PROPOSED REMONDIS INTEGRATED RECYCLING PARK
GRAND AVENUE CAMELLIA
REMONDIS
ENVIRONMENTAL ASSESSMENT

SUBMISSIONS REPORT, PREFERRED PROJECT REPORT AND REVISED STATEMENT OF COMMITMENTS

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NECS
NATIONAL ENVIRONMENTAL CONSULTING SERVICES

PROPOSED REMONDIS INTEGRATED RECYCLING PARK
GRAND AVENUE CAMELLIA
REMONDIS

Environmental Assessment – Submissions Report, Preferred Project Report and Revised Statement of Commitments

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Environmental Assessment

Submissions Report, Preferred Project Report and Revised Statement of Commitments

Draft Table of Contents
REMONDIS RIRP

APPENDICES

FIGURES

TABLES

ABBREVIATIONS

AAAC	Association of Australian Acoustical Consultants
ADFA	Asbestos Diseases Foundation of Australia
AQIA	Air Quality Impact Assessment
AWT	Alternative Waste Treatment
CES	Consulting Earth Scientists
CIRRF	Commercial and Industrial Resource Recovery Facility
C&I	Commercial and Industrial
CLM Act	*Contaminated Land Management Act*
CMP	Contamination Management Plan
$CO2_{-e}$	Carbon Dioxide - Equivalent
DA	Development Application
DECC	Department of Environment and Climate Change
DECCW	Department of Environment, Climate Change and Water
DoP	Department of Planning
DoPI	Department of Planning and Infrastructure
EA	Environmental Assessment
EC	Electrical Conductivity
ECRTN	Environmental Criteria for Road Traffic Noise
ELR	Environmental Lapse Rates
EMP	Environmental Management Plan
EMS	Environmental Management System
EPA	Environment Protection Authority
EP&A Act	*Environmental Planning & Assessment Act*
EP&A Regulation	Environmental Planning & Assessment Regulation
EPBC Act	*Environment Protection and Biodiversity Conservation Act*
EPL	Environment Protection Licence
EPRG	Environmental Protection and Regulatory Group

EPZ	Environment Protection Zone
ESD	Ecologically Sustainable Development
FM Act	*Fisheries Management Act*
GLC	Ground Level Concentration
GPR	Ground Penetrating Radar
GSW	General Solid Waste
Ha	Hectare
HRV	Heavy Rigid Vehicle
ICNG	Interim Construction Noise Guideline
INP	Industrial Noise Policy
JH	James Hardie
LEP	Local Environmental Plan
LGA	Local Government Area
LOR	Level of Reporting
LOS	Level of Service
LTADM	Longterm Average Daily Mass
m	Metres
MDM	Maximum Daily Mass
MDPE	Medium Density Polyethylene
MRF	Material Recycling Facilities
MRV	Medium Rigid Vehicle
MSW	Municipal Solid Waste
NGA	National Greenhouse Accounts
NGER	National Greenhouse and Energy Reporting
NIR	Near Infra Red
NML	Noise Management Levels
NSW EPA	NSW Environment Protection Authority
OEH	Office of Environment and Heritage
OGM	Organic Growing Medium

OHS	Occupational Health and Safety
ORRF	Organic Resource Recovery Facility
OU	Odour Unit
PEA	Preliminary Environmental Assessment
POEO Act	*Protection of the Environment Operations Act*
PRP	Pollution Reduction Programme
RBL	Rating Background Level
RIRP	REMONDIS Integrated Recycling Park
RL	Relative Level
RMS	Roads and Maritime Services
RTA	Roads and Traffic Authority
SEPP	State Environmental Planning Policy
SME	Subject Matter Experts
SMP	Site Management Plan
SMS	Safety Management System
SOP	Standard Operating Procedure
SREP	Sydney Regional Environmental Plan
SSOM	Source Separated Organic Material
SSORRF	Source Separated Organic Resource Recovery Facility
SWC	Sydney Water Corporation
SWL	Sound Power Level
SWP	Site Work Plan
TNMNS	Traffic Noise Management Strategy
tpa	Tonnes per Annum
TR	Technical Report
TSC Act	*Threatened Species Conservation Act*
UNFCC	United Nations Framework on Climate Change
UST	Underground Storage Tank

UWS	University of Western Sydney
VPD	Vehicles Per Day
VRA	Voluntary Remediation Agreement
WARR Act	*Waste Avoidance and Resource Recovery Act*
WARRS	Waste and Resource Recovery Strategy
WMA	*Water Management Act*
WRAPP	Waste Reduction and Purchasing Plan
WWC	Woodward Clyde
ZVI	Zone of Visual Impact

1. INTRODUCTION AND BACKGROUND

1.1 BACKGROUND

REMONDIS Pty Ltd (REMONDIS) and Billbergia Pty Ltd (Billbergia) are jointly seeking approval for the construction and operation of an integrated Alternative Waste Treatment (AWT) facility to be known as the REMONDIS Integrated Recycling Park (RIRP) on a site at 1 Grand Avenue, Camellia (refer Figures 1 and 2).

The proposed development is a project to which the former Part 3A of the *Environmental Planning and Assessment Act (EP&A Act) 1979* applied. A Major Project Application accompanied by a Preliminary Environmental Assessment, was lodged with the Department of Planning (now Department of Planning and Infrastructure – DoPI) in December 2009. The Department issued Director-General's Requirements on 28 April 2010 (reissued 5 August 2010) for the Environmental Assessment (EA) for the proposed development. The EA was prepared in accordance with the Director General's Requirements.

REMONDIS proposes to construct and operate the facility which comprises the RIRP. The RIRP will be located on land leased to REMONDIS by Billbergia the land owner. Billbergia proposes to provide the necessary utility services to the facility.

1.2 THE PROPOSAL

1.2.1 The Site

The proposed RIRP site is part of a larger area of land which prior to 1996 was occupied by James Hardie (JH) for the manufacture of fibrous cement and related products and chemical manufacturing. The JH Site consisted mainly of warehouse buildings which have been demolished down to slab level. The site was acquired by Sydney Water in 1996.

Large quantities of fill have been used to level various parts of the JH Site. Asbestos cement waste and friable asbestos are within this fill. On this basis all of the fill material on the JH Site was assumed to be contaminated with asbestos. In 2000, the NSW Environment Protection Authority (NSW EPA) declared that the JH Site represented a significant risk of harm. A Voluntary Remediation Agreement (VRA) (Agreement No 26012) was entered into between Sydney Water and the NSW EPA under Section 26 of the *Contaminated Land Management (CLM) Act 1997*. During 2001 and 2002, Sydney Water undertook works for the VRA for the JH Site. The buried asbestos waste was well covered with hardstand providing an effective barrier to human contact and no further remedial work was considered necessary under the VRA.

After inspecting the JH Site, the NSW EPA determined (14 May 2003) that the VRA had been satisfactorily completed and that the NSW EPA considered that contamination no longer presented a significant risk of harm to human health or the environment. In accordance with a Section 26 (5) of the *CLM Act* the NSW EPA determined that the terms of the VRA had been carried out.

The NSW EPA registered a public positive covenant on the titles of the JH Site under Section 29 of the *CLM Act* and Section 88E of the *Conveyancing Act 1919*. The terms of the covenant require the site owner(s) to maintain remediation of the properties in line with the terms of the Site Management Plan (SMP).The SMP requires that approval be obtained from the NSW EPA for any form of excavation other than that for the sole purpose of maintenance or repair of underground services.

The site was acquired by Billbergia in 2007. Since that time the site has been used for temporary storage of containers and materials.

Figure 1 **Site Location**

Legend

Existing Features

- Railway Tracks
- Passenger Ferry Route - Parramatta to Circular Quay
- Existing Site Boundary
- Existing and Proposed Shared Site Accessway
- Tilrox/Aldi building

Proposed Features

- Proposed Buildings
- Proposed Circulation Road
- Proposed Hard Surface Areas
- Proposed Landscape Areas
- Non-Leased Area
- E.P.Z. Environmental Protection Zone

1. Admin/Office Building
2. Car Parking
3. SSORRF Biofilter
4. CIRRF Biofilter
5. Storage and Handling
6. Organic Waste Composting
7. CIRRF Waste Stabilisation
8. SSORRF Treatment and Sorting
9. CIRRF Treatment and Sorting
10. Weighbridge and Gate House

○ Rainwater Storage Tank

Figure 2 Layout of Proposed Development

1.2.2 The Proposed RIRP

The proposed RIRP will process Commercial and Industrial (C&I) waste and Source Separated Organic Materials (SSOM) kerbside collected in the Metropolitan Sydney area with the objective of maximising resource recovery and minimising landfill disposal.

The facility will comprise:

- Commercial & Industrial Resource Recovery Facility (CIRRF) with a capacity to process up to 100,000 tonnes per annum (tpa) of C&I waste; and

- Source Separated Organic Resource Recovery Facility (SSORRF) facility with a capacity to process 50,000 tpa of food and green waste.

The RIRP will include ancillary facilities including a weighbridge, administrative offices, car parking and workshops. It will operate 24 hours per day, seven days per week. There would be three shifts per day with 40 staff working on the morning shift (6am to 2pm), 20 staff working on the 2nd shift (2pm to 10pm) and 5 staff working on the night shift (10pm to 6am). The waste streams will be sourced from within the Greater Sydney Metropolitan Area and delivered by collection contractors.

All vehicles will enter the site through the existing gates on Grand Avenue North before proceeding along the site access road to the weighbridge. A gatehouse is located at the weighbridge which will be staffed at all times. Having passed through the weighbridge vehicles will then proceed in a clockwise direction along the site ring road. The site administration office and car parking are located adjacent to the site entrance. Additional car parking is provided adjacent to the northern boundary of the site. Trucks will proceed to either the CIRRF or the SSORRF depending on the load being delivered or collected. The CIRRF is located on the eastern side of the site while the SSORRF is located on the western side of the site closer to the site entrance and adjacent to the site offices.

The main building complex includes the waste delivery and pre-treatment facilities for the CIRRF and SSORRF plants, all equipment, compost tunnels and associated hallway and product storage and handling areas. The building complex is fully enclosed and equipped with an integrated air and water management system. A Process Water Tank (closed) is provided for each facility as part of the leachate management system and a biofilter is provided for each facility as part of the air management system. Rain water tanks are located adjacent to the north eastern side of the SSORRF.

The facilities have been designed so that entry to the buildings for waste delivery is on the southern side of the site. The composting tunnels and bioflilters are located on the northern side of the site. Vehicle entry to both plants is via rapid shutting roller doors. All trucks will reverse into the facility allowing departure in a forward direction.

The site boundaries on the southern, eastern and western sides will be enclosed by a fence. The northern boundary of the site along the Parramatta River is bounded by a concrete wall and chain mesh fence.

On the boundary of the site adjacent to the Parramatta River there is a 30m wide Environment Protection Zone. This area will not be impacted by the development (refer Figure 2). Landscaping will be undertaken within the 30m wide Environmental Protection Zone (EPZ) to provide filtered screening from the Parramatta River and also to enhance the aesthetic value of the site. Provision has been made for pedestrian and cycle access within the EPZ in accordance with Parramatta City Council's longterm vision for provision of public access along a corridor adjoining the Parramatta River.

1.2.3 Management

REMONDIS will implement an Environmental Management System specific to the Camellia site. The company has recently achieved certification under AS/NZS ISO 14001:2004 standard for the Port Macquarie Organic Resource Recovery Facility. The system ensures the organisation's structure, responsibilities, practices, procedures, processes and resources for environmental management are clearly defined and monitored so as to ensure compliance with legislative requirements, the International Standard and with the organisation's policies, objectives and targets.

The EMS at Camellia would comprise Standard Operational Procedures (SOP's) including Emergency Response Procedures specifically developed to ensure the safe operation of the RIRP and its equipment. Compliance with Conditions of Approval and the EPL would be supported and embedded into the overall REMONDIS Environmental Management System.

The Site Manager will be responsible for implementation of the system.

1.2.4 Construction

Design of the facility requires the construction of a platform on which the facility will be located. The purpose of the platform is to minimise disturbance of the existing site cap.

Construction of the proposed RIRP will include:

- Provision of site services including stormwater;
- Construction of a platform on which the facility will be located; and
- Construction of the facility.

Construction hours will be restricted to 7am to 6pm Monday to Friday, 8am to 1pm Saturdays with no construction work on Sundays or public holidays.

A geotechnical review of the site has been undertaken by CES (refer Appendix E of EA). The review identified the potential for differential settlement within the fill material below the existing site cap with the possibility that voids may have formed as a result of this settlement. The potential for the cap to subside into the voids once the platform is constructed was also identified. As a result of the findings of the geotechnical review a geophysical survey of the site has been undertaken using Ground Penetrating Radar to identify and locate any existing voids and areas within the site that are susceptible to ground subsidence. Due to the presence of storage containers and other material associated with the current use of the site it was not possible to survey the entire area. Following approval and removal of the storage containers and other material the survey will be extended to cover the remainder of the site. The results of the survey have identified areas with voids (refer Section 7.1 and Appendix E of the EA).

It is proposed to treat identified voids using a localised grouting technique which would be undertaken by a specialist grouting contractor. Grouts used for such an application are typically cement based or polysynthetic grouts. Grouting would involve drilling a small diameter hole(s) (typically <50mm) into the void and injecting liquid grout. Drilling of grout holes is normally carried out using two methods pneumatic percussion and/or core type. Each method is a wet drill process which dampens the drilled material and eliminates dust generation. It is expected that 1.5m^3 to 2m^3 of material would be generated from an estimated 200 to 300 drill holes over the area of the development footprint. This material will be classified using the NSW EPA Waste Classification Guidelines and transported off-site for disposal. The grout is pumped into the void until the void is filled and the grout allowed to harden. Grouting is injected into the subgrade until there is evidence of saturation which either causes a discharge at the surface or through adjoining grid grout holes.

Based on the extent and number of identified voids an estimated capacity of grout is calculated by the Grouting Contractor. It will take approximately 8 to 10 weeks to complete the work associated with grouting. A curing time of 7 to 14 days is required prior to commencement of any construction activities.

The use of targeted grouting allows contaminated fill to remain insitu and minimise disturbance to the site capping. A Site Work Plan and Safe Work Method Statement would be developed in accordance with the requirements of the SMP. The NSW EPA approved Safe Work Method Statement would address health and safety issues, environmental management and construction quality. As a precautionary measure these works will be undertaken within a contained tent structure. A Subsidence Monitoring Program would also be implemented to regularly monitor movements of the earth platform and structures constructed at the site.

1.2.5 Preferred Project

Billbergia the land owner proposes to provide the necessary utility services to the proposed RIRP. Services to be provided include potable water, sewerage, electricity, telephone services and connection to the existing stormwater system. The provision of these services as described in the EA required installation of service trenches. Site works included excavation, removal of excavated material, installation of drainage and service components, filling of the trenches and the replacement of site capping.

The Proponents have amended the project with respect to the installation of these services removing the need to both breach the site cap and excavate material below the site cap.

The proposal described in the EA included generation of 1200m^3 of spoil as a result of excavation activities which would have required 80 vehicle loads of spoil to be removed from the site. The proposed changes with respect to the installation of services and connection to the stormwater system include no requirement to remove spoil from the site.

These measures are aimed at addressing the concerns raised in submissions particularly those relating to potential impacts on children attending the child care centre located within the Tilrox building adjacent to the southern boundary of the site and the Sandown – Clyde spurline.

1.3 EXHIBITION OF THE ENVIRONMENTAL ASSESSMENT

An EA for the Proposal was prepared in accordance with Part 3A of the *Environmental Planning and Assessment (EP&A) Act* 1979. The EA was placed on extended public exhibition by the Department of Planning and Infrastructure for the period Thursday 23 February 2012 until Tuesday 10 April 20012. Copies of the EA were available at:

- Department of Planning and Infrastructure (Head Office);
- Nature Conservation Council; and
- Parramatta City Council.

A copy of the EA was also made available on the DoPI website. The DoPI provided the Proponent with copies of the 279 submissions received during the exhibition period.

1.4 SUMMARY OF ISSUES

Section 2 of this report provides a summary of the submissions received during the public exhibition period and the issues raised in submissions. In summary the key issues related to:

- Impact of disturbance to the site cap and the potential for asbestos to be released into the environment

  All works associated with disturbance to the site cap will be undertaken in accordance with the Site Management Plan. Billbergia has prepared a Safe Work Method Statement and an Asbestos Handling Procedure for the works associated with disturbance to the site cap. The Asbestos Handling Procedure provides a guide for how asbestos contaminated material will be handled, stored, collected, transported and disposed. All works associated with breaching the site cap require NSW EPA approval. Section 2.2 provides further detail of the proposed management measures. The only activity which will require breaching of the site cap will be for drilling of small holes through the site cap which will allow grout to be injected into identified voids prior to construction(refer Section 1.2.4). It is expected that 1.5 to 2m^3 of material would be generated from the drilling of the holes.

