating scores have been determined for each combination of consequence and likelihood as shown in Table 8 below.

Table 8: Risk Rating

Risk rating score	Risk Category	General Description
12-25	High	Detailed assessment and planning is necessary to develop appropriate measures to mitigate and manage the potential impacts.
4-10	Medium	Potential impacts can be mitigated through the application of relatively standard environmental management measures.
1-3	Low	Potential impacts either require no specific management measures or are mitigated adequately through other working controls (such as detailed design requirements, normal working practice, quality and safety controls).

The potential effectiveness of the proposed mitigation measures have been assessed and the degree of effectiveness of the mitigation measures are classed as:

- **Very effective** – the measure would decrease the risk rating score by 12 points – for example, from 20 (high) to 8 (medium).
- **Effective** – the measure would decrease the risk rating score by 7 points – for example, from 12 (high) to 5 (medium).
- **Partly effective** – the measure would decrease the risk rating score by 3 points – for example, from 6 (medium) to 3 (low).
- **Not effective** – the measure would not change the risk rating.

5.5 Environmental Risk Analysis

Using the risk framework from above, an ERA has been undertaken for the Proposal based on investigations and assessment of the environmental issues during the preparation of the EIS. The relative chapters of the EIS include potential impacts and benefits and consideration of proposed mitigation and management measures. Mitigation and management is detailed in full in the Compilation of Mitigation Measures (Part I of the EIS). The results of the environmental risk assessment are presented in **Table 9** below.

There are, 3 aspects of the Proposal which present a medium level of residual risk. These include:

- Waste Management; and
- Noise;
-

The remaining environmental issues are considered low risk with the appropriate mitigation and management measures being put in place.

Aspects	Potential Impact	Overall Consequences	Overall Likelihood	Risk Rating	Proposed Mitigation Measure	Effectiveness	Residual Risk Factor
Waste Management	Integrity of waste management processes, and the potential for harmful adverse impacts on the surrounding area as a result of waste handling and transport.	Major	Unlikely	3 Low	Refer Sections 2.1 and 6.3 and Part H	Effective	3 Low
	Unplanned disruption to terminal operations resulting in large quantities of waste being stored on Site.	Moderate	Possible	3 Low	Refer Sections 2.1 and 6.3 and Part H	Effective	3 Low
	Waste which the facility does not permit to be handled at the Site brought to the Site.	Major	Possible	10 High	Refer Sections 2.1 and 6.3 and Part H	Effective	7 Medium

Aspects	Potential Impact	Overall Consequences	Overall Likelihood	Risk Rating	Proposed Mitigation Measure	Effectiveness	Residual Risk Factor
Air Quality - Odour	Odour from operation activities affecting surrounding landowners.	Insignificant	Unlikely	1 Low	Refer Sections 2.1 and 6.4 and Part I	Effective	1 Low
Air Quality - Dust	Dust during construction and operation affecting amenity of the surrounding area	Moderate	Unlikely	3 Low	Refer Sections 2.1 and 6.4 and Part I	Effective	2 Low
	The operation of numerous vehicles on the Site, including trucks, front-end loaders, has the potential to result in dust and pollutants reducing ambient air quality if not properly	Moderate	Unlikely	3 Low	Refer Sections 2.1 and 6.4 and Part I	Effective	3 Low

Aspects	Potential Impact	Overall Consequences	Overall Likelihood	Risk Rating	Proposed Mitigation Measure	Effectiveness	Residual Risk Factor
	managed.						
Air Quality – Greenhouse Gas	Greenhouse gas emissions.	Minor	Unlikely	1 Low	Refer Section 6.9 and Part I	Effective	1 Low
Traffic and Transport	Increased traffic on the roads leading to the Site. Ability of the Site to safety operate within increased traffic flow.	Moderate	Possible	2 Low	Refer Section 6.5 and Part I	Effective	2 Low
Noise	Construction, operational and transport noise from traffic and transfer trucks in and out of the Site, machinery and plant upon sensitive receivers.	Moderate	Likely	10 Medium	Refer Section 6.6 and Part I	Effective	10 Medium
Soil and Contamination	Clean and dirty water (sediment laden) and	Major	Possible	2 Medium	Refer Section 6.7, 6.14 and Part I	Effective	2 Medium

Aspects	Potential Impact	Overall Consequences	Overall Likelihood	Risk Rating	Proposed Mitigation Measure	Effectiveness	Residual Risk Factor
	leachate leaving the Site, and impacting downstream environments. Soil, soil vapour and groundwater contamination						
Flood and Hydrology	Flooding impacts from further development of the Site.	Minor	Unlikely	3 Low	Refer Section 6.7 and Part I	NA	3 low
	Release of leachate from waste to stormwater causing pollution of surface water.	Major	Unlikely	1 Low	Refer Section 6.7 and Part I	Effective	1 Low
Hazards and Risks. Fire	Breakdowns in operational procedures and/or storage	Minor	Very Unlikely	1 Low	Refer Section 6.8 and Part I	Effective	1 Low

Aspects	Potential Impact	Overall Consequences	Overall Likelihood	Risk Rating	Proposed Mitigation Measure	Effectiveness	Residual Risk Factor
	and transport of materials may give rise to hazards and toxicity						
Visual Amenity	Unacceptable visual impacts due to changes in the landscape and outlook from neighbouring properties as a result of any external changes to the Site.	Minor	Unlikely	3 Low	Refer Section 6.2 and Part I	Partly Effective	3 Low
Socio Economic	Impacts to equality and access to waste disposal facilities for the community as a result of the Proposal.	Minor	Unlikely	3 Low	Refer Section 6.10 and Part I	Effective	3 Low

Aspects	Potential Impact	Overall Consequences	Overall Likelihood	Risk Rating	Proposed Mitigation Measure	Effectiveness	Residual Risk Factor
	Changes to local demographic and local economic impacts.	Minor	Unlikely	1 Low	Refer Section 6.10 and Part I	Partly effective	1 Low
Flora and Fauna	Impact to flora and fauna from construction footprint.	Insignificant	Very Unlikely	1 Low	Refer Section 6.11 and Part I	Not effective	1 Low
Heritage	Impact to heritage from construction footprint or impact to nearby heritage items.	Insignificant	Very Unlikely	1 Low	Refer Section 6.12 and Part I	Not effective	1 Low
Ecologically Sustainable Development	Development not in accordance with the principles of ESD.	Minor	Very Unlikely	1 Low	Refer Section 6.13 and Part I	NA	1 Low

Table 9: Risk Analysis

5.6 Environmental Risk Analysis Findings

The ERA has identified no aspects of the Proposal that present a high level of residual risk, whilst it also identifies that 3 aspects of the Proposal present a medium level of residual risk. These include:

- Waste Management;
- Noise.
- Site contamination

The residual risk rating of ‘medium’ suggests that the residual risk can be managed through the application of environmental management measures. These are detailed within the relevant EIS, and in Part I Compilation of Mitigation Measures.

The remaining environmental risks considered for the Proposal have been assessed as having a low level of residual risk once mitigation measures have been applied. Considering these environmental risks, the residual risk is of a nature that it can be managed through detailed design controls, conditions of consent, and normal working practices. These include:

- Air Quality – Odour;
- Air Quality – Dust;
- Traffic and Transport;
- Soil and Contamination;
- Greenhouse Gas Emissions;
- Flood and Hydrology;
- Hazards and Risk;
- Visual Amenity;
- Ecologically Sustainable Development;
- Flora and Fauna; and
- Heritage.

PART F – ENVIRONMENTAL ISSUES AND ASSESSMENT

6. Overview of Identified Environmental Issues

The project team has identified the following potential environmental impacts that should be assessed:

- Land use;
- Design and Appearance and Visual Amenity;
- Waste Management;
- Air Quality and Odour;
- Contamination;
- Traffic and Transport;
- Noise and Vibration;
- Soil and Water;
- Hazards and Fire;
- Heritage;
- Socio-Economic;
- Environmental Sustainable Development; and

Appropriate management and mitigation measures are proposed as outlined in the following sections in relation to each identified issue. The following specialist reports have also been provided at **Appendix D** to **P** that address each environmental issue in more detail, and outlines proposed mitigation measures and control procedures to be adopted on Site:

- Grean Been Design – Visual Impact Assessment
- Greenspace Planning – Landscape Design
- Pulse White Noise Acoustics – Noise and Vibration Impact Assessment
- SLR Consulting – Water and Stormwater Management
- SLR Consulting – Flood Assessment
- Todoroski Air Sciences – Air Quality and Odour Assessment
- Riskcon Engineering – State Environmental Planning Policy No. 33 Assessment
- Riskcon – Fire Risk Assessment
- Traffix -Traffic and Transport
- JK Environments - Acid Sulfate Soils Assessment –
- JK Environments – Geotechnical Assessment
- JK Environments - Contamination
- Weir Phillips – Heritage Impact Assessment

6.1 Land use

The site is zoned IN2 Light Industrial under the provisions of Ryde Local Environmental Plan 2014 (**RLEP**) and a waste or resource transfer station for scrap metals and is an innominate permissible use with consent in that zone, being a development not specified as permitted without consent or prohibited.

The objectives of the zone are:

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

The Proposal is considered to be consistent with the objectives of the IN2 zone.

Within the dictionary of the RLEP, *'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)*."

Therefore, the use of the Site is permitted with development consent.

The proposed use is compatible with existing uses on the Site and adjacent land. The investigations undertaken as part of this application conclude that no significant cumulative impact is to occur from the proposed use of the facility.

Land use - Mitigation and Management Measures:

- **No measures required in relation to land use and permissibility of the use on Site.**

6.2 Design and Appearance and Visual Amenity

The proposal results in the following changes to the built form under the subject application:

- Demolish a warehouse building currently situated on No 50 Buffalo Road and the rear part of the building forward on the site at No 52 Buffalo Road;
- Construct a new (fully enclosed) building addition to the rear warehouse to house metals, machines and for the unloading and loading of trucks;
- Installation of two weighbridges;
- New landscaping at the frontage of the site.

The proposed built form for the Site is included at **Appendix B** in the relevant plans and elevations.

- The proposed demolition of the existing warehouse structure and provision of a new addition to the rear warehouse will improve the overall appearance of the site when viewed from Buffalo Road.
- The provision of new landscaping and concrete hardstand across the site will also add to visual improvements to the site.
- The scale bulk and massing of the new additions are appropriate to the locality and similar in scale and massing to other warehouse/industrial type buildings in the locality.
- The provision of new weighbridges will not result in a visual impact to the site or neighbouring properties.
- The overall character and appearance of the proposed built form on site is typical of an industrial site.
- No change to the appearance of the office/workshop building that fronts Buffalo Road (No. 52) and therefore no significant changes will occur to the streetscape appearance and the sites interface with the streetscape.
- The visual appearance of the Site will be largely as it currently exists within the streetscape, and is appropriate for the industrial precinct that the Site is contained within.

Visual Amenity - Mitigation and Management Measures:

- Regular maintenance to the landscaped areas will be undertaken by the Site operators to ensure the visual appearance of the Site is maintained.
- The general appearance of the buildings and its surrounding hardstand will be maintained on a regular basis by the Site operators.
- Regular site maintenance should occur to ensure all product is stored in the appropriate storage stockpiles within the buildings.
- Regular watering of new planting within first 12 months from planting. The implementation of irrigation systems for garden beds should be considered.

6.3 Waste Management

The following types of waste and quantities listed in Table 10 are received at the Site.

Table 10: Volume/Quantities of Waste Received

Type of Material	Processing or Storage	Location on Site for Storage	Bins on Site or Stacked	Volume Per Annum Tonnes
Ferrous Steel	Storage	Refer plans	Stacked	20,000
Copper	Storage	Refer plans	Bins	1,000
Brass	Storage	Refer plans	Bins	250
Aluminium	Storage	Refer plans	Stacked	2,000

Type of Material	Processing or Storage	Location on Site for Storage	Bins on Site or Stacked	Volume Per Annum Tonnes
Zinc	Storage	Refer plans	Bins	150
Lead	Storage	Refer plans	Bins	75
Stainless Steel	Storage	Refer plans	Bins	1,000
E Waste	Storage	Refer plans	Bins	500
Batteries **Total**	Storage	Refer plans	Pallets Bunded	250 **25,000**

No liquid waste, hazardous waste, clinical waste or toxic waste is received on Site. A preliminary risk screening in accordance with State Environmental Planning Policy Resilience and Hazards (refer **Appendix H**) confirms no hazardous waste is stored or accepted on Site.

The facility is designed to process and store the material listed in Table 10 only. All other materials are excluded. From time to time, it can be expected that other forms of waste (putrescible or hazardous materials) may unintentionally enter the waste stream at the facility. This is the same at any waste management facility.

It is recommended that the facility formulate its own Plan of Management (**PoM**) that outlines the procedures in force for a range of waste streams to ensure that only the intended waste is collected. A summary of these processes is provided at Section 3.1 of this EIS.

The general procedure for waste management is as follows:

6.3.1 Storage of materials

The designated development consent will outline the authorised amount of waste permitted on the premises that cannot be exceeded at any time or annually, in accordance with those listed in Table 10.

Recyclable materials are stored on Site internally within the warehouse building, or externally within the proposed drop off bin (frontage of No. 52) to ensure the vehicle paths of travel are not obstructed.

The quantity of materials stored in the facility will vary with the type and amount of recoverable materials in the waste stream. It is estimated that the types of scrap metal that are stored on Site are cleared within a 30-day maximum period.

6.3.2 Unacceptable Materials

Circular Metals Gladesville will not accept asbestos, putrescible waste, garden waste, building and demolition wastes, industrial wastes, toxic waste, hazardous waste, liquid waste or medical waste at the Site. Employees should be trained in accordance with a recommended PoM, to ensure they are qualified 'Spotters' of unacceptable material.

In the event that unacceptable materials arrive on Site, Circular Metals Gladesville employees will follow the procedure for dealing with small quantities of unacceptable materials below;

- The load will be rejected;
- The driver will not be permitted to unload the vehicle;
- The Spotter will mark the docket as a "Rejected Load";
- The Spotter will take photos of the docket, the vehicle registration and the materials (if possible);
- The Spotter will record the load in the Rejected Load Register.
- The Spotter will ask the customer to sign the docket marked as a rejected load;
- Spotter will inform the Site Manager who is responsible for notifying the customer; and
- The driver will be directed to exit the facility.

If hazardous wastes are detected they're not accepted, and the customer is told to remove them from site. The facilities website contains a list of wastes not accepted and as considered as hazardous.

6.3.3 Unacceptable Materials Identified after Material is Unloaded

It is recommended that a POM is formulated for the facility to include an outline the procedures for dealing with unacceptable materials that are identified after the material is unloaded.

6.3.4 Unloading trucks and Vehicles

The procedure for unloading trucks containing waste is as follows;

- All loads are weighed initially on the weighbridge upon entry to the Site;
- Driver proceeds to the Site Office to complete paper work;
- Spotters will check the weighbridge docket and confirm the type of materials in the vehicle;
- All loads that arrive on Site in packaged form are unloaded in the designated unloading areas;
- Materials that arrive in loose form are tipped inside the building within the relevant unloading areas where a secondary inspection is undertaken by a Spotter.
- If a load is rejected it must be registered in the Rejected Load Register.
- Product is received by cars, utes and small trucks at the facility according to metal types and unloaded inside the enclosed transfer station building, placed into allocated bays (i.e. steel, aluminium, copper, brass).

6.3.5 Loading Trucks

Loading is conducted with the use of a front-end loader or by forklift. The loading of trucks will not take place before 7:00 am.

Steel, aluminium scraps, copper scraps and other non-ferrous scraps will be transferred to resource recovery facilities that are lawfully capable of accepting that material for processing.

Waste Management - Mitigation and Management Measures

In addition to the procedures regarding unacceptable and hazardous waste and the processing and storage of accepted waste, the following procedures should also be implemented:

- **A Plan of Management (POM) should be prepared for the site prior to the issue of an occupation certificate that includes the following:**
  - **Identifies site managers responsibilities;**
  - **Outlines accepted materials;**
  - **Outlines the general materials handling process;**
  - **Procedures for assessing incoming loads;**
  - **Procedures for unloading of acceptable materials;**
  - **Procedures for unacceptable materials including those identified after vehicle is unloaded;**
  - **Personal Protective Equipment;**
  - **Training and review.**
  - **Mitigation Measures for the Site**
- **All customers are advised that only scrap metals, including ferrous, non-ferrous, electronic waste, (limited amount of) whitegoods and batteries are accepted on Site;**
- **All bins containing unacceptable material on Site, should be labeled to ensure workers are aware of their contents;**
- **All invoices bear the message no 'materials other than scrap metals, including ferrous, non-ferrous, electronic waste, (limited amount of) whitegoods and batteries waste are accepted on Site'.**

6.4 Air Quality and Odour

An assessment of potential odour impacts related to the Proposal has been undertaken by Todoroski Air Sciences and is included at **Appendix J**. The assessment identifies that the POEO Act is applicable to scheduled activities in NSW and emphasises the importance of preventing 'offensive odour'.

This air quality impact assessment has been prepared in general accordance with the New South Wales (NSW) Environment Protection Authority (EPA) document Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (NSW EPA, 2017).

The main sources of air pollutants in the area are emissions from surrounding industrial and commercial operations and from other anthropogenic activities such as wood heaters and motor vehicle exhaust.

Ambient air quality monitoring data from the Project site are not available. Therefore, the available PM_{10} and $PM_{2.5}$ data from the nearest air quality monitors operated by the NSW Department of Planning, Industry and Environment (DPIE) at Rozelle and Macquarie Park (approximately 6.4km southeast and 5.9km north of the Project Site respectively) were used to characterise the background levels for the Project Site.

