State Significant Development Application 15_7421

Response to Submissions Report

SSD - Mortdale Resource Recovery Facility

APP Corporation Pty Limited

APP Project Number 10336

Contents

Amendment, Distribution & Authorisation Record

Amendment Record

Revision	Description / Details	Date
1	Draft for Client Review	30/11/2016
2	Updated to incorporate client comments	02/12/2016
3	Final Draft for Client Review	05/12/2016
4	Final Draft for Client Review 2	05/12/2016
5	Issue to Department of Planning and Environment	05/12/2016

Distribution

This Report Is Prepared For Distribution to:

Copy No	Name / Location	Position	Organisation
1	Shivesh Singh	Planner	Skylife Properties
2	Shivesh Singh	Planner	Skylife Properties
3	Shivesh Singh	Planner	Skylife Properties
4	Shivesh Singh	Planner	Skylife Properties
5	Mazz Appleton via email	Planner	DPE
6			
7			
8			

Authorisation Record

Prepared by
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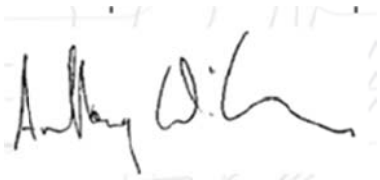
Senior Planner



Signature

05/12/2016
Date

Approval by
Elise Crameri
Principle Planner

Signature

05/12/2016
Date

Executive Summary

APP Corporation Pty Ltd on behalf of Skylife Properties Pty Ltd (the applicant) is seeking development consent under Division 4.1 of Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) to redevelop an existing resource recovery facility at 20 Hearne Street, Mortdale. The Department of Planning and Environment (DPE) resolved to publicly exhibit the Environmental Impact Statement (EIS) and sought comment from the community and relevant government agencies. The exhibition period commenced on 22 July 2016 and concluded on 22 August 2016.

The DPE received total of 37 objections, including one petition with 150 signatures, 1 letter of support and 1 letter with comments from the public. As a consequence of the number of submissions, the application will be determined by the NSW Planning Assessment Commission in accordance with current Ministerial delegations.

The DPE also sought comment from:

- NSW Environment Protection Agency (EPA);
- Roads and Maritime Services (RMS);
- Georges River Council (GRC);
- NSW Office of Water (NOW);
- Office of Environment and Heritage (OEH);
- Department of Primary Industries (DPI);
- NSW Fire and Rescue; and
- NSW Rural Fire Service.

None of the aforementioned agencies objected to the project, however the following agencies sought additional information or clarification on certain elements of the proposal:

- NSW Environment Protection Agency (EPA);
- Roads and Maritime Services (RMS);
- Georges River Council (GRC); and
- NSW Fire and Rescue.

The DPE also provided comment on the EIS at the conclusion of the exhibition process seeking further clarification on the proposal.

The key concerns in submissions from the public and agencies (including DPE) related to:

- Impacts from traffic, noise, machinery vibration and dust generated from the business;
- Vehicle movements within and outside the site, road safety, traffic management over the 24-hour operating period;
- Operational details relating to the management of waste streams, stockpiles and justification for 24-hour operation;
- Use of Barry Avenue for heavy vehicle access;

- Compliance with the 10m height requirement in the Hurstville Local Environmental Plan; and
- Locality of dangerous goods storage and fire safety and management.

Further investigations have been undertaken to ensure that all relevant matters raised in the submissions received during the exhibition process have been addressed. These investigations are attached to this 'response to submissions' report in the form of technical documentation prepared by SLR Consulting (SLR), The Transport Planning Partnership (TTPP), Dewcape and amended architectural plans by Insight Architecture.

The outcomes of the further investigations undertaken as a result of the exhibition process are provided below:

Traffic assessment

Further traffic investigations (**Appendix A**) were conducted by TTPP to predict the distribution of traffic volumes over a 24-hour period. It was estimated that between 2 to 6 trucks will arrive or depart the site at any hour over the night-time period depending on the business operator's needs. Heavy vehicle movements during the night time period are not predicted to have any impacts to the road network or residential amenity as confirmed by the SLR Noise and Vibration Report, GTA Transport Impact Assessment Report and TTPP Response to Submissions (Traffic).

These investigations also allow for an updated assessment of the proposal during the local road network peak periods and the site operation peak period, noting that these periods do not coincide. It remains clear that there is sufficient capacity in the local road network to account for the additional vehicle movements generated by the proposal.

In recognition of concerns raised in relation to heavy vehicles queuing on Hearne Street during peak periods, an onsite queuing plan has been prepared which allows for trucks to be held safely onsite and ensure heavy vehicles will not queue onto Hearne Street. Further detail is also provided addressing the predicted flow and timing of heavy vehicles and management of waste streams, which are based on an assessment of a similar scale facility at Auburn, also managed by the site operator for Mortdale. Commitments have been made to ensure strict site protocols will be implemented for the new development which will allow for the efficient movement of vehicles and management of waste across the site.

A detailed swept path assessment for the range of heavy vehicles predicted to access the site has been undertaken and demonstrates that access can occur without conflict or compromising road safety or network efficiency. Consequently the proposal is not predicted to compromise the access arrangements of other businesses in the locality or their ability to utilise the local road network in an efficient manner.

Noise and Vibration assessment

The Noise and Vibration Assessment (NVA) prepared by SLR and lodged with the Mortdale EIS has been updated at **Appendix B.** In recognition of the matters arising from agency and community consultation, the updated NVA now includes:

- A detailed assessment against the NSW EPA Road Noise Policy. This assessment includes a comparison of noise generated from existing traffic flows against predicted traffic flows generated from the project and finds that traffic noise levels would increase by 1.5dBA and 1.3dBA during the daytime and night-time periods respectively. A noise increase of up to 2dB represents a minor impact that is considered barely perceptible to the average person;
- A broad spectrum noise and vibration survey of finger and Finlay screens of the same design as that proposed and currently in operation at a similar facility (Auburn) was completed. The survey found the screen to be operating in the dominant third octave band of 6.3Hz. The difference in the A and C weighted noise levels was found to be 4.4dB, which is significantly lower than 15dB. Accordingly the INP low frequency noise modifying factor does not apply. Further, a comparison of the third octave bands adjoining 6.3Hz found the level difference to be 7dB and 12dB, which are both below 15dB. Accordingly, the INP tonal noise modifying factor does not apply;
- Further detail confirming operations and truck movements during the morning shoulder period. The noise assessment has been revised to include LAmax noise levels for the morning shoulder period; and
- Revised predicted noise levels to incorporate all operations and traffic movements at 18 receivers. Any changes in the revised assessment remain in compliance with project specific noise criteria.

The revised NVA concludes that the site will be able to operate at a rate of 300,000 tonnes per annum whilst remaining compliant relevant project specific noise criteria derived through application of the NSW Industrial Noise Policy and Road Noise Policy to the project.

Air Quality Assessment

The NSW EPA has requested confirmation on emission estimates and requested that a tabulated emission inventory be provided. An addendum to the Air Quality Impact Assessment (AQIA) is provided at **Appendix C**. This provides a revised emissions inventory, which incorporates emission controls, and consequently revised emission rates.

The resulting maximum predicted 24-hour average PM_{10} concentrations at surrounding sensitive and industrial receptors with the additional controls accounted for in the emission inventory, the maximum predicted 24-hour average PM_{10} concentrations at all receptors included in the model (including the industrial sites) comply with the assessment criterion of 50 µg/m³.

Fire Safety Study

A Fire Safety Study (FSS) is provided at **Appendix D** and seeks to respond to the requirements of *NSW Fire and Rescue* and *HIPAP No. 2 – Fire Safety Study Guidelines.* The FFS aims to establish the adequacy and requirements of fire safety proposals for the development to ensure the fire prevention, detection, protection and fighting measures are deemed appropriate for the specific fire hazard at the development site. In making recommendations on the suitability of the proposal and need for mitigation measures, the FSS gives consideration to:

- The type and quantity of materials stored on site;
- Surrounding land uses;
- Identified hazards;
- LPG prevention / detection / protection requirements;
- Diesel prevention / detection / protection requirements;
- Fire prevention / detection / protection requirements;
- Water demand calculations;
- Containment of firefighting water; and
- First aid and emergency planning.

The FFS documents the fire prevention measures including, fire hydrant, fire hose reels, fire extinguishers, sprinkler system, smoke detection and other measures, as deemed appropriate to comply with the requirements of the Building Code of Australia and relevant Australian Standards. The FFS also outlines the steps required to confirm compliance during the detailed design phase, construction and at commissioning when the business commences.

Furthermore, the FFS considers the measures proposed to contain firewater, which involves blocking the stormwater drain with a Rocla water level controller with a raised turret with firewater collected by a mobile tanker for lawful appropriate off-site disposal.

The measures recommended in the FFS are incorporated into the revised Statement of Commitments found **Appendix F**.

Construction Waste Management Plan

A project specific Construction Waste Management Plan (CWMP) has been prepared and is provided at **Appendix E**. The CWMP includes measures to allow for the safe removal and disposal of asbestos and addresses the request from the NSW Environment Protection Authority (EPA) to review a CWMP prior to issuing conditions of approval for the proposal. The CWMP has been prepared with regard given to the Asbestos Inspection and Register (12 August 2015) prepared for the site to ensure appropriate control measures are in place for the duration of the construction program.

Operational Environmental Management Plan

The draft OEMP submitted with the EIS will be finalised once all site operational requirements are known and have been accepted by the DPE and EPA. The statement of commitments (**Appendix F**) requires that the final OEMP be submitted to and approved by the DPE and EPA prior to the site recommencing waste operations. The OEMP will continue to be reviewed annually and amended as required based on reassessment of risk, compliance with operational commitments, the project approval and the Environment Protection Licence (EPL).

A final OEMP representative of the conditions of approval and identified risks will nominate all relevant mitigation, management, control measures and procedures to eliminate or minimise risks where possible. Relevant procedures for each section of the OEMP are referenced in the OEMP as they are part of the business operations ISO14001, 9001 and 4801 (SEQ) management systems.

The site operator has an established compliance team that will manage and maintain the SEQ Management Systems documentation which includes the OEMP, policies and procedures relevant to site operations at Mortdale.

Waste streams and vehicle types

The site operator has secured tenders to accept waste for several infrastructure projects. The composition of waste accepted at the facility from these projects is predicted to comprise of 75% construction and demolition waste and 20% soil. The remaining 5% of waste streams will comprise of wood, non-chemical manufacturing waste, asphalt, paper and cardboard, household waste (municipal clean-up), office and packaging and Virgin Excavated Natural Material (VENM).

The majority of vehicles used in the collection of construction waste and transportation to the site would be medium rigid vehicles (MRV) up to 8.8m in length. After the waste is processed at the site, the product materials are transported off-site to other facilities for further reuse, recycling or further recovery. Waste is to be transported off-site mostly by 19m semi-trailers and 19.6m truck-and-dog combinations.

Conclusion

The issues raised following exhibition of the EIS from the public and government agencies have been further investigated and accounted for in this Response to Submissions. Where necessary, the statement of commitments have been updated to provide further safeguards, or the operational details modified to mitigate impacts.

Importantly, approval of this application will assist in achieving key objectives of the *Plan for Growing Sydney* (the Plan) by providing a suitably located resource recovery facility which will be capable of processing up to 300,000 tonnes of waste per annum. To achieve the objectives of the Plan, it is essential for facilities such as that proposed to be given the

necessary support and protection and allow for the effective diversion of waste from landfill, whilst ensuring that the costs of waste disposal do not become an overbearing impost on urban renewal and infrastructure projects across the metropolitan region.

The proposed development will have significant benefits to the local area and NSW by allowing for waste to be processed in an efficient, safe and timely manner. In this regard, the intended use of this facility will not only assist in achieving the key objectives of the Plan but confirms its place as being inextricably woven into the urban fabric of Greater Metropolitan Sydney.

1. Introduction

1.1. Background

APP Corporation Pty Ltd (APP) on behalf of Skylife Properties Pty Ltd (the applicant) has prepared this Response to Submissions Report to address the issues raised in the public exhibition process of the Mortdale State Significant Development (SSD) application (SSD 7421).

The subject site is located at 20 Hearne Street, Mortdale and is situated in the middle of an industrial precinct within Georges River Council.

The applicant is seeking development consent under Division 4.1 of Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) to redevelop an existing waste management facility at 20 Hearne Street, Mortdale.

Pursuant to Section 89C of the EP&A Act, projects are classified as SSD if they are declared under a State environmental planning policy. Clause 23(2) of Schedule 1 *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP) makes provision for "*Development for the purpose of waste or resource transfer stations in metropolitan areas of the Sydney region that handle more than 100,000 tonnes per year of waste."*

The redeveloped facility is expected to process up to 300,000 tonnes of non-putrescible waste per annum. Processing activities will include resource recovery, waste processing and waste storage. Based on the intended handling capacity, the proposed Resource Recovery Facility is classified as SSD and approval is sought from the Minister for Planning and Environment or his delegate.

The proposal also involves a reconfiguration of the internal site layout and includes the demolition of all buildings, the construction of a new processing and storage shed, office and amenities building and the installation of two new weighbridges.

An Environmental Impact Statement (EIS) was prepared and submitted to the DPE to assess environmental impacts associated with the development and to incorporate issues identified through preliminary consultation with the community, local and State Government agencies. SLR Consulting, GTA Consultants and Insight Architecture prepared the specialist studies and plans to support the EIS. These studies were in the form of:

• Architectural plans	Insight Architecture
• Urban Planning	APP Corporation Pty Limited
• Transport Impact Assessment	GTA Consultants
• Survey plan	Grinsell and Johns Pty Ltd
• Air Quality, Odour and GHG Impact Assessment	SLR Consulting

- Soil and Water Impact Assessment — SLR Consulting
- Noise and Vibration Impact Assessment — SLR Consulting
- Phase 1 Contamination Land Study — SLR Consulting
- Preliminary Hazards Analysis — SLR Consulting
- Community Consultation — APP Corporation Pty Limited
- Draft OEMP — Bingo Industries Pty Ltd

The key milestones and dates for the project thus far are listed below:

- Request for SEARs — 30 November 2015
- SEARs issued — 16 December 2015
- EIS for Adequacy Review — 8 June 2016
- EIS on exhibition — 22 July to 22 August 2016
- Submissions forwarded to Proponent — 1 September 2016

1.2. Summary of Submissions

The SSD application was placed on public exhibition by the Department of Planning and Environment from 22 July to 22 August 2016.

The DPE received total of 37 objections, including one petition with 150 signatures, 1 letter of support and 1 letter with comments were received from the public. As a consequence of the number of submissions, the application will be determined by the NSW Planning Assessment Commission in accordance with current Ministerial delegations.

The DPE also sought comment from:

- NSW Environment Protection Agency (EPA);
- Roads and Maritime Services (RMS);
- Georges River Council (GRC);
- NSW Office of Water (NOW);
- Office of Environment and Heritage (OEH);
- Department of Primary Industries (DPI);
- NSW Fire and Rescue; and
- NSW Rural Fire Service.

None of the aforementioned agencies objected to the project, however the following agencies sought additional information or clarification on certain elements of the proposal:

- NSW Environment Protection Agency (EPA);
- Georges River Council (GRC); and
- NSW Fire and Rescue.

The Department of Planning and Environment (DPE) also provided comment on the EIS at the conclusion of the exhibition process raising issues with the proposal.

The key themes contained in submissions from the public and agencies (including DPE) related to:

- Impacts from traffic, noise, machinery vibration and dust generated from the business;
- Vehicle movements within and outside the site, road safety, traffic management over the 24-hour operating period;
- Operational details relating to the management of waste streams, stockpiles and justification for 24-hour operation;
- Use of Barry Avenue for heavy vehicle access;
- Compliance with the 10m height requirement in the Hurstville Local Environmental Plan 2012; and
- Locality of dangerous goods storage and fire safety and management.