  A suitably qualified occupational hygienist will be engaged to prepare an air monitoring program in accordance with Australian Code of Practice for the Safe Removal of Asbestos (NOHSC:2002 (2005)). A weather station will be established on site to assist with monitoring of weather conditions including wind movement. The occupational hygienist will be employed on site for the duration of activities associated with disturbance to the site cap.

- Impact of traffic on local roads;

  Existing traffic conditions and the impact of additional traffic is of concern to local road users particularly in relation to Grand Avenue North which provides access to the site. A Road Safety Audit has been conducted and measures identified to improve traffic signage, line marking and delineation in terms of functional and safe operation for motorists and vulnerable users including pedestrians and cyclists. The Proponents have committed to the implementation of the recommendations of that report if the project proceeds. All heavy vehicles departing the site will be required to turn left onto Grand Avenue after departing the site. An alternative route has been nominated for the pm peak period to minimise impacts associated with the intersection of James Ruse Drive and Grand Avenue (refer Section 2.5).

- Impact of activities on surrounding land uses including a child care centre, Rosehill Racecourse and adjoining businesses;

  The Proponents have included stringent environmental controls in the design of the facility with respect to odour control, noise mitigation, traffic management and the proposed works which require disturbance to the existing site capping layer.

  The environmental assessment has demonstrated that impacts associated with the construction and operation of the proposed RIRP can largely be contained within the site. The design of the odour control system and subsequent odour modelling indicate odour from the operations will not be detectable at the site boundary. Noise modelling also indicates that the construction and operation of the RIRP will comply with regulatory requirements. Traffic and safety with respect to other users of Grand Avenue North and existing congestion of the local road network has been a key concern. As outlined above a number of measures have been proposed to ensure the safety of other users of Grand Avenue North and to limit the impact on the local road network during peak periods. A Driver Code of Conduct will also be put in place to manage the interface of RIRP traffic with other users of Grand Avenue North.

  The design of the facility and the construction methodology are aimed at limiting disturbance to the site cap. Breaching of the cap will be restricted to drilling of holes to allow grouting of voids.

The Proponents have committed to the implementation of a specific management strategy targeted at minimising impacts on the children, parents, employees and the owner/operators of the child care centre. The objectives of the strategy are:

- Prevent negative impacts of the construction and operation of the RIRP on the children attending the child care centre with regard to health and safety;
- Ensure that operations of the RIRP do not negatively impact on the activities undertaken within the child care centre;
- Ensure that access to the child care centre is not impacted in terms of parents ability to drop and pick up their children in a timely and safe manner; and
- Ensure that the parents and operators of the centre are aware of activities being undertaken on the site, particularly with respect to management and timing of activities.

Sections 2.2, 2.3, 2.4, 2.5, 2.8, 2.10, 2.11 and 2.12 address this issue.

The environmental assessment undertaken concludes that the environmental impacts associated with construction and operation of the proposed RIRP are minor and can be effectively managed through REMONDIS commitments to the RIRP management measures described in the EA.

Issues raised in submissions indicate that there is a perception that the impacts of the construction and operation of the RIRP will result in more intense impacts on the child care centre than predicted in the EA and the technical studies. As a result of this perception there is a potential socio-economic impact on the child care centre and the families utilising the centre. The child care centre operator would be impacted if parents chose to withdraw their children from the centre as a result of the perceived impacts associated with construction and operation of the proposed RIRP.

REMONDIS has committed to working with the operators of the child care centre to resolve any issues resulting from the construction and operation of the proposed RIRP which may impact on the business and its customers. The operator of the child care centre has indicated she will not facilitate consultation between REMONDIS and the parents of the children attending the child care centre pending determination of the project.

REMONDIS and the operator of the child care centre have discussed options with respect to minimising the potential socio-economic impact on the child care centre including:

- Temporary Relocation during the construction phase for the proposed RIRP;
- Financial Compensation for any loss of business incurred as a result of the construction activities on the child care centre; and
- Permanent Relocation.

The operator of the child care centre has indicated that perceived risks associated with the penetration of the site cap layer will potentially heighten the concerns of parents and staff and that many customers would cease to use the centre once construction commenced. The Operator of the child care centre has indicated a preference for the Centre to be relocated to a nearby safer location.

Due to cost and timing issues associated with a temporary or permanent relocation of the child care centre REMONDIS considers these relocation options would make the project commercially unviable. The Proponents have modified the project so that there will be no requirement to disturb and/or remove asbestos contaminated material situated below the site capping layer.

REMONDIS considers that it has designed the proposed RIRP to be a world class waste and resource recovery facility that adopts best practice design. In addition the precautionary principle has been applied to the construction phase in that all activities associated with breaching the site cap include proven procedures and measures to contain and prevent emissions to the environment associated with disturbance to asbestos contaminated material.

REMONDIS proposes that a compensation package be developed that meets the concerns of both the Operator of the child care centre and the families attending the centre. The basis of the package would be that:

- Families are offered the opportunity to maintain and fund their current enrolment at the Centre with REMONDIS financing reasonable costs associated with an alternative placement or child care arrangement for the child/children attending the Centre for a period not exceeding 3 months when penetration of the cap occurs; and

- REMONDIS provides compensation to the Operator of the child care centre for any loss of permanent enrolments due to parents choosing to remove their child/children from the Centre as a result of the perceived risks associated with the breaching of the site cap prior to construction of the RIRP. REMONDIS would expect that the Operator of the child care centre in good faith would seek to find new enrolments for the vacant places attributed to the impact of the project during this period.

These proposals would need to be developed through consultation with the operators, staff and customers of the child care centre in relation to their concerns, the proposed safeguards and any temporary relocation requirements. Parents would be provided with information regarding amendments to the proposal and additional management measures aimed at reducing the risks associated with breaching the site cap during the construction phase. Parents would need to be provided with an opportunity to discuss the project with REMONDIS and technical specialists. This would allow them to make a more informed decision.

- Proposed use of the site

The proposed use of the site is permissible with consent under the site zoning (refer Section 2.10).

The operation of the proposed RIRP is in accordance with the principles of ESD, the National Waste Policy and the NSW State Waste Avoidance and Resource Recovery Strategy. The proposed RIRP will result in less waste material being disposed of in landfills serving the Sydney region and improve recycling and resource recovery.

1.5 STATUTORY CONTEXT

The proposed RIRP is a Project to which the transitional arrangements consequent to the repeal of Part 3A of the *EP&A Act* apply. The Project will continue to be assessed and determined under Part 3A, as in force immediately before its repeal.

After the exhibition of an EA, Section 75H(5) of the *EP&A Act* requires that copies of submissions received or a report of the issues raised in submissions be provided to the Director-General. Section 75H(6) of the Act identifies that the Director-General may require the proponent to submit to the Director-General:

(a) a response to the issues raised in those submissions;

(b) a preferred project report that outlines any proposed changes to the project to minimise its environmental impact; and
(c) any revised statement of commitments.

This Submissions Report, Preferred Project Report and revised Statement of Commitments will be submitted to the Director-General of the DoPI, thereby fulfilling the Proponent's requirements under Section 75(H) (6) of the *EP&A Act*.

1.6 STRUCTURE OF THE DOCUMENT

This document has been prepared at the request of the Director-General of the DoPI dated 24 April 2012, pursuant to Section 75H (6) of the *EP&A Act* following the exhibition of the EA for the proposed RIRP. It includes identification of, and the Proponent's response to, issues raised in public submissions (refer Section 2), a Preferred Project Report (refer Section 3), a revised Statement of Commitments (refer Section 4) and comments/ proposed amendments to the draft Conditions of Approval (refer Section 5).

1.7 PROJECT JUSTIFICATION

The EA presented an assessment of the potential environmental impacts associated with the proposed RIRP at 1 Grand Avenue, Camellia. The EA was prepared in accordance with the provisions of Part 3A of the *EP&A Act* and the Director-General's Requirements issued by the Department of Planning. Specific environmental investigations were undertaken to assess the potential environmental impacts. The results of these were documented in the EA and the Technical Reports. The environmental assessment undertaken concluded that the environmental impacts associated with construction and operation of the proposed RIRP are minor and can be effectively managed through the Proponents commitments to the RIRP design and management measures described in the EA. The Statement of Commitments summarises the commitments made by the Proponents with respect to the design, construction, operation and management of the proposed RIRP. Government Agencies have identified stringent environmental controls which have been incorporated into the design of the facility and the Statement of Commitments and will be included in the management of the construction and operation of the facility.

Issues raised in submissions highlight stakeholder concerns with respect to breaching of the site cap and the potential for disturbance to asbestos material and the impacts associated with operation of the proposed RIRP including traffic, noise and odour. Management and mitigative measures have been included in the project design to ensure the highest level of environmental performance during both the construction and operational phases. The design of the project has been revised so that breaching of the site cap is limited to activities associated with grouting of the site prior to construction. There will be no requirement to excavate asbestos contaminated material. Perception of the risks associated with the facility are based on previous history of the site and historical issues associated with waste and reuse facilities. The Proponent will continue to liaise with stakeholders to ensure they have information which addresses their concerns and have access to information to confirm the performance of the facility in meeting strict environmental compliance requirements. A Community Engagement Programme has been established for the project and will continue during the construction and operational phases.

With respect to the child care centre there is the potential for an impact on the business as a result of perception of the risk associated with the construction and operation of the proposed RIRP. The Proponent has committed to the implementation of safeguards to ensure that potential impacts are minimised, managed and controlled. REMONDIS has committed to working with the child care centre to ensure that the Centre's concerns are addressed and to develop additional measures which will reduce identified risks and address any financial impacts on the business as a result of the construction of the proposed RIRP.

2. RESPONSE TO ISSUES

2.1 RESPONDENTS

Two hundred and seventy-nine submissions were received during public exhibition of the EA. Each submission was reviewed individually and the issues raised were identified. Table 2.1 identifies the community respondents to the EA and allocates each respondent with a submission number. Table 2.1 also identifies the sections within this report where the respondent's issues are addressed and a brief summary of the response to the issue raised. Table 2.2 presents a summary of Government Agency Submissions and a brief summary of the response to the issue raised. Sections 2.2 to 2.14 provide the detailed responses to the issues raised by the community respondents and government agencies.

There were:

- 246 Form Letters;
- 19 Other individuals;
- 5 Surrounding businesses - GPT, Australian Turf Club, Explore and Develop (two submissions), Armaguard;
- Dr Geoff Lee – State Member for Parramatta;
- Bettergrow;
- Bernie Banton Foundation; and
- 6 Government Agencies - Environment Protection Authority (EPA), NSW Office of Water, RailCorp, Sydney Regional Advisory Committee, NSW WorkCover and Parramatta City Council.

The key issues raised in submissions related to the following matters:

1. Management of site contamination and potential impacts on workers, children attending the child care centre, residents and local businesses;
2. Air quality including dust and odour and health impacts particularly with respect to the child care centre;
3. Noise particularly with respect to impacts on the child care centre;
4. Land use conflicts - location and proposed land use inappropriate in terms of other existing and future uses;
5. Proximity to sensitive land uses including the child care centre and Australian Turf Club;
6. Traffic and safety - Grand Avenue is already congested particularly during peak periods and the safety of vehicles and pedestrians using Grand Avenue North is an issue; and
7. Proposed use of the site for a waste facility.

TABLE 2.1
Community Issues

NO.	NAME	ISSUE	RESPONSE
1	MRTHOMPSON	1. Site Contamination • Breaching of the cap could potentially result in the release of asbestos fibres. • Unacceptable risk to nearby receivers including the child care centre. • Proposed breaching of the cap is contrary to the Government's measures imposed on the site to manage any impacts. • No guarantee can be provided that this would not result in an impact on nearby receivers. • The cap should not be broken under any circumstances. • Use of Asbestos materials was banned in Australia, so why should a primary source of the production of this material be allowed to be breached, and to particularly allow friable fibres to be released. 2. Traffic and Safety • Since closure of the JH site and the development of a number of operators in the B3 zone along Grand Avenue, Grand Avenue North is akin to a driveway and parking area for the occupiers of 1 Grand Avenue. • Grand Avenue North was not designed for this type of traffic or operated as a separate road. • Traffic is already a significant issue in terms of traffic generation and safety along Grand Avenue. • The proposal to share access to the site with other users would significantly increase the safety risks particularly with parents picking up/dropping off their children. • It is extremely unsafe and there is a conflict with light vehicles which would also use the driveway access and the people who park along and around Grand Avenue North, including some parents and their children leaving and returning to their cars. 3. Odour Impacts • AWTs have odour issues, with a number already generating significant odour issues such as the UR-3R facility at Eastern Creek and Jacks Gully at Camden.	Sections 2.2, 2.3, 2.8, 2.11, 2.14, 3 and 4 Extent of disturbance to the cap has been reduced as a result of revisions to the design for installation of services. No excavation of contaminated material will be required. SMP allows breaching of the cap with approval by the EPA. SMP to be updated and approved by the EPA. Asbestos Handling Procedure prepared. Occupational Hygienist to be on site during activities associated with disturbance to the site cap. Air quality monitoring programme to be approved by the EPA. Statement of Commitments updated to included additional management measures. Section 2.5 Road Safety Audit for Grand Avenue North conducted and measures to be implemented to improve signage and road markings for safe operation for motorists, pedestrians and cyclists. Transport Code of Conduct to be prepared for drivers accessing the site. Section 2.3 All operations will be undertaken within an enclosed facility. Integrated air management system to be installed.

NO.	NAME	ISSUE	RESPONSE
		• The proposal seeks to process waste from the greater metropolitan area and not specifically from Parramatta. • The proximity of the facility to sensitive receivers including businesses and the child care centre would cause odour issues. • These facilities are more suited to being treated within a broader waste facility, given the separation from other sensitive receivers and the fact they need to dispose of a residual component at landfill eg SITA AWT is located at Kemps Creek landfill, the Kimbriki AWT is at a landfill and the Woy Woy AWT is at a landfill. • The AWT will stink and should not be located near sensitive receivers, and these facilities are more appropriately located at larger waste sites.	No outdoor handling or materials. Negative pressure will be maintained within the buildings. Biofilter pre and post, commissioning studies to be undertaken in accordance with EPA requirements. Biofilter Monitoring and Maintenance Plan to be implemented. Proposed use is permissible with consent under the zoning for the site.
		4. Noise and Dust Impacts • Construction and operations will result in unacceptable noise impacts. • Construction will occur over an extended period and involves major truck movements and dumping of large volumes of soil on the site. • With the nearby sensitive businesses and child care centre this will result in both excessive noise and dust impacts. • Child care centre will experience construction noise of up to 65 dBA and assumes a 20 dBA reduction inside the facility. However the child care has a large open area to allow for an open learning environment so the 20 dBA reduction would not be achievable and is therefore unacceptable and would the relevant criteria would not be met. • Operational noise including significant traffic accessing the site would result in noise levels up to 60dBA in the area including 58 and 59 dBA at the child care centre. • The major soil stockpile will result in significant dust generation, which particularly during the summer and autumn period when the sensitive uses on Grand Avenue would experience impacts. • The noise and dust generation from the project would result in significant impacts on the local area and in particular an unacceptable impact to the sleeping	Sections 2.3, 2.4 and 2.8 Traffic noise management strategy to be implemented. Management Strategy being developed to manage and minimise impacts on children attending the child care centre. Noise impact assessment predicts noise levels will comply with regulatory requirements during both construction and operational phases. Dust impacts will be minimised during construction. Air Quality Management Plan to be implemented. Measures identified to improve safety in relation to traffic conditions on Grand Avenue North.