6.4.1 Odour

Odour emissions have some potential to arise from the diesel exhaust emissions of on-site plant equipment. These odorous emissions are generally considered to be too low to generate any significant off-site pollutant concentrations and have not been assessed further in this study. The material delivered on site is non-putrescible and as such would not be odorous, and therefore, odour emissions from the material onsite has not been considered further in this assessment.

6.4.2 Air and Dust

The significant dust generating activities associated with operation of the Project are identified as the loading/unloading of material, vehicles travelling on-site and off-site, and windblown dust from exposed areas and stockpiles. The vehicle and plant equipment also have the potential to generate particulate emissions from the diesel exhaust.

Dust emission estimates have been calculated by analysing the various types of dust generating activities taking place and utilising suitable emissions sourced from both locally developed and United States Environmental Protection Agency (US EPA) developed documentation.

A worst-case scenario has been assessed for estimated dust emissions due to the operation of the Project. This is based on the daily maximum production rate of 83 tonnes per day (500 tpw / 6 working days), occurring every day of the modelling year (365 days). This results in an equivalent annual tonnage of 30,417tpa for the Project. It is to be noted that these emissions have been conservatively calculated and would overestimate likely impacts.

6.4.3 Construction Emissions

The establishment of the Project would involve the construction of the associated infrastructure. This construction activity has the potential to generate dust emissions.

Potential construction dust emissions will be primarily generated due to material handling, vehicle movements, windblown dust generated from exposed areas and stockpiles. Exhaust emissions will be from the operation of construction vehicles and plant.

The potential dust impacts due to these activities are difficult to accurately quantify on any given day due to the short sporadic periods of dust generating activity which may occur over the construction time frame. The sources of dust are temporary in nature and will only occur during the construction period. The total amount of dust generated from the construction process is unlikely to be significant given the nature of the activities. Also, as the activities would occur for a limited period, no significant or prolonged effect at any off-site receptor is predicted to arise.

To ensure dust generation is controlled during the construction activities and the potential for off-site impacts is reduced, appropriate (operational and physical) mitigation measures will be implemented as necessary

Conclusions of Air Quality Impact Assessment

Air dispersion modelling was used to predict the potential for off-site dust impacts in the surrounding area due to the operation of the Project. The estimated emissions of dust applied in the modelling are likely to be conservative and would overestimate the actual impacts.

It is predicted that all the assessed air pollutants generated by the operation of the Project would comply with the applicable assessment criteria at the assessed receptors and therefore would not lead to any unacceptable level of environmental harm or impact in the surrounding area.

Nevertheless, the site would apply appropriate dust management measures to ensure it minimises the potential occurrence of excessive air emissions from the site.

Overall, the assessment demonstrates that even using conservative assumptions, the Project can operate without causing any significant air quality impact at receptors in the surrounding environment

Air / Odour and Dust - Mitigation and Management Measures:

General Operations

- **Activities to be assessed during adverse weather conditions and modified as required (e.g. cease activity where reasonable levels of dust cannot be maintained using the available means).**
- **Weather forecast to be checked prior to undertaking material handling or processing.**
- **Engines of on-site vehicles and plant to be switched off when not in use.**
- **Vehicles and plant are to be fitted with pollution reduction devices where practicable.**
- **Vehicles are to be maintained and serviced according to manufacturer's specifications.**
- **Visual monitoring of activities is to be undertaken to identify dust generation.**

Stockpiles

- **Store material is designed bays**

Hauling Activities

- **Regularly inspect haul roads and maintain surfaces to remove potholes or depressions**
- **Driveways and hardstand areas to be swept/cleaned regularly as required etc.**
- **Vehicle traffic is to be restricted to designated routes.**
- **Speed limits are to be enforced.**
- **Vehicle loads are to be covered when travelling off-site.**

Incident and Complaints Management

- **Record all air/ dust incidents.**
- **Complaints are logged and investigated.**
- **It is anticipated that the Project would develop a suitable Operational Environmental Management Plan for the site. The Operational Environmental Management Plan would include a specific chapter which outlines the measures to manage dust emissions at the site and include aspects such as key performance indicators, response mechanisms, and complaints management.**

6.5 Traffic and Transport

Existing Conditions

A detailed Traffic and Parking Impact Assessment is provided in **Appendix D.**

- Vehicular access is currently provided to the subject site comprising 50 and 52 Buffalo Road via two (2) existing access driveways to Buffalo Road.
- Buffalo Road is local collector road that generally traverses northwest southeast between Lane Cove Road in the northwest and Monash Road in the southeast.
- It is evident that the development benefits from good bus services with bus stops located within walking distance (400 metres) of the subject site along both sides of Buffalo Road.
- The combined vehicle trip generation of the existing Vehicle Service Centre and existing Waste Transfer Facility can be summarised as follows:
  - 9 vehicle trips per hour (5 in, 4 out) during the morning peak hour; and
  - 9 vehicle trips per hour (4 in, 5 out) during the evening peak hour.

Potential Environmental Impacts

- Application of the Ryde DCP 2014 car parking rate to the proposed 1,308m2 of Industrial GFA results i a requirement for 18-20 parking spaces. However, it is emphasised the above parking rate is generic in nature and unrepresentative of the operational characteristics applicable to the subject development, being a waste transfer facility. In this regard, based on operational experience and future requirements based on experience the applicant proposes a total of eleven (11) spaces.
- It can be seen that all parking demands (staff and visitor) will be readily accommodated onsite based on operational requirements in relation to the subject development, with no reliance on on-street parking.
- The internal car park complies with the requirements of AS 2890.1 (2004), AS2890.2 (2018) and AS 2890.6 (2009).

  One (1) accessible parking space is provided, in compliance with BCA requirements.

  A minimum of two (2) bicycle parking spaces can be accommodated onsite in accordance with RDCP requirements.

  It is noted that motorcycles can park within standard parking spaces and all motorcycle parking requirements are therefore accommodated onsite.

  All service and waste vehicles will enter and exit the subject development in a forward direction using the ingress and egress access driveways via Buffalo Road. Therefore, all waste and servicing requirements will be adequately accommodated onsite in accordance with Council's DCP requirements.

  The following vehicle trips during morning and afternoon peaks based on previous operational experience, as follows:
  - 11 vehicle trips per hour in the morning peak hour (6 in, 5 out)
  - 11 vehicle trips per hour in evening peak hour (5 in, 6 out)

The above trips are based on the following hourly vehicle types and frequencies:

- 1 x Semi Trailer (20.0m Articulated Vehicle)
- Up to 4 x small Utes per hour
- 1 x light truck per hour
- Up to 3 x cars/trailer per hour
- Up to 2 x skip bin trucks per hour

- The net increase in vehicle trips is 2 additional vehicles per hour in the morning and two additional vehicle trips in the evening and is equivalent to an additional vehicle trip every 30 minutes and will have negligible impact to the surrounding network having regard for existing intersection performance.
- The two key intersections that will be impacted by the proposal are Victoria Road and Cressy Road, and Cressy Road and Buffalo Road. In summary, both intersections currently operate at a good level of service with acceptable delays and spare capacity. The forecast increase in vehicle trips (+2 vehicles per hour during the morning and evening peaks) is considered minor and will have no noticeable impact to intersection performance. Therefore, intersection and road upgrades are not required, accordingly.
  Proposed truck routes to and from the subject site are via the RMS approved heavy vehicle routes (Cressy Road and Buffalo Road) which run adjacent to the Holy Cross High School. Therefore, it is proposed that truck arrivals are to be managed to ensure AV's do not coincide with school start and finish times. All other vehicle arrivals and departures will occur on an hourly basis for the duration of the subject sites proposed operating hours.
- All service vehicles and trucks are accommodated within the subject site with no requirement to queue on-street.
  A Green Travel Plan for the proposal encourages the use of existing and future sustainable transport services available within the vicinity of the site.

Traffic and Transport - Mitigation and Management Measures:

- **The Site will be maintained in perpetuity to ensure internal vehicle circulation allows for vehicles to access and leave the Site in a forward direction.**
- **Vehicle movements will be restricted to core hours of operation to minimise impacts on surrounding residential occupier's amenity.**
- **The internal configuration of the car park be designed and maintained in accordance with AS 2890.1 (2004), AS2890.2 (2018) and AS 2890.6 (2009).**
- **Loading and unloading of vehicles is only to occur on site.**
- **In the event of future construction in relation to this application, or any future development application for the Site, it is recommended that the detailed construction traffic management plan that has been provided by Traffix to manage and mitigate any potential traffic conflicts associated with construction both on and off the Site be implemented**.
- The truck routes that have been allocated based on the size of vehicles to ensure vehicles can negotiate the intersections to and from the site within the TAIA at Appendix D shall be adopted and provided to regular drivers to and from the site.

- Waste collection for the subject site and all truck loading and unloading is to be undertaken onsite.

6.6 Noise

The proposed resource recovery transfer station at 50 – 52 Buffalo Road in Gladesville is surrounded by the following noise sensitive receivers:

- Residences at 77-89 Buffalo Road, ranging from approximately 224m to 330m north-west from the project site.
- Residence at 13 Buffalo Road, located approximately 239m north-east from the project site.
- Residences at 50-52 Cressy Road, located approximately 348m north-west from the project site.
- Residences at Patrician Brothers Monastery located approximately 338m south-west from the project site.
- Industrial sites located adjacent and opposite the site of interest are within a 198m radius.
- Recreational playground area belonging to Holy Cross College is approximately 100m in the north-west direction at the closest distance. This ranges to 405m at the furthest point.
- Educational site in the form of Holy Cross College is located 307m south-west from the project site.

The identified noise sources on Site include the following:

- Construction Noise
- Mobile Plant - Mobile plant of acoustical significance includes trucks, forklifts, excavator;
- Onsite car and truck movements; and
- General operational activity – sorting of materials.

Potential environmental impacts in relation to noise that are assessed as part of this EIS include:

- Operational and transport noise from traffic and transfer trucks in and out of the Site, machinery and plant upon sensitive receivers.
- Site audits undertaken revealed there are minimal activities that would give rise to induced ground vibration.

An Acoustic Impact assessment is included at **Appendix F.**

Based on the findings from the acoustic assessment, the proposed development can achieve compliance with the operational acoustic criteria required by local authorities, provided the conceptual recommendations discussed assessment and outlined in the below mitigation and management measures are implemented and developed at the later detailed design stages.

Noise - Mitigation and Management Measures:

Operations - Mitigation and Management Measures:

- **Mechanical equipment is to have a sound power level of 80 dBA or less and are to be reviewed once final**

selections can be obtained in detailed design phase;

Scheduling of semi-trailer and rigid trucks is such that there can only be one vehicle entering or leaving the site within a 15-minute period

- **Idling of vehicles and movements in general should be minimised as much as practicable.**
- **Forklifts are to be fitted with "quaker" or broadband reversing alarms;**
- **Closing the openings to the facility building during loading/unloading activities.**
- **A complaints register should be maintained onsite and be overseen by the site manager.**

Construction Noise - Mitigation and Management Measures:

General

- **Introduce best-practice general mitigation measures in the workplace which are aimed at reducing the acoustic impact onto the nearest affected receivers.**
- **Issue project updates to stakeholders, discussing overviews of current and upcoming works. Advanced warning of potential disruptions can be included. Content and length to be determined on a project-by-project basis.**
- **Implement a management system which includes procedures for receiving and addressing complaints from affected stakeholders.**
- **Individual letters or phone calls to notify stakeholders that noise levels are likely to exceed noise objectives. Alternatively, contractor could visit stakeholders individually in order to brief them on the noise impact and the mitigation measures that will be implemented.**
- **Offer provided to stakeholders subjected to an ongoing impact. The offer could include movie tickets, meal vouchers, gift cards or equivalent measures.**
- **Contractor to consider alternative construction options that achieve compliance with relevant criteria. Alternative option to be determined on a case-by-case basis. It is recommended that the selection of the alternative option should also be determined by considering the assessment of on-site measurements (refer to Verification Monitoring above).**
- **For plant items which are static it is recommended that, in the event exceedances are being measured due to operation of the plant item, an acoustic enclosure/screen is constructed to reduce impacts. These systems can be constructed from Fibre Cement (FC) sheeting or, if airflow is required, acoustic attenuators or louvres.**
- **Compliance with AS 2436-2010 "Guide to Noise and Vibration Control on Construction, Demolition and Maintenance Sites" sets out numerous practical recommendations to assist in mitigating construction noise emissions.**
- **Toolbox meetings should be undertaken with all contractors commencing works on the site**
- **All plant and equipment are to be maintained such that they are in good working order.**
- **Avoiding the use of portable radios, public address systems or other methods of site communication that may unnecessarily impact upon nearby sensitive receivers.**
- **Construction traffic accessing the site including the movements of heavy vehicles are required to comply with the projects Conditions of Consent and will be detailed in the sites Construction Management Plan.**
- **Attended noise level measurements of typical demolition and ground works activities should be undertaken at site. Attended construction noise surveys of the site and surrounding impacts on neighbours should be undertaken during the following as a minimum:**

  i. Start of Demolition

ii. Commencement of any rock breaking or sawing on the site.

iii. In response to any ongoing complaints received from neighbours.

- General Construction activities are not expected to exceed project vibration limits detailed in the project Acoustic Report.

Vibration Mitigation

Construction

- Any vibration generating plant and equipment is to be in areas within the site to lower the vibration impacts.
- Investigate the feasibility of rescheduling the hours of operation of major vibration generating plant and equipment.
- Use lower vibration generating items of construction plant and equipment; that is, smaller capacity plant.
- Minimise conducting vibration generating works consecutively in the same area (if applicable).
- Undertake the removal of concrete within the building using saw cutting or pulverising where possible.
- To confirm vibration magnitudes are within the expected levels the following attended vibration measurements are required: a. Short term attended vibration measurements – Attended short term vibration measurement of activities with the potential to generate maximum vibration to be undertaken on commencement at the site, including the following:

  i. Measurements to be undertaken at a representative location from the activity being conducted with a similar distance to the potentially affected receiver.

  ii. Activities with the potential to generate the greatest magnitudes of vibration include:

  iii. Hydraulic hammering of concrete slabs.

  iv. Hydraulic hammering during ground works within rock.

Demolition

- Hydraulic Hammering - Separation to the neighbouring buildings is to be established prior to hammering of the existing building structures and maintained at all times during demolition.
- Materials and Equipment Movement - Ensure no contact with the neighbouring building structures occur during materials movement or equipment movements.
- Removal of concrete structures - The removal of concrete structures within the building is to be undertaken using saw cutting or pulverising where possible.

Excavation

- Removal of Rock - Where possible remove rock from the required excavation using ripping and the like. When the use of hydraulic hammers are required to remove rock during excavation a saw cut is required to be undertaken at the perimeter of the excavation prior to commencement of hydraulic hammering of rock.

6.7 Water Quality Management

6.7.1 Surface Water and Stormwater

Existing Conditions

- The site currently discharges stormwater to Buffalo Road.
- The existing site does not have any groundwater bores nor capture groundwater for use in any way. There are no groundwater bores in the vicinity of the site or downstream.
- City of Ryde has an existing piped stormwater system along Buffalo Road, which reports to Buffalo Creek.
- Council has provided a constructed wetland to improve water quality in Buffalo Creek and Lane Cove River.
- A Humeguard gross pollutant trap (GPT) is located upstream of the constructed wetland primarily to remove sediment and trash prior to runoff entering into the constructed wetland.
- The GPT and constructed wetland provide improvement of stormwater quality from existing land-uses within the catchment, including the subject site.

Proposed Water Management

- The re-developed site will discharge stormwater to:
  - the kerb at Buffalo Road;
  - the existing drainage easements along the northern boundary; and
  - the existing downstream drainage easement into property to the south.
- Stormwater pipes within the development site will be re-arranged to collect run-off from roof downpipes of the new building. Although roof water discharge is expected to be unpolluted water, it will be treated prior to discharge to reduce the nitrogen levels as present in rainwater.
- Several new surface inlet stormwater pits will collect runoff from the proposed hardstand areas.
- City of Ryde requires MUSIC modelling to verify that proposed stormwater treatment complies with the objectives stipulated in their DCP. The MUSIC modelling undertaken by SLR Consulting confirms that the proposed post-development meets and exceeds the water quality objectives set by the City of Ryde.
- Both the existing site and proposed redevelopment comprise fully impervious surfaces. Therefore, on site detention is not required.
- The development will include water management measures which may marginally reduce stormwater runoff volumes and peak flows during rainfall events. These include:
  - Roof water tanks; and
  - A precast StormFilter system including a sedimentation compartment.
- The hydrological impact of the proposed development is considered negligible, and possibly a marginally beneficial reduction in stormwater runoff compared to the existing site.

The proposed stormwater arrangement is shown **at Appendix G**.

Potential Environmental Impact

Construction Phase

An assessment of potential environmental impacts, mitigation and management during the operational and construction phases of the project is provided below.

Erosion and Sediment Transport

- Construction activities on land may expose soils to rainfall and result in discolouration of runoff and sediment transport.
- Fine sediments exported into the receiving environment can create turbid water which reduces light penetration and carry additional nutrients which impact on riparian ecology and causse bacterial levels to exceed water quality objectives.
- Coarse sediments exported from site have the potential to build up along creek beds, potentially smothering riparian plants, and reducing water depth in pools.

Mitigation and Management Measures

- **Provide environmental controls in accordance with a site Erosion and Sediment Control Plan (ESCP), to be developed as part of the Construction Environmental Management Plan (CEMP).**
- **Minimum requirements for the ESCP will include:**
  - **Sediment fencing on the downslope perimeter of all disturbed areas**
  - **A construction entry/exit to reduce wheel tracking of dirt onto the road**
- **Monitor the condition of Buffalo Road and if necessary arrange sweeping to remove accumulated dirt**
- **The site CEMP will include an ESCP that will detail requirements for erosion and sediment controls during construction.**

Construction Site Spills

- Hydrocarbons or other hazardous materials could be spilled during construction activities from a range of events potentially including refuelling of machinery, disruption or spillage of existing containers storing hazardous materials, or leakage from machinery.
- Wash-out from concrete trucks is highly alkaline and can adversely impact marine environments in the immediate shoreline vicinity.