The submissions received during the exhibition process can be viewed on the Department's website at http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7421

1.3. Structure of Document

This Response to Submissions Report has been prepared by APP Corporation Pty Ltd to address the issues raised in the public exhibition process for the Mortdale SSD. This report is structured as follows:

- Chapter 1 - provides the background to the report
- Chapter 2- sets out the changes made to the EIS
- Chapter 3 - discusses the submissions made by government agencies
- Chapter 4 - discusses the submissions made by the public
- Chapter 5 - provides a response to the key issues raised
- Chapter 6 – provides a tabulated response to all submissions raised
- Chapter 7 – identifies any reports referenced
- Chapter 8 – concludes the report

2. Summary of Changes in Responses to Submissions

The proponent has made several minor changes to the architectural plans and operational details to address the issues raised in the submissions and improve functionality of the site as follows:

2.1. Location of liquefied petroleum gas (LPG)

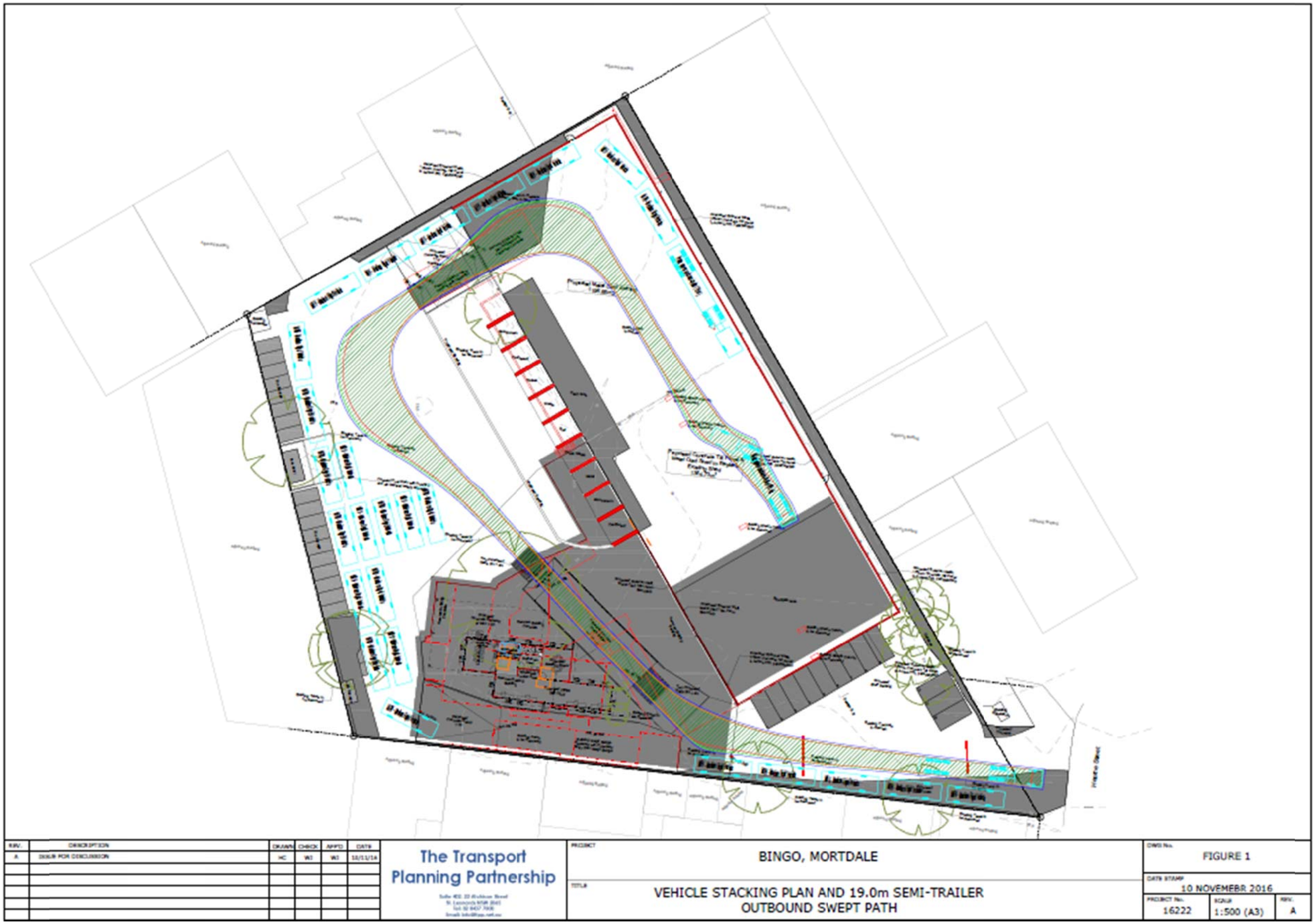
The LGP has been relocated to the south-western corner of the site and reflected on the updated architectural plans. The amount of LPG stored on site is minimal. At most times, there is not more than 4 x 15kg gas bottles containing LPG relevant to operation of the site forklift.

2.2. Access, manoeuvring and parking arrangements

The car parking spaces located at the rear of the shed have been moved 700mm closer to the eastern boundary to accommodate the proposed truck swept path movement.

A vehicle queuing plan has also been prepared and submitted with the EIS which would allow for up to 64 vehicles to be managed on site in any one hour during peak periods and this is reflected in Figure 1 below, which demonstrates the ability to hold up to 28 vehicels at any one time, if necessary

FIGURE 1 – VEHICLE QUEUING PLAN



REV.	DESCRIPTION	DRAWN	CHECK	APPD	DATE
A	ISSUE FOR DISCUSSION	HC	WI	WI	10/11/16

The Transport Planning Partnership

PROJECT: BINGO, MORTDALE

TITLE: VEHICLE STACKING PLAN AND 19.0m SEMI-TRAILER OUTBOUND SWEPT PATH

DWG No. FIGURE 1

DATE STAMP 10 NOVEMEBR 2016

PROJECT No. 16222 | SCALE 1:500 (A3) | REV. A

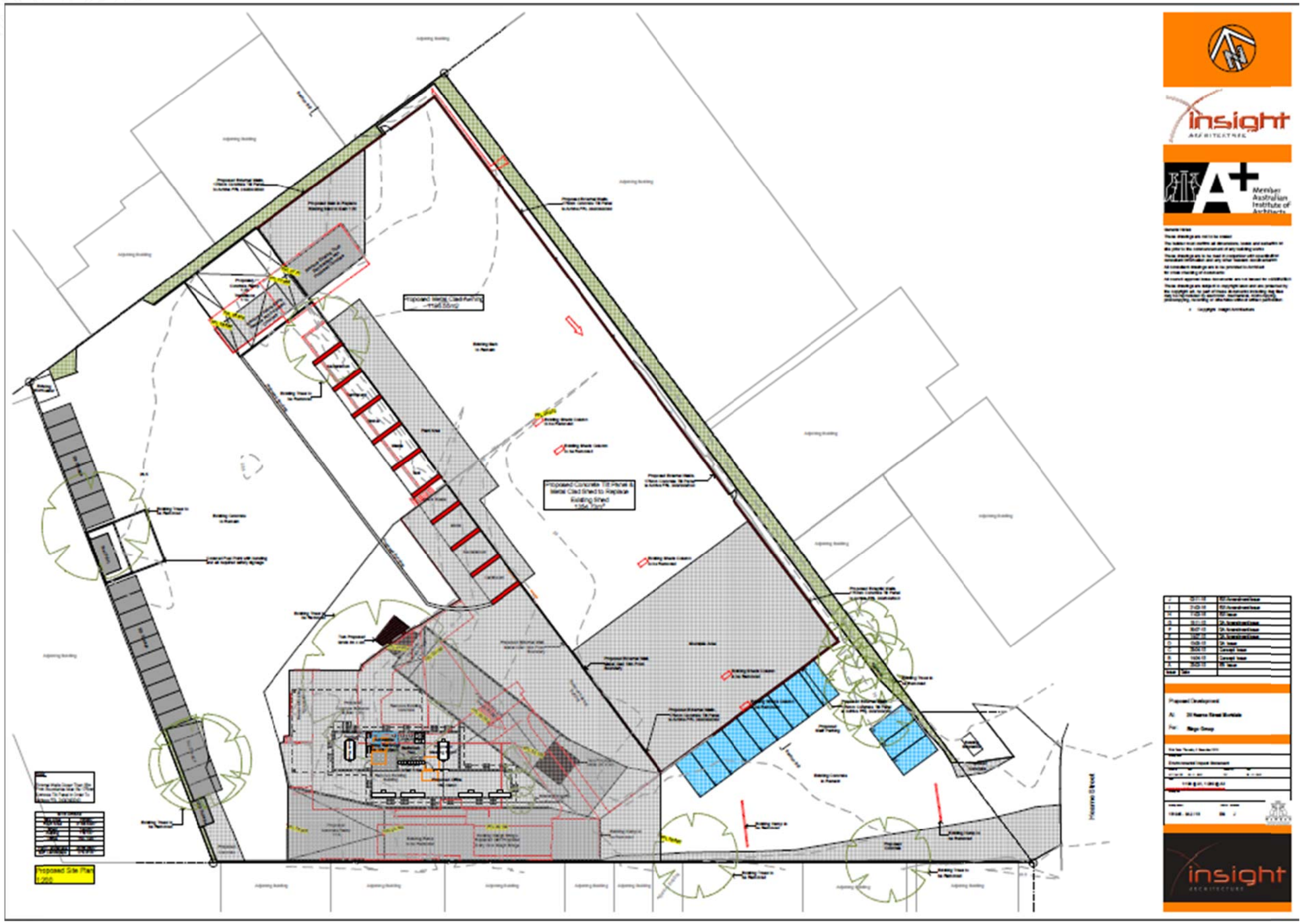
2.3. Machinery/plant

Minor modifications to the plant area within the shed has been aligned with the proposed material bays.

The proposed modifications are reflected in the updated architectural plans provided at **Appendix G**.

Figure 2 denotes the above described changes to the site layout.

FIGURE 2 – SITE LAYOUT PLAN



2.4. Use of Barry Avenue

The proponent does not propose to use Barry Avenue for heavy vehicle movements. All movements will be via Hearne Street and onto Boundary Road. Customers and transporters will be encouraged to access the site via Hearne Street from the Boundary Road intersection.

3. Government Agency Submissions

Eight government agencies provided comments during the exhibition process. Whilst none of the aforementioned agencies objected to the project, the following agencies sought additional information or clarification on certain elements of the proposal:

- NSW Environment Protection Agency (EPA);
- Georges River Council (GRC); and
- NSW Fire and Rescue.

The Department of Planning and Environment (DPE) also provided its comments on the EIS at the conclusion of the exhibition process.

The following agencies have raised no concern with the proposal, however do not wish to have any further input:

- NSW Roads and Maritime Services;
- NSW Department of Primary Industries;
- NSW Office of Environment & Heritage; and
- NSW Rural Fire Services.

The key issues raised in the submissions related to:

- traffic management over the 24-hour operation;
- business operational details;
- detailed design of access to the site;
- preparation of a vehicle queuing Plan of Management;
- limiting the use of Barry Avenue;
- further details of the proposed waste streams;
- breakdown of the waste recycling process carried out on site;
- machinery and vehicle noise assessment;
- development of an Operations Environmental Management Plan in consultation with EPA;
- confirm emission estimates and provide a tabulated emission inventory;
- prepare a Construction Waste Management Plan;
- preparation of a dust management plan;
- preparation of a Water Cycle Management Plan;
- compliance with the 10m height requirement in the *Hurstville Local Environmental Plan 2012*;
- locality of dangerous goods storage;
- a Fire Safety Study to be prepared and installation of a fire hydrant system; and
- stormwater management system designed to contain contaminated fire water runoff.

A response to each of the key issues is provided in Sections 5 and 6 of this Response to Submissions Report.

4. Public Submissions

The major concerns raised by the surrounding residential and business community relate to:

- Suitability of current land use;
- Increased through-put and associated truck movements;
- Impacts from the proposed 24-hour operation;
- traffic impacts to the local road system;
- limiting the use of Barry Avenue;
- road safety; and
- amenity impacts from the operation in terms of dust and noise.

From the submissions received, it is noted within several submissions that the management of the site has improved noticeably since the current operator took over site operations from previous owners 'Get Fast' with particular reference to dust management and vehicle queuing. It should be recognised that the concerns expressed by some members of the community may stand as a legacy of past operations. Notwithstanding this comment, all concerns raised by the business and residential community have been documented and given due consideration in this response to submissions.

5. Response to Issues

This Chapter provides a response to the comments and submissions made during the public consultation process.

5.1. Project Justification

The site will have sufficient capacity to process 300,000 tonnes of waste per annum. The site is not being used to its fullest potential under its current operation to process waste. The current processing capacity of 30,000 tonnes is outdated and reliant on a development consent which is over 5 years old and an outdated facility and operation which lacked the foresight to cater for Sydney's infrastructure and development boom.

The proposed 300,000 tonnes sought under the SSD reflects a market demand for waste and recycling facilities from the development and housing and infrastructure boom currently experienced in NSW. There is presently a lack of similar legally operating facilities in the Mortdale area to cater for local needs and also a lack of facilities generally in the Sydney metropolitan area based on Environment Protection Authority studies.
The specialist studies in the EIS have supported the 300,000-tonne limit sought and this study has proven that the business will operate within industry standards with minimal impact to the environment, the surrounding business and community. Further, the modern machinery proposed for the facility has a fast and efficient processing time to ensure waste is processed with maximum efficiency.

The Mortdale facility forms part of a network of seven other similar facilities located throughout NSW run by the site operator. The entire network collects, separates, recycles and processes approximately 27% of NSW's construction and demolition waste. In line with the predicted increases in waste generation across the State (*NSW Waste Avoidance and Resource Recovery Strategy 2014 – 21*) and ongoing trends and expectations to recycle a higher percentage of waste, demand for the operator's services is increasing across Greater Metropolitan Sydney and across the State. This includes significant government led infrastructure projects which require the operator to manage waste on behalf of the government or appointed head contractor.

Amongst this, it must also be recognised that the industry is heavily regulated, with obligations to track waste throughout the cycle becoming an integral and accepted part of day to day business.

To this extent, the management of waste is not confined to individual sites, but, in the case of the operator, run as a network, with scheduling, fleet management and waste / vehicle tracking coordinated from a dedicated resource and scheduling centre. For the majority of vehicle movements associated with site operations, the timing of a delivery of waste, the volume and nature of the waste being transported is known and planned for, well in advance

of arriving at the Mortdale site. Similarly, the end destination of the waste after separation is known well before it arrives to site. Commercial arrangements are in place with numerous facilities that can accept each waste type likely to be generated by site processes. The site operator has a tested and proven waste management and handling system combined with certified operational, maintenance and risk management procedures, as reflected in the Draft OEMP. It should also be noted that the operator has made a significant investment into the research and design and procurement of new generation processing equipment to ensure operations will run efficiently and with reduced noise levels when compared to conventional resource recovery facilities.

The proponent remains committed to work with the NSW Government to not only achieve the Government's vision for Sydney by implementing the Plan for Growing Sydney (the Plan) but also by handling and managing waste efficiently and contributing towards employment and housing delivery. It will also assist the government and the Environmental Protection Authority in achieving recycling targets and the overarching objectives of the *NSW Waste Avoidance and Resource Recovery Strategy 2014 – 21*.

The SSD proposal will assist the NSW Government in achieving these objectives by providing a suitably located resource recovery facility which will utilise the most advanced processing technology to process up to 300,000 tonnes of waste per annum. To achieve the objectives of the Plan, it is imperative that facilities such as the Mortdale facility are given the necessary support to reduce demand on landfill and enable Sydney to better manage the impact of development on the environment.

In this regard, the future development of the Mortdale facility will assist in achieving a key objective of the Plan and needs of the wider community with respect to waste management and resource recovery.

5.2. Hurstville Local Environmental Plan 2012

5.2.1. Permissibility and Zone Objectives

The subject site is zoned IN2 – Light Industrial Zone under the Hurstville Local Environmental Plan 2012 (HLEP). The proposed development, which is defined in the HLEP as a resource recovery facility, is permitted with consent in the zone.

The objectives of the IN2 zone are provided below with commentary to articulate how the proposed use meets the relevant objectives.

- *To provide a wide range of light industrial, warehouse and related land uses.*

  Comment: While the subject application does not represent a change of use, the nature of the expansion in operating capacity is such that any operational impacts can be mitigated and are not predicted to have a detrimental impact on the operations of other industries, warehousing and other complementary uses found in the locality. In this regard, the development will continue to contribute to the range of industries situated in the locality.

- *To encourage employment opportunities and to support the viability of centres.*

  Comment: The proposed business expansion will provide additional employment opportunities as well as providing a facility which will better serve the economic viability of the industrial precinct. This will be achieved by providing cost efficient waste handling and resource recovery associated with the day to day operation of a range of businesses as well as providing for the efficient handling and recovery of waste products, in particular demolition, construction and infrastructure projects across the LGA and beyond.

- *To minimise any adverse effect of industry on other land uses.*

  Comment: The EIS and this response to submissions report provides a comprehensive assessment of the likely impacts of the proposed development on the receiving environment, including non-industrial / residential receivers. This includes measures required to minimise the effect of the proposal on other land uses and addresses the timing and implementation of such measures and management practices. Such recommendations have been derived from technical assessments undertaken for the proposal in the context of the policy framework and guidelines relevant to the project. Successful implementation of proposed mitigation measures and management practices will minimise adverse impacts of the proposal on other land uses, in particular residential receivers.

- *To enable other land uses that provide facilities or services to meet the day to day needs of workers in the area.*

  Comment: Since the use of the site will not change, the proposed development will not adversely impact on the operations of other land uses / service industries found in the immediate locality. Proposed increases in staff numbers associated with the facility will support the long term viability of such services.

- *To support and protect industrial land for industrial uses.*

  Comment: The proposed development is ideally situated within an industrial area and is appropriately characterised as an industrial land use. Approval of the subject application will see the retention of this industry in the industrial precinct, reinforcing the desired land use mix and typology as expressed in the Hurstville LEP 2012.

- *To enable industrial development which does not pollute or adversely affect adjoining land, air or water.*

  Comment: The EIS and the Response to Submissions report provides a comprehensive assessment of the likely impacts of the proposed development on the receiving environment, including non-industrial / residential receivers. As part of this assessment, any mitigation measures required to minimise the effect of the proposal on other land uses are also considered.

  Recommendations are also made concerning the timing and implementation of such measures and management practices. The recommendations have been derived from the relevant technical assessments prepared with regard given to relevant policy framework and guidelines. It is expected that the implementation of such mitigation measures will minimise adverse impacts of the proposal on other land uses, in particular residential receivers identified in close proximity to the site.