NO.	NAME	ISSUE	RESPONSE
		regime and learning processes of the 80 odd children in the child care centre. This would clearly be detrimental to their development and an unacceptable impact to the local and regional area of Parramatta. 5. Land Use Conflicts • The proposal will result in a clear land use conflict with nearby and adjacent businesses. Why would approval be granted to this proposal, which would result in a clear conflict with the existing and established businesses and operators of 1 Grand Avenue and the Parramatta area. 6. Metropolitan Waste • As the proposal would be processing waste from all over Sydney and not Parramatta, why should the Parramatta LGA become Sydney waste management and dumping ground.	Section 2.11 Proposed use is consistent with the zoning for the site. Design of proposed RIRP incorporates measures to control and manage impacts. Section 2.10 Proposed facility meets government objectives. Waste facilities are an existing use in the Camellia area.
2	MRS THOMPSON	As per Submission 1	
3	J. THOMPSON	As per Submission 1	
4	MISS WHITE	As per Submission 1	
5	MR LEWIS	As per Submission 1	
6	B. LEE	As per Submission 1	
7	F. LEE	As per Submission 1	
8	L & A HARRIS	As per Submission 1	
9	F. HARRIS	As per Submission 1	
10	MISS HARRISON	As per Submission 1	
11	MRS PARKER	As per Submission 1	
12	O. PARKER	As per Submission 1	
13	T. LAUGHTON	As per Submission 1	
14	D. LAUGHTON	As per Submission 1	
15	J. WERBE	As per Submission 1	
16	T. CUMMINGS	As per Submission 1	
17	F. LAWRENCE	As per Submission 1	
18	KAY LEWIN	As per Submission 1	
19	K. STEWART	As per Submission 1	
20	KATRINA & STEWART GOTT	As per Submission 1	
21	WENDY TULIP	As per Submission 1	
22	FIONA MITCHELL	As per Submission 1	
23	SCOTT BEASLEY	As per Submission 1	
24	SU GARRETT	As per Submission 1	

NO.	NAME	ISSUE	RESPONSE
25	ALAN HYE	As per Submission 1	
26	JOHN EDWARD	As per Submission 1	
27	MICHAEL PACE	As per Submission 1	
28	N. HUMMERSTON	As per Submission 1	
29	PHILLIP NICHOLSON	As per Submission 1	
30	ROSE PACE	As per Submission 1	
31	KIM NORDFELDT	As per Submission 1	
32	THE RESIDENT	As per Submission 1	
33	PIERRE ALAIN	As per Submission 1	
34	TRICIA GILLESPIE	As per Submission 1	
35	S. HALEMA	As per Submission 1	
36	ANN MAREE WAHBE	As per Submission 1	
37	J. BARTLEY	As per Submission 1	
38	GARRY GILLESPIE	As per Submission 1	
39	A. WAHBE	As per Submission 1	
40	P. TAIT	As per Submission 1	
41	C. ALAM	As per Submission 1	
42	JUSTIN ROIA	As per Submission 1	
43	P. EASSON	As per Submission 1	
44	PINA ROIA	As per Submission 1	
45	DIANA SMITH	As per Submission 1	
46	RACHAEL FIELD	As per Submission 1	
47	LEE MARSCHALL	As per Submission 1	
48	TIFFANY BREEZE	As per Submission 1	
49	L. WESTRUP	As per Submission 1	
50	LIBBY SANDERS	As per Submission 1	
51	MARIA BIFULCO	As per Submission 1	
52	SHARON DURHAM	As per Submission 1	
53	R. TANNOUZ	As per Submission 1	
54	J. WILSON	As per Submission 1	
55	M. SASSEN	As per Submission 1	
56	R. SASSEN	As per Submission 1	
57	K. GOLCHIN	As per Submission 1	
58	YAMIN SASSEN	As per Submission 1	
59	MR NICHOLAS	As per Submission 1	
60	MRS ANTHONY	As per Submission 1	
61	MRS GEORGE	As per Submission 1	
62	GEORGE	As per Submission 1	
63	D. STEVENS	As per Submission 1	

NO.	NAME	ISSUE	RESPONSE
64	AJ. RILEY	As per Submission 1	
65	E. WHITE	As per Submission 1	
66	CHANG BO KIM	As per Submission 1	
67	M. FISHER	As per Submission 1	
68	MR & MRS HADDAD	As per Submission 1	
69	MR CHEN	As per Submission 1	
70	C. JOSEPH	As per Submission 1	
71	MR SARKIS	As per Submission 1	
72	M. PARKER	As per Submission 1	
73	N. KHOURY	As per Submission 1	
74	MRS BLACK	As per Submission 1	
75	MR STEVENS	As per Submission 1	
76	F SARKIS	As per Submission 1	
77	MR JOSEPH	As per Submission 1	
78	A. BLACK	As per Submission 1	
79	MICHAEL LEE	As per Submission 1	
80	STEPHEN BEHEN	As per Submission 1	
81	THE RESIDENT	As per Submission 1	
82	E. GREEN	As per Submission 1	
83	VIVIEN LAY	As per Submission 1	
84	"BILL"	As per Submission 1	
85	CARMEN JAMES	As per Submission 1	
86	LACHLAN GRIEVES	As per Submission 1	
87	RHIANNON KENTISH	As per Submission 1	
88	VINKA MARKOVINA	As per Submission 1	
89	TIA JOHNSTONE	As per Submission 1	
90	ANDREW ELLIS	As per Submission 1	
91	JEANNE IRO	As per Submission 1	
92	SAMUEL SASSEN	As per Submission 1	
93	SOPHIE SASSEN	As per Submission 1	
94	MICHAEL BEHAN	As per Submission 1	
95	THERESE FRENDO	As per Submission 1	
96	CATE JOSEPH	As per Submission 1	
97	MICHELLE NICHOLLS	As per Submission 1	
98	PETER KHOURY	As per Submission 1	
99	PHILLI YOUAKIM	As per Submission 1	
100	JUNE SMITH	As per Submission 1	
101	BRUCE SMITH	As per Submission 1	
102	E. BROWN	As per Submission 1	

NO.	NAME	ISSUE	RESPONSE
103	R. HUDSON	As per Submission 1	
104	MRS LEWIS	As per Submission 1	
105	ERICKA BENIN HARRIS	As per Submission 1	
106	SUSANA BENIN	As per Submission 1	
107	CINTHYA BENIN	As per Submission 1	
108	JOANNA TATSIS	As per Submission 1	
109	T. TUSA	As per Submission 1	
110	JACINTA DI BARTOLO	As per Submission 1	
111	ANDREA BINA	As per Submission 1	
112	APRIL MCGUINNESS	As per Submission 1	
113	EMILY LAWSON	As per Submission 1	
114	JOSEPHNE LANY-BARROS	As per Submission 1	
115	ALICIA PERKOVICH	As per Submission 1	
116	PETER LEBIUS	As per Submission 1	
117	SANDRA OSHALIM	As per Submission 1	
118	THOMAS POULLOS	As per Submission 1	
119	ROSALIE SIROL	As per Submission 1	
120	ANGELICA PERKOVICH	As per Submission 1	
121	HENRYKA PERKOVICH	As per Submission 1	
122	ROBERT SELVARAJ	As per Submission 1	
123	MARIA TATSIS	As per Submission 1	
124	KRISTINA VIDAIC	As per Submission 1	
125	JOSIP VIDAIC	As per Submission 1	
126	EMILIO VIDAIC	As per Submission 1	
127	MILENKA VIDAIC	As per Submission 1	
128	DANNI WILD	As per Submission 1	
129	ANITA MERTKHANIAN	As per Submission 1	
130	JOAN ZORS	As per Submission 1	
131	CINDY DAVEY	As per Submission 1	
132	S. RAMSAY	As per Submission 1	
133	STEVEN PRICE	As per Submission 1	
134	KYLIE JONES	As per Submission 1	
135	SHARON SASSEN	As per Submission 1	
136	J. CONNOR	As per Submission 1	
137	F. CONRAD	As per Submission 1	
138	S. KNOTTS	As per Submission 1	
139	T. BLIGHTON	As per Submission 1	
140	IAN JOHNSON	As per Submission 1	
141	B. WILSON	As per Submission 1	

NO.	NAME	ISSUE	RESPONSE
142	C. ROBERTSON	As per Submission 1	
143	DAVID HEFFERON	As per Submission 1	
144	ROY BAHRI	As per Submission 1	
145	GREGORY EDWARDS	As per Submission 1	
146	A. SCHMITZER	As per Submission 1	
147	S. CAMPBELL	As per Submission 1	
148	T. CAMPBELL	As per Submission 1	
149	A. TAYLOR	As per Submission 1	
150	N. CANNON	As per Submission 1	
151	PATRICK SALMON	As per Submission 1	
152	M. GLOSSOP	As per Submission 1	
153	L. JENKINS	As per Submission 1	
154	MARICHY ROY	As per Submission 1	
155	EMILY WALSH	As per Submission 1	
156	R. KELLY	As per Submission 1	
157	P. THOMPSON	As per Submission 1	
158	R. THOMPSON	As per Submission 1	
159	CARMEL BOURKE	As per Submission 1	
160	CARMEN BAY	As per Submission 1	
161	JASMINE BAY	As per Submission 1	
162	G. DI BARTOLO	As per Submission 1	
163	A. DI BARTOLO	As per Submission 1	
164	SHIRRY KRISHNA	As per Submission 1	
165	ANTHONY HARTLEY	As per Submission 1	
166	SUSAN RICHARDSON	As per Submission 1	
167	ALSION SHEARER	As per Submission 1	
168	HASANTHI PREMACHINDRA	As per Submission 1	
169	RL. WEBSTER	As per Submission 1	
170	BIANCA HARRIS	As per Submission 1	
171	MS GREEN	As per Submission 1	
172	C. ZADRO	As per Submission 1	
173	KEIRRA SNEDDON	As per Submission 1	
174	LAUREN KENNY	As per Submission 1	
175	ALICIA KENNY	As per Submission 1	
176	RACHELLE HOLLAND	As per Submission 1	
177	NICHOLAS MATAIA	As per Submission 1	
178	MILANA GRAVORAC	As per Submission 1	
179	GUY ONLEY	As per Submission 1	
180	PIETA PASUGLI	As per Submission 1	

NO.	NAME	ISSUE	RESPONSE
181	DIANNE BOSWELL	As per Submission 1	
182	CATHERINE HOLDER	As per Submission 1	
183	MAGGY YERM	As per Submission 1	
184	KATHLEEN HARRISON	As per Submission 1	
185	MICHELLE RIVERS	As per Submission 1	
186	MICHELLE MURRAY	As per Submission 1	
187	AMANDA BAHBAH	As per Submission 1	
188	GEORGE SASSEN	As per Submission 1	
189	TRACEY CLARK	As per Submission 1	
190	TONY ELHAGE	As per Submission 1	
191	ANTHONY SUHAN	As per Submission 1	
192	ROBERT FITTON	As per Submission 1	
193	CHARLIE ALAN	As per Submission 1	
194	JULIA MADDEN	As per Submission 1	
195	SHEREE MADDEN	As per Submission 1	
196	DARIA MOUSLEY	As per Submission 1	
197	DANIELLE SASSEN	As per Submission 1	
198	LOU SASSEN	As per Submission 1	
199	JASMINE BORG	As per Submission 1	
200	M. SASSEN	As per Submission 1	
201	RV. FISHER	As per Submission 1	
202	TONY SASSEN	As per Submission 1	
203	R. SASSEN	As per Submission 1	
204	J. WILSON	As per Submission 1	
205	P. THOMSON	As per Submission 1	
206	ANN SAWYER	As per Submission 1	
207	JUNE BLACKWOOD	As per Submission 1	
208	MRS K LACEY	As per Submission 1	
209	JOHN PETERS	As per Submission 1	
210	B. RYAN	As per Submission 1	
211	NICOLE ADAMS	As per Submission 1	
212	LORRAINE CAMPBELL	As per Submission 1	
213	ADAM DAVIS	As per Submission 1	
214	MRS N. NAPIER	As per Submission 1	
215	MISS P. TAYLOR	As per Submission 1	
216	MR R. THOMPSON	As per Submission 1	
217	J. LONGBOTTOM	As per Submission 1	
218	MR H. ROBINS	As per Submission 1	
219	J. THOMAS	As per Submission 1	

NO.	NAME	ISSUE	RESPONSE
220	P. ANDREWS	As per Submission 1	
221	FRANK MOORE	As per Submission 1	
222	TONY WRIGHT	As per Submission 1	
223	ANN FRANCIS	As per Submission 1	
224	JOHN PASZEK	As per Submission 1	
225	DR TIMOTHY ROBERTS	As per Submission 1	
226	JASMINE YEW	As per Submission 1	
227	STEFAN HALAMKOV	As per Submission 1	
228	TATIANA HALAMKOVA	As per Submission 1	
229	TIEN-MING HING	As per Submission 1	
230	DONNA GLASSON	As per Submission 1	
231	SANDY MILLER	As per Submission 1	
232	SONJA ANDREWS	As per Submission 1	
233	JAMES TAYLOR	As per Submission 1	
234	STEVEN WEHBE	As per Submission 1	
235	WILLIAM SASSINE	As per Submission 1	
236	TONY SASSINE	As per Submission 1	
237	MARY SASSINE	As per Submission 1	
238	SALLY PARFITT	As per Submission 1	
239	SJ. WEBB	As per Submission 1	
240	BETTY TAN	As per Submission 1	
241	THE RESIDENT	As per Submission 1	
242	BRUCE GRAHAM	As per Submission 1	
243	NATHAN PAGE	As per Submission 1	
244	LEONA JENKINS	As per Submission 1	
245	MR IR. WAPLES	As per Submission 1	
246	ANNE FAULDER	As per Submission 1	
247	TIM BAKER	1. Rosehill Racecourse is a major entertainment venue in the Parramatta and Camellia area that may be potentially affected by foul odours potentially affecting patrons and further traffic congestion on race days which may cause delays. 2. The extra trucks will create further traffic delays and congestion along James Ruse Drive particularly during peak hours where traffic jam can sometimes be up to Victoria Road and commonly to the bridge over Parramatta River.	Sections 2.3, 2.5, 2.8 and 2.11 Odour impacts will be contained within the site. Traffic impacts associated with the RIRP are in relation to weekday commuter periods. Racecourse traffic is typically associated weekend events. Section 2.5 Proponent has committed to use of alternative route if required during peak pm period.

NO.	NAME	ISSUE	RESPONSE
		3. Considering the history of the site and the liabilities that have been created through prior land use, that with the proposed development the likelihood of Asbestos being raised to the surfaced through unforseen excavation of accidental means needs more mitigation that what is currently proposed. 4. Residential properties are situated within 500m of the proposed development and would be impacted by the 24 hour operation of the site, foul/putrid odours, extra noise outside 7am and 6pm and remote possibility of air borne asbestos contamination if an incident/accident were to occur in the future. 5. We just live over 1km from the site and given the close proximity to the development are disappointed with the level and thoroughness of the community consultation undertaken with none of our neighbours being consulted either whom may be most affected if ever an asbestos contamination accident were ever to happen.	Sections 2.2 and 2.8 Site is managed in accordance with SMP. Asbestos Handling Procedure prepared. Air Quality Management Plan to be implemented. Occupational Hygienist to be on site during activities associated with disturbance to the site cap. Sections 2.2, 2.3, 2.4 and 2.8 Air quality and noise emissions are predicted to comply with regulatory requirements. Emergency Response Procedures to be included in OEMP. Section 2.13 Community representatives have been included within the community engagement programme. Community Engagement Programme to be maintained during construction and operational phases of project.
248	KYLIE READY	1. There are asbestos and other contaminants in the ground at the old JH site. Asbestos is dangerous to humans and that is why it was banned and a cap placed on the site. The site should not be disturbed due to its proximity to residences, day care facilities, supermarkets, restaurant and workplaces. No one really knows how far the asbestos may travel and how many people may be affected if disturbed. Asbestos is a deadly substance. It is not worth the risk. 2. Intersection of James Ruse Drive and Grand Avenue is already a busy intersection, especially in peak hour. Increasing this with more trucks will cause a gridlock that will feed back onto Hassall St into Harris Park and Parramatta. Not to mention more trucks coming during the night will disturb a relatively peaceful area. 3. Odours from the waste will affect the surrounding area despite your best efforts to prevent this. There are 2 supermarkets, a number of restaurants and fast food establishments in close proximity to the waste site, no one wants to shop and eat with the smell of garbage nearby, be it green waste or otherwise.	Sections 2.2, 2.3 and 2.8 Site is managed in accordance with SMP. Asbestos Handling Procedure prepared for proposed activities. Air Quality Management Plan to be implemented. Occupational Hygienist to be on site during activities associated with disturbance to the site cap. Section 2.5 Proponent has committed to use of alternative route if required during peak periods. Traffic Noise Management Strategy to be implemented. Section 2.3 All operations will be undertaken within an enclosed facility. Integrated air management system to be installed. Odour will be contained within the site boundary.