Mitigation and Management Measures

- **Storage of chemicals in accordance with Australian Standards**
- **Storage of hydrocarbon fuels within bunded storage areas, or self-bunding tanks**
- **A Spill Response Plan, including emergency response and EPA notification procedures**
- **Concrete agitators must not wash-out water to the stormwater system or discharge into Careening Bay.**
- **Requirements for the storage and use of hydrocarbon fuels and other chemicals on site will be documented in the CEMP.**
- **The CEMP will also include requirements for spill management and reporting.**

Potential Environmental Impact

Construction Phase

Operational phase – runoff water quality

- Water pollution from driveway and hardstand areas have the potential to adversely affect the water quality of the receiving water environment and in turn adversely impact the health of aquatic flora and animals, reduce the aesthetic amenity of the waterway for residents, increase health risks to people involved in secondary recreational activities such as kayaking, rowing and sailing.
- Higher nutrient loads (phosphorous and nitrogen) promote rapid growth of aquatic plants, and can lead to can lead to algal blooms, or elevated bacteria levels.
- Metals such as copper, zinc and lead can be toxic at elevated levels, and can bio-accumulate in an ecosystem.

Mitigation and Management Measures

- **A stormwater treatment train is proposed which will meet the pollutant retention requirements of City of Ryde. This system is described in the Soil and Water Report prepared by SLR Consulting (Section 6) at Appendix G.**
- **Discharges to sewer (sewage from site facilities and washdown water from inside buildings) will be managed in accordance with the requirements of Sydney Water.**
- **If excessive dirt becomes evident across driveway or hardstand areas then these should be cleaned by washdown to the first flush system (during dry weather). Site operational management procedures should include periodic inspection of the driveways (weekly initially for first 6 months of operation and then relaxing to monthly if the need for washing down is not evident).**
- **Water quality should be monitored monthly (during rainfall events) during the first 12 months to allow evaluation of the efficacy of the proposed water treatment train along with site management measures. Analytes should include TSS, TN, TP and full metal suite. If there are exceedances of the ANZECC 2000 Guidelines then these should be investigated and a report submitted to City of Ryde Council and the NSW EPA. It is recommended that this requirement be a condition of planning consent.**
- **Water quality sampling for monitoring purposes would be taken at the site discharge it located in the south west corner of the site.**
- **The water quality devices proposed require regular inspection and maintenance as recommended by the supplier. Inspection and maintenance requirements will be documented in the Operational Management Plan for the facility.**

6.7.1 Flooding

Flooding risk at the sites is described in the Soil and Water Report prepared by SLR Consulting at **Appendix G.**

- A summary of the flood behavior of the Site is as follows:
    - Sites are affected by localised inundation in the site low point. Depth of inundation is 0 – 0.12m in a 1% AEP event.

- The flooding is Low Risk and Low Hazard
- The existing flooding relates to localised ponding at a low point and flood velocity is therefore very low. The demolition of an existing proposed building along the southern boundary reduces the existing degree of flood obstruction.
- The proposal will meet the requirements of the Department of Planning's 'Floodplain Development Manual' and City of Ryde Council's Flood guidelines.
- Proposed flood storage has been calculated as approximately 10.2m^3, based on limiting the depth of inundation in a 1%AEP event to 0.12m at the location of proposed locations of stormwater pits. This would increase to over 17m^3 with an increase in inundation of 0.15m depth.

Potential Environmental Impact

- The site may be subject to shallow inundation during a 100 year flood event, resulting from overland flows from the local catchment.
- Inundation of waste materials causing contamination of stormwater.

Flooding - Mitigation and Management Measures:

- **All wastes will be stored under roof and should not be inundated by flooding in a 1% AEP event.**
- **Since the proposal does not include storage of any wastes which generate leachate when inundated, no additional mitigation measures are proposed.**
- **It is also recommended that the large roller doors on either side of the metal shed be closed by staff during a flood event to prevent the ingress of floodwaters.**
- **Habitable areas of the front building are to be provided with freeboard of 0.5m above the flood levels.**

6.5.2 Leachate Management and Groundwater

Leachate is a liquid which has percolated through and/or drained from waste material and which contains soluble or suspended components of the waste, including products of decomposition. All water falling onto the yard and hardstand surfaces is immediately classified as leachate. If the quality of the leachate does not meet the environmental concentration limits it must be kept separate from the stormwater catchment system and/or not allowed to discharge into the environment.

The Site operations do not produce leachate requirement management. The principal pollutant is gross pollutants which are managed through the existing/proposed stormwater measures.

Leachate - Mitigation and Management Measures

- **Not applicable**

6.8 Hazards and Fire

Hazards

A review of the storage and operations at the site was conducted to determine whether any activities could be deemed hazardous or offensive by the SEPP Resilience and Hazards.

The site is determined to not pose any hazardous or offensive risks and therefore it is concluded that the site is not considered potentially hazardous and does not pose significant risk to adjacent land uses. As the facility is not classified as potentially hazardous, it is not necessary to prepare a Preliminary Hazard Analysis for the facility.

A SEPP Assessment is provided at **Appendix H**. It is noted from that assessment that no mitigation or management measures are recommended in relation to hazardous materials at the site.

Fire

Properties of Waste Stored and Potential for Combustion

- Aluminium - Aluminium can burn with sustained combustion and is not considered a fire source.
- Steel and iron - Steel and iron will melt when exposed to heat but typical temperatures within a fire would not result in steel and iron burning
- Copper and brass - Copper and brass will melt when exposed to heat but typical temperatures within a fire would not result in copper and brass burning.
- Stainless steel - Stainless steel will melt when exposed to heat but typical temperatures within a fire would not result in stainless steel burning
- Non ferrous metals - Other non-ferrous metals are unlikely to readily burn or contribute to a fire scenario and will not increase ignition or fire risk at the site.

Waste scrap metal delivered to the site is deposited into several stockpiles of varying size. The stockpiles are intentionally separated and segregated to assist in operational efficiency, as well as reduce the potential for propagation in the event that a fire does commence.

All material received at the site is solely scrap metal, however there is a low risk of combustible material inadvertently entering a stockpile and resulting in a fire. Despite this, it is unlikely that a fire would progress in size or propagate due to the lack of fuel within each stockpile as well as the response of site personnel and the separation between stockpiles.

Most of the wastes on the site (scrap metal) were identified to be non-combustible and are therefore unlikely to be involved in a fire due to the negligible potential for the wastes to be ignited and to sustain combustion. Wastes identified to fall into this category include:

- • Aluminium
- • Stainless steel
- • Lead
- • Copper – pipes and similar
- • Copper cabling

Therefore, the risk of fire associated with these wastes and the associated storages is not considered to be credible.

Fire - Mitigation and Management Measures

- **Dry powder fire extinguishers shall be readily accessible by staff within the site to facilitate immediate response by site personnel following identification of a fire.**
- **Operators shall be trained in the use of site fire extinguishers.**
- **A site emergency response plan (ERP) and emergency services information booklet shall be prepared for the site to fully document the emergency scenarios and the appropriate responses to those emergency scenarios.**
- **A detailed pressure loss calculation shall be prepared for the most disadvantaged hydrant to demonstrate compliance with AS 2419.1-2017.**
- **The pressure loss calculation shall be incorporated into the fire risk assessment.**
- **A fire equipment layout drawing shall be prepared for the site, indicating all fire controls (extinguishers, hydrants, hose reels, etc.).**
- **Site containment shall be reviewed to ensure appropriate capacity is available for potentially contaminated fire water.**

6.9 Greenhouse Gas Emissions

The Site does not accept types of waste (including putrescible waste) that generate Greenhouse Gas Emissions. The only likely emissions from the Site are from the machinery operated on Site.

Greenhouse Gas - Mitigation and Management Measures:

- **Machinery will be regularly tested and maintained so that emissions are as clean and minimal in quantity as possible.**

6.10 Geotechnical

A Geotechnical Investigation for the proposal was undertaken by JK Geotechnics and is included at **Appendix L.**

Existing Conditions

- The 1:100,000 Geological Series sheet of Sydney indicates that the site is underlain by Hawkesbury Sandstone. This subsurface profile does not take into account the fill from previous site earthworks or residual soils derived from in-situ weathering of the sandstone.
- The boreholes disclosed a subsurface profile of pavements over variably compacted fill of variable depths over residual soil transitioning to weathered sandstone bedrock at mostly shallow to moderate depths below existing ground level.
- Fill was encountered beneath the pavement surface in all boreholes and varied in depth across the site from 50mm -100mm in BH3, BH4 and BH5 to 0.6m and 2.3m in BH1 and BH2 respectively. The deeper fill in BH3 and BH4 comprised mainly silty clays with inclusions of sand, gravel and ash. It is inferred that the deeper fill is associate with past earthworks that were carried out to level the site.

- Natural sandy clays, silty clays and clayey sands of residual origin, were encountered beneath the fill and extended to the underlying sandstone bedrock.
- The depth to sandstone bedrock varied significantly across the site, mostly due to the depth of the fill cover at the front and prior excavation at the rear. In the rear of the site where the fill and natural soil cover was shallow then the sandstone bedrock was encountered at shallow depths of about 0.2m in BH4 and BH5. Towards the front and the south-eastern, downslope side of the site of the site, in the deep fill and natural soil areas the rock was at 1.3m in BH1, 1.5m in BH3 and 2.7m in BH2.
- No groundwater was observed in any of the boreholes, other than BH3 where seepage occurred during drilling at 4m depth and standing water was recorded after drilling at 5.3m depth.

Geotechnical - Mitigation and Management Measures:

Based on the subsurface conditions found at the site JK Geotechnics recommends the following to be considered in the planning, design and construction considerations for the development

- **The weighbridge excavations may require rock excavation if they are deeper than the rock depths of 1.5m on the north-western side of the site, though rock is not expected on the south-eastern side. Excavation will be mostly carried through variable soils and possibly sandstone bedrock of variable strengths. Hence, most of the soils and weathered sandstone are expected to be excavated with the buckets of large excavators, perhaps assisted by ripping tynes. If rock in the low to medium strength range is encountered it will require the use of rock breaker equipment. Rock breakers may transmit vibrations through the rock mass that could affect adjoining buildings. Vibration effects on adjoining structures must be considered.**
- **The weighbridge excavations will be close to the site boundaries and it is recommended to have full depth support by shoring pile walls or where possible, by cutting the sides to a batter slope. Support may be required even in the excavation through the sandstone due to its interlayered nature of very low and low strength rock.**
- **The most competent foundation for the proposed buildings is the bedrock. It is recommended footings be founded uniformly into the sandstone.**
- **The residual clays are considered to be moderately reactive, i.e. similar to Class M clays in AS2870-2011 though the site classification varies from one part to another and is not really applicable to industrial buildings.**
- **The presence of the deep uncontrolled fill of varying compaction and thickness is considered unsuitable as a foundation stratum, based on the test borehole information. We consider this existing material to be 'uncontrolled' fill. Because of this fill, that part of the site as seen is considered to be Class P ('problem') in accordance with AS2870-2011.**
- **The fill is deemed unsuitable as a bearing stratum for footings and is considered a 'moderate to high risk' (of poor performance) as a supporting subgrade under slabs and external pavements (note that some of the pavements have already suffered cracking damage). Essentially, there are two options for the engineering design: suspend the building, including its floor slabs, on a system of pile footings founded within the bedrock, or, alternatively, excavate and replace the fill**

with engineered, controlled fill that can then support the slab on grade (and if desired, footings as well, albeit with a low allowable bearing pressure of 100kPa).

- **A waste classification will need to be assigned to any soil excavated from the site prior to offsite disposal. In this respect, and in regards to contamination, reference should be made to the JK Environments report.**
- **All concrete pavements should be underlain by a layer of good quality roadbase (equivalent to TfNSW Specification 3051 for DGB20) at least 100mm in thickness and compacted to 98% of Modified Maximum Dry Density. Concrete pavements should have joints designed to transfer shear but not bending force**
- **Prior to demolition, earthworks or excavation commencing, detailed dilapidation reports should be compiled on neighbouring buildings that fall within the zone of influence of the excavation, which is defined by a distance back from the excavation perimeter of twice the depth of the excavation. The respective owners should be asked to confirm that the dilapidation reports represent a fair record of actual conditions. These reports should be carefully reviewed prior to excavation commencing to ensure that appropriate equipment is used.**
- **Prior to commencement of construction consideration should be given to the findings in JK Geotechnical Report for the site by the builder, and civil and structural engineers.**

6.11 Social and Economic

In facilitating the operation of the Site, the proposed development will provide employment-generating activity. This has positive impacts on local and regional economies and populations.

The Proposal provides a supply of employment in an area of high accessibility, and contributes to desirable employment outcomes.

The operation of the facility would allow for the efficient provision of resource recovery initiatives and infrastructure. Operation of the Site would facilitate the objectives of relevant State and Commonwealth legislation. For instance, the waste management objectives of the WARR Act include establishing the waste hierarchy of avoidance, resource recovery and disposal. It is considered that the facility would have a positive impact upon waste minimisation and resource recovery in the region.

The facility is also strategically located within an industrial area sufficiently set away from residential areas. It is therefore considered that the facility would not reduce the economic land value of the surrounding area.

Social and Economic - Mitigation and Management Measures:

- **No further mitigation measures are proposed with regard to socio-economic issues as it is considered that the facility would be of net benefit to the community, providing for increased social efficiency associated with waste management and resource recovery within**

6.12 Flora and Fauna

The Site is not identified as not containing threatened species, populations or communities within relevant State or Commonwealth legislation. Therefore, there should be no requirement for protection of any flora and fauna species.

No trees or shrubs are proposed to be removed or impacted as a result of the proposal.

Flora - Mitigation and Management Measures:

- **Not applicable**

6.13 European or Aboriginal Heritage

The site is not within a conservation area and is not identified as an item of heritage. The site is within the vicinity of an item of heritage, Holy Cross College, however the proposed works do not result in any detrimental impact upon the heritage significance of that property. A Heritage Impact Statement prepared by Weir Phillips accompanies the proposal at **Appendix M.** The proposal concludes:

> *The proposed works will have no impact on the heritage item at Nos. 499-521 Victoria Road, Ryde as the subject site is sufficiently separated so as to have no impact on the fabric of the item. There will be no impact on significant view corridors towards the item, specifically the c. 1896 school building as the focus of the listing, which are obtained from Victoria Road. The site is located well outside these view corridors. The proposed waste management facility is consistent with the existing industrial and commercial uses which characterise the wider setting of the item. The proposed waste management facility will have no visibility from any part of the item due to the fall of Buffalo Road to the east and intervening buildings which are consistent with the scale of the proposed building. The proposed works will, overall, have no impact on the ability of the public to understand and appreciate the historic and aesthetic significance of the item as a c. 1896 school building.*
> *The proposed works fulfil the aims and objectives of the Ryde LEP 2014 and the Ryde DCP 2014 by improving the quality and diversity of industrial options in Gladesville while respecting the heritage significance of the area in which it lies.*

European and Aboriginal - Mitigation and Management Measures:

- **Not applicable**

6.14 Ecologically Sustainable Development

Precautionary Principle

The precautionary principle necessitates consideration of the risks of serious or irreversible environmental damage associated with a development. The Proposal has been assessed with the purpose of reducing the risk of serious and permanent impacts on the environment including an evaluation of the risk-weighted consequences of alternatives and options regarding the Proposal.

The technical studies provided in the appendices of the EIS did not identify any issues that may cause serious and irreversible environmental damage as a result of the facility. While the designated development application has an intended use of the Site, there are further measures identified that will be implemented for the purpose of improving operations and protecting the environment at the Site.

Inter-generational equity

The principle of inter-generational equity is concerned with ensuring that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations. The Designated Development Application is for operation of the Site, which as a waste and resource transfer facility within an industrial area that does not currently support a significant amount of natural assets, containing limited native vegetation cover and minimal presence of native fauna.

The approval of the designated development application would secure an important waste infrastructure need, thereby facilitating future developments within the Ryde LGA, the Western Sydney Area and the wider Sydney metropolitan area. The Site would secure waste requirements and have a working life that would extend to future generations, providing benefits for a number of generations without increasing the burden on future generations to deal with waste disposal problems. Should the Designated Development Application not proceed, the principle of intergenerational equity may be compromised, as future generations could inherit a higher cost for disposal and processing of waste in addition to the increased likelihood of illegal dumping.

Through the granting of development consent the Circular Metals Gladesville facility would continue to meet the demands for waste treatment now and into the future, supporting source separation, and enabling resource recovery targets to be achieved.

In addition, it is recommended that an Operational Environmental Management Plan (**OEMP**) is prepared prior to construction and operation of the site to address the ongoing development of management and mitigation of issues on-site which will be implemented. Site management will need to be carried out to ensure that best practice methods are being employed wherever possible that facilitate the health, diversity and productivity of the environment are maintained or enhanced for future generations. Refer to Part I of this EIS that provides a consolidated table of mitigation and management measures that Circular Metals Gladesville are committed to providing for the Site.

Conservation of biological diversity and ecological integrity

This principle provides that biological diversity and ecological integrity should be fundamentally considered when assessing the impacts of a Proposal. As identified within the EIS and supporting technical reports, the facility will have no impact upon biodiversity, and natural hazards. The Site is located within an industrial precinct. No threatened flora or fauna listed under the *Environment Protection and Biodiversity Conservation Act 1999* (**EPBC Act**) or *Threatened Species Conservation Act 1995* (**TSC Act**) have been recorded within the Site area. The development is not considered to significantly impact biological diversity or ecological integrity.