- *To ensure industrial development creates areas that are pleasant to work in, safe and efficient in terms of transportation, land utilisation and service distribution.*

  Comment: Approval of the proposed redevelopment of the existing facility will result in an optimal use of the land. An approval will also result in improvements to the site (e.g. dual weighbridges) which will allow for the site to operate in a safe and efficient manner along with improved amenity for all staff. Additional measures such as the onsite vehicle queuing plan will assist in maintaining the efficient use of land and transportation across the Mortdale light industrial precinct.

  The proximity of the facility to key urban growth corridors and infrastructure projects will allow for the efficient transportation of waste products to and from the site. This will

improve the operating capacity of road infrastructure by reducing the distance that waste needs to be transported from its source.

5.2.2. Variation to LEP height control

The subject site accommodates an existing resource recovery facility which uses a 14.5m high shed for its operation. The SSD application does not change the use of the site but seeks to replace the old shed with a new shed of a similar scale and design to the previous shed. The proposed development maintains the existing building height of 14.5m.

The proposal is supported by a well-founded 'Clause 4.6 Variation Request'. This report makes the following conclusions with respect to the proposed variation to the 10 metre height limit prescribed under Clause 4.3 of the HLEP 2012:

> *"The proposed height of the development, remains consistent with the height of existing improvements within the site and thus is not considered to be out of keeping with established industrial development found in the immediate locality. A development strictly complying with the numerical standard would not significantly improve the amenity of surrounding land uses. In the context of the locality it would be unreasonable for strict compliance to be enforced, as the height and scale of the proposed development is compatible with surrounding existing and likely future development. Furthermore the development, as demonstrated in the EIS, is consistent with Council's key development objectives for the IN2 – Light Industrial Zone and the overarching objectives of the NSW Waste Avoidance and Resource Recovery Strategy.*
>
> *On the basis of reasons provided within this written request it is concluded that the objection is well founded as compliance with the standard is both unnecessary and unreasonable."*

It is noted that the DPE, as the relevant planning authority has not raised concern with the proposed height of the building.

5.3. Compliance with Hurstville Development Control Plan No. 1

A review of the Department of Planning and Environments Fact Sheet (February 2012) *What is State significant development and how are applications assessed and determined* was undertaken in consideration of development control plans (DCP) and the following was noted:

> *DCPs do not apply to SSD since they are generally concerned with local or specific issues and do not provide appropriate planning controls for large, complex developments of importance to the State or region. Consequently, as a result of the above justification from the appropriate legislation, it is confirmed that Council's DCP does not apply to the proposed development.*

This Response to Submissions Report does not consider provisions of the Hurstville DCP No 1 any further.

5.4. Business Operations

5.4.1. Night Time Operations

Concerns relating to noise impacts associated with night time operations are at the core of many of the public submissions made.

The operator seeks to accept waste and transport waste from the site 24 hours per day Monday to Saturday with processing activities (separation of waste) limited to 6:00am to 10:00pm. No processing operations will be carried out on Sunday and public holidays.

The technical reports prepared in support of the EIS, and as amended to supplement this Response to Submissions Report, assess the likely impacts based on the different operating scenarios proposed by the operator.

Whilst the majority of heavy vehicle movements are predicted to be between 7:00am and 6:00pm, it is imperative that truck movements can occur 24 hours per day to accommodate waste generated from projects which operate over a 24 hour period. In response to concerns raised by residents and business operators on Barry Avenue, the site operator will restrict heavy vehicle movements to Hearne Street only.. This will reduce road noise, road safety and air quality impacts to residents and businesses located on Barry Avenue, and will consequently alleviate concerns relating to heavy vehicle movements on this street.

Extended operating hours will allow for a greater distribution of vehicle movements over a longer period of time, which is consistent with the waste disposal needs of the various infrastructure projects contracted to the site operator, where removing waste during the night time period is a requirement.

A greater distribution of traffic will effectively 'flatten' the peak activity further outside of the current road network peak periods which will assist in reducing day-time vehicles movements within the site and on the road network during peak periods.

During the extended hours, no processing machinery will be used and deliveries will be unloaded within the shed resulting in minimal noise being generated from the facility. Only already separated materials will be removed from the site during the extended hours (10:00pm to 6am).

Most night-time deliveries will be waste generated from major infrastructure contracts secured by the site operator. These projects are mostly in the form of urban infrastructure projects, most of which construction works operate on a 24-hour basis and will require waste disposal at night. This operation will be in the form of scheduled loads to the Mortdale facility as agreed between the operator and its clients. This will allow the operator to plan for such deliveries, and ensure there is sufficient capacity to stockpile waste within the building until 6:00am the following morning, when processing activities can recommence.

The extended hours of operation will also allow the operator to remove material from the facility which will move a small proportion (in the order of up to 6 vehicles per hour) of heavy vehicle movements from day-time to night-time and to make further improvements to site safety by ensuring larger vehicles are able to avoid peak customer unloading times. The 24-hour operation will allow materials which are already separated into different material classes and stored in the loading bays to be conveniently removed from the site. This controlled operation is expected to account for a small number of vehicle movements during the night time and morning shoulder period and is predicted to have minimal impact on the local amenity.

The 24-hour operation will allow waste, which will mostly be in the form of soil, bricks and concrete, to be delivered at a pre-arranged convenient time to the facility. This operation is expected to be strictly controlled by the operator to ensure there will be minimal impact on the local amenity. As a maximum, this will result in 6 truck movements per hour over the night-time period.

The operator is committed to ensuring both night-time removal and deliveries will function harmoniously with each other. This controlled operation will ensure there are no conflicts or overlap with removals or deliveries to maintain minimal disturbance to the local amenity.
The frequency of vehicle movements and associated loading and unloading operations have been considered in the updated NVA (**Appendix B**) and TIA (**Appendix A**). Importantly, as detailed in Section 5.7 of this submission proposed night time operations will not result in any exceedance to the relevant noise criteria during the night (Laeq) or relevant sleep disturbance criteria (Lmax) during the night time or morning shoulder period.

It is evident that the benefits of permitting night time operations outweigh the cumulative impacts associated with such operations. This forms the basis for justifying limited operations during the night time period (10pm to 6am). Given that the cumulative impacts of night time operations have been demonstrated to be within the acceptable limits, with no breach of identified thresholds, it is felt that such operations are justified, within the public interest and should be supported by DPE.

5.4.2. Waste Streams

The site operator has secured tenders for several long term infrastructure projects. Consequently it is expected that the mix of waste streams will comprise 75% of construction and demolition waste and 20% soil being processed through the site. The remaining 5% of waste streams will comprise of wood, non-chemical manufacturing waste, asphalt, paper and cardboard, household waste (municipal clean-up), office and packaging and Virgin Excavated Natural Material (VENM).

The type of material received at the Mortdale facility will not change, however, the composition of materials may vary from time to time with a greater proportion of heavy mixed waste material including materials such as soil, brick and concrete, rock and sandstone being received whilst there is significant infrastructure and housing development activity in Greater Sydney. When stockpiled or transported, the area or volume of heavier wastes will be proportionately less than lighter waste streams, which will allow for a greater volume of waste to be held on site.

The processed waste and residual materials will be delivered to large range of facilities located both within and outside Sydney for further processing or reuse.

The facilities to which waste is delivered vary frequently due to market conditions, gate fees, capacity to accept material and waste acceptance criteria. This condition is expected to continue to be the case for the life of the facility.

Due to the extent of development and associated waste generation rates, both current and proposed, as well as the requirement for facilities to adhere to authorised amounts, it is necessary to maintain a number of options for tipping of each material type regardless of whether or not for the purposes of further processing or disposal.

The business operator currently has access to 60 sites (including both disposal and resource recovery facilities). New sites are considered in relation to ability to lawfully accept the waste site as new opportunities arise, changes in market drivers occur, changes to gate fees are implemented and or a facility advises that they have reached their limits.

5.4.3. Waste Transportation

Heavy materials are most commonly transported by bulk in trucks rather than in skip and hook bins. The bulk trucks have significantly more cubic metre capacity than marrel and hook trucks which carry skip and hook bins. Accordingly, when allowing for a greater volume of heavy materials due to development and infrastructure projects, 300,000-tonnes of material being ten times the current volume will not result in a 10-times increase in vehicle numbers.

Due to skip and hook bin gross vehicle mass and axle weight limits, larger bins cannot be used to carry heavy materials. Generally, the heaviest load the bin trucks can carry is 14 tonnes as compared to a truck and dog for example which will cart on average approximately 32.5 tonnes per load.

Medium rigid vehicles (MRV) up to 8.8m in length are the most common vehicles used in the collection of construction waste and examples of the most common MRVs at the facility are identified in the Table 2 below along with the truck and dog combinations that deliver in bulk to the site. After the waste is processed at the site, the product materials are transported off-site to other facilities for further reuse, recycling or further recovery. Waste is to be transported off-site by 19m semi-trailers and 19.6m truck-and-dog combinations. These larger trucks are required to remove the product materials between 4-6pm to ensure sorting, processing and stockpiling activities can run efficiently at the site.

Table 1: Medium rigid vehicles servicing the site

Truck Type	Total Weight (tonnes)	Dimensions (w x h x l)	Figure
Single Axle Marrel	15	2.7 x 3.0 x 7.6	
Double Axle Marrel	22.5	3.0 x 3.0 x 8.3	
Hook Truck	27.5	2.7 x 3.3 x 8.6	

In summary:

- The vehicles delivering material in bulk are larger vehicles and therefore have a larger capacity; and
- The weight of the material is generally heavier (being less mixed waste that includes light material such as paper and cardboard, plastics, and textiles) and a higher proportion of heavy materials such as soil, brick and concrete.

Consequently, it is evident that the 10 fold increase of waste processed on site by weight, will not result in a 10 fold increase in waste processed by volume or a 10 fold increase in vehicle movements. This is further addressed when considering the likely transport impacts associated with the proposal.

5.5. Traffic

GTA Consultants (GTA) prepared the Transport Impact Assessment (TIA) submitted with the EIS. The Transport Planning Partnership (TTPP) have been engaged to respond to the issues raised during the exhibition of the EIS.

The GTA traffic study identified the peak activity period for the site to be between 11:30am to 12:30pm which is outside the existing surrounding road network peak periods. The site is predicted to generate up to 430 two way movements per day, which will result in an estimated net increase of 226 vehicle movements per day from current movements. This equates to a maximum of 113 additional trucks accessing the site in a day.

The TIA notes that the surrounding roads operates with traffic volumes well within its operational capacity threshold as identified in the RMS Guide to Traffic Generating Developments. The TIA report importantly notes that:

- adequate capacity exists in the surrounding road network to cater for the traffic generated by the proposed development;
- no upgrades to existing road infrastructure is required;
- additional traffic generated by the proposed development is negligible and could not be expected to compromise the safety and function of the surrounding road network; and
- traffic generated by the development would not result in a significant change to the existing intersection level of service.

Heavy vehicles travelling to and from the site currently access Hearne Street via Boundary Road and with limited access via Barry Avenue. The key intersections within the vicinity of the site are Boundary Road/ Hearne Street and Boundary Road/ Barry Avenue. The vast majority of vehicles accessing the site travel via the M5 Motorway, approximately 5 kilometres north of Hearne Street.

Truck movements, including delivery and unloading of waste materials are proposed on a 24-hour basis. In line with the current development consent, heavy vehicle movements will be limited within the local road network to Hearne Street. It is believed that this control will address the amenity concerns raised by agencies and the community.

5.5.1. Vehicle flows during 24-hour operation

The TTPP Response to Submissions letter (18/11/2016) predicted the distribution of traffic volumes over a 24-hour period (**Figure 3**) based on a similar hourly distribution as currently

experienced at the Mortdale facility and that previously modelled by GTA to account for 24 hour operations, rather than the linear distribution modelled over a 16 hour period by GTA.

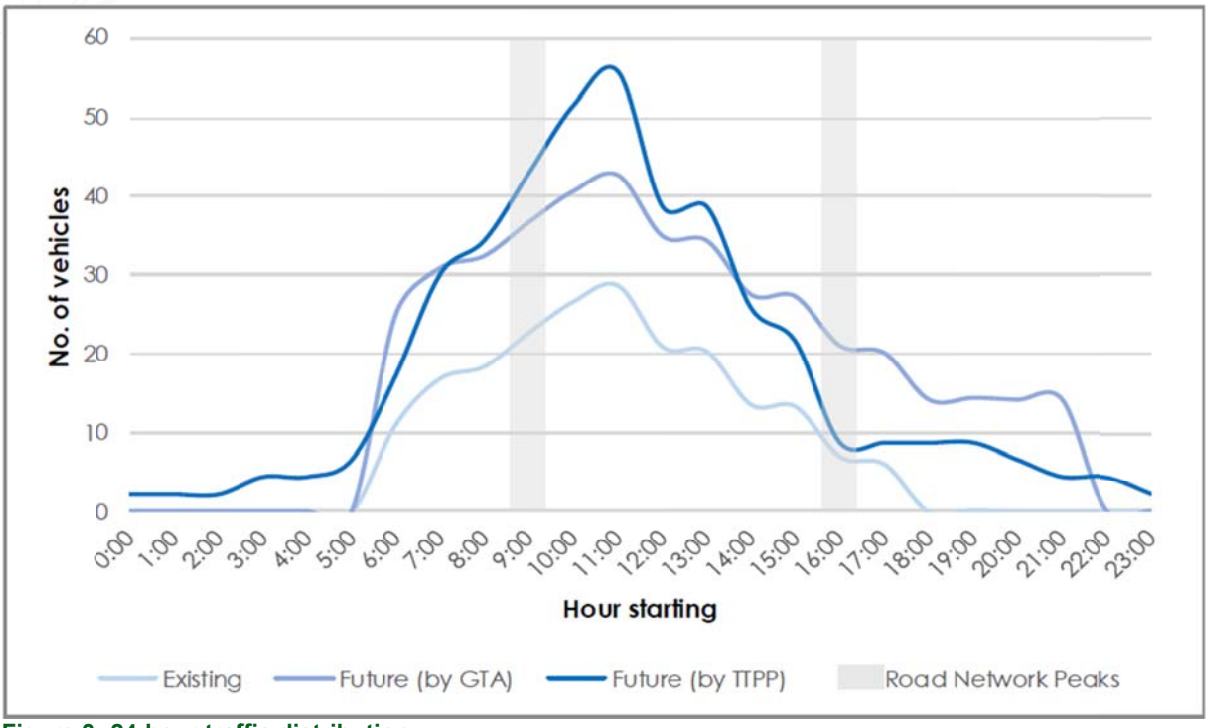


Figure 3: 24-hour traffic distribution

Source: TTPP Response to Submissions letter

As can be seen in Figure 3, the main effects of redistributing the predicted traffic include:

- There are slightly more trucks (around six trucks) on the road network during the AM peak (9:00am-10:00am) and less trucks (around 12 trucks) in the PM peak (4:00pm-5:00pm).
- The site's operational peak period (11:00am-12:00pm) experiences a slightly greater volume of trucks (around 13 trucks).

Of the two outcomes, the latter is expected to generate additional demands on future site operations compared to the GTA assessment.

Incorporating TTPP's revised traffic distribution, changes in the estimated truck volumes would be expected to be absorbed by the road network. The key difference is apparent between 11:00am-12:00pm during which 13 less trucks have been accounted for in the GTA report. In summary, TTPP's assessment of the site's capacity concludes that these 13 trucks can be accommodated onsite.

Most night-time deliveries will be from current and future major infrastructure projects most of which operate on a 24-hour basis and require scheduled loads to allow waste to be delivered at a pre-arranged convenient time to the facility. It is estimated that between 2 to 6

trucks per hour will arrive or depart the site at any scheduled time over the night-time period to assist the business operation.

Controlled scheduling of vehicle movements during night time operations will ensure there will be minimal impact on the local amenity especially in terms of noise from truck movements. This has been confirmed in the updated NVA which finds that there will be no exceedance of the sleep disturbance criteria, and the incremental increase in road traffic noise will be less than 2dBA. The *NSW Road Noise Policy* RNP notes that an increase of up to 2 dB represents a minor impact that is considered barely perceptible to the average person. It is noted that no exceedances are forecast in the modelling undertaken by SLR, as found in the NVA.

5.5.2. Vehicle stacking

In response to community concerns relating to vehicle queuing within the public road reserve, the site operator has investigated options to allow for vehicle stacking during peak periods.

TTPP have prepared a vehicle stacking plan for the Mortdale facility which allows for trucks to queue safely on-site. Vehicle stacking within designated spaces as identified on **Figure 4** would be managed by two dedicated site traffic controllers during peak periods. A total of 28 stacking spaces are available to satisfactorily accommodate a range of vehicles.

At the businesses busiest operation time between 11:00 and 12:00, it is estimated that a maximum of 56 trucks could be held in a stacked arrangement over the course of an hour. TTPP have undertaken an assessment of vehicle flows during the peak period at the site operator's Auburn Facility, using similar equipment and weigh bridge operations to that proposed. Based on this assessment, it can be conservatively estimated that a truck would be on site for maximum of 25 minutes between entry and exit. Since each stacking space could accommodate 2.4 vehicles in one hour (60 minutes/ 25 minutes), in one hour there would be a turn-over of 67 vehicles (2.4 vehicles x 28 spaces), which would be able to adequately manage the anticipated 56 trucks during the peak hour.

When implemented, the proposed stacking arrangement will ensure heavy vehicles will not queue onto Hearne Street or the surrounding road network.