NO.	NAME	ISSUE	RESPONSE
		4. The current strategic aim for Parramatta is to increase its capacity to be the second CBD of Sydney, building more office and retail sites. In the past few years more and more residential apartment buildings have been built in Harris Park and Rosehill to assist with this goal. I find putting a waste site near this expansion contrary to Council's aims. It may increase employment in the area by a small amount but decrease people willing to live in the area as who would choose to live near a waste site? This will decrease the value of our properties.	Section 2.11 Proposed use is consistent with site zoning and government policy.
249	DAVID ROBERSON	No issue raised.	Noted.
250	CONFIDENTIAL	1. Local residents within 400-1km of the site were not advised of this proposal.	Section 2.13 Community representatives have been included within the community engagement programme. Community Engagement Programme to be maintained during construction and operational phases of project. Public Exhibition was notified by DoPI.
		2. No confidence that the management plans to mitigate problems associated with dust, odour or noise during construction or operation will be effective.	Sections 2.2, 2.3, 2.4 and 2.8 Management Plans to be approved by DoPI and the EPA.
		3. Suitable sites outside Western Sydney should have been considered. We are effectively being burdened with a large number of waste treatment facilities at Lidcombe, Granville, Eastern Creek, Kemps Creek. Who is taking responsibility for the National Waste Policy if another plant to treat waste is to be located in Western Sydney. The commercial waste it being generated and collected from small businesses across the Sydney CBD and the green and food waste is being collected by groups of Councils.	Section 2.14 Site selection process included a number of sites within Western Sydney. Proposed site was selected based on proximity to demand, access to transport links, appropriate zoning and ability to contain and minimise environmental impacts.
		4. It is insensitive to propose this type of plant operation on the former JH site. I have neighbours whose family members worked for JH and subsequently passed away from asbestos related illnesses.	Sections, 2.3, 2.3 and 2.8 Consultation has been undertaken with the Asbestos Diseases Foundation of Australia and the Bernie Banton foundation to ensure issues are addressed.
		5. This proposal is an unfair burden on our local community, residents, workers and tourists to Parramatta.	Section 2.14 Proposed use is consistent with zoning and impacts have been minimised through design and proposed management regime.

NO.	NAME	ISSUE	RESPONSE
		6. Recent responses to problems in Stockton, do not engender confidence that anyone is seriously concerned about resident's health and safety.	Section 2.8 Design of the facility and proposed management regime have been designed to ensure environmental controls are established, maintained and monitored.
251	CONFIDENTIAL	The scale and operation of the proposed development will significantly negatively impact our neighbourhood (which includes Elizabeth Farm and Heritage walk) by: 1. Exacerbating traffic problems – The Traffic report indicates that traffic on James Ruse Drive currently exceeds capacity, yet an additional 288 movements per day of garbage trucks, rigid and articulated vehicles 8.8 to 12.5m wide are not considered to warrant improvements to the road system. 2. Increasing the capacity of exposure of a number of health hazards (such as dust, noise, foul smells), which will can have adverse impacts on our wellbeing. 3. Exposing us to contamination when accidents/leaks occur. 4. Disturbing our sleep (it's a 24/7 operation and 10pm is to late to turn off the industrial shredders). 5. Dominating the skyline. 6. We object to the proposal and advise the consultation has been poor.	Section 2.5 Road Safety Audit for Grand Avenue North conducted and measures to be implemented to improve signage and road markings for safe operation for motorists, pedestrians and cyclists. Sections 2.2, 2.3, 2.4 and 2.8 Design of facility and proposed management regime are aimed at minimising and managing impacts on the local community and the environment. Sections 2.2 and 2.8 Construction will be undertaken in accordance with the requirements of the SMP and an Asbestos Handling Procedure. Operation of the facility will be in accordance with the OEMP which includes Emergency Response Procedures. Sections 2.4, 2.8 and 2.14 Noise management strategy will be implemented. Noise emissions are predicted to comply with regulatory requirements. Section 2.12 Predicted visual impact is minimal. Site Landscape plan provides screening of the site. Section 2.13 Community representatives have been included within the community engagement programme. Community Engagement Programme to be maintained during construction and operational phases of project.
252	NICOLE GRIFFITHS	1. This is a built up area which will be affected by the additional trucks required to transport waste to and from the facility, odour from the facility and the trucks transporting waste and noise impacts.	Sections 2.3, 2.4 and 2.5 Peak site traffic is associated with shift changeover times which generally occur prior to on-street peak periods.

NO.	NAME	ISSUE	RESPONSE
			All operations will be undertaken within an enclosed facility. Integrated air management system to be installed. Odour will be contained within the site boundary. Proponent has committed to use of alternative route if required during peak periods. Traffic Noise Management Strategy to be implemented.
		2. The stench from this tip will most likely affect the businesses in the vicinity including a day care centre, the racecourse, university, bowling club and shopping centres (ALDIs and Woolworth's).	Sections 2.3 and 2.14 All operations will be undertaken within an enclosed facility. Integrated air management system to be installed. No outdoor handling or materials. Negative pressure will be maintained within the buildings.
		3. Object to the proposed breach of the cap protecting us from contaminated fibres hidden beneath the concrete covering the former JH site. This is a major health and safety risk to the community and the government is in breach of its duty of care to the residents of NSW, in particular Western Sydney-Camellia. I think the Government will be opening itself up for an onslaught of legal battles in the future when the children attending the nearby daycare centre are diagnosed with mesothelioma.	Sections 2.2, 2.3 and 2.8 SMP to be updated and approved by the EPA. Asbestos Handling Procedure prepared. Occupational Hygienist to be on site during activities associated with disturbance to the site cap. Air quality monitoring programme to be approved by the EPA. Extent of disturbance to the cap will be reduced as a result of revision to design for installation of services. No excavation of contaminated material will be required.
253	MONIQUE BELLAMY	1. Potential odour issues for the community. Any waste treatment facility I have been near emits odours – I do not believe the odour can be fully contained.	Sections 2.3 and 2.8 All operations will be undertaken within an enclosed facility. Integrated air management system to be installed. Odour will be contained within the site boundary.
		2. The proposed increased traffic congestion on James Ruse Drive which can be dangerous.	Section 2.5 Proponents has committed to use of alternative route in peak pm period.
		3. Building the waste treatment facility on the former JH site is also a health risk to surrounding people who work, live or utilise services in the area. Asbestos contamination is a possibility if the sealed concrete cap is allowed to be breached.	Sections 2.2, 2.8, 2.14 and 3 SMP to be updated and approved by the EPA. Asbestos Handling Procedure prepared. Occupational Hygienist to be on site during activities associated with disturbance to the site cap.

NO.	NAME	ISSUE	RESPONSE
		4. Why is Western Sydney becoming the dumping ground for NSW – and if this has be the case than why can't the facilities be located together away from the general population – Rosehill/Camellia is a built up area – Why not put it at Eastern Creek with an existing waste facility.	Air quality monitoring programme to be approved by the EPA. Section 2.14 Proposed use is consistent with site zoning and government policy.
254	PANKAJ DHIR	1. Parramatta City is a growing city and the physical space in question could be better used for: • Dwellings to cater for essential workers who are needed to service the growing city; • Or for businesses to relocate from Sydney city to ease congestion in Sydney and reducing workers commute; • Or to make tourist attraction or an event venue, already events such as circuses are being held next door. 2. Proposed recycling plant does not bring any advantages to Parramatta city by being this close and will increase the traffic congestion by big trucks. 3. Proposed recycling plant is in close proximity to Rosehill Racecourse, Parramatta CBD, Parramatta River foreshore, UNSW campus and residential areas. 4. This plant is almost part of the Elizabeth Farm Heritage View which is described in the DEP for this area and prohibits such developments. 5. Proposed plant is expected emit damp odour and we already know from Mauri Foods (located few blocks further from the proposed plant) that such odour travels strongly. 6. There is already a Caltex refinery and other heavy industry some blocks away and why add another source of potential disaster this close to the city. 7. There is a childcare centre in the silver building on the fourth floor next door. 8. Rosehill Racecourse across the road holds continuous events throughout the year (any accident at the proposed facility can affect thousands of public attendees within minutes).	Section 2.11 The site is zoned Heavy Industrial. Sections 2.5 and 2.11 Project is consistent with government policy. Traffic impacts can be minimised by use of alternative route in peak pm period. Section 2.11 Project is consistent with government policy. Visual impact is mitigated by proposed landscaping. Section 2.12 Visual impact is mitigated by proposed landscaping. Section 2.3 Odour emissions will not be detectable at the site boundary. Section 2.11 Hazards associated with the operations will be managed and Emergency Response Procedures established. Section 2.11 Impacts on the child care centre will be managed in consultation with the operators and parents of children attending the child care centre. Sections 2.8 and 2.11 Operations are not predicted to impact on activities associated with Rosehill racecourse.

NO.	NAME	ISSUE	RESPONSE
		9. During last federal government election current labour government confirmed development of Parramatta to Epping rail line and such a link supports item (1) above.	Noted.
255	HELEN GRIFFITHS	1. Noise, dust, site contamination, traffic and odour issues will inflict the surrounding services, businesses and users of James Ruse Drive.	Sections 2.2,2.3, 2.4, 2.5 and 2.8 Proposed operations are predicted to meet air quality and noise goals. Traffic will be managed to minimise local impacts. Activities will be undertaken in accordance with the SMP and SWMS.
		2. Intended beach of the sealed cap protecting people from harmful contaminants on the site residual from the former JH business. This can be potentially harmful to the health and well being of the surrounding businesses and services and subject other wider community.	Sections 2.2, 2.3 and 2.8 SMP to be updated and approved by the EPA. Asbestos Handling Procedure prepared. Occupational Hygienist to be on site during activities associated with disturbance to the site cap. Air quality monitoring programme to be approved by the EPA.
		3. Proximity of the day care entre and the innocent children within 30m of this proposal. Not only can they be subjected to harmful contamination in the short term but the quality of life will be affected in the long term with ongoing traffic, odour, noise and dust issues.	Sections 2.2, 2.3, 2.4, 2.5 and 2.8 Impacts on the child care centre will be managed in consultation with the operators and parents of children attending the child care centre.
		4. Conflict of use for this area – Why have a waste treatment facility located so close to a day care centre, an ALDI, the racecourse and university just to name a few.	Section 2.11 Proposed use is consistent with the zoning for the site.
		5. If the proposal is approved than the Government should be ashamed of itself because you could easily stop it by enacting the rights of the covenant declaring the site "contaminated and a serious risk to humans".	Section 2.2 The SMP allows a proposed breach of the cap if approved by the EPA. All activities involving breach of the cap will be in accordance with SWMS.
256	PAUL GRIFFITHS	1. Site contamination, traffic and safety, odour impacts, dust/noise impacts, land use conflicts and metropolitan waste. All of these issues will affect the quality of life of my grandchild who attends the day care centre located within 30m of the proposed waste management facility.	Sections 2.2, 2.3, 2.4, 2.5, 2.8 and 2.11 Impacts on the child care centre will be monitored and managed in consultation with the operators and parents of children attending the child care centre. Proposed operations are predicted to meet air quality and noise goals. Road Safety Audit has identified measures which will be implemented to improve traffic and pedestrian safety on Grand Avenue North.

NO.	NAME	ISSUE	RESPONSE
		2. Potential health risks associated with the breach of the cap covering the formed JH site which has a covenant requiring it to remain sealed. How can this be allowed to happen. The JH site has been closed for over 20 years, a relatively short period of time and at this time it was recognised that the contamination was of such high proportions it was significant enough to be the subject to Public Positive Covenant.	Sections 2.2, 2.3 and 2.8 The SMP allows a proposed breach of the cap if approved by the EPA. All activities involving breach of the cap will be in accordance with SWMS. Occupational Hygienist to be on site during activities associated with disturbance to the site cap. Air quality monitoring programme to be approved by the EPA.
		3. It will also affect other businesses including ALDI.	Sections 2.2, 2.3, 2.4, 2.5 and 2.8 Proposed use will comply with regulatory requirements.
		4. The additional traffic to the area will also cause more congestion and delay on both James Ruse Dr and Grand Avenue. The bridge on Grand Avenue is not designed for such high traffic levels.	Section 2.5 Traffic impacts will be minimised by use of alternative route in peak pm period.
		5. Access to the facility should not be via the entry road to the day care centre (1 Grand Avenue) as this was not designed for high traffic and is a very sharp turn into a business and railway commuter car park – high traffic will cause OH&S issues for other users of the road.	Sections 2.5, 2.8 and 2.14 Road Safety Audit for Grand Avenue North conducted and measures to be implemented to improve signage and road markings for safe operation for motorists, pedestrians and cyclists. Transport Code of Conduct to be prepared for drivers accessing the site.
		6. Odour, noise and dust will also have affects to the quality of life for the day care and surrounding businesses.	Sections 2.2, 2.3 and 2.8 Impacts on the child care centre will be managed in consultation with the operators and parents of children attending the child care centre. Proposed operations are predicted to meet air quality and noise goals.
		7. Whilst REMONDIS may comply with conditions in the start, inevitably these waste management facilities stink and impact the surrounding community.	Sections 2.8, 3 and 4 All operations will be undertaken within an enclosed facility. Integrated air management system to be installed. No outdoor handling or materials. Negative pressure will be maintained within the buildings.
257	CONFIDENTIAL	Confidential	
258	CONFIDENTIAL	1. The incorrect place has been selected for the REMONDIS AWT facility. The Parramatta region is an historical area, not only high density population living in this area, but it was	Sections 2.11 and 2.14 Proposed use is consistent with the zoning for the site.

NO.	NAME	ISSUE	RESPONSE
		also a kind of commercial and political centre in this state. Many government departments are located in Parramatta and more are planned to move here. Many business headquarters have historically been located in this geographical area of great Sydney region. From a longterm point of view, the waste treatment facilities might not be suitable to be constructed near any commercial, political and population centre if considered environmentally. A lot of correct places (low density areas) could be selected to construct the facility. 2. From an economic point of view it is not wise to waste any money constructing any waste treatment facility near the centre area.	Proposed facility meets government objectives. Waste facilities are an existing use in the Camellia area. Section 2.10 Proposed use is consistent with the zoning for the site.
259	BBC CONSULTING PLANNERS	GPT owns Nos 11, 11A, 11B and 11C Grand Avenue, Camellia which contain four industrial premises for manufacturing, warehousing and distribution businesses. The property is immediately east and south east of 1 Grand Avenue Camellia. There are a number of matters that are of concern to GPT in relation to the project and include: 1. The suitability of the site for the Project having regard to the regional and local planning instruments. 2. The traffic, odour, noise and dust impacts of the Project. 3. The unearthing and management of contaminated materials during the construction of the project. 4. The disturbance to the existing remnant pavement by loads and machinery and the associated unplanned release of contamination materials.	Section 2.11 Proposed use is consistent with the zoning for the site. Proposed facility meets government objectives. Sections 2.2, 2.3, 2.4, 2.5 and 2.8 Proposed operations are predicted to meet air quality and noise goals. Traffic impact will be mitigated by use of alternative route in pm peak period. Sections 2.2, 2.3 and 2.8 SMP to be updated and approved by the EPA. Asbestos Handling Procedure prepared. Occupational Hygienist to be on site during activities associated with disturbance to the site cap. Air quality monitoring programme to be approved by the EPA. Sections 2.2, 2.3 and 2.8 SMP to be updated and approved by the EPA. SMP includes annual review of condition of site cap.
260	AUSTRALIAN TURF CLUB LIMITED	1. Social impacts and Public Interest	Sections 2.2, 2.3, 2.4, 2.5, 2.8 and 2.14

NO.	NAME	ISSUE	RESPONSE
		As outlined in the EA social impacts include: • Odour • Noise • Traffic • Contamination • Community health. The draft Statement of Commitments provides opportunities to have complaints investigated and allow for consultation however it is not reasonable to approve development in a location with the expectation that complaints will be generated. A 24 hour AWT in close proximity to other significant activities will inevitably result in tensions with surrounding stakeholders and should be located in a more suitable environment or a site entirely surrounded by industrial development. 2. Potential impacts on the environmental sensitivity of the area, involving contamination • Exposure to asbestos currently under hardstand due to need to provide services. • Waste material, runoff and the proximity to Parramatta River. • Air quality and odour. While the EA and TRs reports highlight the above environmental concerns and seek to address them, we believe the justification is not adequate to provide	All operations will be undertaken within an enclosed facility. Integrated air management system to be installed. No outdoor handling or materials. Negative pressure will be maintained within the buildings. Noise impact assessment predicts noise levels will comply with regulatory requirements during both construction and operational phases. Traffic impact will be mitigated by use of alternative route in pm peak period. SMP to be updated and approved by the EPA. Asbestos Handling Procedure prepared. Occupational Hygienist to be on site during activities associated with excavation. Air quality monitoring programme to be approved by the EPA. Design of the facility has been to minimise impact on the local community and the environment. Monitoring systems will be included as part of the ongoing management of the operations and site. Community Engagement Programme to be maintained. 24 hour Emergency Contact will be available. Proposed use is consistent with the zoning for the site. Sections 2.2, 2.3, 2.6 and 2.8 SMP to be updated and approved by the EPA. Asbestos Handling Procedure prepared. Occupational Hygienist to be on site during activities associated with disturbance to the site cap. Air quality monitoring programme to be approved by the EPA. Construction and Operational EMPs to be implemented. Monitoring will be continued of the condition of the