Improved valuation, pricing and incentive mechanisms

This principle requires that costs to the environment are incorporated or internalised in terms of the overall project costs, ensuring that decision making takes into account the environmental impacts. This EIS has identified that the environmental, social and economic costs associated with the ‘do nothing’ or construction of a new facility approaches are greater than the ongoing and more efficient use of an existing resource recovery facility.

The EIS further provides for mitigation measures to ameliorate potential environmental impacts that may occur as a result of the facility. The implementation of mitigation and management measures represents a

capital or operational cost for the facility, acting as a valuation in economic terms of environmental resources.

ESD – Mitigation and Management Measures:

- **Prepare and Implementation of an Operational Environmental Management Plan (OEMP).**

6.15 Contamination

- No significant excavation is proposed as part of the subject application and historical data indicates that the Site has been used for light industrial purposes previously.
- No significant subsurface disturbance activities are proposed. On this basis, it is considered that the Site is suitable for the existing facility.

Contamination - Mitigation and Management Measures

- **A suitably qualified/licensed contractor is to carry out an 'emu pick' to remove all visible FCF from the surface of the site. A surface clearance for asbestos is then to be issued by a Licensed Asbestos Assessor (LAA). This is to occur as soon as possible;**
- **Prepare and implement a RAP.**
- **Validate the implementation of the RAP and provide a validation report on completion of remediation.**
- **The RAP recommends the appropriate remediation actions for the site, and should be implemented prior to construction.**

In the event that contamination is managed on site, long-term EMP must also be prepared.

PART G - CONSULTATION

During the preparation of this EIS, as required by the SEARs, the proponent has consulted with the relevant local, State and Commonwealth government authorities, service providers and community groups, and addressed any issues they have raised in the EIS.

Consultation, to date, has been with the following:

- Environment Protection Authority (EPA);
- City of Ryde Council;
- Transport for NSW;
- Fire and Rescue NSW;
- Sydney Water; and
- The surrounding landowners and occupiers that are likely to be impacted by the Proposal.

Details of the consultation carried out are included below.

Environment Protection Authority (EPA)

The proponent notified the EPA of this proposal on 12 August 2022 with a consultation letter and fact sheet (**Appendix T**), along with SEARs 1617, and architectural plans as proposed.

On 30 August 2022, Stuart Gibson of the EPA emailed the proponent requesting the following:

EPA Request

I wanted to check the following with you:

- *The volume of waste batteries that will be stored at any one time on site*
- *What type of batteries will be stored (eg lead acid batteries)*

Proponent Response

The proponent responded as follows:

> *The batteries collected and stored will be Lead / Acid only.*
>
> *No Lithium batteries will be brought to the site. The batteries will be kept on pallets within the building and with a maximum of 5 pallets at a time. A maximum of 200 batteries will be stored on-site.*
>
> *No loads exceeding 200 kg of waste lead acid batteries will be transported to or from the site.*
>
> *In total we do not anticipate coming anywhere near exceeding the 60 tonnes per annum restrictions.*
>
> The EPA formally responded with a letter to the proponent on 12 September 2022 (**Refer Appendix T)** as follows:
>
> *Based on the information provided in your consultation, the EPA is unable to determine whether your proposal will require an Environment Protection Licence.*

I recommend that you review your proposal to determine if it will constitute a Scheduled Activity under Schedule 1 of the Protection of the Environment Operations Act (1997). You might also consider the EPA's guideline, Television and computer recycling in NSW, which will help you to determine whether you require an environment protection licence to store the volume of waste described as "e-waste" in your letter, on your site.

Proponents Comment:

At this stage, the nominated 'Schedule Activity' to be requested from the NSW EPA for inclusion in the EPL will be Clause 34 'Resource Recovery' activity (Schedule 1 of the POEO Act).

A future EPL application will be made separately to this proposal for designated development consent as no EPL can be granted by the EPA until such time as the Development Consent is granted for the use of the facility.

On 19 January 2023, the proponent's planner emailed the EPA requesting confirmation as to whether they had any further questions / comments regarding the proposal and extending an invitation for a meeting (if needed).

At the time of finalizing this EIS no further responses had been received from the EPA.

City of Ryde Council

The proponent has notified the City of Ryde of this proposal on 12 August 2022 with a consultation letter and fact sheet (**Appendix T**), along with SEARs 1617, and architectural plans as proposed.

Subsequently Council provided a detailed letter of response on 26 August 2022 raising the following maters as outlined in the following table.

Ryde Council Matters – 26 August 2022	**Proponent Response**
Strategic and Statutory Context	
The application is to be supported by Environmental Impact Statement demonstrating consistency with the requirements of the SEARs dated 27 October 2021.	This document is and Environmental Impact Statement and it does demonstrate consistency with the requirements of the SEARs dated 27 October 2021.
The application is to be supported by an acoustic assessment, vibration assessment, air quality assessment, stormwater management report and plans (which shows the freeboard requirements for the development in relation to habitable and non-habitable areas consistent with the freeboards identified in DCP 2014), landscape plans, and architectural plans.	This EIS is supported by an - Acoustic assessment and vibration assessment, - Air quality assessment, - Stormwater management report and plans (which shows the freeboard requirements for the development in relation to habitable and non-habitable areas consistent with the freeboards identified in DCP 2014), - Landscape plans - Architectural plans.

Ryde Council Matters – 26 August 2022	Proponent Response
	Refer to relevant appendices to this report.
The Air Quality Impact Assessment is to include what will constitute an appropriate drop height for metals. This will include any relevant parameters in preventing the emissions of dust, as well as how it will be ensured that drop heights of metals are not exceeded.	Drop heights from loading and handling equipment are to be reduced as much as practical. A reduction from 3 metres (m) to 1.5m is recommended to be applied where possible when dropping dusty material. Refer to Section 6.3.1 Dust emissions of the Air Quality Impact Assessment included at Appendix J.
A Plan of Management addressing the matters outlined below under suitability.	A Plan of Management is provided at Appendix Q.
A soil and stormwater report should be submitted. Where any water quality monitoring is proposed to ensure efficiency of water treatment. Analytes are to include TSS, TN, TP and full metal suite. Details should include on how this would be conducted, where, and specific information as to what circumstances any exceedance of analytes would be required to be reported to the City of Ryde Council.	Refer to Appendix G – Stormwater and Flooding Assessment.
The application should address the management of groundwater during demolition and construction stages, specifically regarding preventing any potential for associated pollutant events.	Refer to Appendix G – Stormwater and Flooding Assessment.
A preliminary and detailed site investigation in accordance with State Environmental Planning Policy Resilience and Hazards SEPP 2021.	A Preliminary and Detailed Site Investigation is provided. Please refer to Appendix R and S.
The architectural plans should demonstrate the following matters: o The bunded around all loading, unloading and processing areas required by the GTAs issued by the NSW EPA; o The location of the required OSD tank; o Modification of the location of the proposed building, as necessary, to avoid any encroachment to the easement, including eaves, gutters, window aluminium decorations, etc; o Any changes necessary to the plans to address the required freeboards identified in the amended Stormwater Management Report; o Parking areas for any vehicles to remain onsite overnight; o The relocation of the entry weighbridge such that it	The Architectural Plans provided at Appendix B address these requests where relevant. - The plans provide bunding to all processing areas as per AS1940-2004. - Proposed OSD tanks location are shown on Figure 4 of the Stormwater Report and on the Stormwater Management Plan of the same report. - Relocating the 'in-ground' weighbridge is not supported by the proponent. The weighbridge will not block access to parking areas, as all parking areas will be used pre and post trading, by staff, and therefore no vehicle conflict is likely. Relocating the weighbridge will result in reducing the size of the truck or demolishing the front building

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does not block access to the parking areas when in use and does not result in the need for vehicles waiting to enter the site to queue on the street; o The relocation of the exit weighbridge if necessary, to ensure it does not detrimentally impact the stormwater easement; o Clarify the intended use of the paved area forward of the front building; o Identify materials and colours for all buildings (including the treatment of those to be retained), to ensure a cohesive and appropriate presentation to the street; and o Identify existing signage that is to remain and be removed in order to reduce the visual signage clutter on the site.	due to the swept path requirements, which is not supported by the proponent. The weighbridge is removable for maintenance purposes. - The paved area forward of the building is for access to building. - Vehicles on site overnight will be stored internally in warehouse building. All staff vehicles will leave the site at the end of the trading. - The plans clearly annotate proposed materials. - All signage that currently exists will be moved. New signage will be subject of separate future DAs.
A landscape plan prepared by a suitably qualified expert is required providing detail (including species, numbers, pot size and maturity height) of the landscaping identified in the Visual Impact Assessment, inclusive of 2-3 small trees. - Landscape beds forward of the front building should be 2.5m in width. - Landscaping should also be provided forward of the onsite parking.	A landscape plan is provided at Appendix D. The landscape plan includes: - 3 small trees - Landscape beds forward of the front building greater than 2.5m width - Landscaping is provided adjacent the parking area.
A separate stormwater management plan is required detailing the proposed drainage for the development including connection details. The plans are also to show: i. The proposed stormwater disposal system for the Site, including OSD; and ii. All existing Council drainage assets within and adjacent the development site.	Refer to Appendix G – Stormwater and Flooding Assessment.
A detailed survey plan is required that shows: i. The stormwater infrastructures and easement within the property.	A Survey Plan is provided at Appendix A.
Suitability of the Site	
The EIS should specifically detail all the operational plant/machinery to be used on the Site and ensure consistency between expert reports regarding plant/machinery proposed for use as part of the operations.	Refer to Section 3.2 of this EIS that outlines all plant/machinery, along with the Acoustic and Vibration Assessment.

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The EIS should specify how large items will be received and their size reduced to be more effectively managed for transport. If large items are not to be received, specific parameters are required detailing the maximum size of items to be delivered and such should be included in the POM.	The maximum size of items is 2 tonne or 4m long to ensure they can be loaded to trucks. Any materials larger are not accepted at site. A Plan of Management is provided at Appendix Q that references large items.
A Plan of Management should be submitted detailing the following matters specifically: o Information as to how it will be ensured all doors and openings of the facility will remain closed other than when open for vehicles to enter and leave the building. o A maintenance plan for water quality filtration devices, to ensure they are maintained as recommended by the manufacturer. o Detail how the use of the entry weighbridge will not unreasonably impact the operation of the parking spaces. o Detail procedures for assessing incoming loads and that the doors are to be closed before commencement of material sorting. o Specify whether any dismantling of white goods is to occur onsite. o Detail in the unacceptable waste types section that all wastes other than those identified on page 8 are unacceptable wastes (including putrescible waste). o Detail what, if any unacceptable hazardous wastes are appropriate to be retained onsite when detected prior to unloading in accordance with the procedure. o Detail all mitigation measures.	A Plan of Management is provided at Appendix Q. The truck enters the rear building and occupies the loading area, the doors are then shut and the truck is unloaded. To ensure that doors will remain closed, each door will be fitted with electric quick doors. In the event of a power failure, the site manager will be responsible for manually closing each door as required. All doors will be closed before commencement of materials sorting. The proposed car parking on site is for staff only, so when they arrive early in the day they will park their vehicles until when they exit in the evenings. Therefore, no conflict with the weighbridge operation is likely to occur as the car parking is not available to the public visiting to the site. Whitegoods will be stockpiled in a sperate bin. No dismantling of white goods is to occur on site. Circular Metals Gladesville does not accept asbestos, toxic waste, hazardous waste, liquid waste or medical waste (unacceptable waste) at the Site. All Circular Metals Gladesville employees are trained in accordance with this Plan of Management and are therefore deemed to be qualified “Spotters” of unacceptable waste. As such, it is the responsibility of all Circular Metals Gladesville employees to identify and address unacceptable waste on Site appropriately and as soon as possible.
Noise and Vibration	
An acoustic and vibration report should be prepared in relation to the proposed development that specifically address the following matters:	Refer to Acoustic and Vibration Assessment at Appendix F.

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An acoustic assessment based on the identified plant/machinery to be used on site including the use of a front end loader or excavator or if both are being used on site. Information on the noise or vibration associated with taking the metal off the delivery truck (particularly if it is dropped), or if a forklift of similar is needed on the site.	Refer to Acoustic and Vibration Assessment at Appendix F. Refer to Section 5 of Appendix F which addresses Operational Noise Impacts
An assessment of noise from vehicles moving into and out of the processing sheds.	Refer to Acoustic and Vibration Assessment at Appendix F. Refer to Section 5 of Appendix F which addresses Operational Noise Impacts
Modelling for worst case scenario of impact on the existing acoustic environment. This is to include: a. Loading times being revised to include more accurate loading times predicted for various types of vehicles expected to attend the premises. This will include establishing the predicted times for vehicles e.g. light vehicles, medium rigid, and semi-trailers. b. That acoustic impact is modelled for a number of vehicles waiting outside the facility. This is in consideration that worst case modelling was previously based on the impact of one vehicle whilst present at the facility. c. Noise and vibration generated from dropping of metal, dragging and compressing of metal, in addition to noise associated with the truck movements and operation of the use.	Refer to Acoustic and Vibration Assessment at Appendix F. Refer to Section 4 and 5 of Appendix F which addresses Construction and Operational Noise Impacts, and modelling.
The report should detail what the appropriate drop height will consist of and the impact drop heights may pose to the existing acoustic environment. This is in relation to items being received during loading, unloading, sorting and management of items and materials at the site.	Refer to Acoustic and Vibration Assessment at Appendix F. Operational noise emission is predominately governed by the use of machinery, heavy vehicles manoeuvring onsite, and the dropping of materials during loading and unloading activities. In general, noise impacts from these activities have been predicted to be compliant at nearby receivers, with the exception of the adjacent industrial receiver. Noise mitigation controls have been recommended in Section 6.2 of Appendix F for consideration. Adherence to these control measures will minimise the noise impacts at the nearby receivers.
The report should specifically identify the noise measurements and how they were measured	Refer above.

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including specifics on dropping of metal, dragging of metal, compressing the metal.	Refer to Acoustic and Vibration Assessment at Appendix F.
Measurements undertaken where the operations will occur. For example, measurements undertaken in a larger enclosed area as opposed to within a smaller shed proposed at the frontage of the site which will likely result in a greater noise generation.	Refer to Acoustic and Vibration Assessment at Appendix F.
A vibration assessment of operational conditions, having regard to proposed machinery, size of materials and drop heights and providing mitigation measures as necessary.	Refer to Acoustic and Vibration Assessment at Appendix F. Vibration from operation and construction is assessed and appropriate mitigation measures are provided.
The vibration assessment should demonstrate consistency with the applicable noise limit and there is no adverse acoustic or vibration impact upon adjoining properties.	Refer to Acoustic and Vibration Assessment at Appendix F. Vibration from operation and construction is assessed and appropriate mitigation measures are provided.
Where there is an exceedance of typical noise goals, noise mitigation measures shall be implemented to ensure noise goals are not exceeded.	Refer to Section 6 of the Acoustic and Vibration Assessment at Appendix F which identifies multiple mitigation measure in relation to construction and operational noise.
Consideration should be given to the specific operation of surrounding sites and their sensitivities to vibration.	Refer to Acoustic and Vibration Assessment at Appendix F.
The vibration report is to include specific details about the precise noise levels from individual activities (dragging, dropping, crushing of vehicles (if proposed) and for how long in any 15 minute period), to justify the noise levels).	Refer to Section 5 of the Acoustic and Vibration Assessment at Appendix F, which details predictive noise modelling of a similar facility that is currently operational.
Traffic and Transport	
A Traffic and Transport Impact Assessment which address (at minimum) the following:	A Traffic and Accessibility Impact Assessment is included at **Appendix D.**

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An analysis of the existing traffic conditions within the surrounding road network, including but not limited to a description of the surrounding road hierarchy, current daily and peak hour vehicle movements and an assessment of the existing performance levels of nearby intersections.	Section 4.1 of Traffic and Accessibility Impact Assessment: describes the existing road hierarchy and traffic conditions within the vicinity of the site.
A forecast of additional daily and peak hour vehicle movements based on the operational characteristics of the proposed land use (i.e. first principles assessment).	Reference should be made to Section 7.3 of the TAIA which assesses the peak hour vehicle movements. As the additional traffic has the most impact upon the network during the peak periods this has been the focus in the TAIA.
Identification of potential traffic impacts on road capacity, intersection performance (e.g. level of service) and road safety (including pedestrian and cycle conflict) based on the additional traffic introduced on the surrounding public road network by the proposed development. Queuing analysis to demonstrate that the location of the weighbridge is appropriate and will not result in vehicle queues being extended onto Buffalo Road.	Vehicles required to use the weighbridge will be managed to ensure the weighbridge is clear upon arrival. This can be further detailed in a Traffic Management Plan for the development as part of an appropriate condition of consent.
Proposals to mitigate any traffic impacts, including intersection/driveway upgrades and active/public transport infrastructure improvements to minimise private vehicle trips to ensure nearby roads and intersections operate with an acceptable level of service as well as address potential road safety concerns (e.g.manoeuvring of the largest vehicles required to travel to the site).	The TAIA has assessed the surrounding intersections in Section 7.5 of the TAIA, which demonstrated the operation of the intersections is good with spare capacity during both peak periods. Therefore, no upgrades to the existing road network are required to accommodate the proposed development. The development proposes new vehicular driveways to accommodate the vehicles on site which is detailed in Section 8.1. Bicycle parking and end of trip facilities are provided in accordance with the DCP to encourage active transport and reduce private vehicle trips, which is detailed in Section 6.3. Road safety concerns have been addressed in Sections 7.8 and 7.9 of the TAIA.
Proposals to improve walking and cycling, such as connections into existing walking and cycling networks, high quality end-of-trip facilities and adequate bicycle parking for visitors, employees and residents(provided in accordance with the relevant rates, specifications and standards).	Reference should be made to Section 6.3 of the TAIA regarding provision of future bicycle parking facilities. It is noted that end of trip facilities are provided for staff use including showers within the accessible bathroom located on the Ground Floor. Reference should also be made to the Green Travel Plan (GTP) and Travel Access Guide (TAG) which outlines initiatives for encouraging travel by more sustainable modes of transport including

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	walking and cycling.
The architectural design is required to address (at minimum) the following vehicular access, parking and servicing considerations: •The proposed vehicular access, off-street car/bicycle parking and heavy vehicle servicing arrangements shall be designed to comply withAS2890.1, AS2890.2, AS2890.3, AS2890.6 and Council's DCP. •Adequate parking spaces are to be provided on site to accommodate the peak parking demand generated by the proposed development. This includes both passenger and heavy vehicle parking requirements. •Swept paths of the largest/longest vehicle to be accommodated on site are to be provided to demonstrate that such vehicles will not impact on the existing public road infrastructure. At a minimum, the swept path assessment needs to test the following movements based on the largest/longest vehicle expected to travel to the site: -Left turn into the site from Buffalo Road -Left turn out of the site from Buffalo Road -Left turn from Victoria Road into Cressy Road -Left turn onto Victoria Road from Monash Road -Right turn onto Buffalo Road from Cressy Road -Right turn onto Monash Road from Buffalo Road -Southbound through movement through the roundabout intersection of Monash Road and Ryde Road.	Reference should be made to Section 8 of the TAIA which assesses the above. Reference should be made to Section 6 of the TAIA which assesses the above. A revised route has been developed to allow for vehicles up to and including the 20.0m Articulated Vehicle which is detailed in Section 7.7 of the TAIA.