Figure 4: Stacking of vehicles

Source: TTPP Response to Submissions letter

5.5.3. Site supervision

As identified on **Figure 5** below, site personnel will be located at various stations within the site to direct truck drivers and during waste unloading/ loading through the day and night and implement the vehicle stacking plan. Upon entry to the site, truck drivers will be instructed by the weighbridge officer to complete a weigh-in.

As vehicles circulate through the site, drivers will progress to the upper deck where a second traffic controller will manage vehicle flows in the tipping shed. A tip floor officer will be positioned in the tipping shed to assist drivers unload waste. Unloaded trucks will then proceed to the outbound weighbridge where the weighbridge officer will collect final details and authorise the truck to exit the site.

The main communication device for site personnel is via a hand-held two-way radio. Whilst onsite, truck drivers will receive instructions via the two-way radio within their vehicles.

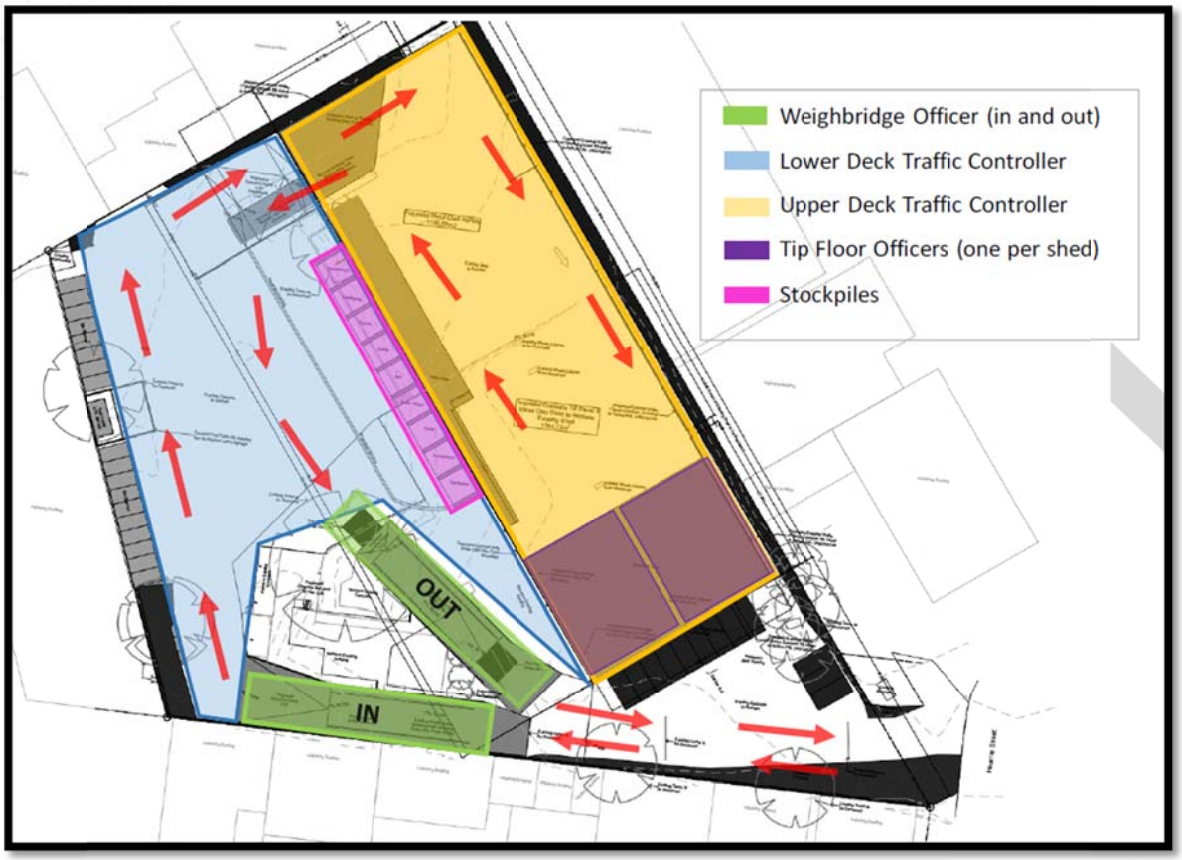


Figure 5: Site supervision

Source: TTPP Response to Submissions letter

5.5.4. Site access and swept path assessment

The site entry is proposed to be widened to 16.2m. This is reflected in the swept path analysis for the site access driveway which confirms there are no conflicts with vehicle movements. A swept path assessment was prepared for the most common vehicles using the facility and is attached at Appendix A of this report:

- MRVs (up to 8.8m);
- 19m semi-trailer; and
- 19.6m truck-and-dog combination.

5.5.5. Summary

The following commitments are made for the new development to ensure the efficient movement of vehicles across the site:

- Provision of upgraded sorting and processing machinery to ensure processing efficiency;
- Increased scheduling and tracking of waste deliveries (in and out) by the operators dedicated scheduling team;

- Utilising dedicated site traffic controllers during peak periods and enforcement of driver protocols will enhance vehicle operations onsite; and
- Limiting distribution of trucks removing outbound waste to mostly outside of peak periods.

5.6. Road Safety

The occupier of the site currently undertakes site inductions for all visitors (drivers) to the premises in accordance with work health and safety and environmental obligations. This procedure ensures that all drivers are informed of rules that apply on the site and in relation to their travel to and from the site. Transport NSW key focus areas in the *NSW Road Safety Strategy 2012 - 2021* such as vehicle design, driver behaviours and compliance which have also been a focus of the business operator and will continue to be.

Some of the vehicle and driver initiatives of the operator include:

- Use of route planning software applications to assist the driver in safer routes, fatigue management, emergency response and immediate and constant support from a team of driver experts located on radio at head office;
- Over two thirds of the business operator's fleet are less than two years old and therefore incorporate the most modern and advanced technology available for vehicle safety including GPS tracking, speed tracking, radio communications, training and development software, job planning and records management;
- Communications and Scheduling systems that provide advanced communications with a team of allocation staff that are experienced heavy vehicle drivers available and able to provide valuable expertise for most situations;
- Routine and random drug and alcohol testing by business operator's Compliance Team;
- Driver and vehicle compliance programs and procedures that monitor speeding, fatigue, drugs and alcohol impairment, vehicle roadworthiness and routine inspection and maintenance;
- Certified National Heavy Vehicle Accreditation Scheme (NHVAS) for maintenance of all heavy vehicles in the parent company fleet;
- Continued work to certify vehicle load restraint systems engineered specifically for skip bins;
- In-house experienced mechanics and workshop to respond immediately to vehicle maintenance and servicing requirements and with a mobile support unit;
- Random vehicle and driver inspections conducted by the Compliance Team (with a minimum number of 20 inspections per month);
- Minimum monthly compliance led toolbox meetings for all drivers;
- Employment of Driver Managers with the specific role of overseeing driver support and compliance;
- Employment of driver supervisors whose role is to double up with each driver in the team for the purposes of ongoing training and continuous improvement; and
- All heavy vehicle drivers employed undergo Certificate III training for driver operations.

5.6.1. Site Protocols and Driver Procedures

As already committed to in the draft Operational Environmental Management Plan (OEMP) submitted with the EIS and as outlined in the Site Access Protocol prepared for the site, the following procedures would be adopted:

- All vehicles must enter the site from Hearne Street;
- All vehicles entering the site must proceed with caution in a forward direction;
- All inbound vehicles are to give way to outbound vehicles;
- All outbound vehicles must exit via the weighbridge as required;
- All outbound vehicles must exit the site in a forward direction;
- Drivers are not to exceed the sitespeed limit is 5 km/hr;
- Two way radios to be tuned to site channel and driver to follow any instructions by site staff issued over the radio;
- The instructions of the Traffic Controller, Site Supervisor, or delegates are to be followed at all times;
- A driver is responsible for ensuring all beacons and reversing alarms are operational at all times;
- All site signage is to be complied with at all times;
- Where traffic aids such as mirrors and speed humps are provided they are to be used with caution; and
- Two way arrows on traffic management plans indicate reversing vehicles or single lane. No passing is allowed in these areas until instructed by site staff. One vehicle is to proceed at a time.

5.6.2. Pedestrians

The proposal does not impact on pedestrians who use the local footpaths, traffic lights and road crossings correctly. All drivers will be reminded through site safety exit signage that they must give way to pedestrians except on site where vehicles and mobile plant have right of way. Pedestrian access to the site is restricted.

5.7. Environmental impacts from the operation

The proposed shed will be of a similar bulk and scale to the existing shed and will not have a negative impact on the surrounding industrial development. The business operation will remain substantially the same on the site except for improvements to mitigate any impacts to the environment including:

- a new, modern and enclosed shed to contain the majority of operations and reduce dust, noise and vibration impacts and soil and water impacts;
- a second weighbridge for quicker vehicle movements through the site;
- a wider driveway for smoother vehicle entry/exit and to improve truck movements;
- fogging system within the shed and sprinkler system outdoors for dust control;
- new stormwater measures to control runoff; and
- modern processing machinery within the shed which will be quiet and increase processing of waste.

5.7.1. Air Quality

SLR's air quality consultants have prepared a response to the EPA's comments with regards to air quality at Appendix C of this report. Specifically, clarification was sought on emission estimates and parameters used to estimate emissions. The modelling assessment was revised to include proposed emission controls to be adopted at the premises, namely:

- most of the processing operation will occur within the shed which will achieve 90% emission reduction for dust emissions from this activity; and
- on-site vehicle speed will be a maximum of 5km/hr which will achieve an additional 40% reduction in on-site wheel generated dust emissions.

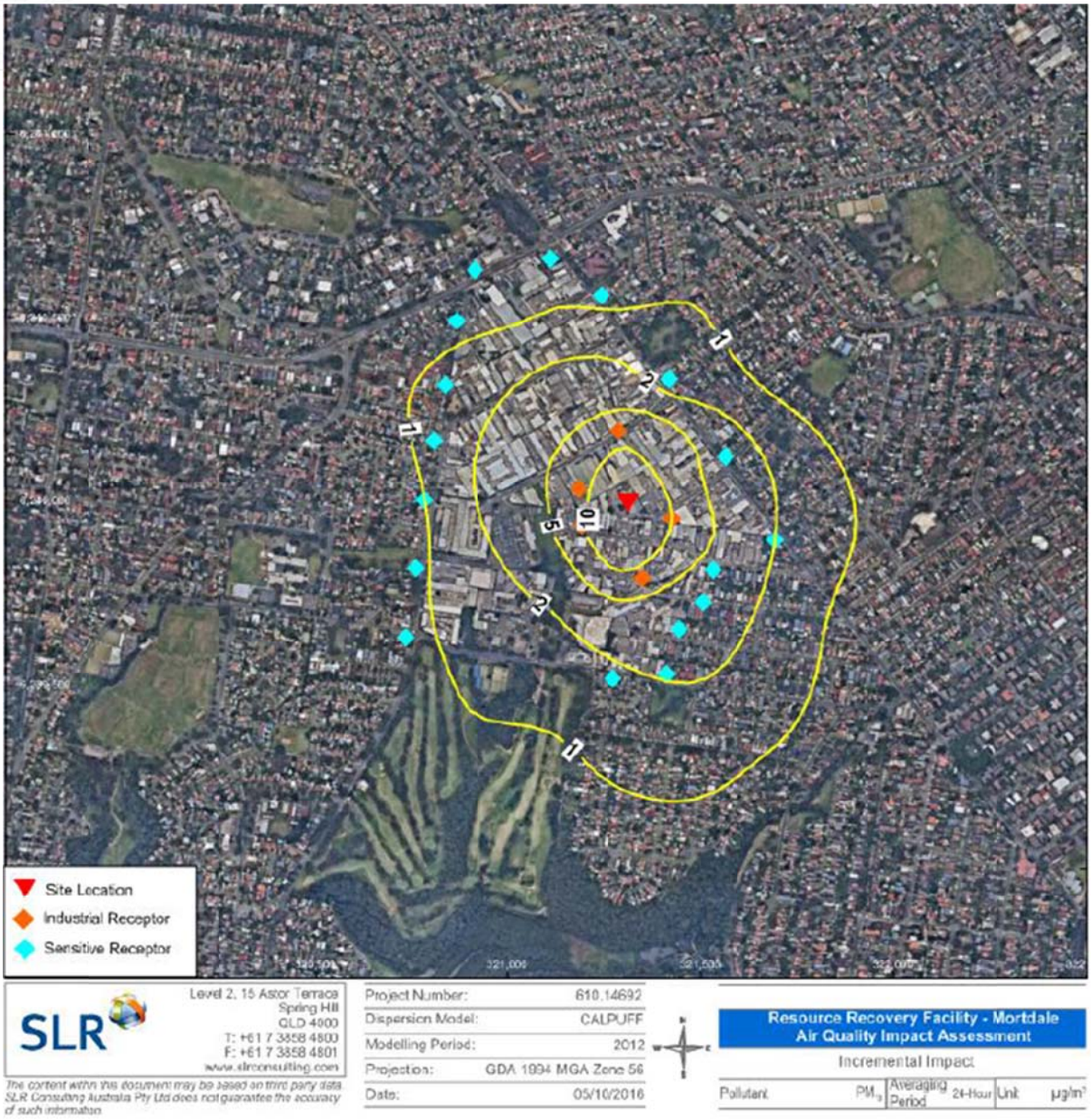
Based on the revised emission inventory, cumulative 24-hour average PM_{10} concentrations at each receptor were calculated using the predicted increment from the project and background 24-hour average PM_{10} concentrations outlined in the AQIA (SLR 2016).

The resulting maximum predicted 24-hour average PM_{10} concentrations at surrounding sensitive and industrial receptors are presented at **Table 2** with the additional controls accounted for in the emission inventory, the maximum predicted 24-hour average PM_{10} concentrations at all receptors included in the model (including the industrial sites) comply with the assessment criterion of 50 µg/m³. The maximum predicted incremental 24-hour average PM_{10} concentrations are shown as a contour plot in **Figure 6**.

Table 2: Predicted 24- Hour Average PM10 Concentrations at Surrounding Receptors

Receptor ID	Receptor Type	24-Hour Average PM10 Concentrations (µg/m³)	
		Increment	Cumulative
Sensitive Receptors			
R1	Residential	0.6	44.2
R2	Residential	0.9	44.2
R3	Residential	2.0	44.2
R4	Residential	3.0	44.2
R5	Residential	1.9	44.4
R6	Residential	3.9	45.0
R7	Residential	3.2	44.9
R8	Residential	2.2	44.6
R9	Residential	1.6	44.3
R10	Residential	0.7	44.2
R11	Residential	0.7	44.2
R12	Residential	0.8	44.2
R13	Residential	1.3	44.2
R14	Residential	1.2	44.2
R15	Residential	0.8	44.2
R16	Residential	0.6	44.2
R17	Childcare Centre	3.5	45.1
Industrial Receptors			
I1	Industrial	8.7	44.2
I2	Industrial	5.9	44.2
I3	Industrial	10.1	46.3
I4	Industrial	7.4	44.2
I5	Industrial	4.6	44.8
CRITERION		**-**	**50.0**

Figure 6 Maximum Predicted Incremental 24 Hour Average PM10 Concentrations



The EIS Report and the Air Quality Addendum prepared by SLR at **Appendix C** have confirmed that there will be no emission exceedances as a result of emission control measures implemented for the site in the form of:

- good housekeeping of the facility;
- regular sweeping of the yard;
- maintain and enforce a vehicle speed limit of 5 km/hour on the premises;
- fixed water sprays (fogging system) installed around the perimeter of the shed and sprinklers installed around the site perimeter;
- hand held hoses to dampen areas not covered by sprays and dusty loads;
- regular use of a water sprays during dry and/or windy conditions;
- ensuring that outward loads are covered and vehicle tailgates are securely fixed;
- when a mobilised dust plume is observed water sprays to be activated and level of operations assessed;
- stop operations when wind speed is excessive;
- use of wind anemometer to gauge and monitor wind speed and direction; and
- machine operators are in constant two-way radio contact with traffic controllers and the site supervisor to activate external sprays and internal fogging systems.

5.7.2. Operational Noise

The noise and vibration assessment prepared by SLR Consulting and lodged with the Mortdale EIS has been updated at **Appendix B.** All baseline and background noise monitoring for the noise assessment was undertaken in accordance with the requirements of the NSWEPA Industrial Noise Policy. SLR has confirmed that all processing plant to be installed at the site has been included in the noise assessment.

A typical operational scenario has been depicted in the **Table 3** below and these activities have been accounted for in the noise model.

Table 3: Operational Scenarios over a 24-Hour Period

INP Assessment Time Period	Operational Characteristics
Morning Shoulder Period (6:00 am to 7:00 am)	Processing and sorting of waste only • Finger Screen operational • Waste processing vehicles[1] fully operational • Trucks dropping off / picking up waste
Daytime (7:00 am to 6:00 pm)	Busiest operational period • Finger Screen operational • Waste processing vehicles[1] fully operational • Trucks dropping off / picking up waste • Up to four trucks waiting in hardstand area
Evening (6:00 pm to 10:00 pm)	• Finger Screen operational • Trucks entering site, loading and unloading within the site area
Night-time (10:00pm to 6:00 am)	• Trucks entering site, loading and unloading within the site

Note 1: Skidsteer, front end loaders, excavators + grabber attachment.

SLR has reviewed the noise model and confirms that the LAmax noise levels presented in **Table 4** have been predicted based on the LAmax sound power levels presented in **Table 5** of the NVR. This analysis confirms no project related traffic noise impacts are anticipated.