NO.	NAME	ISSUE	RESPONSE
		confirmation that undue impacts would be avoided. The location of the site next to the Parramatta River, the Racecourse and other commercial and uses renders this issue very significant and worthy of great sensitivity.	Parramatta River which abuts the site. All operations will be undertaken within an enclosed facility. Integrated air management system to be installed. No outdoor handling or materials. Negative pressure will be maintained within the buildings.
		3. Increased traffic congestion and parking The proposed facility will generate on average 288 movements daily with the majority (184) being heavy vehicle movements. Grand Avenue is already congested with significant delays at key intersections and the introduction of such volumes of heavy vehicle traffic will exacerbate current congestion issues.	Section 2.5 Traffic impact will be mitigated by use of alternative route in pm peak period.
		4. Visual amenity of the area Land to the west of the proposed site is zoned to accommodate open space, event, retail and commercial development with linkages to Camellia rail station. The close proximity of the AWT would introduce amenity impacts many of which would be hard to mitigate against. Impacts such as odour and noise, the only solution would be that of separation and therefore the site is not considered suitable for the development.	Section 2.12 Visual impact will be minimal with landscape plan to be implemented which will screen views of the site and enhance site amenity.
		5. Real and perceived impacts of the proposed Waste Centre on future use of the site and surrounding area. Strategic importance of a waste management and recycling facility are understood and encouraged, such development would be better located on a site: • That is without high environmental sensitivity. • That has adequate access and road capacity. • Away from significant tourism attractions. • In the heart of an industrial area.	Section 2.11 Proposed use is consistent with the zoning for the site.
261	IRENE VIDAIC - NISIV ENTERPRISES PTY LTD t/as EXPLORE & DEVELOP PARRAMATTA	As per submission 1. • Site Contamination	Sections 2.2, 2.3, 2.4, 2.5, 2.8, 2.10, 2.11, 2.14 and 3 Extent of disturbance to the cap has been reduced as a result of revision to the design for installation of services. No excavation of contaminated material will be required. SMP to be updated and approved by the EPA. Asbestos Handling Procedure prepared.

NO.	NAME	ISSUE	RESPONSE
		• Traffic and Safety • Odour Impacts • Noise and Dust Impacts • Land Use Conflicts • Metropolitan Waste Under the Children Services Education and Care Services Regulations the Approved provider is required to comply with these regulations at all times. Refer to Part 4.2 Children's Health and Safety of the Regulations.	Occupational Hygienist to be on site during activities associated with breaching the site cap. Air quality monitoring programme to be approved by the EPA. Road Safety Audit for Grand Avenue North conducted and measures to be implemented to improve signage and road markings for safe operation for motorists, pedestrians and cyclists. Transport Code of Conduct to be prepared for drivers accessing the site. All operations will be undertaken within an enclosed facility. Integrated air management system to be installed. No outdoor handling or materials. Negative pressure will be maintained within the buildings. Traffic noise management strategy to be implemented. Management Strategy being developed to manage and minimise impacts on children attending the child care centre. Noise impact assessment predicts noise levels will comply with regulatory requirements during both construction and operational phases. Dust impacts will be minimised during construction. Air Quality Management Plan to be implemented. Design of the facility has been to minimise impacts on the community and environment. Proposed facility meets government objectives. Management of activities and impacts will minimise impacts of the facility on the child care centre. Ongoing consultation will be undertaken to ensure the RIRP does not impact on the Operators ability to comply with the Regulations. REMONDIS has committed to working with the child care centre to ensure that the Centre's concerns are addressed and to develop additional measures which will reduce identified risks and address any financial impacts on the business as a result of the construction of the proposed RIRP.

NO.	NAME	ISSUE	RESPONSE
262	LEONARD POULSEN	1. Ingress and Egress of vehicles to and from the facility. 2. One narrow bridge to cope with the extra number of vehicles would cause considerable traffic problems. 3. To add to the number of large vehicles already servicing industrial establishments along Grand Avenue would be chaotic.	Section 2.5 Road Safety Audit for Grand Avenue North conducted and measures to be implemented to improve signage and road markings for safe operation for motorists, pedestrians and cyclists. Transport Code of Conduct to be prepared for drivers accessing the site. Traffic impact will be mitigated by use of alternative route in pm peak period.
263	OLIVIA BARBARA LUDBROOK	1. Health issues. 2. Odour. 3. Pollution.	Sections 2.2, 2.3, 2.4, 2.8 and 2.14 Activities will be undertaken in accordance with the SMP, Construction EMP and Operational EMP. Design of the facility has been aimed at minimising impact on local community and the environment.
264	GLENN HOME	Bettergrow has been supplying quality compost and agricultural material for more than 20 years and the company is pleased to see alternate technology being planned to assist in the diversion of organic waste from landfill. The reuse of organic material is a growing market and technologies that can improve the quality of material via effective source separation to produce high quality organic fertiliser and compost is good for the environment.	Section 2.10 Noted.
265	KAREN BANTON	1. The assessment speaks in terms of 'minimising' (rather than eliminating) the risk of asbestos dust escaping during development. 2. Section 7.5.2 states that over a 6-8 week period "excavation and trenching activities" will occur below the seal. Part 7.5.2 then seems to provide contradictory statements as to whether or not asbestos dust will be released. Initially it is stated that "as the site contains asbestos. Appropriate management practices will be in place to ensure no off-site impacts from the material occur. This sentence suggests that "no" of site impact will occur, or in other words the asbestos will be contained. However in the very next sentence it states that "dust emissions are (to be) minimal. This following sentence indicates that there will be asbestos contamination. Just how much contamination will occur is not known. 3. Section 7.5.2 also states that "dust mitigation measures will be utilised to reduce any off site impacts". The words	Sections 2.2, 2.3, 2.8, 2.13, 3 and 5 Extent of disturbance to the cap has been reduced as a result of revision to the design for installation of services. No excavation of contaminated material will be required. SMP to be updated and approved by the EPA. Asbestos Handling Procedure prepared. Occupational Hygienist to be on site during activities associated with disturbance to the site cap. Air quality monitoring programme to be approved by the EPA. A Construction EMP will be in place for all stages of construction. During grouting activities the site cap will be disturbed. These activities will be contained within an enclosed tent structure. Dust emissions will be prevented through implementation of the SWP SWMS. Construction of the platform and buildings

NO.	NAME	ISSUE	RESPONSE
		mitigation and reduce are dangerous and ambiguous words. What do these words mean. It is noted that the author of the assessment has chosen not to use words such as "elimination" or 'eliminate". The author of the report gives no guarantees that asbestos dust will not escape from the site into neighbouring areas resulting in asbestos exposures to men, women and children. 4. Section 4.10 of Appendix D states that the works will be undertaken "in a manner that minimises fugitive dust" with the engagement of an occupational hygienist "to prepare an air monitoring programme for the excavation, storage and offsite removal of fill material containing asbestos" in accordance with the relevant code. A list of various measures to be implemented to "control" the dust has also been set out. It is in no way clear what the word control means here. Again this is an ambiguous word. Further it is not obvious if there will be a suitably qualified occupational hygienist on site throughout the proposed excavation works. 5. Enormous concern that asbestos dust emissions would occur during the excavation of the old JH site. It is beyond any controversy that any exposure to asbestos can result in persons developing asbestos related disease, such as the dreadful and fatal mesothelioma. 6. A comprehensive feasibility study should be authorised by the NSW state government and conducted by appropriate authorities in determining the site's suitability (or otherwise) for redevelopment (from a health and safety perspective). 7. Preventing asbestos exposure now and in the future is paramount, ensuring no new cases of (ARD) asbestos related disease do not develop decades down the track, within our communities.	has the potential to result in dust emissions from clean fill, building materials and construction activities. These dust emissions will be minimised under the Construction EMP. All work on the site has to be in accordance with the Work Health and Safety Act and Regulation 2011 and the code of practice How to Safely Remove Asbestos 2011.
266	JBA URBAN PLANNING CONSULTANTS PTY LTD	Submission prepared on behalf of Linfox Armaguard Proprietary Limited (Armaguard). 1. Significant concerns in relation to the impacts of the RIRP on which provides access to the industrial area. Any further deterioration in the operation of the traffic access arrangement for the industrial area will severely and detrimentally impact the performance and security of Armaguard's operations. Of particular concern to Armaguard is the impact on the shift at 2pm, which	Section 2.5 Traffic impact will be mitigated by use of alternative route in pm peak period. Road Safety Audit for Grand Avenue North conducted and measures to be implemented to improve signage and road markings for safe operation for motorists, pedestrians and cyclists.

NO.	NAME	ISSUE	RESPONSE
		coincides with the peak traffic generation from the proposed RIRP. Armaguard has a detailed understanding of the nature of traffic movements on the local traffic network and the efficiency of the network. the efficiency of the already overburdened traffic network: • The traffic impact assessment does not specify on what days background traffic surveys were carried out and whether these were considered reflective of normal traffic on the network. Armaguard operational staff note that there are particular days when there seems to be large amount of traffic on the local road network with a resultant reduction in the efficiency of the network. • There is no discussion of the potential implications of events at Rosehill Gardens Racecourse. • There is no discussion of the impact of the James Ruse Drive/Grand Avenue/Hassall Street intersection on the operations of the Grand avenue/Grand Avenue North intersection. • The traffic impact assessment provides no broader or strategic analysis of the operation of the local traffic network, or any consideration of what future traffic arrangements might be implemented to alleviate the current unacceptable situation. • An alternative traffic route is proposed however the Traffic Impact Assessment does not consider or assess the potential traffic impacts on the Grand Avenue/Colquhoun Street intersection not the Wentworth Road/Parramatta Road intersection. • There is no evidence that the proponent has consulted with RMS in relation to the operation of the James Ruse Drive/Grand Avenue/ Hassall Street intersection not whether there are any plans in the short, medium to longterm to improve the operation of this unacceptably performing intersection. 2. Contamination of the site and potential impacts on the surrounding land users • The Site Management Plan is not included in the EA. • Given the proximity of the works to the child care centre	Transport Code of Conduct to be prepared for drivers accessing the site. Operations are not predicted to impact on activities associated with Rosehill racecourse. The alternative route has been assessed using SIDRA Intersection which demonstrates that the development will create minimal impacts on the critical intersections of James Ruse Drive, Grand Avenue and Hassall Street & James Ruse Drive, Berry Street and Parramatta Road. In this regard, the proposal alternative route will have a minimal impact on existing operation of intersections in the vicinity of the site. The development will generate moderate traffic volumes and will have a minimal impact on the existing operation of intersections in the vicinity of the site. Consultation has been undertaken with RMS. Sections 2.2, 2.3 and 2.8 Site Management Plan was included in Appendix C of the EA. SMP to be updated and approved by the EPA.

NO.	NAME	ISSUE	RESPONSE
		it is considered that at a minimum all of the works in the SWP should be implemented including that: - All excavation material potentially contaminated with asbestos must be carried out within a tent or similar structure. - All stockpiles of material potentially contaminated with asbestos must be contained within a tent or similar structure. - An air monitoring programme to be prepared by a qualified occupational hygienist which will assess the nature of the asbestos material, different wind movements across the site, location of nearby receptors such as the child care centre, train station and residential housing, be carried out prior to the determination of the application.	Asbestos Handling Procedure prepared. Occupational Hygienist to be on site during activities associated with disturbance to the site cap. Air quality monitoring programme to be approved by the EPA.
		3. Noise impacts on the surrounding land users. With respect to the child care centre: • The NIS does not provide a background noise level for the child care centre. • The NIS does not specify a project specific noise goal for this receptor. • Table 25 puts forward 60dBA noise goal based on achieving 40dBa assuming the child care centre has fixed and closed windows at all times. The child care centre includes an outdoor area and this would be better assessed as an active recreation area. • The NIS calculates an intrusive noise level of 58dBA LAeq 15 min which is 3dBa above the Amenity Noise Goal. • It is not clear if the intrusive noise criterion of the amenity noise criterion should be applied. • The proponent should carry out a more detailed analysis of the noise impact assessment to take into account the potential impacts on the closest sensitive receptors including the child care centre.	Sections 2.4, 2.8 and 2.13 Assessment demonstrates construction and operational noise goals will be achieved at the day care centre. Construction and Operational EMPs will be implemented. Noise monitoring will be undertaken in accordance with Conditions of Approval and EPL.
		4. Justification of exceeding the prescribed height limit for buildings • The proposed RIRP exceeds the height limits across the site as identified in the Parramatta LEP 2011. • The visual impact assessment does not assess the	Sections 2.10 and 2.12 Visual impact will be minimal.

NO.	NAME	ISSUE	RESPONSE
		visual impact arising from the exceedance of the height limit. • The proponent should provide a detailed assessment of the visual impacts resulting from the height of the proposed buildings, with consideration of the height of the adjacent buildings, and the nature of the surrounding land uses. • The Proponent should justify the proposed xceedances of the height limit with consideration of the outcomes of the detailed assessment. 5. Consideration of Alternatives • Level of analysis of alternatives by the Proponent is inadequate for the purposes of or carrying out meaningful assessment of the proponents evaluation of alternatives. Significant constraints seem not to have been taken in to account in the evaluation of alternatives. • Other alternatives that have not been raised in the EA include locating the facility in closer proximity to the final landfill and/or composting facility destination, incorporating the transport of waste by rail. 6. Project Justification. • No justification for the project other than to claim that the RIRP is an appropriate response to the recycling and resource recovery targets at a National and State level and that to do nothing would to lose an opportunity to contribute to meeting such targets by not recovering and utilising materials from the specified waste stream and educing landfill demand. • Mass loss should be explained and substantiated. • Achieving the waste management objectives should not come at the expense of unacceptable local impacts. • Proponent has not justified the development.	Sections 2.10 and 2.14 Site selection process included a number of sites within Western Sydney. Proposed site was selected based on proximity to demand, access to transport links, appropriate zoning and ability to contain and minimise environmental impacts. Section 2.10 Proposed use is consistent with the zoning for the site. Proposed facility meets government objectives. Waste facilities are an existing use in the Camellia area. Section 2.10 Mass loss is part of the aerobic process. Section 2.14 Assessment demonstrates that impact can be minimised and managed. Sections 2.10 and 2.14 Proposed facility meets government objectives Assessment demonstrates that impact can be minimised and managed.

NO.	NAME	ISSUE	RESPONSE
267	DR GEOFF LEE MP STATE MEMBER FOR PARRAMATTA	1. The proposal is of concern for Parramatta residents and local businesses due to its adverse impacts on: • Traffic congestion with increasing heavy traffic movements. Concerns include the number and frequency of heavy vehicles and the negative impacts during peak periods. • Potential redevelopment opportunities for the Camellia precinct over its 20 year lease period. 2. Other concerns raised include: • Potential breaches to the structural integrity of the concrete capping from construction and overtime due to the continuous flow of heavy vehicle traffic to and from the site. Concerns include public safety issues as a result of asbestos still contained in the grounds being released. • Proliferation of fumes and dust affecting adjoining businesses and residents in this area with no proactive solutions planned to ensure continuous monitoring for odours and dust around the site. • Interference of the historic grave site of Eleanor McGee on the adjacent site. 3. The area offers a significant opportunity for redevelopment. The 20 year lease period for the RIRP stymies any potential that could be gained from the $250 million development of Rosehill Racecourse and the impending closure of the Shell refinery at Clyde to provide a catalyst for business and residential development to cater for the expected 20,000	Section 2.5 Traffic impact will be mitigated by use of alternative route in pm peak period. Section 2.11 Proposed use is consistent with the zoning for the site. Proposed facility meets government objectives. Waste facilities are an existing use in the Camellia area. Sections 2.2, 2.3 and 2.8 SMP to be updated and approved by the EPA. Asbestos Handling Procedure prepared. Occupational Hygienist to be on site during activities associated with disturbance to the site cap. Air quality monitoring programme to be approved by the EPA. Extent of disturbance to the cap has been reduced as a result of revisions to the design for installation of services. No excavation of contaminated material will be required. Sections 2.2, 2.3 and 2.8 Noise impact assessment predicts noise levels will comply with regulatory requirements during both construction and operational phases. Dust impacts will be minimised during construction. Monitoring programme to be included in Construction and Operational EMPs. Section 2.14 The proposed RIRP will not impact on the grave and measures will be included in the EMPs to protect heritage values. Section 2.11 Proposed use is consistent with the zoning for the site. Proposed facility meets government objectives. Waste facilities are an existing use in the Camellia area.