Historical Consultation / Engagement with Council

Following the refusal of LDA2021/0124 Circular Metals Gladesville representatives met with Council staff 27 September 2021 to discuss their intentions of lodging a SEARs request and subsequent EIS for the proposal that is currently under assessment.

On 6 October 2021, Council wrote to Circular Metals Gladesville and advised of their intentions to commence legal proceedings in relation to the unauthorised use of the site as a waste resource facility.

On 13 November 2021, Circular Metals Gladesville wrote to the Mayor of Ryde and other Councillors, expressing their disappointment in Council's actions, and that they intended to seek designated development consent by way of lodging a SEARs request and subsequent EIS for the proposal.

On 8 February 2022, a new Development Application was lodged with the Environment Impact Statement (**EIS**). Part G of that former EIS deals with the consultation requirement.

In summary form, consultation did not occur with (relevantly):

(a) the Environment Protection Authority,

(b) the City of Ryde Council, or / with

(c) the surrounding landowners and occupiers that are likely to be impacted by the Proposal.

Various reasons for the non-consultation were provided for in Part G of that former EIS.

Public notification of that DA occurred between 11 February 2022 and 15 March 2022.

On 5 April 2022, the Council received the GTAs from the EPA in relation to the new Development application.

On 13 April 2022, Circular Metals Gladesville commenced Class 1 proceedings in the Land and Environment Court of NSW against the deemed refusal of the new DA. That Class 1 appeal was the subject of a section 34 Conciliation Conference on 1 August 2022, where concerns were raised with respect to consultation.

On 8 August 2022, Circular Metals Gladesville discontinued the Class 1 proceedings and withdrew the DA with Council to consider and re-engage with the consultation requirements outlined in the SEARs and to prepare a new EIS.

Transport for NSW

The proponent notified the Transport for NSW of this proposal on 12 August 2022 and again as a follow up on 24 January 2023 with a consultation letter and fact sheet (**Appendix T**), along with SEARs 1617, and architectural plans as proposed.

At the time of writing this EIS, no response was received by Transport for NSW.

The proponent notes that Transport for NSW provided a detailed list of issues in '**TAB A**' to be addressed as part of the traffic and transport impact assessment for the proposal. This letter with '**TAB A**' was included in the SEARs, as an attachment dated 20 October 2021, under cover of their letter prepared by Brendan Pegg. Given the comprehensive list of issues to be addressed, the proponent's traffic consultant has addressed these requirements in their traffic impact assessment.

Fire and Rescue NSW

The proponent notified Fire and Rescue NSW of this proposal on 23 January 2023 with a consultation letter and fact sheet (Appendix T), along with SEARs 1617, and architectural plans as proposed.

At the time of writing this EIS no response had been received other than an acknowledgement of receipt of the information provided.

Sydney Water

The proponent notified Sydney Water of this proposal on 23 January 2023 with a consultation letter and fact sheet (Appendix T), along with SEARs 1617, and architectural plans as proposed.

A response was received from Sydney Water (**Appendix T)** advising that they receive SEARs referrals from Council and the Department of Planning as part of an agreed process for development referrals, and that they will respond to the referral from the consent authority, if required.

Surrounding Landowners and Occupiers

As required under clause 45(4) of Schedule 3 of the *Environmental Planning and Assessment Regulation* 2021, Development for the purposes of a waste management facility of works *is* designated development if the facility or works are located –

> (f) within 500 metres of a residential zone or 250 metres of a dwelling not associated with the development and, in the consent authority's opinion, considering the topography and local meteorological conditions, are likely to significantly affect the amenity of the neighbourhood because of noise, visual impacts, vermin, traffic or air pollution, including odour, smoke, fumes or dust".

Given this legislative framework and the requirements for community engagement and consultation, the proponent undertook a comprehensive letterbox drop (**Appendix U**) on 14 August 2022 to surrounding businesses and residents (within a radius of 250m of the site) likely to be affected by the proposal. Residents were given until 29 August 2022 to provide a written response if they should wish to do so.

As part of this letterbox drop, an invitation for written responses with any comments about the proposal was undertaken, in addition to an invitation for representatives of businesses or residents to attend a meeting on site with the operators of Circular Metals and their consultant town planner on 26 August 2022, between 9am and 10am.

Subsequently, without authority of the proponent and unbeknown to the proponent, in advance of the planned community meeting of 26 August 2022, an unknown individual or group of individuals sought to prepare their own letter and fact sheet, which contained factually incorrect information about the proposal, and also sought a wider catchment audience than the 250m radius proposed by the proponent, and invited additional businesses and residents to the proposed on site meeting. A copy of this factually incorrect letter prepared by an unknown individual, and not authorized by the proponent is (**Appendix V)**

A record of comments received at the meeting of 26 August 2022 is shown in the following table, and provides a response to each comment by the proponent.

At the conclusion of the community meeting, the proponent decided to undertake a further letterbox drop on 30 August 2022 to a 500m radius as outlined in the image below, inviting businesses or residents likely to be affected by the proposal to provide a written response with any comments about the proposal. Residents were given until 13 September 2022 to provide a written response if they should wish to do so.

Figure 10: The letter drop catchment of 500m radius from the subject site.

Site Meeting with the community – 26 August 2022

The following table is a record of comments received from businesses representatives and residents attending the on-site meeting held 26 August 2022, and the proponent's response to each matter raised.

Representatives of Circular Metals Gladesville, their engaged town-planner and invited community individuals and businesses were in attendance.

	Consultation Comments from community	Proponents Response
1	**Waste Types and Handling**	
1.1	Concerns were raised about the potential for hazardous wastes.	No hazardous wastes are proposed on site. Refer to Hazard Assessment at Appendix H.
1.2	What happens when hazardous wastes are presented at the site? What guarantees are there that they will be dealt with in the interests of surrounding occupiers health?	Circular Metals Gladesville does not accept asbestos, toxic waste, hazardous waste, liquid waste or medical waste (unacceptable waste) at the Site. In the event that unacceptable waste arrives on Site, Circular Metals Gladesville will employ the procedures detailed in below to ensure that the unacceptable waste is safely and efficiently handled. If hazardous wastes are detected they're not accepted, and the customer is told to remove them from site. The facilities website contains a list of wastes not accepted and as considered as hazardous.
1.3	Are trucks arriving at site screened for hazardous wastes?	Yes, refer to Plan of Management at Appendix Q for Operating Procedures.
1.4	Where do the large trucks arriving at site come from. What waste collection points are they originating from before coming to the facility?	Multiple waste transfer stations across the Sydney Metropolitan Area, and wider NSW.
1.5	What waste types would mum/dads (general residents) normally drop off at the facility?	General household type waste from furniture or building materials that are metal.

	Consultation Comments from community	Proponents Response
1.6	Concerns that the volume of waste delivered to the site will be significant.	The site is capable of operating at the capacity proposed, as is supported by the relevant consultant reports and mitigation measures.
1.7	Is Suez a supplier of waste streams to the site?	Not directly. It is unclear why this would be relevant, so long as the type of waste proposed to come to site is permitted on site, it should be irrelevant where waste is sourced from.
1.8	Where does the product get sent to once it is collected on the site?	Steel, aluminium scraps, copper scraps and other non-ferrous scraps will be transferred to resource recovery facilities that are lawfully capable of accepting that material for processing. No shredding or processing will occur on site.
1.9	Is crushing of product proposed for the site?	No crushing of product will occur on site.
1.10	How many facilities are there like this in Sydney?	These facilities are not uncommon in Sydney in the IN2 Zone.
1.11	Will Circular Metals agree to operate under three strikes and you're out ruling, in terms of a breach of any development consent or operational restrictions?	The monitoring and enforcement of a Development Consent (and its operating conditions) for the site is the legal responsibility of Ryde Council. Council are well within their rights to impose enforcement action if required following a thorough investigation of any genuine complaint.
1.12	When trucks arrive on site, how do they unload?	With on site machinery, or use of tippers. Unloading is behind closed doors and under-cover.
1.13	Will waste come from Sydney's existing waste and landfill stations?	Yes, from time to time, but only those approved waste streams as authorised

	Consultation Comments from community	Proponents Response
		by any Development Consent granted by Ryde Council.
2	**Traffic and Transport**	
2.1	How many trucks come to the site at present? What will be the increase in truck movements?	<u>Existing – (approximate maximum)</u> 9 vehicle trips per hour (5 in, 4 out) during the morning peak hour; and 9 vehicle trips per hour (4 in, 5 out) during the evening peak hour. Proposed 11 vehicle trips per hour in the morning peak hour (6 in, 5 out) 11 vehicle trips per hour in evening peak hour (5 in, 6 out) **Overall increase in 2 vehicle trips during peak periods.**
2.2	Will large tucks remove materials from site? If so, how many?	Yes The above trips are based on the following hourly vehicle types and frequencies: • 1 x Semi Trailer (20.0m Articulated Vehicle) • Up to 4 x small Utes per hour • 1 x light truck per hour • Up to 3 x cars/trailer per hour • Up to 2 x skip bin trucks per hour
2.3	Will the new proposal increase the overall traffic generation in the area, particularly along Cressy Road?	Overall increase in 2 vehicle trips during peak periods.
2.4	What guarantee is there that no trucks will come down College Road, and strictly stick to Bufffalo Road and Monash Road?	It has been assumed that all vehicles will arrive to and depart from the subject development via Victoria Road and Cressy Road to the west, which is based on a worst-case scenario and conservative assessment. The proponent can recommend

	Consultation Comments from community	Proponents Response
		suggested routes to drivers, however once they commence their journey to or from the site, the proponent cannot entirely control driver actions or route planning.
2.5	How do you intend to control and manage drivers from taking short cuts in terms or their favoured route to and from the facility?	Refer to Section 7.7 of the TAIA at Appendix D for suggested truck routes. The truck routes have been allocated based on the size of vehicles to ensure vehicles can negotiate the intersections to and from the site.
2.6	Who is responsible for the policing of vehicles coming to and from the site?	When vehicles are on site or at the weighbridge they are at the discretion of the site operators. When on public roads the proponent cannot have responsibility for driver actions or behaviour as this would be impossible to control.
2.7	Bollards need to be put in place on the surrounding streets to ensure no trucks and heavy vehicles use other roads other than Monash Road and Buffalo Road.	Noted. That is at the discretion of Council and the relevant roads authorities and may be a condition of development consent.
2.8	What route do trucks coming from Wicks Road transfer station?	Refer to Section 7.7 of the TAIA at Appendix D for suggested truck routes. The truck routes have been allocated based on the size of vehicles to ensure vehicles can negotiate the intersections to and from the site.
2.9	There are currently issues with students crossing the surrounding roads from Holy Cross College. An increase in large vehicles will exacerbate these concerns.	The subject development is located approximately 400 metres east of an existing High School (Holy Cross High School located at 517 Victoria Road, Ryde on the corner of Victoria Road and Cressy Road). It is noteworthy that proposed truck routes to and from the

	Consultation Comments from community	Proponents Response
		subject site are via the RMS approved heavy vehicle routes (Cressy Road and Buffalo Road) which run adjacent to the High School. Therefore, it is proposed that truck arrivals are to be managed to ensure that Articulated vehicle (AV's) do not coincide with school start and finish times. AV arrivals will occur outside of school pick up and drop off times (8:00am-9:30am and 2:30pm-4:00pm on school days) thereby minimising impacts to existing traffic flow and safety along Cressy Road and Buffalo Road during school drop off and pick up times. All other vehicle arrivals and departures will occur on an hourly basis for the duration of the subject sites proposed operating hours.
2.10	Concern with the size and type of vehicles coming and going from the site, and the lack of visibility from these vehicles to see young children, therefore presenting a health and safety danger to pedestrians and children.	AV arrivals will occur outside of school pick up and drop off times (8:00am-9:30am and 2:30pm-4:00pm on school days) thereby minimising impacts to existing traffic flow and safety along Cressy Road and Buffalo Road during school drop off and pick up times. All traffic on the roads are subject to RMS speed limits for school zones.
2.11	The existing roundabout at Cressy Road and Buffalo already presents a danger to school children. More large vehicles will make the situation worse.	Refer above.
2.12	What types of trucks are used to take materials away?	Vehicles over 12.5m in length and up to the 20.0m long articulated vehicle (AV). Vehicles up to the 12.5m include long heavy rigid vehicle (HRV).

	Consultation Comments from community	Proponents Response
		General cars and utes.
2.13	The population of the area and surrounding environment has changed. This area was never designed to take this volume of traffic both existing and proposed.	Noted
2.14	How many tonnes of waste do the medium trucks carry?	1-3 tonnes
2.15	Can you include in the DA the proposed route of trucks?	Refer to Section 7.7 of the TAIA at Appendix D for suggested truck routes.
2.16	Are 200 trucks per week from the local area or wider Sydney?	Trucks to the site will be from the wider Sydney Metropolitan Area.
2.17	Where are utes taking materials to and from the site?	Generally from residential households.
2.18	Why don't you use Cressy Road for carry materials as opposed to Monash Road. It is a shorter distance?	Refer to Section 7.7 of the TAIA at Appendix D for suggested truck routes.
2.19	How many parking spaces are allocated on site to employees?	Up to 11.
2.20	Traffic in Cressy Road is already significantly congested.	Noted
	There are too many buses that use the roads already.	Noted, the site is adjacent a regional bus terminal.
2.21	Concerns the proposed hours of use will impact the overall levels of traffic during peak hours.	Noted
2.22	Existing roads already at saturation point.	Noted
2.23	Can the proponent propose hours to restrict the use of trucks and small vehicles?	No, truck movements will be as per the proposed hours of operation.
2.24	Traffic levels along Buffalo Road and Monash Road is already very busy. Concerns mums and prams are at danger.	All vehicle operators are not the responsibility of Circular Metals once they leave the site, however as per NSW driving regulations, all licenced drivers of any motor vehicle must have due consideration to pedestrian safety.
2.25	Do large trucks enter and exit site in a forward direction?	Yes. Refer to swept path analysis.

	Consultation Comments from community	Proponents Response
2.26	Are there time slots for truck drop off and pick up?	No
2.27	Proponent should be responsible for upgrades to roads and pedestrian safety in the area including crossing, traffic islands and bollards.	The proponent will be subject to the City of Ryde 7.11 Developer Contributions Plan, if consent is granted. The applicant should not be held responsible for upgrading the entire infrastructure surrounding the site, as there are multiple businesses and land uses that utilise surrounding infrastructure.
3	**Air Quality**	
3.1	Where does all the dust generated from the site go?	Refer to the Air Quality Impact Assessment at Appendix J. Whilst minimal, the significant dust generating activities associated with operation of the Project are identified as the loading/unloading of material, vehicles travelling on-site and off-site, and windblown dust from exposed areas and stockpiles. The vehicle and plant equipment also have the potential to generate particulate emissions from the diesel exhaust.
3.2	Do staff wear masks?	Staff are not required to wear masks, however are welcome to if they choose.
4	**Noise**	
4.1	I support recycling, I have concerns about noise.	Noted, refer to Acoustic and Vibration Assessment at Appendix F.
4.2	Current noise levels from site are unbearable and will be post consent.	Noted, refer to Acoustic and Vibration Assessment at Appendix F.
4.3	The operators claim they are not operating as they propose at present, yet the levels of noise over the last two years have been at their worst.	The operators of the site are not operating as per the proposal outlined in this EIS.