Table 4: Predicted Operational Noise Levels (dBA)

Receiver	Morning Shoulder	Day	Evening	Night	Sleep Disturbance	
					Night	Morning Shoulder
	LAeq	LAeq	LAeq	LAeq	LAmax	LAmax
R1	30	36	34	16	32	36
R2	32	40	38	31	34	38
R3	38	46	41	26	38	44
R4	39	45	42	27	39	45
R5	36	42	40	36	39	41
R6	41	46	43	35	41	47
R7	39	45	42	32	40	45
R8	37	43	40	28	36	43
R9	33	39	38	25	35	39
R10	27	33	31	10	28	33
R11	40	45	41	21	38	46
R12	34	40	38	21	36	40
R13	32	38	36	19	33	38
R14	30	36	34	28	31	36
R15	28	34	31	26	29	34
R16	24	30	28	23	23	30
R17	41	46	42	N/A	N/A	N/A
R18	59	64	53	N/A	N/A	N/A

Source: SLR Noise and Vibration Impact Assessment

In the order for the facility to be able to operate in compliance with the project specific noise criteria the following noise mitigation and management measures have been including in this assessment:

- The building layout and orientation is such that building openings will not direct noise towards sensitive receivers.
- 175 mm concrete reinforced tilt panel construction of wall on east, south and western facades.
- Heavy vehicles will access the facility via Boundary Road and Hearne Street and shall avoid using Barry Avenue.

5.7.3. Off-site Heavy Vehicle Noise Emission

SLR has confirmed that truck movements are included in the noise model for the night and morning shoulder period. The noise assessment has been revised to include a detailed assessment against the *NSW EPA Road Noise Policy* (RNP). The noise assessment has found that the proposed vehicle movements would comply with the noise criteria nominated

in the NSW EPA RNP and no sleep disturbance impacts are anticipated as reflected at **Table 4**.

The updated NVA includes existing traffic flows on Boundary Road as presented in **Table 5**, along with the Project-generated traffic flows. For the purposes of the revised noise impact assessment, the peak hour traffic flow for morning and afternoon are shown, together with the relative percentage increase associated with the Project traffic.

SLR have confirmed that the facility operations would comply with project specific noise criteria for residential, industrial and other sensitive receivers.

Table 5: Weekly Average Traffic Flow on Boundary Road [1,6]

Road	Period	Existing[2,3]			Project-generated (Proposed) [1,2]			Cumulative			Increase due to Project		
		LV	HV	Total	LV	HV	Total	LV	HV	Total	LV	HV	Total
Boundary Road	Daytime[4]	14075	921	14996	12	774	786	14087	1695	15782	0%	84%	5%
	Night-time[5]	1792	140	1932	12	86	98	1804	226	2030	1%	61%	5%

Note 1: Traffic flows are for two-way traffic movements. To determine the number of vehicles accessing the Project Site divide Project-generated (Proposed) flow by 2.
Note 2: Existing and proposed traffic flows based on information presented in The Transport Planning Partnership Pty Ltd letter *Response to Submissions Letter - Traffic/Vehicle Movements* dated 18 November 2016 (TTPP Letter).
Note 3: Existing traffic flow is based on the traffic count survey conducted on 19 September 2016 presented in TTPP Letter.
Note 4: Average 7-day traffic flow for daytime period (7am to 10pm) from the traffic count survey conducted on 19 September 2016 presented in TTPP Letter. Divide by 15 to get average hourly daytime period traffic flow.
Note 5: Average 7-day traffic flow for night-time period (10pm to 7am) from the traffic count survey conducted on 19 September 2016 presented in TTPP Letter. Divide by 9 to get average hourly night-time period traffic flow.
Note 6: LV – number of light vehicles. HV – Number of heavy vehicles.
Source: SLR, Noise and Vibration Impact Assessment

The SLR report deduced that Boundary Road will have an overall 5% increase in both day-time and night-time vehicle flows. The project related vehicles on Boundary Road would result in less than a 2 dBA increase in the existing traffic noise levels. Specifically, the traffic noise levels would increase by 1.5 dBA and 1.3 dBA during the daytime and night-time periods, respectively.

In accordance with the NSW EPA's RNP, a noise increase of up to 2 dB represents a minor impact that is considered barely perceptible to the average person. Where existing residences and other sensitive land uses are potentially affected by additional traffic on existing roads due to land use developments, any increase in the total traffic noise level should be limited to 2 dB above the corresponding 'no build option'.

Accordingly, no traffic noise impacts are anticipated at residential receivers adjacent to the surrounding road network, including Boundary and Barry Avenue.

5.7.4. Finger and Finlay Screen Vibrations

In response to concerns raised by the NSW EPA, SLR undertook a broad spectrum (1Hz to 20kHz) noise and vibration survey of finger and Finlay screen currently in operation at the site operator's Auburn facility, which is of a similar design to that proposed for the Mortdale facility.
The survey found the screen to be operating in the dominant third octave band of 6.3Hz with overall root mean square vibration levels of 0.09 mm/s and 0.01 m/s² measured at 5m. The corresponding vibration dose being 0.17 $m/s^{1.75}$ which is significantly lower than the preferred vibration dose value of 0.8 $m/s^{1.75}$ for workshops associated with the neighbouring properties.

The difference in the A and C weighted noise levels was found to be 4.4dB, which is significantly lower than 15dB. Accordingly, the INP low frequency noise modifying factor does not apply.

Further, a comparison of the third octave bands adjoining 6.3Hz found the level difference to be 7dB and 12dB, which are both below 15dB. Accordingly, the INP tonal noise modifying factor does not apply.

Consequently, there will be no vibration impact to the surrounding industrial developments from the project operation of plant and equipment.

5.7.5. Noise Mitigation Measures

While the proposed operations will not exceed the project specific noise criteria set down in the NVA, the proponent is keen to implement the mitigation measures as identified in the noise and vibration report as well as several other methods implemented under the current operation.

The following noise and vibration amenity protection measures are proposed for the Mortdale facility:

- where practicable, access to the site at any time must be via Boundary Road / Hearne Street;
- site speed limit of 5 km/hour;
- the proposed shed layout is such that the location of openings will not direct noise generated from plant towards sensitive receivers;
- 175mm concrete reinforced tilt panel construction of wall on east, south and western facades;
- all on-site, fixed and mobile diesel powered plant, excluding road vehicles are to be correctly fitted and maintained according to the manufacturers' standards or the minimum standards or specifications with respect to engine exhaust or muffler, and reversing beepers;
- where plant has been, or is proposed to be modified, the modifications are to conform to the manufacturers' standards or specifications;
- site activities are to not occur close to site boundaries where possible;
- construction works are to be restricted to 7:00 am to 6:00 pm Monday to Friday and 8:00 am to 1:00 pm Saturdays; and
- speed humps are to be removed and replaced with posted speed limit signs.

The updated NVA (**Appendix B**) demonstrates that the site will be able to operate at a rate of 300,000 tonnes per annum in an acoustically compliant manner without causing a discernible loss of amenity. As such the concerns of the community, Council and EPA have been adequately addressed.

5.7.6. Fire Safety Study and Hazards

NSW Fire and Rescue made several comments and recommendations on the proposed EIS. These were for:

- an assessment of dangerous goods being stored on-site (specifically 30,000L of diesel being stored and managed in accordance with AS1940 – 2004);
- the increase in material to be stored and processed represents a realistic possibility of a high fire load and fire hazard requiring details on the hydrant system and that the development complies with Clause E1.10 of the National Construction Code; and
- the sites surface and stormwater management system should be designed with the ability to contain contaminated fire water runoff.

SLR Consulting prepared a Fire Safety Study (FSS) (**Appendix D**) in accordance with the requirements of the Hazardous Industry Advisory Paper (HIPAP) No.2 – Fire Safety Study Guidelines (Department of Planning, 2011) to establish the adequacy of fire safety proposals for the proposed facility to ensure the fire prevention, detection, protection and fighting measures are appropriate for the development. The key objectives of the FSS are:

- to identify the fire hazards and consequences of possible fire incidents;
- to identify the proposed fire prevention strategies and measures;
- to analyse the requirements for fire detection and protection and identify the specific measures to be implemented;
- to calculate the firefighting water supply and demand;
- ensure containment of firefighting water; and
- provide fire protection requirements.

The FSS has confirmed that no dangerous combustible substances currently on the site will present a fire risk. The proposed dangerous goods stored on the site in the form of LPG and diesel are below the screening threshold levels and are therefore not considered to be potentially hazardous. Fire prevention measures will be installed to the relevant Australian Standards and maintained on a regular basis as identified in the FSS. The final locality and specifications of these measures will be to the satisfaction of the private certifier. The FSS made recommendations to ensure safety across the business operation with regards to:

- the separation of LPG and fuel storage areas as reflected on the amended architectural plans;
- LPG is to be covered and stored separately from diesel fuel;
- diesel fuel storage bunded at 110% and one powder-type fire extinguisher provided outside the bunded area;
- fire prevention in the form of:
    - fire hydrant to be installed at the entrance of the site,
    - fire hose reel to be located in an accessible area,
    - fire extinguishers to be located adjacent to the diesel tank, within the main processing shed and office building,
    - sprinkler system to be installed within the shed with a 3m x 3m spacing; and

- smoke detection within the office;
- storage of small quantities of chemicals to be stored in a designated dangerous goods storage cabinet and not exceed 250L;
- preparation of an Emergency Plan to respond to fire emergencies; and
- installation of appropriately located warning signage throughout the site.

The FSS identified the approximate locality of fire fighting equipment for the Mortdale Facility as reflected at **Figure 7**.

The stormwater management plan submitted with the EIS has been designed to contain firewater by blocking the stormwater drain with a Rocla water level controller which has a raised turret and has been identified on the stormwater plans submitted with the EIS (BRS, SY16043C101 Rev. E) (**Figure 8**). The Rocla controller is to be installed upstream of the Rocla first defence treatment system. Firewater will be collected by a mobile tanker for lawful offsite disposal to prevent firefighting water being discharged through the stormwater drain.

The site office will be the Emergency Control Centre where an Emergency Resource Pack with up-to-date information will be maintained. All employees and contractors will be inducted and trained in accordance with the final OEMP for the facility prior to commencing work on-site.

Furthermore, the sites Emergency and Pollution Incident Response Management Plan assesses the risk of fire and contains measures to mitigate and control the risk as well as procedures to be followed in the event of a fire emergency.

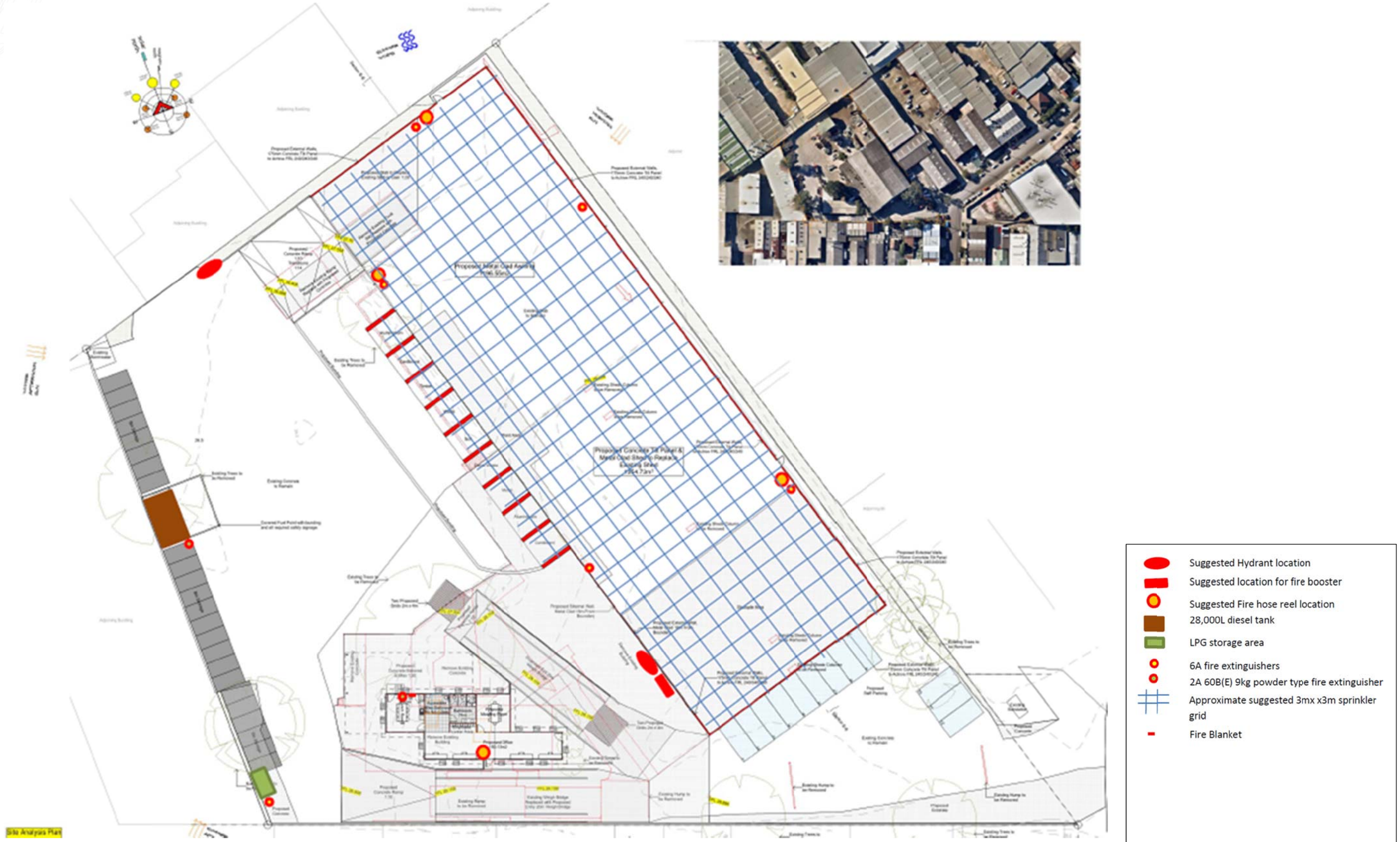


Figure 7: Proposed location of firefighting equipment

A1

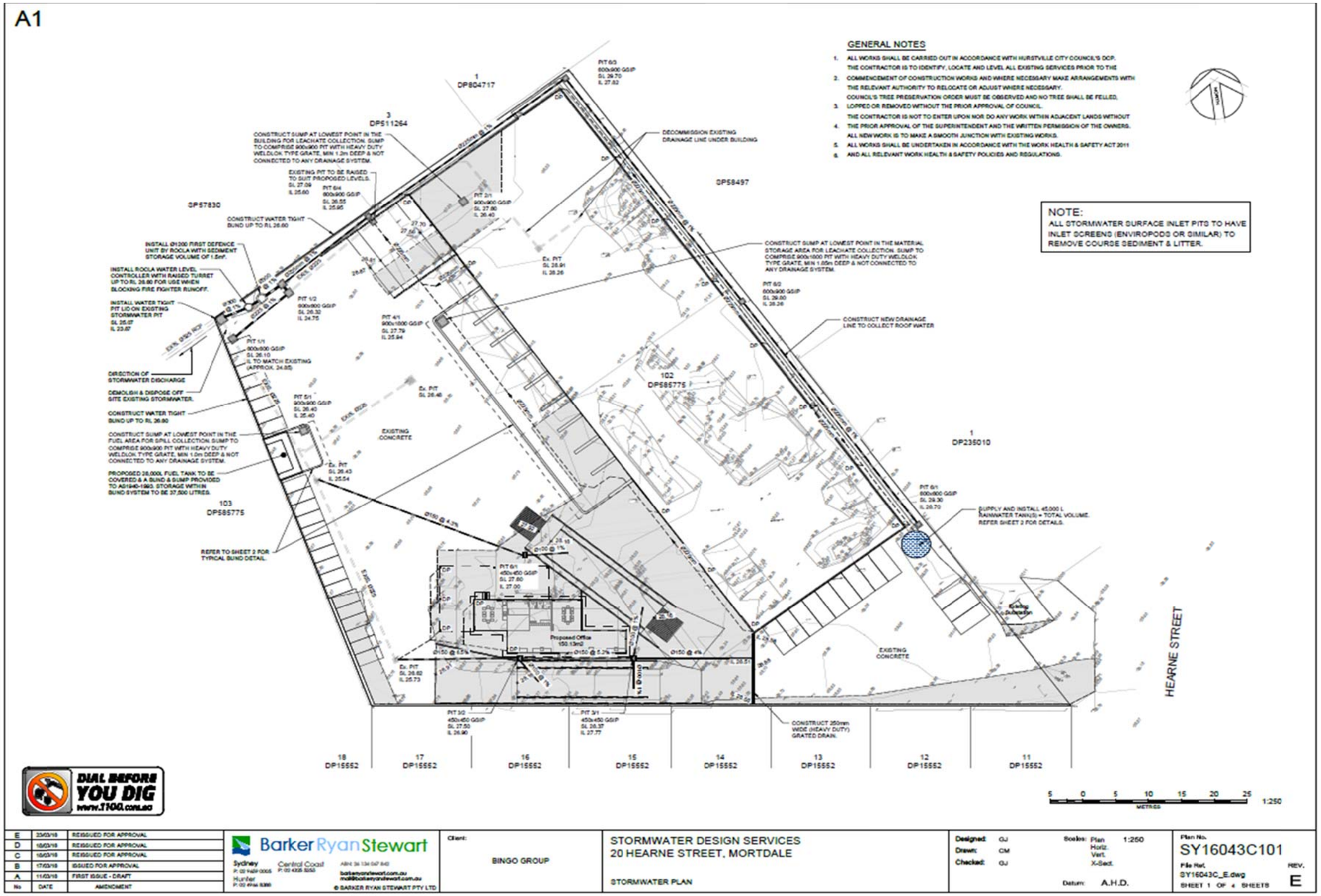


Figure 8 – Water Cycle Management Plan

5.7.7. Stormwater Management and Leachate

Council requested for a Water Cycle Management Plan which identifies specifications and limitations of the wastewater control measures to be provided prior to any approval of the proposal. SLR's environmental consultants sought clarity on the matters raised by Georges River Council and it was noted through consultation with Council's Planning Manager Ms Tina Christy that Council would be satisfied with the provision of an OEMP which contains procedures, maintenance and monitoring to suffice their assessment criteria.