NO.	NAME	ISSUE	RESPONSE
		new jobs forecast for Parramatta over the next 20 years.	
268	ANDREW STOKER	1. Breaking of the cement barrier put in place to contain the asbestos is not in the public interest and go against why it was put in place originally.	Sections 2.2 and 3 Extent of disturbance to the cap has been reduced as a result of revisions to the design for installation of services. No excavation of contaminated material will be required. SMP to be updated and approved by the EPA. Asbestos Handling Procedure prepared. Occupational Hygienist to be on site during activities associated with disturbance to the site cap. Air quality monitoring programme to be approved by the EPA.
		2. Child goes to the child care centre metres away from the proposed RIRP and we drive past each day down James Ruse Drive.	Sections 2.2, 2.3, 2.4, 2.5, 2.8 and 2.14 Design of the facility has been to minimise impacts on child care centre. Management Strategy to be implemented with the aim of mitigating impacts on the centre and its users.
269	CLINTON GREER	1. Proximity to residential and urban spaces.	Sections 2.2, 2.3, 2.4, 2.5, 2.8 and 2.14 Proposed use is consistent with the zoning for the site. Impacts on adjoining community and environment to be minimised by design and management practices.
		2. Concerns regarding the management of disturbances to the asbestos-contaminated ground on the site.	Section 2.3 and 3 Extent of disturbance to the cap has been reduced as a result of revisions to the design for installation of services. No excavation of contaminated material will be required. SMP to be updated and approved by the EPA. Asbestos Handling Procedure prepared. Occupational Hygienist to be on site during activities associated with disturbance to the site cap. Air quality monitoring programme to be approved by the EPA.
		3. Inappropriate to develop an organic waste processing facility in such a densely populated area. It is a waterfront property located next to a major residential area with close access to public transport and work/business in the Parramatta CBD.	Sections 2.3 and 2.11 All operations will be undertaken within an enclosed facility. Proposed use is consistent with the zoning for the site.

NO.	NAME	ISSUE	RESPONSE
		4. Smell of organic waste processing facility cannot be 100% contained and nearby residents, including the university will be impacted. This type of development belongs on the urban fringes not Parramatta, on the Parramatta River next to a high growth residential and commercial space. 5. Inappropriate location for such a development.	Sections 2.3 and 2.11 All operations will be undertaken within an enclosed facility. Proposed use is consistent with the zoning for the site. Section 2.11 Proposed use is consistent with the zoning for the site.
270	SHARONLEA KOUROUTIS	1. Proposal would be terrible for the area. 2. 300 more tucks a day using James Ruse Drive would be a terrible impact on residents. 3. Potential hazards. 4. There are 4 preschool and a public school close to the site. 5. Value of properties will drop and residents should be compensated.	Section 2 – Design and management will minimise impact on local community and environment. Section 2.5 288 vehicle movements per day of which 184 will be truck movements. Section 2.8 and 2.14 Management of the site and its operations will minimise hazards and have Emergency Procedures established in the event of an incident. Section 2.11 Proposed use is consistent with the zoning for the site. Design and management aimed at minimising impacts on the local community and the environment. Section 2.11 Proposed use is consistent with the zoning for the site.
271	KRISTIAN WYNN	1. Sydney needs more facilities like this to assist with state goals and objectives of reducing waste to landfill, increased recovery and reuse of materials as well as meeting the diversion targets of C&I and MSW waste.	Section 2.10 Proposed facility meets government objectives.
272	CONFIDENTIAL	1. Hazardous place and we have a child who goes to school a few streets away. 2. Noise impact from 300 trucks coming and out and pollution will impact on my family.	Section 2 Management of the site and its operations will minimise hazards and have Emergency Procedures established in the event of an incident. Section 2.4 288 vehicle movements per day of which 184 will be truck movements. Traffic noise management strategy to be implemented.

NO.	NAME	ISSUE	RESPONSE
		3. There are many sites around NSW that are not neighbourhoods and a tourist destination like where I live in Rosehill racecourse and will suffer from traffic and noise. 4. Please build somewhere else.	Section 2.11 Proposed use is consistent with the zoning for the site.
273	JENNY MAYS – CEO EXPLORE AND DEVELOP	1. We operate an Early Childhood Learning environment next door at Level 4, 1 Grand Avenue Drive, Parramatta and look directly into that property. 2. When we opened the centre 1 Grand Avenue was presented as a possible public parkland area. As such the location of our service appeared to be appropriate. 3. We currently service 137 families and 105 children attend our centre. Concerns for our children and families include: • Hazards associated with the treatment of waste in such close proximity to children. • Hazards associated with the delivery of waste material in such close proximity to children. • Odour that will emulate from managing waste material in such close proximity to children. • Construction of the facility on land that has been previously been capped due to asbestos contamination. • Priority is the well being of the children in our care.	Noted. Section 2.11 Proposed use is consistent with the zoning for the site. Sections 2.2, 2.3, 2.4, 2.5, 2.8, 2.13 and 2.14 Design and management aimed at minimising impacts on the local community and the environment. Management Strategy being developed to manage and minimise impacts on children attending the child care centre. Road Safety Audit for Grand Avenue North conducted and measures to be implemented to improve signage and road markings for safe operation for motorists, pedestrians and cyclists. Transport Code of Conduct to be prepared for drivers accessing the site. All operations will be undertaken within an enclosed facility. Integrated air management system to be installed. No outdoor handling or materials. Negative pressure will be maintained within the buildings. SMP to be updated and approved by the EPA. Asbestos Handling Procedure prepared. Extent of disturbance to the cap has been reduced as a result of revisions to the design for installation of services. No excavation of contaminated material will be required. Occupational Hygienist to be on site during activities associated with disturbance to the site cap. Air quality monitoring programme to be approved by the EPA.

NO.	NAME	ISSUE	RESPONSE
			Ongoing consultation will be undertaken to ensure the RIRP does not impact on the Operators ability to comply with the Regulations.

Table 2.2
Summary Government Agency Submissions

NO.	NAME	ISSUE	RESPONSE
	EPA	Air Quality and Odour 1. The Air Quality Impact Assessment is adequate. 2. The risk of unacceptable odour impacts is high if air control equipment is not appropriately designed and maintained. Accordingly it is imperative that the Proponent be required to engage an independent odour specialist to oversee final design of the facility and develop and implement a formal Air Quality and Odour Management Plan. 3. Recommended Conditions of Approval include requirements to: • Prepare a Biofilter Pre-commissioning Study. • Prepare a Biofilter Post Commissioning Study. • Odour control system design must be undertaken by odour control specialist. The system must be capable of treating the extracted air from all odour sources in the waste handling and composting processes. Emissions must be emitted through a dedicated emission stack. The system must be operated and maintained in accordance with the manufacturer's specification, the facility odour management plan and as required to maintain the emissions controls of the system. Maintenance records and monitoring data must be maintained and available for inspection. • Air Quality and Odour Management plan must be developed and implemented in consultation with an odour control specialist and the EPA.	Sections 2.3, 2.8, 4 and 5 Noted. Air Quality and Odour Management Plan to be prepared. Independent odour specialist to review the final design of the facility. Agreed. Agreed. Independent odour specialist to review the final design of the facility. Odour Management Plan to be prepared and implemented. Agreed.
		Noise 1. Conditions of Approval recommended with respect to compliance, including requirement to monitor noise, weather. Traffic Noise Management System required to address both construction and operational noise.	Sections 2.8 and 5 Agreed. Suggest additional condition relating to review of monitoring programme.
		Contaminated Sites 1. Conditions of Approval recommended including: • Requirement to obtain NSW EPA approval to undertake excavation works and install new services. • Proponent must provide Progressive Erosion and Sediment Control Plans for each stage of the development. • Environmental inspections and daily surveillance inspection must be documented and kept on record with a register. • Groundwater monitoring is to be carried out prior to the commencement of trenching /excavation works.	Sections 2.2, 2.8 Agreed.

NO.	NAME	ISSUE	RESPONSE
		• Prior to commencement of any works a detailed air monitoring programme will need to be provided to the EPA. 2. If approval is granted, consideration be given to requiring trenching for services to be undertaken within a negative air tent with emission controls.	
		General - Conditions of Approval recommended.	Section 5
	NSW OFFICE OF WATER	Satisfied with assessment and no recommended conditions of approval.	Noted.
	RAILCORP	Conditions of Approval provided. 1. Prior to commencement of operations the Applicant shall undertake works proposed on Grand Avenue North or negotiate with Council. 2. Prior to commencement of operation the Applicant is to liaise with RailCorp in relation to specific requirements relating to: • Requirements for reconditioning works of the level crossing. • Obtain advice as to whether a revised Level Cross Risk Assessment is required. • Undertake new assessment if required. • Undertake annual inspection and maintenance of the Level Crossing. • Should construction works involve ground penetration deeper than 2m and within 25m of the adjoining rail corridor the Proponent is to submit relevant documentation to RailCorp. • Prior to commencement of works an accurate survey locating the correct property boundary with respect to the rail boundary and rail infrastructure. • Prior to commencement of works a joint inspection for rail infrastructure and property to be carried out. • Electrolysis Risk report to be prepared. • Risk Assessment/Management Plan and SWMS to be submitted. • Submit a plan showing all craneage and other aerial operations for the development and must comply with RailCorp requirements. • Measures to be installed to prevent any contaminants from entering the rail corridor. • Drainage must be adequately disposed or managed and not allowed to discharge into the rail corridor. • No work is allowed within the rail corridor without the permission of RailCorp. • Ensure roots and foliage of proposed trees being planted does not impact on rail corridor. Landscaping plan to be submitted to RailCorp. • Appropriate fencing shall be installed along the rail corridor to prevent unauthorised access to the rail corridor. • During works and operations of the facility, employees / visitors shall not utilise the adjoining commuter carpark.	Section 5 Agreed.

NO.	NAME	ISSUE	RESPONSE
	SYDNEY REGIONAL DEVELOPMENT ADVISORY COMMITTEE	1. Further background traffic growth may result in longer westbound traffic queues along Grand Avenue and hence vehicles would not be able to turn right out of Grand Avenue North into Grand Avenue.	Noted and Section 2.5
		2. Road Safety Audit to be conducted on Grand Avenue/Grand Avenue North intersection.	Section 2.5 Road Safety Audit for Grand Avenue North conducted and measures to be implemented to improve signage and road markings for safe operation for motorists, pedestrians and cyclists.
		3. Swept Paths to be prepared for Grand Avenue / Grand Avenue North intersection.	Section 2.5 Swept paths prepared and submitted to SRDAC.
		4. All works / regulatory sign posting associated with the proposed development are to be at no cost to RMS.	Noted.
	NSW WORKCOVER	1. WorkCover has not been previously consulted about the exposure to asbestos and other hazardous substances that could be released from this site during construction and use stages of the development.	Section 2.13 Consultation undertaken as requested.
		2. The JH site has a history of asbestos contamination as it was the site of major asbestos manufacture and although the buildings have been demolished and the area covered in concrete and asphalt, the asbestos fill material remains underneath the capping.	Section 2.2
		3. No where in the EA is there any details about how they intend to mitigate asbestos fibres during the construction phase of the redevelopment. Concern as recent work involving excavation of old garbage tips have yielded high fibre in air readings.	Sections 2.2, 2.3 and 2.8 SMP to be updated and approved by the EPA. Asbestos Handling Procedure prepared. Occupational Hygienist to be on site during activities associated with disturbance to the site cap. Air quality monitoring programme to be approved by the EPA.
		4. There is no methodology of how the fill will be compacted over the hard stand without penetrating the capped layer or how the weight of the buildings and structures may affect the capping layer.	Section 1 and 2.2 Ground penetrating radar survey undertaken and grouting proposed to ensure stability of the site. Subsidence Management Plan to be prepared for event of subsidence.

NO.	NAME	ISSUE	RESPONSE
		5. The extent of excavation works to be carried out are along the side of site that holds the most contamination and the amount of earth to be removed from this area would constitute major friable asbestos removal programme carried out by a licensed friable asbestos removal contractor and not just supervised by one.	Section 2.2 Extent of disturbance to the cap has been reduced as a result of revisions to the design for installation of services. No excavation of contaminated material will be required.
		6. Before any approval WorkCover would like to be informed and consulted on the following matters; • The manner of construction of the service trenches so that no asbestos fibres are released into the atmosphere that could cause adverse health effects to the workers and general public. This may required complete enclosure of the work areas. • The methodology for ensuring the integrity of the capping layer during construction and use of the site, as well as the ongoing assessment of the capping layer to ensure no breaches occur in the future. • Comprehensive air monitoring programme not just of the site but the neighbouring area to ensure no asbestos fibres migrate beyond the development.	Sections 2.2, 2.3, 2.8 and 2.13 Agreed.
		6. All work on the site has to be in accordance with the Work Health and Safety Act and Regulation 2011 and the code of practice How to Safely Remove Asbestos 2011.	Section 2.2 Agreed.
	PARRAMATTA CITY COUNCIL	1. The proposed use of the site is not sympathetic to the preferred future use of the site and future plans for the Camellia Precinct. 2. The subject site is considered to be a gateway site for Parramatta and the proposed use would present a poor image for Parramatta. 3. Council foresees the site being used in a more positive fashion, similar to other signature developments in the immediate area such as the University of Western Sydney and Rosehill Racecourse. 4. Proposed development will result in the disturbance to the integrity of the existing capping and groundwater, resulting in an unacceptable environmental impact on the area.	Section 2.11 Proposed use is consistent with the zoning for the site. Sections 2.11 and 2.12 Proposed use is consistent with the zoning for the site. As above. Section 2.2 Extent of disturbance to the cap has been reduced as a result of revisions to the design for installation of services. No excavation of contaminated material will be required. SMP to be updated and approved by the EPA.

NO.	NAME	ISSUE	RESPONSE
		5. Access to the site from James Ruse Drive should be via Grand Avenue North across the rail line. Subject to this being allowed by RailCorp, the road should be upgraded appropriately. 6. Strong concerns regarding the integrity of the existing capping. Capping does not appear to be a surface of acceptable quality to sufficiently and securely seal the contaminated area. Erosion occurring on the northern side of the Parramatta River potentially exposing contaminated soil. Capping should be audited and upgraded immediately.	Asbestos Handling Procedure prepared. Occupational Hygienist to be on site during activities associated with disturbance to the site cap. Air quality monitoring programme to be approved by the EPA. Section 2.5 RailCorp has confirmed this option is not viable. Sections 2.2 and 2.6 SMP to be updated and approved by the EPA. SMP includes monitoring requirements in relation to the site cap and the northern wall of the site adjacent to the Parramatta River.
	Social Outcome Comments	To minimise potential negative impacts as much as possible it is recommended that: 1. Documented processes and procedures are put in place to minimise and manage odour impact. 2. Documented processes and procedures for the surrounding community and key stakeholders to report concerns with operations should they arise including provision of a 24 hour contact point for urgent issues. 3. Documented consumer engagement plan and mechanisms to keep local resident and business community informed of progress of the development. 4. Implementation of a Heavy Vehicle Driver Orientation Programme. 5. Documented emergency and evacuation procedures for the businesses and surrounding area. Information needs to be communicated and mechanisms put in place for ongoing updates. 6. Completion of pathway upgrades and vegetation clearance to support safer pedestrian travel and better amenity for stakeholders. 7. A safe and sympathetically landscaped pedestrian pathway be created between Camellia Railway station and the proposed site entrance. 8. Two landscaped recreational eating areas be created for staff.	Sections 2.3 and 2.8 Agreed. Sections 2.8 and 2.13 Agreed. Sections 2.8 and 2.13 Agreed. Section 2.8 Agreed. Section 2.8 Agreed. Section 2.5 Agreed. Sections 2.5, 2.12 and 4 Agreed. Section 2.12 Proposal already incorporates eating areas within the proposed RIRP boundary.