	Consultation Comments from community	Proponents Response
4.4	Noise levels higher than 35db is of concern.	Noted, refer to Acoustic and Vibration Assessment at Appendix F.
4.5	We can currently hear all cars being ripped up in Cressy Road.	The site has consent that is still active to dismantle cars, and the operators of the site are operating in accordance with that consent. Refer to Acoustic and Vibration Assessment at Appendix F.
5	**Economics**	
5.1	The proposed facility is a likely failed business model, and is economically limited by the volume of materials to be accepted at the site.	Noted, no further comment.
6	**General Comments**	
6.1	We're here to prevent any more changes to the surrounding environment.	Noted
6.2	How many people will be employed on the site?	Approximately six (6) full time equivalent jobs. Refer Section 3.3 of this EIS.
6.3	There are 500L barrels on site that are full of liquids. What are these liquids? Prove they're not hazardous.	No hazardous materials are stored on site. The barrels being referred to are merely used for storage of scrap metal and e-waste.
6.4	I did not receive a flyer in Cressy Road.	Two letter box drops occurred on 12 and 30 of August 2022 to a radius of 500m from the site. Cressy Road was included in this catchment.
6.5	Can we set up a panel of residents that can overview the levels of impact of the proposal?	That is at the resident's discretion although they would have no jurisdiction over how the site is operated. Council's

	Consultation Comments from community	Proponents Response
		Environmental Health Department will monitor the site should any complaints be made in relation not site operations.
6.6	Can we have a meeting with all your consultants to have answers to everything?	It was not possible to arrange for every consultant to be available at the site meeting. This EIS and the specialist consultant reports largely respond either directly or indirectly to all matters raised.
6.7	Disagree that the site has a development consent for car wreckers.	A development consent for car wreckers was previously permitted on the site. Development Consents No. 44/92 and No 1488 are to cease and make way for the proposed resource recovery transfer station.

Written Responses from Surrounding Businesses and Residents

Following the conclusion of both letter box drops that occurred **12 August 2022** and **30 August 2022**, a total of seven (7) submissions were received from nearby the following properties.

- 1 Holly Avenue, Ryde – located approximately 290 metres from the subject site.
- 224 Buffalo Road, Ryde – located approximately 1420 metres from the subject site.
- 58A Cressy Road, Ryde – located approximately 355 metres from the subject site.
- Owners Corporation of Strata Plan 61065 on behalf of 19 Unit owners at 46-48 Buffalo Road, Gladesville (prepared by Holding Redlich Lawyers) – located next door to the subject site.
- Holy Cross College Ryde (prepared by Robinson Planning)
- 2 x submissions from unknown addresses.

Copies of these written responses appear at (**Appendix U)**

The following outlines the written responses from the above listed submissions received in response to the letter box drop undertaken by Circular Metals, and the Proponent's response to each submission.

	Submissions Objection Comment	Proponents Response
1	**Use**	
1.1	Question the suitability of a "resource recovery transfer station for scrap metals" in a busy light industrial zone, adjacent to residential zones and Holy Cross College.	The site is zoned IN2 Light Industrial under the provisions of Ryde Local Environmental Plan 2014 (RLEP) and

	Submissions Objection Comment	Proponents Response
		a waste or resource transfer station for scrap metals and is an innominate permissible use with consent in that zone, being a development not specified as permitted without consent or prohibited.
1.2	This residential area is not an appropriate location for such a development.	The site is zoned IN2 Light Industrial under the provisions of Ryde Local Environmental Plan 2014 (RLEP) and a waste or resource transfer station for scrap metals and is an innominate permissible use with consent in that zone, being a development not specified as permitted without consent or prohibited.
1.3	We live on the corner of Buffalo and Cressy Roads and in the previous several months, while the facility was operating without the appropriate permissions, there was a significant and noticeable inconvenience to both our living and working environment at home. We are both involved in working from home arrangements and were regularly disturbed and disrupted by the sound and vibration of the trucks driving down Cressy Road from Victoria Road and turning onto Buffalo Road in the intersection.	The facility, if approved, will operate within the confines of the approved development, and implement the approved mitigation measures to ensure minimal impact to surrounding residents. Working from home now is a common practice although not mandated for many people, however just because people are working from home, it should not impact the operation of commercial areas like the site and their surrounds.
2	**Traffic**	
2.1	We have personally experienced delays in traffic flows along Buffalo Road as heavy vehicles are manoeuvred to enter and exit the existing site 50-52 Buffalo Road, causing traffic to bank up in both directions.	Noted. Refer to TAIA at Appendix D The net increase in vehicle trips is equivalent to an additional vehicle trip every 30 minutes and will have negligible impact to the surrounding network having regard for existing intersection performance.
2.2	Ryde Council's Traffic Engineers and Town Planners are well informed of the existing and escalating traffic and parking issues on local roads including Buffalo Road and its closely surrounding residential streets between Monash Road and Cressy Road.	Noted. Refer to TAIA at Appendix D The net increase in vehicle trips is equivalent to an additional vehicle trip every 30 minutes and will have

	Submissions Objection Comment	Proponents Response
		negligible impact to the surrounding network having regard for existing intersection performance.
2.3	Significant traffic is generated by the neighbouring Holy Cross College, Ryde Bus Depot and Bunnings in the immediate vicinity, in addition to workers and customers accessing individual businesses in the industrial estate	General comment is noted.
2.4	Road Safety: There are no pedestrian crossings between Monash and Cressy on Buffalo Road. This situation is increasingly problematic.	Noted. The provision of pedestrian crossings is not the responsibility of the proponent. As part of any approvals, the proponent will be required to pay developer contributions to which the Council may choose to upgrade road and pedestrian infrastructure at their discretion.
2.5	Insufficient parking for employees and customers of existing businesses in the industrial area is impacted by parking for long term periods in Buffalo and Orient in particular.	Noted. 11 onsite parking spaces are proposed. It can be seen that all parking demands (staff and visitor) will be readily accommodated onsite based on operational requirements in relation to the subject development, with no reliance on on-street parking.
2.6	This proposed development will have major negative implications on the local roads used by heavy trucks to access 50-52 Buffalo Rd Gladesville.	In order to determine the distribution of traffic to and from the subject development, it has been assumed that all vehicles will arrive to and depart from the subject development via Victoria Road and Cressy Road to the west, which is based on a worst-case scenario and conservative assessment. In order to assess the potential traffic impacts of the proposed development, the base case scenario was assessed in relation to the below intersections: - Victoria Road / Cressy Road - Buffalo Road / Cressy Street In summary, both intersections

	Submissions Objection Comment	Proponents Response
		currently operate at a good level of service with acceptable delays and spare capacity. The forecast increase in vehicle trips (+2 vehicles per hour during the morning and evening peaks) is considered minor and will have no noticeable impact to intersection performance. Therefore, intersection and road upgrades are not required, accordingly. Refer to TAIA for more detail at Appendix D.
2.7	Concerned about the impact on Cressy Rd with the frequent use of heavy trucks accessing Buffalo Rd from Victoria Rd via Cressy Rd.	See above response. Refer to TAIA for more detail at Appendix D.
2.8	Cressy Rd is a narrow Rd that already struggles with traffic volume and congestion including School and Day Care traffic and frequent buses that depart and arrive at the bus depot in Buffalo Rd opposite the proposed site.	See above response. Refer to TAIA for more detail at Appendix D.
2.9	There is substantial traffic from the Bus depot already, the addition of constant semitrailer loads to be delivered will cause further delays to residents, cause more noise, cause more damage to the already damaged roads – all you need do is look at Cressy Road from Holly Avenue down to the roundabout at Higgenbotham Road, both roundabouts at Buffalo Road & Higgenbotham Road are constantly damaged by the buses going over them rather than round them and the same will happen with the semitrailers.	Noted. Refer to TAIA for more detail at Appendix D. Refer specifically to Section 7 Traffic and Transport Impacts.
2.10	Witnessed those semi-trailers doing U-turns within the roundabout – the trucks approach from the Circular Metals location on Buffalo Road and circle back down towards Circular Metals which is completely unacceptable.	Noted. The truck routes have been allocated based on the size of vehicles to ensure vehicles can negotiate the intersections to and from the site. Truck routes are outlined in Section 7.7 of the TAIA in more detail at Appendix D.
2.11	I am a long time resident of Holly Avenue which runs off Cressy Road close to Buffalo Road, We have watched the traffic levels continue to increase and at peak times, we can wait minutes to get out of this cul de sac due to all the traffic coming up Cressy Road towards Buffalo Road.	Noted. Refer to Section 7 Traffic and Transport Impacts of the TAIA in more detail at Appendix D.

	Submissions Objection Comment	Proponents Response
3	**Noise and Vibrations**	
3.1	Acoustic Impact: We frequently hear loud noises emanating from 50-52 Buffalo. This is unacceptable given the adjacent residential zoning. The noise created by moving, sorting and crushing metal against metal for recycling. Any environmental report should address potential for the proposed enclosed building to magnify the noise of metal on metal dumping.	Refer to Acoustic and Vibration Assessment at Appendix F. The facility doors should be closed during loading/unloading and any noise intensive activities.
3.2	The noise of the trucks using Cressy Rd and Buffalo Rd and the noise/dust of the proposed processing of materials will not only negatively impact the residents of Buffalo Rd and Cressy Rd but will also greatly affect the teachers and students of Holy Cross College as it is very close to the proposed site.	Refer to Acoustic and Vibration Assessment at Appendix F. The assessment finds that the noise emissions from vehicular activities on local roads, which are related to the use of the development, are found to be compliant with the relevant noise criteria for local roads.
3.3	Objection on the grounds of the noise and vibration of heavy truck traffic from 25,000 tonnes of scrap metal moving on our roads twice a day.	Refer to Acoustic and Vibration Assessment at Appendix F. The assessment finds that the noise emissions from vehicular activities on local roads, which are related to the use of the development, are found to be compliant with the relevant noise criteria for local roads.
4	**Holding Redlich Letter on behalf of Owners Corporation of Strata Plan 61065 dated 25 August 2022**	
4.1	Strategic and Statutory Context	
	The Site is not suitable for the Proposed Development. The Applicant needs to demonstrate that the Proposed Development is both justifiable and suitable for the Site both strategically and having regard to the statutory requirements the Proposed Development must address.	The site is zoned IN2 Light Industrial under the provisions of Ryde Local Environmental Plan 2014 (RLEP) and a waste or resource transfer station for scrap metals and is an innominate permissible use with consent in that zone, being a development not specified as permitted without consent or prohibited. This EIS and accompanying reports by specialist consultants demonstrate the site is suitable for the proposed

	Submissions Objection Comment	Proponents Response
		development.
4.2	Suitability of the Site	
	The Proposed Development is inconsistent with the objectives of the IN2 zone, particularly that it will not minimise any adverse effect of industry on other land uses.	Refer to Section 4.2 of this EIS where the objectives of the zone are addressed.
	How does the Applicant propose to: (a) Ensure that the use of the Site is compatible with the surrounding uses. (b) Ensure that its use of the Site does not cause unacceptable impacts on those surrounding uses. (c) Minimise any adverse effect of the proposed use on other land uses in the vicinity of the Site. (d) Accommodate the proposed processing capacity.	The site is considered compatible with surrounding land uses. The site has historically been used as a car wrecker. In addition, this EIS proposes mitigation measures to ensure a good level of compatibility with surrounding uses occur and no level of unacceptable impacts to neighboring land uses. The surrounding zone is IN2, and the proposed land use is permitted with consent in the zone. This EIS and accompanying reports by specialist consultants demonstrate the site is suitable for the proposed development and can accommodate the proposed operations processing capacity on site.
4.3	Contamination of the Site	
	Previous uses of the site have resulted in contaminants on the Site that affect the suitability of the Site for the Proposed Development. Our client raises the following issues that need to be assessed and addressed in the EIS: (a) What steps have been taken to assess the existing contamination on the Site? (b) If contamination has been detected on the Site, what steps will be taken to remediate the Site? (c) What steps will be taken during construction to contain any contaminants on the Site?	A Preliminary Site Investigation Report and Detailed Site Investigation report are provided at the Appendix R and S of this EIS. In addition, a Remediation Action Plan is also provided at Appendix W. All contaminants and remediation methods associated with the site are identified in these reports at Appendix R and Appendix S and X. The Remediation Action Plan also identifies steps to contain contaminants during construction.

	Submissions Objection Comment	Proponents Response
4.4	Noise and vibration	
a	What amount of noise and vibration is predicted to occur during construction activities on the Site and what period of time is the construction noise and vibration expected to persist for?	Construction period will be 12-18 months. Refer to Acoustic and Vibration Assessment, in particular Section 3.1 at Appendix F.
b	What noise emissions and vibrations will be created by operations on the Site as well as the source, frequency and expected location (both inside processing buildings and outside) of these noise emissions and vibrations?	Refer to Acoustic and Vibration Assessment, in particular Section 5 at Appendix F. Operational noise emission is predominately governed by the use of machinery, heavy vehicles manoeuvring onsite, and the dropping of materials during loading and unloading activities. In general, noise impacts from these activities have been predicted to be compliant at nearby receivers, with the exception of the adjacent industrial receiver. The internal noise level within the resource recovery transfer station is assumed to be 85 dBA. At this stage of the project, the location of major mechanical plant items have not been selected. As such, a detailed assessment of noise associated from engineering services cannot be undertaken. Based on the traffic report, it is assumed that 1 truck manoeuvre through the site including unloading/loading will take approximately 20 minutes. Each movement consists of arriving on site at 10km/h, idling, and leaving site at 10km/h.
c	What equipment and vehicles are proposed to be operated by the Applicant in the Proposed Development, both inside the buildings and elsewhere on Site, and what noise	x1 excavator x2 forklift Vehicles including trucks for delivery

	Submissions Objection Comment	Proponents Response
	emissions and vibrations will be created by this equipment?	and taking away of material. Refer to Acoustic and Vibration Assessment in particular Section 5, at Appendix F.
d	How does the Applicant intend to attenuate the construction and operational noises and vibrations of the Proposed Development so that they do not adversely impact the adjoining owners?	Refer to Acoustic and Vibration Assessment at Appendix F. A range of mitigation measures for construction and operation are outlined, as well as in Section I of this report.
e	What noise emissions will be created by vehicular movements on Site and how these noise emissions be adequately attenuated? Given the Applicant proposes to drive trucks along the boundary of 46-48 Buffalo Road into the proposed building for loading/unloading, how does it propose to prevent noise from these movements adversely impacting the occupants at 46-48 Buffalo Road?	Refer to Section 5.2 of the Acoustic and Vibration Assessment at Appendix F which provides modelled noise sources and assumptions. A range of mitigation measures for construction and operation are outlined in Appendix F, as well as in Section I of this report. Best practice noise mitigation measures are to be adopted, including such measures as: • Orienting equipment away from noise sensitive areas; • Utilising plant and equipment based on the optimal power and size to most efficiently perform the task; • Utilising plant and equipment with low vibration generation characteristics.
f	Does the Applicant intend to monitor noise and vibration on an ongoing basis to demonstrate compliance with its consent (if granted)?	No, only if complaints are made to Council who may require noise monitoring or if it is made a condition of development consent or a condition contained in an Environment Protection Licence granted by the EPA.

	Submissions Objection Comment	Proponents Response
g	Can an articulated truck be unloaded/loaded inside the proposed building with the doors and windows fully closed?	Yes, this is proposed.
h	Is there sufficient height clearance under the roof structure of the proposed building to accommodate the hydraulic ram of the vehicle which transports the skips onto/off of the Site?	Yes
i	Does the Applicant intend to make the proposed building airtight to prevent airborne noise and dust emissions and any air pollution?	Yes, upon entry of vehicles all doors will be closed, until the vehicles are ready to leave.
j	If the building is proposed to be airtight, does the Applicant propose to install a mechanical ventilation system and if so, what will be the proposed noise emissions from such a system?	A ventilation system of such will be installed.
k	What is the expected noise attenuation of the building envelope of the proposed building?	Detailed design has not occurred at this stage so noise attenuation of the building envelope is not finalised.
l	Does the Applicant propose to undertake upgrade works to the existing buildings situated at 46-48 Buffalo Road in order to attenuate the proposed traffic noise and operation noise of the Site?	No
m	Can the Applicant provide robust evidence demonstrating that the noise and vibration impacts of the Proposed Development can be effectively mitigated and will not adversely impact adjoining land uses?	Refer to Acoustic and Vibration Assessment at Appendix F. Specifically refer to Section 6 of Appendix F which lists a range of noise and vibration mitigation measures. Comprehensive and detailed management / mitigation measures are contained in section 6 of the Noise and Vibration Impact Assessment.
4.5	Air quality and odour	
a	How does the Applicant intend to manage construction dust emissions during construction of the Proposed Development?	Refer to 6.3.2 Construction emissions of the Air Quality Impact Assessment at Appendix J, and the specific suggested dust mitigation measures to apply during construction.
b	Does the Applicant intend to excavate the fill which is	No

	Submissions Objection Comment	Proponents Response
	located on site and replace it with engineered, controlled fill that can support the slab on grade? If so, how does the Applicant intend to manage the construction dust created by this excavation and associated earthworks?	
c	How does the Applicant intend to manage the odorous emissions which will arise from the diesel exhaust of on-site plant and equipment?	Refer to 6.3.1 Dust Emissions and 6.3.2 Construction emissions of the Air Quality Impact Assessment at Appendix J, and the specific suggested dust mitigation measures to apply during construction.
d	How does the Applicant intend to manage dust generating activities associated with the operation of the Proposed Development including the loading/unloading of material, vehicles travelling on-site and off-site and windblown dust from exposed areas and stockpiles?	Refer to 6.3.1 Dust Emissions and 6.3.2 Construction emissions of the Air Quality Impact Assessment at Appendix J, and the specific suggested dust mitigation measures to apply during construction.
e	What kind(s) of metal does the Applicant intend to process on the Site and will the processing of this material create any odour impacts? If so, how does the Applicant intend to manage odour emissions associated with the processing of the metal?	The material delivered on site is non-putrescible and as such would not be odorous, and therefore, odour emissions from the material onsite has not been considered further in this assessment. Refer to Air Quality Impact Assessment at Appendix J for further information.
4.6	Traffic and Transport	
a	What is the nature and extent of truck and other vehicular movements proposed on a daily basis onto the Site, including vehicles transporting skips, 2 or 3-axle rigid trucks, and other vehicles?	Reference should be made to Section 7.2 of the TAIA.
b	How does the Applicant intend to unload and load a skip onto an articulated truck within the confines of the loading zone in the shed at the rear of the Site?	Waste will be unloaded and sorted before being loaded on the articulated vehicle. There is ample space for all loading activities to occur within the confines of the subject site, and within buildings.
c	What route does the Applicant propose its clients, contractors and employees take when transporting waste material to and from the Site?	Reference should be made to Section 7.7 of the TAIA and the above response for the proposed truck route.