A detailed Stormwater Management Plan was provided with the Mortdale EIS. Water runoff from rain or other sources have been addressed and current water pollution mitigation and prevention measures are to be enhanced as noted in the plans and supporting documents. The draft OEMP also notes current and proposed stormwater measures to be maintained and implemented on site. Once all approvals have been granted, the OEMP will be finalised to incorporate these requirements.

It is unlikely that any leachate will be generated on the site since waste will be contained in the enclosed shed will be enclosed. However, in the event of any leachate being produced it will be captured by sumps located within the shed and waste bays, then pumped into a tanker for removal and lawful disposal. As identified in the draft OEMP, a leachate collection sump has been located at the lowest point in each undercover area where waste is stored or processed. The location of these pits are reflected on the stormwater plan submitted with the EIS.

5.7.8. Operational Environmental Management Plan

To note comments in relation to Council requiring a "proper OEMP" the applicant notes as follows.
The Mortdale site has implemented Work Health and Safety, Environment and Quality Management Systems (SEQ). The current operator of the site has certified management systems for:

- ISO 9001 – Quality Management Systems;
- ISO 14001 – Environmental Management Systems; and
- Australian / New Zealand Standards AS/NZ 4801 – Occupational Health and Safety.

In order to achieve these certifications, the site and the SEQ management system must undergo independent external 3rd party audits by qualified auditors at least annually. The systems are rigorous in their requirements and require assessment of risk associated with all activities, identification of control measures and procedures and documentation, training and implementation of all measures to remove, mitigate and manage the risks and controls.

A Risk, Aspects and Impacts Register is maintained for the site with identified controls that include the OEMP. The OEMP notes all policies, procedures and other documents relevant to each site operation. As for any management system and as per requirements of the ISO and AS/NZ certification, relevant documents are required to be regularly reviewed to ensure that all aspects, impacts and risks are identified, accounted for, addressed and the relevant consultation, training and documentation in place.

The OEMP is intended to be a dynamic document reviewed at least annually and following incidents, changes to operations, risk assessments, audits or for any other reasons such as a change to legislation which require the documents to be amended. Because of the management system requirements, it is neither practical nor appropriate nor consistent with ISO and AS/NZ requirements that all "procedures, maintenance and monitoring requirements be contained in the OEMP itself.
Completing the requirements to maintain all 3 certifications as listed above is unique for this industry and sets standards for this operation well above current industry standards and which are best practice for this industry. It also ensures that all appropriate assessments are completed to mitigate control and manage any potential risk to the environment, safety or quality.

Most procedures already exist and are noted in the current OEMP. A final OEMP representative of the final conditions agreed for the development will nominate all relevant procedures for management and control of potential emissions to stormwater and exclude draft management options to be amended as a result of the final determination.

The business operations Compliance Team manages and maintains the SEQ Management Systems documentation which includes the OEMP, policies and procedures relevant to site operations at Mortdale where site specific requirements are accounted for and addressed. In accordance with SEQ Management System requirements, routine checks and audits are conducted. The Compliance Team conducts SEQ site and non-conformance checks and internal audits in accordance with the SEQ Procedures. External third party independent auditors conduct annual surveillance audits for compliance with the ISO and AS/NZ management system requirements. Every three years the business is required to undergo a recertification audit by an external independent qualified auditor.

In conclusion, the final OEMP should be a condition of consent to be submitted and approved prior to the site recommencing waste operations. As is the case currently, the OEMP will continue to be a dynamic document reviewed at least annually based on reassessment of risk etc.

5.7.9. Construction Waste Management Plan

A Construction Waste Management Plan (CWMP) (**Appendix E**) was prepared by DEWCAPE Pty Ltd who were appointed as the demolition and construction contractors for the project. The CWMP sets out the process for waste management of materials generated as a result of the demolition process and specifically, the issue of asbestos removal and disposal in compliance with *Protection of the Environment Operations Act 1997* and the *Waste Avoidance and Resource Recovery Act 2001*. The contractor is committed to providing disposal records to the EPA to demonstrate lawful disposal of asbestos waste.

The CWMP also makes provision for Traffic Impact Management and provides mitigation measures during the demolition and construction phases of the project. The number of heavy vehicles as a proportion of anticipated construction traffic is expected to range from 6.8 average daily movements at the preliminary work stage (12 days) and up to 22.3 average daily movements trucks during the structural stage (66 days). The construction phase will have the highest rate of daily traffic volumes. On average, there are 23 vehicle movements per day whereby 2-3 of these movements will be undertaken by heavy vehicles (around 10%).

The CWMP has anticipates between 40-60 staff will be required over the course of the demolition and construction phases of the development and up to 20 on-site parking spaces will be available for staff.

TTPP traffic consultants have advised that traffic volumes associated with construction of the future facility will not to have a significant impact on the surrounding road network.

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6. Tabulated Response To Issues Raised By Agencies And Public

The following table provides a detailed summary and responses to all the issues raised by agencies and the public during the exhibition process.

No.	Submission	Issue Raised	Comment	Response
Agency Submissions				
1	Department of Planning	Traffic	Provide the predicted spread of vehicle movements to and from the site during a 24-hour operating period including the proportions of light and heavy vehicle movements.	Section 5.4.1 of this submission and Appendix A document the predicted spread of vehicle movements from the site over a 24 hour period. This includes an assessment of the predicted vehicle movements during the road network peak periods and site operation peak period, which do not overlap. The assessment confirms that the proposal will not have an unacceptable impact on the Level of Service provided in the local road network or at key intersections.
			Provide details regarding the management of truck and vehicle movements within the site and extending into Hearne Street during peak waste delivery periods to avoid conflicts and ensure the safety and efficiency of the road network is maintained.	The proposal has been updated to incorporate a vehicle stacking plan and site management protocols to manage heavy vehicle movements during the peak waste periods and are provided at Appendix A. Spatially the site can accommodate up to 28 stacked trucks, comprising 26 MVR's and 2 articulated trucks at any one time. Modelling undertaken by TTPP indicates that during the peak period, up to 67 vehicles could be accommodated over the course of the peak period which would adequately account for the anticipated 56 trucks during the peak hour period.
			Provide a plan showing the potential stacking of vehicles within the site, including proposed traffic controls to be implemented to avoid queuing within Hearne Street.	The proposed vehicle stacking plan and access protocols are provided within the TTPP TIA provided at Appendix A.
			Provide a detailed design of the proposed access way having regard to the swept path of the largest vehicles entering and exiting the site and potential conflicts resulting from the vehicle movements of the adjacent premises which shares a portion of the access.	The site layout has been revised to provide a wider site entry to 16.2m. Swept path analysis undertaken by TTPP indicates that inbound and outbound movements undertaken by MRVs can occur concurrently while two-way movements by an MRV with a semi-trailer or truck-and-dog can also occur concurrently. Two-way movements by larger trucks cannot occur simultaneously. However, it is highly unlikely that two larger-sized vehicles would be undertaking these manoeuvrers at the same time. The likelihood of this scenario occurring is further reduced through the operators scheduling capabilities, which would prevent two larger vehicles accessing the site simultaneously. In the rare occurrence of two large vehicles needing to use the accessway at the same time, departing vehicles have priority and right of way. Given the low-speed road environment on Hearne Street driver visibility to large trucks exiting the site would be sufficient for oncoming vehicles to allow a 30m gap ahead.
			Provide a more detailed justification regarding the breakdown of types of vehicles accessing the site. In particular, what are the specific operational or waste stream changes which will result in the use of a greater number of heavy vehicles (>12 t load).	The site operator's project pipeline includes several infrastructure projects which generate significant volumes of construction waste. Thus, the predicated waste streams would largely comprise construction and demolition waste. These types of waste are denser than other forms of waste and, therefore, require fewer vehicle movements to transport the equivalent amount of waste. Such waste streams will typically be transported to site by MRV vehicles which will have a total weight of between 15 and 27.5 tonnes. After the waste is processed at the site, the product materials are transported off-site to other facilities for further reuse, recycling or further recovery and disposal. Waste is to be transported off-site by 19m semi-trailers and 19.6m truck-and-dog combinations. These larger trucks are required to remove the product materials to ensure sorting, processing and stockpiling activities can run

<table>
<tr><th>No.</th><th>Submission</th><th>Issue Raised</th><th>Comment</th><th>Response</th></tr>
<tr><td></td><td></td><td></td><td></td><td>efficiently at the site.</td></tr>
<tr><td></td><td></td><td></td><td>Confirm the anticipated total and daily peak traffic volumes during construction. This information should include the number of heavy vehicles as a proportion of anticipated construction traffic.</td><td>The construction phase of the future facility is estimated to extend for eight months beginning in June 2017. During this phase, materials will be transported to and from the site by heavy vehicles. Estimated traffic volumes associated with construction have been
extracted from the Construction Waste Management Plan (Appendix E), and are summarised in the below table.
<table><tr><th rowspan="2">Construction Phase (2017/2018)</th><th rowspan="2">Duration (days)</th><th colspan="2">Approx. Vehicle Movements (In + Out)</th><th colspan="2">Daily Average</th></tr><tr><th>Trucks</th><th>Cars</th><th>Vehicle Movements</th><th>% Proportion of Trucks</th></tr><tr><td>Preliminary work (June – July)</td><td>12</td><td>2</td><td>80</td><td>7</td><td>2%</td></tr><tr><td>Demolition (July – Aug)</td><td>28</td><td>80</td><td>373</td><td>17</td><td>18%</td></tr><tr><td>Structure (July – Nov)</td><td>66</td><td>150</td><td>1,320</td><td>23</td><td>10%</td></tr><tr><td>Roofing and Façade (Sep – Oct)</td><td>25</td><td>60</td><td>333</td><td>16</td><td>15%</td></tr><tr><td>Internal Services Fitout (Nov – Feb)</td><td>54</td><td>22</td><td>1,080</td><td>21</td><td>2%</td></tr></table>
Construction of new building structures constitutes the period with the highest rate of daily traffic volumes. On average, there are 23 vehicle movements per day whereby 2-3 of these movements will be undertaken by heavy vehicles (around 10%).

During the construction phase the waste transfer facility will cease operations and recommence post completion of the works. Traffic generated by the site during this period will comprise only construction traffic. Hence, the average daily traffic volumes are expected to reduce from 204 (existing facility) to, at least, 23 vehicles (busiest period in construction phase). This generates a reduction of roughly 181 vehicles per day.

Overall, traffic volumes associated with construction of the future facility are considered not to have a significant impact on the surrounding road network.</td></tr>
<tr><td></td><td></td><td></td><td>Confirm the number of construction staff and parking arrangements during construction.</td><td>During the demolition and construction phase there will be between 40 – 60 staff onsite over the course of the construction program. Off-street car parking will be located along the western boundary of the site where there will be the provision of 20 spaces. In order to manage the limited availability of onsite parking staff will be will be encouraged to car-pool and travel by public transport to site.

The site is within walking distance of bus stops on Hearne Street as well as Mortdale Railway Station.

Demolition/ construction workers will be informed of onsite parking arrangements during staff inductions to ensure workers can plan their journey to work early in the project timeline. On-street parking by workers will be discouraged and will be reiterated at site inductions/briefings.</td></tr>
<tr><td></td><td></td><td>Waste Streams</td><td>Provide further details of the proposed waste streams, including:
• the sources and locations of the waste streams being delivered to the site (including details of any contracts for</td><td>Waste Sources
The site operator has secured tenders for several infrastructure projects. Consequently it is expected that the mix of waste streams will comprise 75% of construction and demolition waste and 20% soil being processed through the site. The remaining</td></tr>
</table>

No.	Submission	Issue Raised	Comment	Response
			large infrastructure projects); and • the location of landfills / recycling facilities the waste will be delivered to. • Provide clear and detailed justification as to the need for 24 hour operations based on the proposed waste streams and provide an indication as to how often the site will be utilised during the night (10:00 pm to 6:00 am).	5% of waste streams will comprise of wood, non-chemical manufacturing waste, asphalt, paper and cardboard, household waste (municipal clean-up), office and packaging and Virgin Excavated Natural Material (VENM). The type of material received at the Mortdale facility will not change, however, the composition of materials may vary from time to time with a greater proportion of heavy mixed waste material including materials such as soil, brick and concrete, rock and sandstone being received whilst there is significant infrastructure and housing development activity in Greater Sydney. When stockpiled or transported, the area or volume of heavier wastes will be proportionately less than lighter waste streams, which will allow for a greater volume of waste to be held on site. **Waste Delivery** The processed waste and residual materials will be delivered to large range of facilities located both within and outside Sydney for further processing or reuse. The facilities to which waste is delivered vary frequently due to market conditions, gate fees, capacity to accept material and waste acceptance criteria. This condition is expected to continue to be the case for the life of the facility. Due to the extent of development and associated waste generation rates, both current and proposed, as well as the requirement for facilities to adhere to authorised amounts, it is necessary to maintain a number of options for tipping of each material type regardless of whether or not for the purposes of further processing or disposal. The business operator currently has access to 60 sites (including both disposal and resource recovery facilities). New sites are considered in relation to ability to lawfully accept the waste site as new opportunities arise, changes in market drivers occur, changes to gate fees are implemented and or a facility advises that they have reached their limits. **24 hour operations** Whilst the majority of heavy vehicle movements are predicted to be between 7:00am and 6:00pm, it is imperative that truck movements can occur 24 hours per day to accommodate waste generated from projects which operate over a 24 hour period. Extended operating hours will allow for a greater distribution of vehicle movements over a longer period of time, which is consistent with the waste disposal needs of the various infrastructure projects contracted to the site operator, where removing waste during the night time period is a requirement. A greater distribution of traffic will effectively 'flatten' the peak activity further outside of the current road network peak periods which will assist in reducing day-time vehicles movements within the site and on the road network during peak periods. The 24-hour operations will have several benefits to the operator in terms of removing waste and accepting waste to the facility. Waste will be delivered and unloaded at the site outside of the hours of 6:00am to 7:00pm (extended hours), will not processed until the following business day. During the extended hours, no processing machinery will be used and deliveries will be unloaded within the shed resulting in minimal noise being generated from the facility. Most night-time deliveries will be waste generated from major infrastructure contracts secured by the site operator. These projects are mostly in the form of urban infrastructure projects, most of which construction works operate on a 24-hour basis and will require waste disposal at night. This operation will be in the form of scheduled loads to the Mortdale facility as agreed between the operator and its clients. This will allow the operator to plan for such deliveries, and ensure there is sufficient capacity to stockpile waste within the building until 6:00am the following morning, when processing activities can recommence.

No.	Submission	Issue Raised	Comment	Response
				The extended hours of operation will also allow the operator to remove material from the facility which will move a small proportion (up to 6 vehicles per night) of heavy vehicle movements from day-time to night-time and to make further improvements to site safety by ensuring larger vehicles are able to avoid peak customer unloading times. The 24-hour operation will allow materials which are already separated into different recyclable materials and stored in the loading bays to be conveniently removed from the site. This controlled operation is expected to account for a small number of vehicle movements during the night time and morning shoulder period and is predicted to have minimal impact on the local amenity. The 24-hour operation will allow waste, which will mostly be in the form of soil, bricks and concrete, to be delivered at a pre-arranged convenient time to the facility. This operation is expected to be strictly controlled by the operator to ensure there will be minimal impact on the local amenity. As a maximum, this will result in 6 truck movements per hour over the night-time period.
		Noise	Provide a detailed assessment of the project against the NSWEPA Road Noise Policy. The Department is particularly concerned with road noise associated with vehicles stopping and turning into Hearne Street from Boundary Road and heavy vehicles traveling on Berry Street.	The updated NVA (Appendix B) has been revised to include a detailed assessment against the NSW EPA Road Noise Policy (RNP). As part of reviewing the off-site heavy vehicle movements in response to submissions, the traffic study was updated to include traffic counts on Boundary Road. The revised NVA also recommends that heavy vehicles no longer access the site via Barry Avenue. Accordingly, heavy vehicles accessing the site would travel via Boundary Road and Hearne Street. Heavy vehicles would be restricted from travelling along Barry Avenue. The NVA notes relevant criteria for residents on Boundary Road are the LAeq(15hour) and LAeq(9hour) criteria. As outlined in the NVA, the predicted increase in heavy vehicle when compared with total traffic flows on Boundary Road would result in less than a 2 dBA increase in the existing traffic noise levels. Specifically, the traffic noise levels would increase by 1.5 dBA and 1.3 dBA during the daytime and night-time periods, respectively. As discussed in Section 4.2 of the revised NVA, a noise increase of up to 2 dB represents a minor impact that is considered barely perceptible to the average person. Where existing residences and other sensitive land uses are potentially affected by additional traffic on existing roads due to land use developments, any increase in the total traffic noise level should be limited to 2 dB above the corresponding 'no build option'. As such, no project related traffic noise impacts are anticipated at residential receivers adjacent to the surrounding road network, including Boundary Road and Barry Avenue.
		Plant	Confirm all processing plant to be installed at the site. Ensure that noise impacts are considered for any additional plant that was not identified in the EIS.	The revised NVA accounts for all noise sources including processing plant to be utilised at the site. In addition, the NVA documents the proposed equipment operating times to allow for cumulative impact assessment. This is provided within Table 6 of the NVA (**Appendix B**)
		Water	Provide further information on the management and disposal of leachate.	As identified in the draft OEMP, a leachate collection sump has been located at the lowest point in each undercover area where waste is stored or processed. The location of the pits are shown in the stormwater plan submitted with the EIS. Also, as stated in the OEMP if leachate is generated, arrangements are in place with a third-party transporter to attend the site to pump out the pit and transport the liquid waste to a lawful liquid waste facility for treatment and disposal.