NO.	NAME	ISSUE	RESPONSE
		9. Council's longterm vision is to have public access along both sides of the river as a shared use pathway.	Sections 2.6 and 2.12 Agreed. Requirement is included in the Site Masterplan.
	Landscape and Riverbank Treatment Options	1. Councils supports the removal of the Cabbage Gum and Jacaranda at the site entrance. 2. Environment Protection Zone: • Do not support use of moveable containers. • Propose replacing removable containers with non-movable contained raised mounded area covering the majority of the EPZ. • Concern regarding erosion on the northern bank of the site under the concrete slab as a result of the Parramatta River – Need to investigate and implement appropriate measures.	Noted. Section 2.6 Site MasterPlan revised. SMP includes requirements for monitoring of this area.
		Heritage – No issues raised.	Noted.
		Air Quality and Noise 1. Recommended that an Occupational Hygienist and a Third Party NSW EPA Approved Contaminated Site Auditor be engaged to develop, review and monitor the construction phase. Monitoring sites should be set up at the perimeter and validated by these experts. 2. Why was NSW EPA Technical Notes: Assessment and Management of Odour from Stationary Sources not considered relevant. 3. Odour – cumulative odour assessment is required. 4. Noise – Should additional acoustic reports be prepared justification for the precedent and acceptability of splitting the receiver types should be sought. 5. Operation Noise Management Plan should be prepared.	Sections 2.2, 2.3, 2.8, 2.13, 3 and 5 Occupational Hygienist to be employed to develop monitoring plan and be present during activities associated with disturbance to the site cap. Technical Notes specifically refer to requirements outlined in the Approved Methods, which the AQIA has been conducted in accordance with. Odour emissions from the RIRP are expected to have a different odour character from other neighbouring sources. Consistent with the guidelines of the INP, the provision of background noise levels are used to '*control intrusive noise impacts in the short term for residences*'. For other sensitive receivers the INP provides Amenity criteria which are independent of the background noise level. Agreed.

NO.	NAME	ISSUE	RESPONSE
		6. Greenhouse Gas Emissions • Investigate options for converting waste to energy from the composting process. • Investigate additional /alternative renewable energy sources to supply electricity to the site. • Provide details of all other energy efficiency measures. 7. Construction Environmental Management Plan A CEMP must be prepared including: • Construction Noise and Vibration Plan. • Construction Contaminated Land Management Sub Plan. • Construction Soil and Water Management Plan. 8. An Occupational Hygienist and a Third Party NSW EPA Approved Contaminated Site Auditor must be engaged to develop, review and monitor construction phase works. 9. Air quality monitoring sites should be set up at the perimeter and validated by experts. 10. Operational EMP - Operational EMP must include: • Operational Noise Management Plan. • Air Quality and Odour Management Plan. 11. Audits must be prepared and submitted to the relevant Authority: • Environmental Impact Audit – Construction. • Environmental Impact Audit – Operation. 12. 24 Hour Contact Number to be provided. A record of all complaints/concerns raised shall be kept in a logbook and details how such matters have been addressed.	These considerations have been taken into account in the project design. Agreed. Occupational Hygienist to be engaged. Agreed. Agreed. Agreed. Agreed.
		Contamination 1. Council is not satisfied that the safety of workers, residents and children of the nearby child care centre will be protected.	Sections 2.2, 2.3, 2.8 and 2.13 Extent of disturbance to the cap has been reduced as a result of revisions to the design for installation of services. No excavation of contaminated material will be required. SMP to be updated and approved by the EPA. Asbestos Handling Procedure prepared. Occupational Hygienist to be on site during activities associated with disturbance to the site cap. Air quality monitoring programme

NO.	NAME	ISSUE	RESPONSE
			to be approved by the EPA. Asbestos Handling Procedure prepared. Occupational Hygienist to be on site during activities associated with disturbance to the site cap. Air quality monitoring programme to be approved by the EPA. All work on the site has to be in accordance with the Work Health and Safety Act and Regulation 2011 and the code of practice How to Safely Remove Asbestos 2011.
		Traffic and Parking 1. Alternate access to the site from Grand Avenue North at James Ruse Drive should be explored. If this access is used the road should be upgraded to Council's satisfaction. 2. Disabled parking to be modified in accordance with AS 2890.6-2009. 3. Car parking spaces 5 and 10 to be widened. 4. No Stopping Sign on the eastern side of Grand Avenue North to be relocated in accordance with Council requirements. 5. Applicant to fund alterations to line marking at the intersection and construction of a concrete island on the north side of Grand Avenue immediately west of Grand Avenue North. 6. Applicant to undertake an assessment of the exit from Grand Avenue to Grand Avenue North in regards the Safe Intersection Sight Distance and Guide to Rod Design Part 4A Unsignalised and Signalised Intersection Section 3. 7. Any approval should be subject to: • Provision of 44 off-street parking spaces. • Modifications to disabled parking - AS 2890.6-2009. • Combined entry and exit driveway to be constructed in accordance with AS 2890.1 and Councils specification. • Driveway gradients are to comply with AS 2890.1-2004. • Driveway width to comply with Council's Standard Heavy Vehicular Crossing Plan (DS9). • Traffic facilities to be installed must comply with AS 2890.1- 2004. • No Stopping Sign on the eastern side of Grand Avenue North to be relocated in accordance with Council Requirements. • Occupation of any part of footpath or road during construction of the	Sections 2.5, 2.8, 4 and 5 RailCorp advised this option is not viable. Agreed. Agreed. Agreed. Agreed. Agreed. Agreed.

NO.	NAME	ISSUE	RESPONSE
		development shall require a Road Occupancy Permit. Oversize vehicles using local roads require Council's approval.	
		Catchment Management 1. Although the applicant has undertaken an assessment against Council's floodplain risk management policy, it is unclear whether the correct land use type has been adopted for that assessment. 2. The Flood Study has not undertaken an assessment against the correct land use type as defined in the Council's floodplain risk management policy. As such the Applicant must undertake another assessment using the Critical Utilities and Uses classification.	Section 2.7 Assessment revised to take account alternative land use category.
		Stormwater Engineering - No issues raised.	Noted.
		Parramatta Council considers the following issues must be addressed: 1. Improved treatment of and increased landscaping within the EPZ. 2. Investigation and implementation of appropriate measures minimising impacts of erosion of the riverbank on the northern boundary of the site. 3. Site is adjacent to other heritage items and its use may have an impact on these heritage items. 4. Known Aboriginal sensitivity and archaeological potential of the affected ground is to be considered. 5. Appropriate management and auditing of the site during construction. 6. Appropriate management and auditing of the site during operation. 7. Structural integrity and suitability of the concrete cap for the proposed use. 8. Further work should be undertaken in relation to managing GHG and investigation of options for converting waste to energy from the composting process. 9. 24 Hour contact line is to be established. 10. Access form Grand Avenue is not appropriate and should be from Grand Avenue North. 11. Modification to Disabled parking spaces. 12. Width of car parking spaces 5 and 10 to be widened. 13. No Stopping zone on the eastern side of Grand Avenue North to be relocated. 14. Consumer engagement plan to be prepared and implemented. 15. Implementation of Heavy Vehicle Driver Orientation Programmes. 16. Documentation of Emergency and Evacuation Procedures. 17. Completion of pathway upgrade and vegetation clearance.	Section 2.6 – Landscape plan revised. Section 2.6 – Monitoring already included in SMP. Section 2.14 – Management to include protection of the site. Section 2.14 – Assessment undertaken.. Section 2.8 – Agreed. Section 2.8 – Agreed. Section 2.2 – Stabilisation to be undertaken prior to construction. Section 2.9 – Requirements considered in design of RIRP. Agreed Sections 2.8 and 2.13 Alternative reviewed and RailCorp advised not viable. Section 2.5 – Agreed. Section 2.5 – Agreed. Section 2.5 – Agreed. Section 2.5 – Agreed. Sections 2.8 and 2.13 –Agreed. Sections 2.5 and 2.8 – Agreed. Section 2.8 – Agreed.

NO.	NAME	ISSUE	RESPONSE
		18. Creation of a sympathetically landscaped pedestrian pathway between the Camellia railway station and the site entrance. 19. 2 Landscaped recreational eating spaces to be create for staff. 20. Undertake another assessment against Floodplain Risk Management Policy using correct land use. 21. Alterations to line marking at the intersection and construction of a concrete island on the north side of Grand Avenue North. 22. Undertake an assessment and alterations to the exit of Grand Avenue North to the satisfaction of Council's traffic unit.	Sections 2.5, 2.12 and 4 – Agreed. Sections 2.5, 2.12 and 4 – Agreed Section 2.12 – Eating areas already allocated on site. Section 2.7 – Assessment undertaken using alternative land use category. Section 2.5 Agreed. Section 2.5 – Agreed.

2.2 CONTAMINATION MANAGEMENT

2.2.1 Submission Numbers

Submissions 1 to 248, 250 to 253, 255, 256, 259 to 261, 263, 265 to 270, 272, 273, EPA, WorkCover, Parramatta City Council

2.2.2 Issue Description

In summary the respondents raised the following issues:

Breaching of the Cap

- Building the waste treatment facility on the former JH site is a health risk to people who work, live or utilise services in the area. No guarantee can be provided that this would not result in an impact on nearby receivers. The site should not be disturbed due to its proximity to residences, day care facilities, supermarkets, restaurants and workplaces;

- Proposed breaching of the cap is contrary to the Government's measures imposed on the site to manage any impacts. Use of Asbestos materials was banned in Australia, so why should a primary source of the production of this material be allowed to be breached, and to particularly allow friable fibres to be released;

- The proposed development will result in the disturbance to the integrity of the existing capping and groundwater, resulting in an unacceptable potential environmental impact of the area;

- Integrity of the existing capping. Currently the capping does not appear to be a surface of acceptable quality to sufficiently and securely seal the contaminated area. The capping should be appropriately audited and upgraded immediately;

- Potential breaches of the site cap from construction and over time due to the continuous flow of heavy traffic to and from the site. Public safety issues;

- Considering the history of the site and the liabilities that have been created through prior land use, that with the proposed development the likelihood of Asbestos being raised to the surface through unforseen excavation of accidental means needs more mitigation than what is currently proposed;

- There is no methodology of how the fill will be compacted over the hard stand without penetrating the capped layer or how the weight of the buildings and structures may affect the capping layer; and

- Not satisfied that the safety of workers, residents and children of the nearby child care centre will be protected.

Management of Activities

- A suitably qualified hygienist should be present during the 6 to 8 week excavation period;

- All excavation and stockpiles of materials must be carried out within a tent structure or similar;

- Air quality monitoring programme needs to be established;

- Need to ensure no new cases of asbestos related disease;

- Additional plans required to support the Site Management Plan;
- Need to consult with WorkCover NSW;
- The SMP does not allow breaching of the cap;
- The extent of excavation works would constitute a major friable asbestos removal programme which would need to be carried out by a licensed friable asbestos removal contractor and not just supervised by one;
- All work on the site has to be in accordance with the *Work Health and Safety Act* and Regulation 2011 and the code of practice How to Safely Remove Asbestos 2011;
- Section 4.10 of Appendix D states that the works will be undertaken "in a manner that minimises fugitive dust" with the engagement of an occupational hygienist "to prepare an air monitoring programme for the excavation, storage and offsite removal of fill material containing asbestos" in accordance with the relevant code. A list of various measures to be implemented to "control" the dust has also been set out. It is in no way clear what the word control means here. Further it is not obvious if there will be a suitably qualified occupational hygienist on site throughout the proposed excavation works over the 6-8 week period;
- Enormous concern that asbestos dust emissions would occur during the excavation of the old JH site. It is beyond any controversy that any exposure to asbestos can result in persons developing asbestos related disease, such as mesothelioma;
- A comprehensive feasibility study should be authorised by the NSW state government and conducted by appropriate authorities in determining the site's suitability (or otherwise) for redevelopment (from a health and safety perspective); and
- Preventing asbestos exposure now and in the future is paramount, ensuring no new cases of asbestos related disease develop decades down the track, within our communities.

2.2.3 Response

Section 3 and Technical Report No 1 of the EA provide an overview of the history of the site in terms of its use by James Hardie and contamination of the site as a result of these activities. As documented in the EA the site has been capped and a Site Management Plan prepared which provides the framework for the ongoing management of the site (refer Appendix C of the EA). Section 4, Appendix D and Appendix E of the EA provide detail of proposed stabilisation works in relation to the existing capping, the proposed construction works which have the potential to impact on the cap and how these activities will be managed. The following section provides a summary of that information and a response to issues and concerns raised in submissions during the Public Exhibition period for the EA.

Site History

The proposed RIRP site is part of a larger area of land which prior to 1996 was occupied by James Hardie (JH) for the manufacture of fibrous cement and related products and chemical manufacturing (refer Section 3 of EA and Technical report No1).

The former JH site consisted mainly of warehouse buildings which have since been demolished down to ground level. Large quantities of fill material have been used to level various parts of the site. Fill materials at the site are impacted with asbestos cement waste and friable asbestos and other contaminants. Due to the presence of some asbestos within the underlying fill materials at the site, all fill materials at the site have been assumed to be impacted by asbestos.

The site was acquired by SWC in 1996. In 1999, SWC formally notified the NSW EPA under Section 60 of the *Contaminated Land Management (CLM) Act 1997* that the site was contaminated and may have posed a Significant Risk of Harm. In 2000, SWC entered into a Voluntary Remediation Agreement (VRA) (Agreement No 26012) with the NSW EPA to clean up surface asbestos contamination at the site and to improve surface seals (concrete and bituminous concrete pavements) to ensure that buried asbestos waste was isolated so that exposure pathways to humans and the environment were not present. The VRA also contained a Contamination Management Plan (CMP) to ensure that remedial measures implemented were effective and maintained into the future.

During 2001 and 2002, Sydney Water undertook works for the VRA for the JH Site. The buried asbestos waste was well covered with hardstand providing an effective barrier to human contact and no further remedial work was considered necessary under the VRA. The following actions were implemented:

- Site Work Plans (SWP) have been developed for the JH Site. A drainage easement exists near the Clyde-Carlingford railway line. A SWP must be followed in the event of the need to undertake any excavation to maintain the service or in response to a service failure;

- Warning signs prohibiting un-authorised excavations and advising of buried hazardous material have been erected across the JH Site;

- Regular inspections are undertaken to monitor the condition of the surface cap;

- Regular monitoring of groundwater was undertaken in 2001, 2002 and 2003. This monitoring confirmed that no significant levels of groundwater contaminants above natural background levels are migrating from the JH Site. The NSW EPA determined that no further groundwater monitoring was required;

- A CMP was developed in 2000 for the JH Site; and

- A Site Management Plan (SMP) (2004) was developed in 2004 and replaced the former CMP to provide management of the contamination issues on the JH Site (Site Management Plan – Eastern Portion of Former James Hardie Site Grand Avenue Camellia March 2004).

After the completion of the capping and demolition works and a groundwater monitoring programme, the NSW EPA re-assessed its “significant risk of harm” determination under the *CLM Act* in the light of the works undertaken as part of the VRA.

After inspecting the JH Site, the NSW EPA determined (14 May 2003) that the VRA had been satisfactorily completed and that the NSW EPA considered that contamination no longer presented a significant risk of harm to human health or the environment. In accordance with a Section 26 (5) of the *CLM Act* the NSW EPA determined that the terms of the VRA had been carried out.

The NSW EPA registered a public positive covenant on the titles of the JH Site under Section 29 of the *CLM Act* and Section 88E of the *Conveyancing Act 1919*. The terms of the covenant require the site owner(s) to maintain remediation of the properties in line with the terms of the SMP. Section 6 of the SMP requires “The site owner must ensure that any excavation other than that which is for the sole purpose of repair or maintenance of the existing underground services or the connection or reconnection to existing services, where that connection or reconnection does not involve the provision of additional infrastructure in order to connect or reconnect the existing underground services, is only carried out if the prior written approval of the NSW EPA has been obtained”. A copy of the Site Management Plan was provided in Appendix C of the EA.

The site was purchased by Billbergia in 2007. REMONDIS propose to lease the eastern portion of the site for the proposed RIRP. In 2011 Billbergia commissioned Graeme Nyland (NSW EPA Accredited Site Auditor 9808) to assess the suitability of the site for its intended

commercial/industrial use. The Site Audit Statement was produced in accordance with the *CLM Act 1997*. The Audit Report found that commercial/industrial use is suitable subject to compliance with the Site Management Plan, Eastern Portion James Hardie site, Grand Avenue, Camellia (2004).