	Submissions Objection Comment	Proponents Response
d	Does the Applicant intend to require its deliveries to be taken along routes which do not pass through residential areas?	Reference should be made to Section 7.7 of the TAIA which outlines the intended truck routes to and from the subject site. All roads that connect with Buffalo Road and part of Buffalo Road itself have residential dwellings and as such it is unavoidable for all vehicles accessing the industrial area on Buffalo Road to not pass through residential streets. However, the proposed routes minimise the distance vehicles have to travel through residential areas and make the most of the arterial road network.
e	How does the Applicant intend to manage the obstruction to traffic flow on Buffalo Road when the heavy vehicles enter and exit the Site?	Reference should be made to the swept path analysis presented in Appendix D of the TAIA which shows that all vehicles are able to enter and exit the site in a forward direction. All vehicles will be able to fully enter the site before being required to stop to ensure no impacts to the traffic on Buffalo Road occur.
f	Does the Applicant intend to have an accredited RMS traffic controller available to assist with deliveries that cause obstruction to the traffic flow for safety reasons?	Reference should be made to the previous response demonstrating there will be no queuing or blocking of traffic along Buffalo Road. Therefore, a TfNSW accredited traffic controller is not required, and vehicles will enter and exit the subject site in accordance with standard road rules.
g	How does the Applicant intend to ensure the safety of school children crossing at the round-about located at the intersection of Buffalo Road and Cressy Road from the large trucks which will be travelling along this route to enter the Site?	Reference should be made to Section 7.9 of the TAIA, which will restrict the articulated vehicles to outside of school pick up and drop off times to ensure the safety of vulnerable pedestrians including school children.
4.7	Visual Impact	
a	The visual impact of the Proposed Development from both private receivers and the public domain and whether the Proposed Development will be consistent with the character of the locality.	Green Bean Design Pty Ltd (GBD) was commissioned by Circular Metals Pty Ltd to prepare a Visual Impact Assessment (VIA) and this is included at Appendix P.

	Submissions Objection Comment	Proponents Response
		Refer to Section 6.2 of this EIS for further assessment of visual impacts. The visual impact from the streetscape will not be out of character given the prevailing industrial frontages along Buffalo Road. The proposal also includes landscaping at the front of the site to soften the visual impact of the proposal on the wider streetscape.
4.8	Waste Management	
a	Can the Applicant demonstrate that the Site can accommodate the proposed processing capacity, having regard to the scope of the operations and its environmental impacts and the proposed mitigation measures?	The accompanying expert consultant reports demonstrate the site can operate at the capacity proposed, and this EIS and the accompanying expert consultant reports provide recommended measures of mitigation to ensure minimal impacts occur.
b	Can the stockpiles and bays proposed by the Applicant can accommodate the capacity proposed?	Yes. It is also noted that products will be entering and exiting the site quickly, with minimum stockpile timeframes proposed. Long term stockpiling on site is not profitable or cost effective for the operator.
c	What chemicals may be stored on-site as a result of the waste processing proposed? If so, how will these chemicals be stored safely on site? What steps will be taken to ensure that spills can be contained and appropriate notification can be given in the case of any incidents regarding chemicals?	The site will not store or handle any materials classified as Dangerous Goods by the ADG Code. No chemicals are proposed to be stored on site.
4.9	Fire and incident management	
a	In relation to fire and incident management, our client raises as an issue that needs to be assessed and addressed in the EIS, the risk of fires and fire spread on the Site, particularly having regard to the intention to stockpile material on-site.	A Fire Risk Assessment is provided at Appendix I, and outlines risk mitigation measures to be adopted with the proposal.
4.10	Stormwater	
a	Is the proposed roof gutter, along the boundary, where the	Yes – the gutter will be designed in

	Submissions Objection Comment	Proponents Response
	roof falls towards the existing building at 46-48 Buffalo Road, sufficient to cope during periods of heavy rainfall? If the gutter is unlikely to cope in the event of heavy rainfall, how does the Applicant propose to ensure that gutter overflows will not cause damage or nuisance to the owners of 46-48 Buffalo Road?	accordance with relevant Australian Standards to provide adequate capacity. Additionally, an overflow from the gutter will be provided at the street end such that any surcharge is directed towards the site stormwater system rather than into the neighboring property. Refer to Appendix G – Stormwater and Flooding Assessment.
b	How will the Applicant ensure that stormwater will be appropriately managed on Site and not unreasonably flow to adjoining lots, including the risk of such flows to cause damage or nuisance to the owners of 46-48 Buffalo Road?	Stormwater pipes within the development site will be re-arranged to collect run-off from roof downpipes of the new building. Although roof water discharge is expected to be unpolluted water, it will be treated prior to discharge to reduce the nitrogen levels as present in rainwater. Stormwater pipe alignments have been arranged to minimise potential conflict with proposed weighbridges. Stormwater collected on-site will be conveyed to an OSD tank. The stormwater pipes include a 600mm and 900mm pipe which are over-sized to provide additional storage. The OSD tank will be fitted with Stormfilter cartridges to provide water quality control, as described further in this report. The OSD tank will discharge to a pit with discharge controls, at which water quality monitoring will be possible. The discharge pit will discharge into the existing Council stormwater system underneath the road pavement. Several new surface inlet stormwater pits will collect runoff from the proposed hardstand areas Refer to Appendix G – Stormwater and Flooding Assessment.
c	Where will the proposed downpipes be located on the proposed buildings? They have not been identified on the architectural or water management drawings prepared by the Applicant.	The location of downpipes will be determined at the project detailed design phase. When the building is setback from the boundary downpipes are typically located on the outside of the building cladding. Refer to

	Submissions Objection Comment	Proponents Response
		Appendix G – Stormwater and Flooding Assessment.
d	What is the purpose of the 225mm diameter stormwater pipe under the proposed building and adjacent to the boundary with 46-48 Buffalo Road? If this stormwater pipe discharges to the stormwater system on Buffalo Road, what steps will be taken to ensure discharge of this pipe will not overload the street stormwater system, or cause water back up/flooding?	The 225mm pipe has been specified to provide ample capacity to receive and convey runoff from roof downpipes into the proposed site stormwater system. The site stormwater system will discharge to the street stormwater system via an 'on-site detention' tank, which will reduce discharges so that the street system is not overloaded. The site stormwater system will be designed with sufficient fall such that 'back-up flooding' is not possible. This may require the 225mm pipe to be elevated above ground. Refer to Appendix G – Stormwater and Flooding Assessment.
e	Does the Applicant intend to install the stormwater pipe under the floor slab, or above the floor slab or near the roof gutter level?	Location of the 225mm stormwater pipe will be determined at detailed design stage of the project. It may be in ground, or more likely be an elevated pipe above ground next to the building.
4.11	Proposed building footprint	
a	Will the footings of the proposed building will adversely affect the existing retaining wall on the boundary with 46-48 Buffalo Road?	It is not anticipated this will occur. The applicant is content to prepare a dilapidation report as a condition of consent in relation to the retaining wall to protect adjoining occupiers during construction.
4.12	Environment Protection Authority (EPA)	
	We also note that the EPA was unable to respond to the request for SEARs in time and that the Department has noted that the Applicant must undertake direct consultation with them and address their requirements in the EIS. Our client should be furnished with a copy of the EPA's requirements when received and should be afforded a separate opportunity to review and comment on the EPA's requirements in relation to the Proposal. Can the Applicant confirm that this will be provided?	A response from the EPA is outlined earlier in Part G of this EIS, and is also included at **Appendix T.**

	Submissions Objection Comment	Proponents Response
5	**Robinson Urban Planning letter dated 20 September on behalf of Holy Cross College Ryde**	
5.1	Traffic, parking, and pedestrian safety The following comments were made in relation to alleged inaccuracies contained with the Transport & Accessibility Impact Assessment (the Traffic Assessment) prepared by Traffix (dated 16 December 2021) in support of LDA2022/0042.	
5.2	The existing traffic generation includes trips generated by the existing unlawful waste facility on the site. This methodology overstates the existing traffic generation and understates the proposed increase in traffic generated by the development. It is patently wrong to include traffic generated by an unlawful activity using existing traffic generation rates.	Whether or not an existing use at the site should be taken into account despite the traffic generation already being accommodated by the road network it can be assessed based its currently approved use only. Excluding the existing waste transfer facility and assuming the vehicle service centre is the only use at the existing development, the net traffic impacts would result in an additional five (5) vehicle trips per hour during peak times. This is equivalent to one (1) additional vehicle trip every 12 minutes and would have minimal impact to the performance of surrounding road network.
5.3	The Traffic Assessment's reliance on just one day of traffic counts, particularly the day selected, is not reliable.	It is considered standard practice for surveys to be undertaken on a typical weekday, outside of school holiday periods to obtain accurate survey results. It is confirmed surveys were undertaken in accordance with the above. Further clarification is sought in this regard as to why the particular day selected is not considered an accurate representation of the traffic volumes on the surrounding road network.
5.4	The Traffic Assessment confirms that the development is to be accessed by 20m long articulated vehicles which cannot be safely accommodated within the surrounding public road network.	Reference should be made to Section 7.7 of the updated TAIA which provides safe routes for all vehicles accessing the site.
5.5	The proposed transport routes require trucks to travel along Cressy Road and Buffalo Road which	Reference should be made to Section 7.9 of the TAIA which addresses the

	Submissions Objection Comment	Proponents Response
	contain school zone restrictions during the hours of operation of the development. The Traffic Assessment Report and previously submitted material in support of earlier applications, failed to address the safety of school children when crossing the road. Our client remains extremely concerned about risks to the safety of its students from these trucks.	above by restricting the times of heavy vehicles accessing the site outside of school drop off and pick up times.
5.6	The Traffic Assessment suggests that articulated vehicle movements should not occur during the College's morning start and afternoon finish. This mitigation measure is not included in the Mitigation Measures nor is it addressed in the previously submitted Plan of Management. In any event, such a restriction would be extremely hard to enforce given the likelihood of independent truck contractors servicing the development.	It is recommended that all necessary steps be taken to ensure that articulated vehicle movements do not occur during the school's morning start and afternoon finish times. This can be formalised as part of an appropriate Condition of Consent to be adhered to by the operator and included in the Plan of Management.
5.7	The design of the proposal would require entering vehicles to wait on the road, obstructing access to the site and the visitor parking spaces.	Reference should be made to Section 7.2 of the TAIA which shows the proposed development will generate 11 vehicle trips per hour, including up to six (6) vehicle arrivals per hour during the morning peak (worst case scenario), equivalent to one (1) vehicle arrival every 10 minutes. Furthermore, once vehicles depart the weighbridge located within the site boundary, there is ample available circulation area and passing opportunities within the subject site to the west of the visitor parking spaces resulting in no requirement for queuing to occur on-street. It should also be noted that most of the vehicles accessing the site will be waste vehicles with the articulated vehicles being much less frequent and more controlled to ensure no vehicle is required to queue on the public road.
5.8	The proposed number of car parking spaces is below Ryde DCP rate (18-20 spaces required and only 11 spaces are proposed). Given the severe shortage of parking in this area, the precautionary principle should be applied to car parking provision on this	Reference should be made to Section 7.2 of the TAIA which shows the proposed development will generate 11 vehicle trips per hour, including up to six (6) vehicle arrivals per hour

	Submissions Objection Comment	Proponents Response
	site.	during the morning peak (worst case scenario), equivalent to one (1) vehicle arrival every 10 minutes. Furthermore, once vehicles depart the weighbridge located within the site boundary, there is ample available circulation area and passing opportunities within the subject site to the west of the visitor parking spaces resulting in no requirement for queuing to occur on-street. It should also be noted that most of the vehicles accessing the site will be waste vehicles with the articulated vehicles being much less frequent and more controlled to ensure no vehicle is required to queue on the public road.
5.9	Noise Concerned about future noise impacts and also the adequacy of the Acoustic Report prepared by PWNA (dated 15 December 2021) in support of LDA2022/0042	
5.10	The Acoustic Report does not adequately assess the impact of construction or operational road traffic noise and the potential for adverse amenity impacts for the College.	Refer to Acoustic and Vibration Assessment at Appendix F, specifically, Section 3.1 Construction Nosie and Section 3.4 Operational Traffic Noise.
5.11	These noise mitigation measures contained in the Acoustic Report are uncertain and not readily enforceable. Our client remains deeply concerned about amenity impacts on the day-to-day operation of the College.	Refer to Acoustic and Vibration Assessment at Appendix F. Refer to Section 6 which outlines comprehensive mitigation measures, including multiple measures that would ensure engagement and consideration with the College.
5.12	Air Quality Concerned about future dust impacts and the adequacy of the Air Quality Report prepared by Todoroski Air Sciences Pty Ltd (dated 20 December 2021) in support of LDA2022/0042	
5.13	The Air Quality Report states that it anticipates that the project would develop a suitable Operational Management Plan and that plan would outline the measures to manage dust emissions. To our knowledge this is yet to be prepared or a copy provided. Given the nature of the proposal	Refer to 6.3.1 Dust Emissions and 6.3.2 Construction emissions of the Air Quality Impact Assessment at Appendix J, and the specific suggested dust mitigation measures to apply during construction.

	Submissions Objection Comment	Proponents Response
	and its sensitive neighbours this is not acceptable.	Reference to Part I of this report also outlines proposed mitigation measures. A Plan of Management is also included at Appendix Q which outlines mitigation measures.
5.14	Site Suitability	
	The Development Site area and shape is inadequate to accommodate truck turning movements and sufficient car parking and only one truck can be accommodated on the site forcing trucks to wait on the public road.	Refer to Swept Path Analysis provided with the Traffic Impact assessment that shows trucks can move adequately. On site parking is provided for workers.
5.15	The proposed use includes servicing by 20m long articulated trucks and the site location requires these and other trucks to travel along Cressy Road and Buffalo Road which contain school zone restrictions posing a significant safety risk.	The applicant cannot be solely responsible for guiding trucks to and from site, and if they do choose to travel through school zones, then they are subject to the same road rules as all motorists within school zones, and should exercise precaution in the school zones. Reference should be made to Section 7.9 of the TAIA, which will restrict the articulated vehicles to outside of school pick up and drop off times to ensure the safety of vulnerable pedestrians including school children.
5.16	It is acknowledged that use of the development site is permissible. However, the site is in the vicinity of sensitive land uses, being the College and low-density residential dwellings.	Noted
5.17	Where industrial uses are located in the vicinity of sensitive land uses, operational measures and controls must be imposed and complied with to reduce and/or manage adverse amenity impacts.	Refer to the mitigation measures proposed under Part I of this EIS.
5.18	It is considered that the proposed mitigation measures previously put forward are inadequate, uncertain, and difficult to enforce.	Noted, and disagreed.

Vexatious objector to the application:

It has come to the Proponent's attention that an objector to the current application resides illegally at Unit 13, 46-48 Buffalo Road, Gladesville.

Unit 13, 46-48 Buffalo Road, Gladesville are industrial commercial units with no residential accommodation permitted.

This particular objector has been motivated by personal issues in a bid to undermine the Proponent's application and has installed cameras facing the proposed facility in order to unlawfully film staff and workers at the facility.

The concerns as expressed by this objector, unlawfully living in the Unit 13, 46-48 Buffalo Road complex, should be given little to no weight by the relevant consent authority.

Any amenity which this objector may say is impacted should not be taken into account, as a relevant consideration, because that individual is not permitted to live there in the first place.

PART H – LIST OF APPROVALS AND LICENCES

7. Relevant Approvals

7.1 Approvals under the *Environmental Planning and Assessment Act 1979* (NSW)

As outlined in detail in Section 3.0 of the EIS the Site has no approvals in relation to the use and operation of the Circular Metals Gladesville facility issued under the EP&A Act, and therefore the current Designated Development Application that this EIS supports is for development consent.

7.2 Environment Protection Licence under the *Protection of the Environment Operations Act 1997* (NSW)

- The proposed use will also trigger an Integrated Development authorisation under the Protection of the Environment Operations Act 1997 (POEO Act).
- Integrated Development is development (not being State Significant Development or Complying Development) that, in order for it to be carried out, requires a licence, approval or authorisation.
- Under the POEO Act, the operator will be required to obtain an Environment Protection Licence (**EPL**) from the NSW EPA (pursuant to sections 43(b), 48 and 55).
- At this stage, the nominated 'Schedule Activity' to be requested from the NSW EPA for inclusion in the EPL will be Clause 34 'Resource Recovery' activity (Schedule 1 of the POEO Act).

A future EPL application will be made separately to this proposal for designated development consent.

PART I – COMPILATION OF MITIGATION MEASURES

8. Compilation of Mitigation Measures Overview

A Compilation of Mitigation Measures is provided by Circular Metals Gladesville to consolidate the measures to mitigate the predicted environmental impacts associated with the construction of the facility and proposed operation and use of the facility.