No.	Submission	Issue Raised	Comment	Response
		Stockpiles	Confirm estimated maximum volume dimensions of the proposed 10,000 tonnes of waste stored in the designated stockpile area of the site and the turnaround time for stockpile removal. The Department is concerned that the size of the designated stockpile is too small to cater for the processing volumes proposed.	Whilst the proposed machinery within the shed has capacity to process in excess of 100 tonnes per hour. It is unlikely that this will eventuate as the business will never operate at capacity for 100% of the time. The proponent is therefore seeking an annual throughput of 300,000 tonnes to meet the current and future market demand. Considering that the business will operate comfortably below the proposed throughput limit, 10,000 tonnes is a reasonable figure ensuring that storage limits are not exceeded at any time. Consequently, the maximum volume proposed for waste storage on site is not just a factor of the capacity of the stockpile of unprocessed material in the designated stockpile area but also of processed materials, deliveries and outbound materials. The NSW EPA's advice to facilities when 'authorised amounts' were introduced, was to determine a volume that the site will always remain below. The applicant believes that 10,000 tonnes is a reasonable determination on the basis of the technical assessments supporting the EIS in the response to submissions which includes discussion related to the capacity of the equipment. Technical assessment of capacity for throughput including the Transport Impact Assessment by GTA and the further review by TTPP address the traffic flow and traffic impact submissions and support an annual throughput of 300,000 tonnes which is not solely dependent on stockpile capacity on site. The stockpile area is sufficient for the purposes of the propose development since the processing and turn-around time have been determined to be appropriate for this operation.
		Process	The Department is concerned that the site will be unable to process the requested amount of waste per annum due to size and other site constraints. Provide a more detailed breakdown of the waste recycling process carried out on site, including timeframes for the removal of wastes and potential maximum daily processing rates.	The equipment to be installed on site has the capacity to process between100- 150 tonnes an hour. Other similar screens developed specifically for recycling waste and in use at other resource recovery facilities. The proposal is to process waste between 6am and 10pm over 6 days. This equates to a processing capacity in excess of 460,000 tonnes per annum.
2	Environment Protection Authority	Noise	Assess whether the low frequency noise modifying factor would apply to noise from the project, due to low frequency noise from the finger and Finlay screen The assessment presented a sound power level for the finger and Finlay screen of 112 dBA, and later stated that the screen operated at 9 Hz to 13 Hz. The screen may generate significant low frequency noise, which does not seem to have been accounted for in the assessment. The Proponent must assess whether the low frequency noise modifying factor should be applied to predicted noise levels.	Refer to Appendix B. SLR undertook a broad spectrum (1Hz to 20kHz) noise and vibration survey of finger and Finlay screen currently in operation at at similar facility at Auburn facility, which is the same design proposed to be installed at the Mortdale facility. The survey found the screen to be operating in the dominant third octave band of 6.3Hz. The difference in the A and C weighted noise levels was found to be 4.4dB, which is significantly lower than 15dB. Accordingly, the INP low frequency noise modifying factor does not apply. Further, a comparison of the third octave bands adjoining 6.3Hz found the level difference to be 7dB and 12dB, which are both below 15dB. Accordingly, the INP tonal noise modifying factor does not apply.
		Noise	Confirm whether truck movements were included in the noise model for the shoulder period	SLR confirms that the truck movements are included in the noise model for the morning shoulder period.

No.	Submission	Issue Raised	Comment	Response
		Noise	The morning shoulder operational scenario modelled for the assessment does not appear to include truck movements, even though the assessment stated that trucks would access the site 24 hours a day, and would leave the site in the shoulder period. If trucks were not included in the shoulder period model, then noise levels could have been under predicted by 3 dBA at some receivers.	SLR confirms that the truck movements are included in the noise model for the morning shoulder period.
		Noise	Provide predicted LAmax noise levels for the shoulder period, and check that predicted LAmax levels for the night period are correct	SLR has reviewed the noise model and confirms that the LAmax noise levels presented in Table 8 have been predicted based on the LAmax sound power levels presented in Table 6 of the revised noise assessment.
		Noise	The predicted operational noise levels did not include LAmax noise levels in the shoulder period, and the predicted LAmax levels for the night period were often only 2 – 3 dBA higher than the predicted night time Leq(15min). This may be due to transcription errors, or use of the wrong sound power levels for maximum noise events. Maximum sound power levels were not presented in the assessment.	The NVA has been revised to include LAmax noise levels for the morning shoulder period. The NVA has been revised to include the LAmax sound power levels used in the sleep disturbance assessment. SLR has reviewed the noise model and confirms that the LAmax noise levels presented in Table 8 of the NVA have been predicted based on the LAmax sound power levels presented in Table 6 of the revised NVA. No sleep disturbance impacts are anticipated. The predicted noise levels from the Project operations remain in compliance with project specific noise criteria.
		Water	In relation to potential water impacts, the EPA notes that the risks to waters will be largely managed by the proposed leachate and stormwater controls, but some residual risk remains as the Proponent has not: • characterised the stormwater discharge quality; • estimated the discharge pollutant loads; • adequately demonstrated the performance of the proposed stormwater treatment system; • provided details of maintenance triggers and actions for the stormwater management system. The EPA advises that in order to mitigate these risks, it will (as part of the recommended conditions of approval) require that the Proponent develop an Operations Environmental Management Plan (OEMP) in consultation with the EPA prior to commencement of operations, which will include a leachate management and disposal; maintenance triggers and actions for the stormwater management system; and a stormwater monitoring program. The stormwater monitoring program will characterise the discharge and provide ongoing assurance that treatment performance is maintained. Further requirements will be outlined in any conditions of approval	Preliminary details relating to the maintenance of the stormwater management system have been incorporated into the draft OEMP. A final OEMP will be developed in consultation with the EPA prior to commencement of operations and will include: • leachate management and disposal; • maintenance triggers and actions for the stormwater management system; and • stormwater monitoring program. This is reflected in the revised Statement of Commitments. As identified in the draft OEMP, a leachate collection sump has been located at the lowest point in each undercover area where waste is stored or processed. The location of these pits are shown in the stormwater plan submitted with the EIS. Also, as documented in the OEMP if leachate is generated, arrangements are in place with a third-party transporter to attend the site to pump out the pit and transport the liquid waste to a lawful liquid waste facility for treatment and disposal.

No.	Submission	Issue Raised	Comment	Response
			issued by the EPA. The EPA notes that the Proponent has proposed that all leachate will be collected in sumps to prevent contamination of stormwater, but the Proponent has not specified how this leachate will be disposed of. Prior to the EPA being able to issue conditions of approval, the Proponent must clarify how leachate will be disposed of (e.g. discharge to sewer).	
		Air	Should the proposed development cause odour impacts, the EPA will require the Proponent to undertake an odour impact assessment as part of an environment protection licence condition (such as a Pollution Reduction Program).	The statement of commitments (**Appendix F**) has been revised to allow for an odour impact assessment to be prepared in line with the requirements of the EPL. As documented in the EIS, the facility is unlikely to generate odour as putrescible wastes will not be accepted at the site.
			The Proponent must confirm emission estimates and provide a tabulated emission inventory, outlining all input parameters utilised to estimate emissions.	Following the EPA's feedback on the AQIA (SLR 2016), the emission inventory has been revised (**Appendix C**), incorporating the following additional proposed emission controls that will be adopted for the operation of the Project: • All processing of materials will be carried out within the enclosure (onsite building). Processed materials will be unloaded at different bays located under the awning with fogging and sprinkler controls to minimise potential dust emissions – it was assumed this will achieve an average of 90% emission reduction for dust emissions from this activity. • Vehicle speed will be limited to less than 5 km/hr on onsite roads – it was assumed this will achieve an additional 40% reduction in on-site wheel generated dust emissions. It is noted that 40% control efficiency is based on limiting vehicle speed to 30 km/hr and no published emission factors are available for limiting vehicle speeds to 5 km/hr. Due to this, the calculated emissions associated with the onsite traffic movements are likely to be overestimated. The revised statement of commitment accounts for the abovementioned emission controls.
			Where exceedances of the EPA's impact assessment criteria for particles are predicted, the modelling assessment should be revised to include proposed emission controls which will be adopted at the premises.	The revised estimated emission rates for the proposed operation have been modelled using the same dispersion modelling methodology as outlined in the AQIA (SLR 2016). Based on the original emission inventory without the additional controls listed above, the AQIA predicted exceedances of the 24-hour average PM10 assessment criterion at one industrial receptor (I3) in the vicinity of the site. No exceedances were predicted for any other pollutants including annual average PM10 concentrations at any surrounding residential or industrial receptors. To address EPA's request therefore, this additional modelling has only addressed the incremental and cumulative 24-hour average PM10 concentrations predicted at surrounding residential and industrial receptors. Based on the revised emission inventory, cumulative 24-hour average PM10 concentrations at each receptor were calculated using the predicted increment from the Project and background 24-hour average PM10 concentrations outlined in the AQIA (SLR 2016). As provided in the AQIA Response to Submissions (**Appendix C**) ,the maximum predicted 24-hour average PM10 concentrations at all receptors included in the model (including the industrial sites) comply with the assessment criterion of 50 µg/m
		General	The EPA requires that the Proponent provide the Construction Waste Management Plan (CWMP) prior to the EPA being able to issue conditions of approval for the proposal.	A comprehensive Construction Waste Management Plan (CWMP) has been prepared and is provided at **Appendix E**. The CWMP documents the predicted waste streams and volume of each material type. The Plan does not nominate the proposed resource recovery or disposal facility as this will depend on gate fees and market value of materials at the time of demolition and

No.	Submission	Issue Raised	Comment	Response
			The EPA notes that asbestos will be removed from the site as part of the demolition works and the EPA will require the Proponent to provide it with all disposal records (including but not limited to tip dockets) to demonstrate lawful disposal of the asbestos waste.	removal from site. All requirements for lawful transport and disposal of materials will be met including waste classification reports and waste tracking where required. All waste materials resulting from the existing resource recovery operations will be removed from site prior to site closure and commencement of works in accordance with procedures and facility arrangements relevant at the time.
3	Georges River Council	Traffic impact	Swept path diagrams for the full range of required movements must be provided to demonstrate that all heavy vehicles (with vehicle lengths of up to 19m stated) can enter and exit the site in a forward direction.	A swept path analysis has been prepared and is provided as part of the TIA at **Appendix A**. The analysis demonstrates that all heavy vehicles can enter and exit the site in a forward direction. The site layout has been revised to provide a wider site entry to 16.2m. Swept path analysis undertaken by TTPP indicates that inbound and outbound movements undertaken by MRVs can occur concurrently while two-way movements by an MRV with a semi-trailer or truck-and-dog can also occur concurrently. Two-way movements by larger trucks cannot occur simultaneously. However, it is highly unlikely that two larger-sized vehicles would be undertaking these manoeuvrers at the same time. The likelihood of this scenario occurring is further reduced through the operators scheduling capabilities, which would prevent two larger vehicles accessing the site simultaneously. In the rare occurrence of two large vehicles needing to use the access way at the same time, the vehicle on approach to the site would be required to give way to the existing vehicle which has priority.. Given the low-speed road environment on Hearne Street driver visibility to large trucks exiting the site would be sufficient for oncoming vehicles to allow a 30m gap ahead.
			Limited queueing is provided for on site. How then, does the proposal aim to prevent extensive heavy vehicle queueing on the street, especially during the midday peak identified? The operation of the proposal with the heavy vehicle movements suggested will result in excessive queueing on Hearne Street and will therefore result in a negative impact on traffic flow in Hearne Street. Need a Plan of Management detailing how the queuing impacts are going to be resolved	A heavy vehicle stacking plan has been prepared, which will accommodate up to 67 vehicles within 28 spaces over the peak period. The facility is predicted to see up to 56 vehicles arrive at the site during the peak period. Implementation of the stacking plan along with site access protocols will prevent extensive heavy vehicle queuing within the Hearne Street Road Reserve. The heavy vehicle stacking plan can be found at **Appendix A** along with the site access protocols.
		Noise impact	Should the application be approved, the movement of trucks between 7pm and 7am should be restricted to using Boundary Road as the only means of access to and from the site. This will reduce the noise impacts on the adjoining residential area.	The Statement of Commitments has been revised limit the movement of trucks between to Hearne Street and Boundary Road. Heavy Vehicles will not be permitted to use Barry Avenue.
			Appropriate conditions should be imposed in relation to operational noise generated from the site, to ensure nearby residential areas are not affected.	The statement of commitments includes measures which will reduce the likelihood of exceedances to the relevant noise criteria. IT is expected that the project approval will embody the findings of the statement of commitments.
		Dust Impact	It is noted that the Air Quality Impact Assessment provided modelling using "relevant NPI or USEPA AP42 emissions factors/equations" on a worst-case scenario for dust emissions. A dust management plan should be lodged prior to any approval to ensure that the worst possible case scenario sited in the Air Quality Impact Assessment is	SLR's Air Quality consultants have confirmed (**Appendix C**) that no exceedances to emission thresholds are predicted for the facility to operate. The proponent has prepared a draft Dust Management Plan integrated within the OEMP submitted with the EIS

No.	Submission	Issue Raised	Comment	Response
			mitigated for the life of the development.	
		Hours of Operation	The impact on residential neighbours in nearby streets (especially Barry Avenue and Boundary Road) between the hours of 7pm and 7am is an issue particularly in relation to noise and traffic related noise after standard hours of business operation.	The proposals seeks to operate: Monday to Friday: 24 hours per day with processing activities 6:00am to 10:00pm Saturday: 24 hours per day with processing activities 6:00am to 10:00pm Sunday and Public Holidays: No processing operations The operator is also prepared to include measures to prevent heavy vehicles from using Barry Avenue. Impacts to closest residential and other sensitive receptors have been assessed in terms of both noise and traffic impacts. The results have been provided in the reports submitted with the EIS and with this response to submissions. Submissions in relation to this issue have been further considered by the consultants and addressed in the Appendices to this RTS report. Both the original and subsequent assessments confirm that noise and traffic arising from the proposed hours of operation are unlikely to impact the closest sensitive receptors (in Barry Avenue) including residents and are therefore also unlikely to affect those further away in Boundary Road. Both noise and traffic management are addressed in the OEMP and the ISO14001 certified management system procedures and other documents.
		Stormwater	A Water Cycle Management Plan must be provided prior to any approval of the proposal. The specifications and limitations of the wastewater control measures must be assessed prior to any approval of the proposal. The control measures proposed (e.g. Rocla First Defence Unit, Ecosol Litter Basket, proprietary litter baskets and Leachate Collection Sumps) must be conditioned to be maintained for the life of the use and to be certified as functioning in accordance with the manufacturers specifications and EPA requirements at 12 monthly intervals by a suitable qualified expert.	Water management has been addressed in the draft OEMP which is supported by the ISO14001 Environmental Management System documents most of which are outlined in the OEMP. Water and waste water management responses have also been provided in Section 5.5.5 and 5.5.6 of this report. It is not proposed to create a separate water cycle management document. Final measures for water and waste water management and mitigation will be considered in the OEMP and documented in the SEQ Management System following approval and will incorporate the requirements resulting from conditions of consent, EPA requirements and recommendations of the final assessment reports to ensure water based emissions are appropriately mitigated. Performance standards of equipment are stated by manufacturer and conditional on management and maintenance. The system shall be managed and maintained in accordance with the manufacturers recommendations. The OEMP will be updated to note the management and mitigation measures and the SEQ Management Systems procedures etc. required to monitor and maintain these controls will be reviewed and updated accordingly.to incorporate consent and EPL conditions.
		Permissibility	A 45% variation to the Hurstville LEP would result in an undesirable precedent that would reduce the strength of this statutory control. The proposal should provide for a redesign demonstrating compliance with the 10m height requirement.	The EIS is supported by a well justified Clause 4.6 'Exception to the Development Standard' which supports the proposed variation to the 10m height limitation prescribed in the HELP 2010. This report outlines that support for the proposed variation would not set an undesirable precedent.
4	NSW Fire & Rescue	Storage of dangerous goods	Proposed storage of dangerous goods plans and EIS are inconsistent and should be in accordance with Australian Standard AS 1940-2004.	Section 5.7 and the Fire Safety Study (**Appendix D**) provides a comprehensive overview of the proposed quantities and storage locations of dangerous goods.
		Fire hydrant	Commitment to installation of a fire hydrant system at the site. Approval should require that the development comply with Clause E1.10 of the National Construction Code.	A fire hydrant will be provided in accordance with the relevant provisions of the National Construction Code and relevant Australian Standards.
		Fire water	Site's surface and stormwater management systems be	The proposed stormwater concept plans submitted with the EIS include a Rocla water level controller with raised turret for use

No.	Submission	Issue Raised	Comment	Response
			designed to provide FRNSW with an ability to contain contaminated fire water runoff.	when blocking fire water run-off.
		Fire safety	Consent should require a Fire Safety Study be prepared in accordance with the recommendations detailed in Hazardous Industry Planning Advisory Paper No.2.	A comprehensive Fire Safety Study prepared in accordance with HIPA Paper No. 2 is attached at **Appendix D**.
5	NSW Roads and Maritime Services		No objection	Roads and Maritime Services did not object to the proposal which indicates that the proposal will not compromise the safety or efficiency of the road network controlled by RMS, which in this instance includes the intersection between Hearne Street and Boundary Road.
6	NSW Department of Primary Industries		No objection	
7	Office of Environment and Heritage		No objection	
8	NSW Rural Fire Service		No objection	

Public Submissions Summary	Number of Submissions	Response
Permissibility	5	The industrial precinct is zoned IN2 Light Industrial and caters for a wide range of land uses. The current waste management facility is permissible with development consent under the current land use zone for the site and is thought to be consistent with the zone objectives.
Suitability of Proposal	15	
24 hour operation - Need	9	It has been demonstrated in the EIS and this RTS Report that the proposal is within the public's interest. There is a large demand for waste and recycling services as a result of the construction and infrastructure boom. The NSW Government has identified the need for additional waste infrastructure and is investing a further $48 million from 2017 to 2021 in increased resource recovery and the upgrade of infrastructure through the Waste and Recycling Infrastructure Fund. Whilst the cost of the project is being met fully by the applicant this development supports the essential infrastructure requirements and state government priorities. It assists in addressing increasing waste generation rates arising from infrastructure projects and redevelopment in the local area and further provides solutions to: • Increase recovery of recyclables from sorted and unsorted waste from business and households; • reuse, recycle and reprocess recyclable materials such as plastics, timber, paper, and cardboard for example process residual business and household waste. The facility increases the ability of the local area and region to effectively manage the waste generated within the region and provide resource recovery services that prevent valuable resources from being disposed of at landfill.
Road Network Capacity	17	The GTA Consultants Traffic Report prepared to support the EIS identified that: • The existing road network surrounding the development is not at capacity. The impact of the proposed development is that the surrounding road network will remain well under capacity; • The surrounding road network operates at traffic volumes well within its operational capacity threshold in accordance with the RMS Traffic Generating Guidelines; • The peak activity period for the site will be between 11:30am to 12:30pm which is outside the existing surrounding road; and • The site is predicted to generate up to 430 two way movements per day, which will result in an estimated net increase of 226 vehicles per day. Importantly the GTA Consultants Traffic Report also notes that: • There is adequate capacity in the surrounding road network to cater for the traffic generated by the proposed development; • No upgrades to existing road infrastructure are required; • Additional traffic generated by the proposed development is negligible and could not be expected to compromise the safety and function of the surrounding road network; and • Traffic generated by the development would not result in a significant change to the existing intersection level of service.
Road Traffic Noise	16	The updated NVA (Appendix B) has been revised to include a detailed assessment against the NSW EPA Road Noise Policy (RNP). As part of reviewing the off-site heavy vehicle movements in response to submissions, the traffic study was updated to include traffic counts on Boundary Road. The revised NVA also recommends that heavy vehicles no longer accessing the site via Barry Avenue. Accordingly, heavy vehicles accessing the site would travel via Boundary Road and Hearne Street. Heavy vehicles would be restricted from travelling along Barry Avenue. The NVA notes relevant criteria for residents on Boundary Road are the LAeq(15hour) and LAeq(9hour) criteria.

		As outlined in the NVA, the predicted increase in heavy vehicle when compared with total traffic flows on Boundary Road would result in less than a 2 dBA increase in the existing traffic noise levels. Specifically, the traffic noise levels would increase by 1.5 dBA and 1.3 dBA during the daytime and night-time periods, respectively. As discussed in Section 4.2 of the revised NVA, a noise increase of up to 2 dB represents a minor impact that is considered barely perceptible to the average person. Where existing residences and other sensitive land uses are potentially affected by additional traffic on existing roads due to land use developments, any increase in the total traffic noise level should be limited to 2 dB above the corresponding 'no build option'. As such, no project related traffic noise impacts are anticipated at residential receivers adjacent to the surrounding road network, including Boundary Road and Barry Avenue.
Road Safety - General	12	The occupier of the site currently undertakes site inductions for all visitors (drivers) to the premises in accordance with work health and safety and environmental obligations. This procedure ensures that all drivers are informed of rules that apply on the site and in relation to their travel to and from the site. Transport NSW key focus areas in the *NSW Road Safety Strategy 2012 - 2021* such as vehicle design, driver behaviours and compliance which have also been a focus of the business operator and will continue to be. Some of the vehicle and driver initiatives of the operator include: • Use of route planning software applications to assist the driver in safer routes, fatigue management, emergency response and immediate and constant support from a team of driver experts located on radio at head office; • Over two thirds of the business operator's fleet are less than two years old and therefore incorporate the most modern and advanced technology available for vehicle safety including GPS tracking, speed tracking, radio communications, training and development software, job planning and records management; • Communications and Scheduling systems that provide advanced communications with a team of allocation staff that are experienced heavy vehicle drivers available and able to provide valuable expertise for most situations; • Routine and random drug and alcohol testing by business operator's Compliance Team; • Driver and vehicle compliance programs and procedures that monitor speeding, fatigue, drugs and alcohol impairment, vehicle roadworthiness and routine inspection and maintenance; • Certified National Heavy Vehicle Accreditation Scheme (NHVAS) for maintenance of all heavy vehicles in the parent company fleet; • Continued work to certify vehicle load restraint systems engineered specifically for skip bins; • In-house experienced mechanics and workshop to respond immediately to vehicle maintenance and servicing requirements and with a mobile support unit; • Random vehicle and driver inspections conducted by the Compliance Team (with a minimum number of 20 inspections per month); • Minimum monthly compliance led toolbox meetings for all drivers; • Employment of Driver Managers with the specific role of overseeing driver support and compliance; • Employment of driver supervisors whose role is to double up with each driver in the team for the purposes of ongoing training and continuous improvement; and • All heavy vehicle drivers employed undergo Certificate III training for driver operations.
Road Safety – Increase in Truck Sizes	4	The proposal does not seek to increase the size of vehicles which access the site. B-Doubles will not be permitted to access the site unless they have an appropriate permit issued by the RMS. The proposal will see an increase in heavy vehicle numbers, however it has been clearly demonstrated that the road network has sufficient capacity to accommodate the proposal.
Road Safety – Driver Management and Enforcement	3	The site's traffic Management Plan, site signage and a site induction process informs drivers of their individual and site responsibilities.

		The business operators driver induction and driver training process is industry best practice. These drivers are subject to random drug and alcohol testing, have a bonus system in place that is reliant on the driver receiving no infringements, no complaints and no accidents. Third party vehicles are reminded of their responsibilities through site induction and clear signage and as part of the sites 'Chain of Responsibilities' obligations for heavy vehicles. The business operator has an obligation to notify drivers of any non-compliances that arises with capacity to prohibit repeat offenders from using the facility. All trucks managed by the operator have GPS tracking and speed monitoring which is directly compared to the speed limit of the road being travelled. All trucks are monitored by Allocations staff from 6am until finish. Allocation staff can at any time reference the location and speed of a driver. The internal Compliance team receives reports of non-compliances and actions any breaches with a warning. Certain breaches are based on a 3-warning system prior to dismissal, any breach within a drivers 6-month probationary period may result in instant dismissal. Drivers are supported by an ongoing driver training program which includes all drivers undergoing a Certificate III Driving Operations within the first 6 months of their employment full time driver supervisors / trainers who accompany drivers in their vehicles and complete competency assessments and retraining as required.
Road Traffic Conflict – Sensitive Uses	10	The traffic report is clear that the peak traffic times are not during peak school times nor in the mornings or afternoons. Hence, there will be no impacts to these uses. Also, many of these uses are located a substantial distance from the site and will not be directly impacted by the proposal with respect to road safety. Penshurst West School is 750m away from the site and is accessed off Forest Road. As it is also on the opposite side of Boundary Road the students are unlikely to have a reason to cross Boundary Road in the vicinity of Hearne Street Chantel Learning Child Care Centre is approximately 650m away and has access from both Forest Road and Boundary Road. It is unlikely that children using this facility are of an age to be accessing the childcare centre unaccompanied by an adult. According to Council's records, 2008/DA-0427 to use the existing factory as childcare centre for seventy- five (75) children was refused by the Council"s Development Assessment committee on 4/03/2009. Funhouse Adventure Play and Party Centre at 35 Barry Avenue is 500m away from the site and vehicles accessing the facility will not pass by this Centre. New Era Early Education Centre at 36 Anderson is approximately 300m away from the site and has development consent to operate as a child care centre since 25/01/2006. Anderson Road can be accessed from Barry Avenue and Boundary Road. Users of this facility have little need to use Hearne Street to access the site and vehicles accessing Hearne Street will not be using Anderson Road. Rogerson's Dance Studio is 180m away from site and is situated at 31A Barry Avenue and will not be affected by heavy vehicle movements associated with the proposal.
Noise Impact – Accuracy of NVA	3	The NVA (as amended) addresses all relevant guidelines including but not limited to: - • EPA Industrial Noise Policy • EPA Road Noise Policy Any matters relating to the application of these policies raised by the EPA have been addressed in this RTS report and in **Appendix B**
Traffic Impact on Local Business	6	Vehicles parked lawfully on the street should not be impacted by the development.

		The detailed design swept path analysis provided by TTPP clearly indicate that vehicles are able to travel in Hearne Street with only a minor risk for physical impact to vehicles parked on Hearne Street. The applicant supports the requirement for business operators to undertake all business activities within the confines of their premises and has incorporated sufficient off street car parking and a heavy vehicle stacking plan to mitigate impacts on the operation and function of the local road network.
Capacity of the site and access limitations	3	The EIS has proven that the site is capable of accommodating the proposed operations including vehicle manoeuvring, stockpiles and processing areas necessary to handle up to 300,000 tonnes per annum. The site entry is proposed to be widened to 16.2m. This is reflected in the swept path analysis for the site access driveway which confirms there are no conflicts with vehicle movements. A swept path assessment was prepared for the most common vehicles using the facility and is attached at Appendix A of this report: • MRVs (up to 8.8m); • 19m semi-trailer; and • 19.6m truck-and-dog combination.
Undesirable Precedent	2	The proposal does not require a rezoning or amendment to the LEP to allow for the proposed resource recovery facility. The zoning does not change with approval of the proposed development as the development is permissible with development consent. Should another operator wish to establish in the locality, it would be necessary for any such proposal to be assessed on its merits in the same way as the proposed facility.
Impact on amenity – Operational Noise	9	While the proposed operations will not exceed the project specific noise criteria set down in the NVA, the proponent is keen to implement the mitigation measures as identified in the noise and vibration report as well as several other methods implemented under the current operation. The following noise and vibration amenity protection measures are proposed for the Mortdale facility: • Where practicable, access to the site at any time must be via Boundary Road / Hearne Street; • site speed limit of 5 km/hour; • the proposed shed layout is such that the location of openings will not direct noise generated from plant towards sensitive receivers. • 175mm concrete reinforced tilt panel construction of wall on east, south and western facades. • all on-site, fixed and mobile diesel powered plant, excluding road vehicles are to be correctly fitted and maintained according to the manufacturers' standards or the minimum standards or specifications with respect to engine exhaust or muffler, and reversing beepers; • where plant has been, or is proposed to be modified, the modifications are to conform to the manufacturers' standards or specifications; • site activities are to not occur close to site boundaries where possible; • construction works are to be restricted to 7:00 am to 6:00 pm Monday to Friday and 8:00 am to 1:00 pm Saturdays; and • speed humps are to be removed and replaced with posted speed limit signs. The updated NVA (**Appendix B**) demonstrates that the site will be able to operate at a rate of 300,000 tonnes per annum in an acoustically compliant manner without causing a discernible loss of amenity. As such, the concerns of the community, Council and EPA have been adequately addressed.
Impact on amenity – Air Quality	14	SLR's air quality consultants have prepared a response to the EPA's comments with regards to air quality at Appendix D of this report. Specifically, clarification was sought on emission estimates and parameters used to estimate emissions. The modelling assessment was revised to include proposed emission controls to be adopted at the premises, and it was deduced that: • most of the processing operation will occur within the shed which will achieve 90% emission reduction for dust emissions from this activity; and • on-site vehicle speed will be a maximum of 5km/hr which will achieve an additional 40% reduction in on-site wheel generated dust emissions. Based on the revised emission inventory, cumulative 24-hour average PM10 concentrations at each receptor were calculated using the predicted increment from

		the project and background 24-hour average PM10 concentrations outlined in the AQIA (SLR 2016). The EIS Report and the Air Quality Addendum prepared by SLR at **Appendix C** have confirmed that there will be no emission exceedances as a result of emission control measures implemented for the site in the form of: • good housekeeping of the facility; • regular sweeping of the yard; • maintain and enforce a vehicle speed limit of 5 km/hour on the premises; • fixed water sprays (fogging system) installed around the perimeter of the shed and sprinklers installed around the site perimeter; • hand held hoses to dampen areas not covered by sprays and dusty loads; • regular use of a water sprays during dry and/or windy conditions; • ensuring that outward loads are covered and vehicle tailgates are securely fixed; • when a mobilised dust plume is observed water sprays to be activated and level of operations assessed; • stop operations when wind speed is excessive; • use of wind anemometer to gauge and monitor wind speed and direction; and • machine operators are in constant radio contact with traffic controllers and the site supervisor to activate external sprays and internal fogging systems.
Health Impacts	6	Air quality, noise and traffic have been assessed in relation to the development. Further assessment of these concerns have been undertaken by expert consultants subsequent to submissions being received. Both previous and revised assessments in relation to pollution emissions including noise and traffic, report that appropriate and sufficient controls are in place to prevent increases in environmental impacts. The new facility will have minimal impacts on local residents and will reduce environment impacts as a result of: • a second weighbridge for quicker processing of trucks to improve vehicles movements through the site. • wider driveway for smoother vehicle entry/exit to improve truck movements; • processing to be undertaken within a new enclosed shed with a fogging system within the shed and sprinkler system outdoors for dust control; • vehicle speed will be limited to 5km/h; and • modern processing machinery within the shed to reduce noise impacts.
Health Impacts – Rodents	2	The site does not accept putrescible wastes likely to attract rodents. The Draft OEMP includes protocols to identify and manage putrescible wastes should they be found mixed with other wastes delivered to site.
Non Compliance with Hurstville DCP No. 1	4	A review of the Department of Planning's Fact Sheet (February 2012) What is State significant development and how are applications assessed and determined was undertaken in consideration of DCPs and the following noted: *Development control plans do not apply to SSD. This is because development control plans are generally concerned with local or specific issues and do not provide appropriate planning controls for large, complex developments of importance to the State or region.*
Environmental Impacts – External Bin Storage	1	The external bin storage area shown on the plans is for empty bins used by customers to the site. This is as per current practice. These bins belong to customers and are kept on site for the purposes of drivers being able to change over to another bin as one bin is tipped whereby the next customer may require a different size bin. These bins are not associated with waste management on site. Bins that may require additional assessment of contents prior to tipping may need to be set aside to be assessed. Full bins are "stored" outside when scheduled for collection in which case they are covered for transport. There are no bins along the western area of the shed. Concrete walled bays several metres in height are located along this elevation. The awning has been designed to take into account requirements to address potential emissions arising from equipment used on site, as has the design of the shed and the emission

		controls. The sources of emissions and the emission controls have been assessed by the technical consultants and the results are incorporated into their reports appended to the EIS. Further reviews of their assessment have been conducted in consideration of submissions and the results of these reviews have been incorporated into this report The shed is fully enclosed on three sides and approximately one third of the fourth elevation. Emission controls have been assessed in accordance with relevant guidelines and have been reported to meet the necessary thresholds. The equipment has been designed and purposely selected to minimise noise emissions. Potential sources of noise have been assessed and modelled on similar equipment in use at other facilities in Sydney and are reported to meet all relevant criteria The proposal assesses potential for adverse impacts and the EIS, technical assessments and further reviews provide a detailed examination whereby no adverse impacts have been identified.

7. Conclusion

This Response to Submissions Report has addressed all matters raised as a result of the public exhibition process, including those matters raised by the Department of Planning and Environment, government agencies and the public.

This report and its associated supporting studies affirm the findings and conclusions made within the Mortdale EIS. It also confirms that all environmental impacts have been accounted for and do not pose risk to the environment or community. As such, it is requested that the Minister for Planning or his delegate approve the proposed development at Mortdale.

8. Appendices

Appendix A

Traffic Assessment Report

Appendix B

Noise and Vibration Assessment Report

Appendix C

Air Quality Assessment

Appendix D

Fire Safety Study

Appendix E

Construction Waste Management Plan

Appendix F

Statement of Commitments

Appendix G

Revised Architectural Plans