8.1 Proposed Mitigation Measures

Table 15: Compilation of Mitigation and Management Measures Proposed

ENVIRONMENTAL ISSUE	MITGATION AND MANAGEMENT MEASURES
Design and Appearance and Visual	• Regular maintenance to the landscaped areas will be undertaken by the Site operators to ensure the visual appearance of the Site is maintained. • The general appearance of the buildings and its surrounding hardstand will be maintained on a regular basis by the Site operators. • Regular site maintenance should occur to ensure all product is stored in the appropriate storage stockpiles within the buildings. • Regular watering of new planting within first 12 months from planting. The implementation of irrigation systems for garden beds should be considered.
Waste Management	• A Plan of Management (POM) should be prepared for the site prior to the issue of an occupation certificate that includes the following: - Identifies site managers responsibilities; - Outlines accepted materials; - Outlines the general materials handling and operational process; - Procedures for assessing incoming loads; - Procedures for unloading of acceptable materials; - Procedures for unacceptable materials including those identified after vehicle is unloaded; - Personal Protective Equipment; - Training and review. - Mitigation measures for the site. • All customers are advised that only scrap metals, including ferrous, non-ferrous, electronic waste, (limited amount of) whitegoods and batteries are accepted on Site; • All bins containing unacceptable material on Site, should be labeled to ensure workers are aware of their contents; • All invoices bear the message no 'materials other than scrap metals, including ferrous, non-ferrous, electronic waste, (limited amount of) whitegoods and batteries waste are accepted on Site'.
Traffic and Transport	• The Site will be maintained in perpetuity to ensure internal vehicle circulation allows for vehicles to access and leave the Site in a forward direction.

	• Vehicle movements will be restricted to core hours of operation to minimise impacts on surrounding residential occupier's amenity. • The internal configuration of the car park be designed and maintained in accordance with AS 2890.1 (2004), AS2890.2 (2018) and AS 2890.6 (2009). • Loading and unloading of vehicles is only to occur on site. • In the event of future construction in relation to this application, or any future development application for the Site, it is recommended that the detailed construction traffic management plan that has been provided by Traffix to manage and mitigate any potential traffic conflicts associated with construction both on and off the Site be implemented. • The truck routes that have been allocated based on the size of vehicles to ensure vehicles can negotiate the intersections to and from the site within the TAIA at Appendix F shall be adopted and provided to regular drivers to and from the site. • Waste collection for the subject site and all truck loading and unloading is to be undertaken onsite.
Air Quality and Odour	• Activities to be assessed during adverse weather conditions and modified as required (e.g. cease activity where reasonable levels of dust cannot be maintained using the available means). • Weather forecast to be checked prior to undertaking material handling or processing. • Engines of on-site vehicles and plant to be switched off when not in use. • Vehicles and plant are to be fitted with pollution reduction devices where practicable. • Vehicles are to be maintained and serviced according to manufacturer's specifications. • Visual monitoring of activities is to be undertaken to identify dust generation. *Stockpiles* • Store material is designed bays *Hauling Activities* • Regularly inspect haul roads and maintain surfaces to remove potholes or depressions • Driveways and hardstand areas to be swept/cleaned regularly as required etc. • Vehicle traffic is to be restricted to designated routes. • Speed limits are to be enforced. • Vehicle loads are to be covered when travelling off-site. *Incident Complaints Management* • Record all air/ dust incidents. • Complaints are logged and investigated. • It is anticipated that the Project would develop a suitable Operational Environmental Management Plan for the site. The Operational Environmental Management Plan would include a specific chapter which outlines the measures to manage dust emissions at the site and include aspects such as key performance indicators, response mechanisms, and complaints management.

Noise	Operations • Mechanical equipment is to have a sound power level of 80 dBA or less and are to be reviewed once final selections can be obtained in detailed design phase; • Scheduling of semi-trailer and rigid trucks is such that there can only be one vehicle entering or leaving the site within a 15-minute period; • Idling of vehicles and movements in general should be minimised as much as practicable. • Forklifts are to be fitted with “quaker” or broadband reversing alarms; • Closing the openings to the facility building during loading/unloading activities. • A complaints register should be maintained onsite and be overseen by the site manager. Construction Noise - Mitigation and Management Measures: General • Introduce best-practice general mitigation measures in the workplace which are aimed at reducing the acoustic impact onto the nearest affected receivers. • Issue project updates to stakeholders, discussing overviews of current and upcoming works. Advanced warning of potential disruptions can be included. Content and length to be determined on a project-by-project basis. • Implement a management system which includes procedures for receiving and addressing complaints from affected stakeholders. • Individual letters or phone calls to notify stakeholders that noise levels are likely to exceed noise objectives. Alternatively, contractor could visit stakeholders individually in order to brief them on the noise impact and the mitigation measures that will be implemented. • Offer provided to stakeholders subjected to an ongoing impact. The offer could include movie tickets, meal vouchers, gift cards or equivalent measures. • Contractor to consider alternative construction options that achieve compliance with relevant criteria. Alternative option to be determined on a case-by-case basis. It is recommended that the selection of the alternative option should also be determined by considering the assessment of on-site measurements (refer to Verification Monitoring above). • For plant items which are static it is recommended that, in the event exceedances are being measured due to operation of the plant item, an acoustic enclosure/screen is constructed to reduce impacts. These systems can be constructed from Fibre Cement (FC) sheeting or, if airflow is required, acoustic attenuators or louvres. • Compliance with AS 2436-2010 “Guide to Noise and Vibration Control on Construction, Demolition and Maintenance Sites” sets out numerous practical recommendations to assist in mitigating construction noise emissions. • Toolbox meetings should be undertaken with all contractors commencing works on the site • All plant and equipment are to be maintained such that they are in good working order. • Avoiding the use of portable radios, public address systems or other methods of site communication that may unnecessarily impact upon nearby sensitive receivers. • Construction traffic accessing the site including the movements of heavy

	vehicles are required to comply with the projects Conditions of Consent and will be detailed in the sites Construction Management Plan. • Attended noise level measurements of typical demolition and ground works activities should be undertaken at site. Attended construction noise surveys of the site and surrounding impacts on neighbours should be undertaken during the following as a minimum: i. Start of Demolition ii. Commencement of any rock breaking or sawing on the site. iii. In response to any ongoing complaints received from neighbours. • General Construction activities are not expected to exceed project vibration limits detailed in the project Acoustic Report. **Vibration Mitigation** Construction • Any vibration generating plant and equipment is to be in areas within the site to lower the vibration impacts. • Investigate the feasibility of rescheduling the hours of operation of major vibration generating plant and equipment. • Use lower vibration generating items of construction plant and equipment; that is, smaller capacity plant. • Minimise conducting vibration generating works consecutively in the same area (if applicable). • Undertake the removal of concrete within the building using saw cutting or pulverising where possible. • To confirm vibration magnitudes are within the expected levels the following attended vibration measurements are required: a. Short term attended vibration measurements – Attended short term vibration measurement of activities with the potential to generate maximum vibration to be undertaken on commencement at the site, including the following: i. Measurements to be undertaken at a representative location from the activity being conducted with a similar distance to the potentially affected receiver. ii. Activities with the potential to generate the greatest magnitudes of vibration include: iii. Hydraulic hammering of concrete slabs. iv. Hydraulic hammering during ground works within rock. Demolition • Hydraulic Hammering - Separation to the neighbouring buildings is to be established prior to hammering of the existing building structures and maintained at all times during demolition. • Materials and Equipment Movement - Ensure no contact with the neighbouring building structures occur during materials movement or equipment movements. • Removal of concrete structures - The removal of concrete structures within the building is to be undertaken using saw cutting or pulverising where possible. Excavation • Removal of Rock - Where possible remove rock from the required excavation using ripping and the like. When the use of hydraulic hammers are required to remove rock during excavation a saw cut is required to be undertaken at the

	perimeter of the excavation prior to commencement of hydraulic hammering of rock.
Water Quality Management	<u>Erosion and Sediment Transport</u> • Provide environmental controls in accordance with a site Erosion and Sediment Control Plan (ESCP), to be developed as part of the Construction Environmental Management Plan (CEMP). • Minimum requirements for the ESCP will include: - Sediment fencing on the downslope perimeter of all disturbed areas - A construction entry/exit to reduce wheel tracking of dirt onto the road • Monitor the condition of Buffalo Road and if necessary arrange sweeping to remove accumulated dirt • The site CEMP will include an ESCP that will detail requirements for erosion and sediment controls during construction. <u>Construction Site Spills</u> • Storage of chemicals in accordance with Australian Standards • Storage of hydrocarbon fuels within bunded storage areas, or self-bunding tanks • A Spill Response Plan, including emergency response and EPA notification procedures • Concrete agitators must not wash-out water to the stormwater system or discharge into Careening Bay. • Requirements for the storage and use of hydrocarbon fuels and other chemicals on site will be documented in the CEMP. • The CEMP will also include requirements for spill management and reporting. <u>Operational phase – runoff water quality</u> • A stormwater treatment train is proposed which will meet the pollutant retention requirements of City of Ryde. This system is described in the Soil and Water Report prepared by SLR Consulting (Section 6) at **Appendix G**. • Discharges to sewer (sewage from site facilities and washdown water from inside buildings) will be managed in accordance with the requirements of Sydney Water. • If excessive dirt becomes evident across driveway or hardstand areas then these should be cleaned by washdown to the first flush system (during dry weather). Site operational management procedures should include periodic inspection of the driveways (weekly initially for first 6 months of operation and then relaxing to monthly if the need for washing down is not evident). • Water quality should be monitored monthly (during rainfall events) during the first 12 months to allow evaluation of the efficacy of the proposed water treatment train along with site management measures. Analytes should include TSS, TN, TP and full metal suite. If there are exceedances of the ANZECC 2000 Guidelines then these should be investigated and a report submitted to City of Ryde Council and the NSW EPA. It is recommended that this requirement be a condition of planning consent. • Water quality sampling for monitoring purposes would be taken at the site discharge it located in the south west corner of the site.

	• The water quality devices proposed require regular inspection and maintenance as recommended by the supplier. Inspection and maintenance requirements will be documented in the Operational Management Plan for the facility. <u>Flooding</u> • All wastes will be stored under roof and should not be inundated by flooding in a 1% AEP event. • Since the proposal does not include storage of any wastes which generate leachate when inundated, no additional mitigation measures are proposed. • It is also recommended that the large roller doors on either side of the metal shed be closed by staff during a flood event to prevent the ingress of floodwaters. • Habitable areas of the front building are to be provided with freeboard of 0.5m above the flood levels.
Hazards - Fire	• Dry powder fire extinguishers shall be readily accessible by staff within the site to facilitate immediate response by site personnel following identification of a fire. • Operators shall be trained in the use of site fire extinguishers. • A site emergency response plan and emergency services information booklet shall be prepared for the site to fully document the emergency scenarios and the appropriate responses to those emergency scenarios. • A detailed pressure loss calculation shall be prepared for the most disadvantaged hydrant to demonstrate compliance with AS 2419.1-2017. • The pressure loss calculation shall be incorporated into the fire risk assessment. • A fire equipment layout drawing shall be prepared for the site, indicating all fire controls (extinguishers, hydrants, hose reels, etc.). • Site containment shall be reviewed to ensure appropriate capacity is available for potentially contaminated fire water.
Greenhouse Gas Emissions	• Machinery will be regularly tested and maintained so that emissions are as clean and minimal in quantity as possible.
Geotechnical	• The weighbridge excavations may require rock excavation if they are deeper than the rock depths of 1.5m on the north-western side of the site, though rock is not expected on the south-eastern side. Excavation will be mostly carried through variable soils and possibly sandstone bedrock of variable strengths. Hence, most of the soils and weathered sandstone are expected to be excavated with buckets of large excavators, perhaps assisted by ripping tynes. If rock in the low to medium strength range is encountered it will require the use of rock breaker equipment. Rock breakers may transmit vibrations through the rock mass that could affect adjoining buildings. Vibration effects on adjoining structures must be considered. • The weighbridge excavations will be close to the site boundaries and it is recommended to have full depth support by shoring pile walls or where possible, by cutting the sides to a batter slope. Support may be required even in the excavation through the sandstone due to its interlayered nature of very

	low and low strength rock. • The most competent foundation for the proposed buildings is the bedrock. It is recommended footings be founded uniformly into the sandstone. • The residual clays are considered to be moderately reactive, i.e. similar to Class M clays in AS2870-2011 though the site classification varies from one part to another and is not really applicable to industrial buildings. • The presence of the deep uncontrolled fill of varying compaction and thickness is considered unsuitable as a foundation stratum, based on the test borehole information. We consider this existing material to be 'uncontrolled' fill. Because of this fill, that part of the site as seen is considered to be Class P ('problem') in accordance with AS2870-2011. • The fill is deemed unsuitable as a bearing stratum for footings and is considered a 'moderate to high risk' (of poor performance) as a supporting subgrade under slabs and external pavements (note that some of the pavements have already suffered cracking damage). Essentially, there are two options for the engineering design: suspend the building, including its floor slabs, on a system of pile footings founded within the bedrock, or, alternatively, excavate and replace the fill with engineered, controlled fill that can then support the slab on grade (and if desired, footings as well, albeit with a low allowable bearing pressure of 100kPa). • A waste classification will need to be assigned to any soil excavated from the site prior to offsite disposal. In this respect, and in regards to contamination, reference should be made to the JK Environments report. • All concrete pavements should be underlain by a layer of good quality roadbase (equivalent to TfNSW Specification 3051 for DGB20) at least 100mm in thickness and compacted to 98% of Modified Maximum Dry Density. Concrete pavements should have joints designed to transfer shear but not bending force • Prior to demolition, earthworks or excavation commencing, detailed dilapidation reports should be compiled on neighbouring buildings that fall within the zone of influence of the excavation, which is defined by a distance back from the excavation perimeter of twice the depth of the excavation. The respective owners should be asked to confirm that the dilapidation reports represent a fair record of actual conditions. These reports should be carefully reviewed prior to excavation commencing to ensure that appropriate equipment is used. • Prior to commencement of construction consideration should be given to the findings in JK Geotechnical Report for the site by the builder, and civil and structural engineers.
Ecologically Sustainable Development	• Prepare and Implementation of an Operational Environmental Management Plan
Contamination	• A suitably qualified/licensed contractor is to carry out an 'emu pick' to remove all visible FCF from the surface of the site. A surface clearance for asbestos is then to be issued by a Licensed Asbestos Assessor (LAA). This is to occur as soon as possible; • Prepare and implement a RAP. • Validate the implementation of the RAP and provide a validation report on completion of remediation. • In the event that contamination is managed on site, long-term EMP must also

	be prepared. • The RAP recommends the appropriate remediation actions for the site, and should be implemented prior to construction.

PART J – JUSTIFICATION FOR PROPOSAL AND CONCLUSION

9. Overview

This chapter reiterates the justification of the Designated Development application in addition to providing the conclusion to the EIS.

9.1 Justification

The Designated Development application is seeking approval for Circular Metals Gladesville to utilise its potential operational capacity to accept, process and store scrap metal and whitegoods. The applications also seeks to optimise and improve upon the ancillary infrastructure and internal layout on-site to ensure safety, increase source separation and facilitate efficient waste management services.

The granting of this Designated Development application is the most suitable alternative to meet the objectives of:

- Facilitating future waste transfer needs of Greater Sydney.
- Securing future capacity for resource recovery and transfer to complement other resource recovery management options in the Greater Sydney region and internationally.
- Facilitating the safety and operation of the facility for future operators and customers.

The facility will meet these objectives as follows:

- The Circular Metals Gladesville will address the waste and resource recovery need within metropolitan Sydney. It will do by maintaining its existing waste and resource management capacity to enable the transfer of recoverable waste currently received at the facility to other relevant facilities across Sydney or internationally.
- Ensure efficient operational practices and onsite monitoring in order to facilitate the ongoing safety and operation of the current facility for future operators and customers.

The facility undertakes the recovery of recyclable materials from wastes through processing, baling and transferring material to a Kurri Kurri processing facility owned by Weston Aluminium Pty Ltd, whilst copper scraps and other non-ferrous scraps will be transferred to either South Australia or Port Kembla for processing. The activity is to receive and consolidate metal bearing wastes, segregate them and onforward to other recycling/processing sites principally in NSW. This assists in the achievement of the NSW Government's landfill diversion targets, conserving landfill space, and returning valuable materials to the productive economy.

The Site is located in the best place possible in that there is no need for long haul transport of waste. The Site is located within the proximity of Sydney's major transport road networks, with good connectivity to waste producers and final destinations for materials.

Maintaining the current Site location while implementing in efficient operations and processes is the best and most efficient alternative.

An environmental impact assessment of the facility has been completed and presented within this EIS. Circular Metals Gladesville is seeking to provide continued sustainable waste management services in managing waste in the Greater Sydney area.

The facility has been shown to be consistent with the relevant local and State government legislation with no significant environmental impacts having been identified during the preparation of the EIS. The impacts identified for the facility are considered to meet all relevant assessment criteria and will be further mitigated through the implementation of the management measures committed to by Circular Metals Gladesville as identified in Part I of this EIS.

The proposed facility as a result of this EIS would result in minor short-term impacts to the local environment. These temporary impacts would generally be confined to the Site and would have a minor impact upon surrounding operations with the proposed management measures.

Circular Metals Gladesville operating procedures and maintenance routines would minimise the potential for incidents occurring during operation, and these will be implemented at the Site. To support and supplement the proposed system of operation, an OEMP and POM has been recommended for the facility. The OEMP should clearly present procedures that have been developed for the Site and outline how environmental goals will be met. The OEMP should continue to be updated and implemented whilst the facility operates to reflect changes to legislative requirements and EPA regulations. With the successful development and implementation of the OEMP for the facility, no significant environmental impacts are predicted during operation.

9.2 Conclusion

The assessment has identified potential impacts that may be satisfactorily mitigated and managed through a range of measures that have been identified within this document. The proposed facility is also consistent with the priorities and targets adopted in relevant Government legislation, policies and strategies.

The facility will provide significant benefit in terms of addressing and securing the need for waste capacity in the local, Western Sydney, and Sydney metropolitan area, in addition to enabling efficient, safe and productive use of waste resources. This facility will service the Ryde region and surrounding area, which is characterised by residential and industrial growth generating significant demand for such a facility.

The EIS considers the granting of designated development consent is in the public interest for a variety of reasons and is it is recommended that the development consent be granted.