Site Management Plan

The Site Management Plan was developed to address the maintenance of remediation of the Eastern Portion of the former JH site which includes the site of the proposed RIRP. The document identifies the required management of the site in order to maintain remediation across the site and outlines measures to be taken to maintain the objectives of the Public Positive Covenant. It identifies hazards associated with the site in its current conditions and outlines management strategies to minimise hazards. There is a programme for reporting to the NSW EPA and a process for monitoring and review of the SMP.

The objectives of the SMP are to:

- Ensure an adequate seal is maintained over the areas of fill known to contain asbestos waste to ensure physical isolation of the waste from casual human contact, restrict infiltration of rainwater and prevent erosion or movement of waste; and

- To provide a detailed site management plan which addresses all human health and environmental issues related to the on-going presence of contaminated soils on the site. In particular, procedures that will control any future intrusive activities that could result in exposure to, or disturbance of the buried contaminated waste on site.

An ongoing system of management is included in the SMP which includes:

- Development of safeguards considered necessary to protect on-site workers when undertaking routine and emergency maintenance of infrastructure through implementation of a Safe Work Plan (SWP). The SWP includes requirements relating to health and safety for field activities, designation of work zones including exclusion and decontamination zones, personal protection levels and equipment, supervision of site activities and decontamination;

- Establishment of a requirement for obtaining approval from the NSW EPA for any form of excavation; and

- Development of an ongoing site monitoring program to assess the effectiveness of measures taken to manage and reduce impacts of identified contamination of the surrounding environment including provision to the NSW EPA of an annual report in accordance with the SMP.

With respect to the existing site cap there is a requirement to undertake an annual visual inspection to ensure the bitumen and concrete surfaces are in sound condition. Action must be taken to repair any surface that is not in sound condition. With respect to grassed areas a continuous grass cover must be maintained. Any areas of poor grass cover must be returfed. Six monthly inspections are required in relation to grass cover.

The Proponents will update the SMP in consultation with the NSW EPA to take account of the use of the site for the proposed RIRP including installation of services within the site and the need for updating the process for ongoing monitoring of the site and associated activities. The update of the SMP will include a review of the condition of the condition of the site cap on the area of the site not included in the RIRP proposal.

Proposed Activities and Management

The RIRP comprises the following main areas (refer Figure 3):

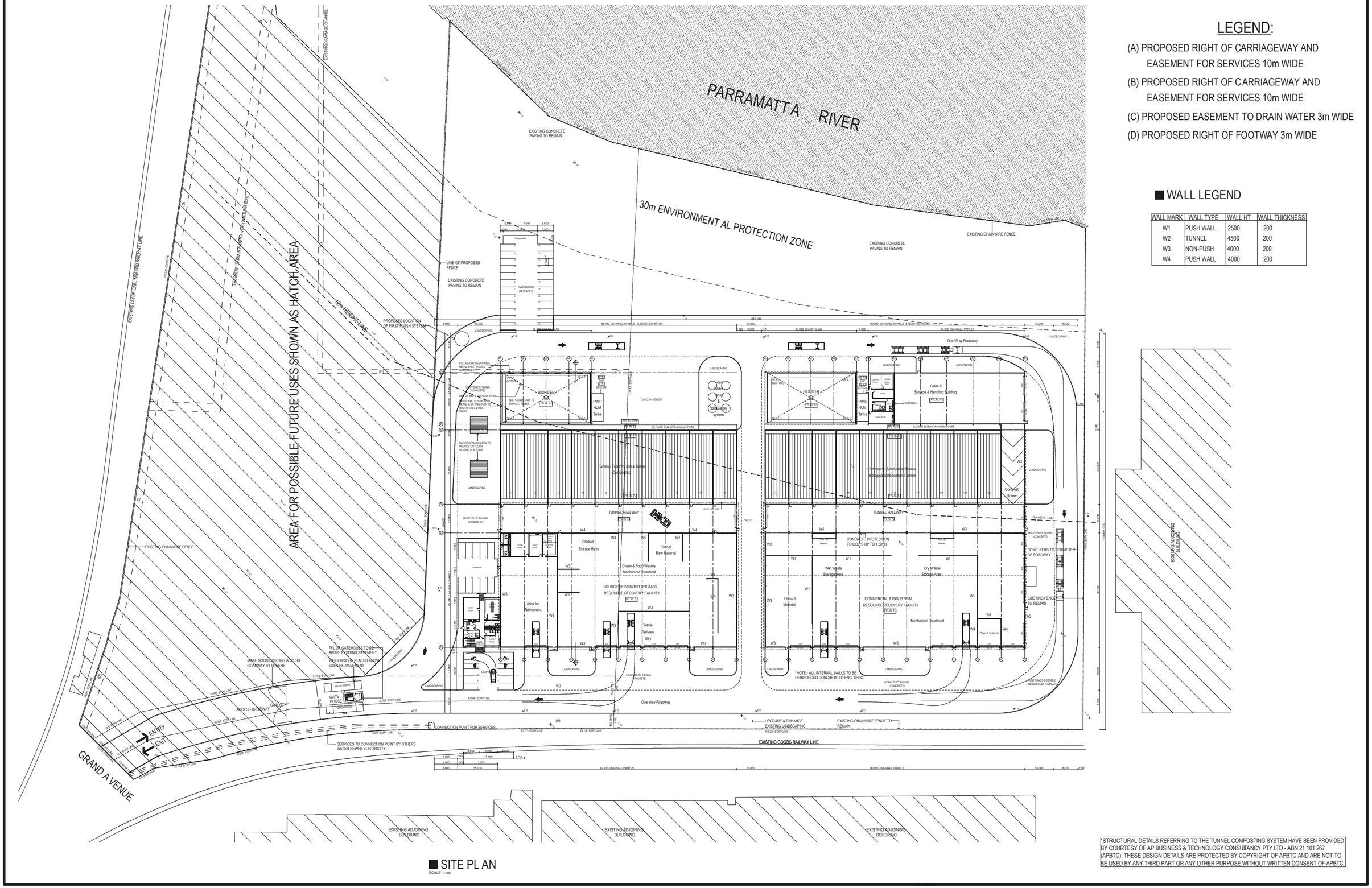
- Commercial and Industrial Resource Recovery Facility (CIRRF);
- Source Separated Organic Resource Recovery Facility (SSORRF);
- Weighbridge;
- Internal Access Road;
- Administration Office; and
- Car Parking.

Billbergia proposes to provide the necessary utility services to the facility comprising potable water, sewerage, electricity and telephone services and an extension of the existing stormwater system (refer Figure 4). Installation of these services will no longer require disturbance to the site cap or excavation of asbestos contaminated material.

REMONDIS will be responsible for the construction of the facility including a platform on which the facility will be located. Prior to construction of the platform a ground penetrating radar survey of the site will be completed and grouting undertaken to ensure stability of ground conditions prior to construction of the platform.

A geotechnical review of the site has been undertaken by CES (refer Appendix E of EA). The review identified the potential for differential settlement within the fill material below the existing site cap with the possibility that voids may have formed as a result of this settlement. The potential for the cap to subside into the voids once the platform is constructed was also identified. As a result of the findings of the geotechnical review a geophysical survey of the site has been undertaken using Ground Penetrating Radar to identify and locate any existing voids and areas within the site that are susceptible to ground subsidence. Due to the presence of storage containers and other material associated with the current use of the site it was not possible to survey the entire area. The results of the survey have identified areas with potential voids (refer Section 7.1 and Appendix E of the EA). The Ground Penetrating Radar survey will be completed prior to commencement of construction activities to allow treatment of the area within the development footprint prior to construction of the platform. Targeted grouting would allow contaminated fill to remain insitu and minimise disturbance to the site capping. A Site Work Plan and Safe Work Method Statement would be developed in accordance with the requirements of the SMP. The Safe Work Method Statement would address health and safety issues, environmental management and construction quality.

The radar survey will be completed prior to commencement of grouting. It is proposed to treat identified voids using a localised grouting technique which would be undertaken by a specialist grouting contractor. Grouting would involve drilling a small diameter hole(s) (typically <50mm) into the void and injecting liquid grout. Drilling of grout holes is normally carried out using two methods pneumatic percussion and/or core type. Each method is a wet drill process which dampens the drilled material and eliminates dust generation. The grid pattern for drilling would be 2.5m x 2.5m. Where a large amount of grout is required up to 3m x 3m may be required. It is expected that 1.5m^3 to 2m^3 of material would be generated from an estimated 200 to 300 drill holes over the area of the development footprint. This material will be classified using the NSW EPA Waste Classification Guidelines and transported off-site for disposal. The grout holes are pre-bored on a grid pattern following the void description parameters obtained from the GPR survey. The grout is pumped into the void until the void is filled and the grout allowed to harden. Grouting is injected into the subgrade until there is evidence of saturation which either causes a discharge at the surface or through adjoining grid grout holes.



*STRUCTURAL DETAILS REFERRING TO THE TUNNEL COMPOSTING SYSTEM HAVE BEEN PROVIDED BY COURTESY OF AP BUSINESS & TECHNOLOGY CONSULTANCY PTY LTD - ABN 21 101 267 (APBTC). THESE DESIGN DETAILS ARE PROTECTED BY COPYRIGHT OF APBTC AND ARE NOT TO BE USED BY ANY THIRD PART OR ANY OTHER PURPOSE WITHOUT WRITTEN CONSENT OF APBTC.

Figure 3 **RIRP Layout on Site**

Source : ALGORY ZAPPIA & ASSOCIATES 2010

Previously Proposed Extent of Excavation for Stormwater & Services
(Subject to final design review and survey)

STORMWATER DRAINAGE CONCEPT PLAN
1:500

TYPICAL STORMWATER PIT
SCALE 1:20

Figure 4 **Previously Proposed Extent of Excavation Works Construction**

Based on the extent and number of identified voids an estimated capacity of grout is calculated by the Grouting Contractor. During grouting each void area will be reported and assessed to ensure that the target estimates indicated in the GPR survey are achieved. Additional grout will be injected if necessary to validate that voids have been treated. A certificate of material quantity will be issued by the Grouting Contractor at the completion of grouting for the validation process. A Geotechnical Engineer will also provide a validation report with respect to the ability of the cap to withstand the load of the platform and facility. It will take approximately 8 to 10 weeks to complete the work associated with grouting. A curing time of 7 to 14 days is required prior to commencement of any construction activities.

A Subsidence Monitoring Program would also be implemented to regularly monitor movements of the earth platform and structures constructed at the site. A Generic Subsidence Management Plan is included in the Geotechnical Review included in Appendix E of the EA.

Construction of the facility will involve:

- Provision of site services;
- Construction of a platform on which the facility will be located; and
- Construction of the facility.

Prior to commencing construction on site:

- The statutory notifications shall be made and approval sought from the NSW EPA as required by the SMP;
- A suitably qualified occupational hygienist will be engaged to prepare an air monitoring program in accordance with Australian code of Practice for the Safe Removal of Asbestos (NOHSC:2002 (2005)). The occupational hygienist will be employed on site for the duration of activities associated with the disturbance of the cap;
- The air monitoring programme including real time-monitoring will be in place prior to commencement of activities. The programme will be approved by the NSW EPA and DoPI with regular reporting requirements. The programme will include the installation of monitoring stations at locations agreed with the DoPI and the EPA. A weather station will also be established on site;
- An Asbestos Handling Procedure has been prepared (refer Appendix A). All activities associated with breaching the site cap will be undertaken within an enclosed tent structure. The use of a tent structure under negative pressure will provide a containment system for activities associated with disturbance to the site cap.
- Procedures will be established to ensure material will be classified using the NSW EPA Waste Classification Guidelines before being transported off-site for disposal;
- WorkCover will be consulted to ensure all work on the site is in accordance with the *Work Health and Safety Act and Regulation 2011* and the code of practice *How to Safely Remove Asbestos 2011*; and
- The Construction EMP will be prepared which will include:
    - Site Induction programme;
    - Construction hours;
    - Traffic Noise Management Strategy;
    - Air Quality Management – Dust and Odour;
    - Noise and Vibration Construction Management Plan;
    - SWP and SWMS;

- Waste Management Plan;
- Hazards and Risks Plan;
- Traffic – Driver Orientation;
- Erosion and Sediment control plans (progressive plans to be submitted to EPA);
- Monitoring Programme;
- Construction Commitments as outlined in Section 4; and
- Community Engagement Programme.

Once approval has been obtained for the site works to commence the site office will be established. Construction hours will be restricted to 7am to 6pm Monday to Friday, 8am to 1pm Saturdays with no construction work on Sundays or public holidays. All contractors and employees will undertake a site induction programme which will identify procedures, responsibilities and penalties for non-compliance.

Stakeholders will be advised of the commencement of activities and a 24 hour contact point established and notified. In particular direct liaison will be undertaken with the adjoining property holders including businesses within the Tilrox/ALDI building, parents of children attending the child care centre and users of the carpark adjacent to the Camellia Railway station. The programme will ensure stakeholders are aware of the timing of activities associated with construction of the facility including disturbance to the site cap and changes to local traffic movements.

The proposed construction activities were described in Section 4.3 and Appendices D and E of the EA. The Proponents have amended the project with respect to the installation of these services removing the need to both breach the site cap and excavate material below the site cap for provision of site services and connection to the stormwater system (refer Section 3).

The proposed changes with respect to the installation of services and connection to the stormwater system include no requirement to remove spoil from the site . The proposal described in the EA included generation of 1200m^3 of spoil as a result of excavation activities which would have required 80 vehicle loads of spoil to be removed from the site.

The only activity which will require disturbance to the site cap will be associated with the drilling of grout holes for filling of voids below the concrete capping layer. This is expected to generate 1.5 to 2m^3 of material which will need to be classified in accordance with the NSW EPA Waste Classification Guidelines before being transported off-site for disposal

Billbergia has prepared an Addendum to the SWP which provides an Asbestos Handling Procedure (refer Appendix A).

A suitably qualified occupational hygienist will be engaged to prepare an air monitoring program for the works associated with drilling for grouting of the site. A weather station will also be established on site to assist with monitoring of weather conditions including wind movement. The occupational hygienist will be employed on site for the duration of activities associated with disturbance to the site cap.

The following measures will be undertaken during construction:

- Handling of material in a manner that minimises dust emissions;
- Placement of screening material on perimeter fences;
- Spraying dusty parts of the site with water;
- Conduct all activities associated with breaching the site cap within a tent structure under negative pressure.

Management of these activities will include monitoring which will include environmental inspections and daily surveillance inspection which will be documented and kept on record within a register.

Construction of the Platform

The facility will be located on a constructed platform above the existing capping layer. Imported clean fill will be compacted in layers to create the platform. Imported clean fill material will only be accepted on receipt of a Certificate of Clearance confirming the material is clear of any contamination. The platform will be sealed with heavy-duty concrete pavement on a compacted sub-base. This will apply for all structures such as the main buildings, tunnels, biofilters, aprons and other slabs. The platform will be constructed to industry standards (ie strength 32-40 MPa, nominal 170-200mm slab thickness). This will accommodate the operational requirements of the facility in association with the geotechnical site conditions. Roads (perimeter road etc.) and car parks will be built using road base material complying with RMS standards. The pavement will be 20mm asphalt pavement on a minimum 100mm unbound well graded aggregate base course (max size 40mm).

Construction of Plant

Construction of the plant will take place over a 12 month period and will include construction of:

- Main buildings;
- Tunnels;
- Biofilters;
- Access Road; and
- Weighbridge and Car Park.

Once the buildings works are completed landscaping will be finalised.

Post Construction

In accordance with the requirements of the SMP visual monitoring will continue to be undertaken of the site cap with annual reporting to the EPA. Regular visual inspections will be undertaken of the sealed surfaces within the buildings and roadways of the RIRP. Any areas require remedial actions will be repaired in consultation with the NSW EPA and in accordance with the requirements of the SMP.

Consultation

Following public exhibition of the EA, REMONDIS and Billbergia has undertaken consultation with a number of organisations and Agencies with respect to the management of contamination issues in relation to the proposed development. Those consulted included the Asbestos Diseases Foundation of Australia (ADFA), Bernie Banton Foundation; Unions NSW and WorkCover.

Section 2.13 provides further detail of the consultation undertaken.

2.3 AIR QUALITY

2.3.1 Submission Numbers

Submissions 1 to 246, 247, 248, 250 to, 256, 259, 260, 261, 263, 265 to 269, 273, EPA, Parramatta City Council, Work Cover

2.3.2 Issue Description

In summary the respondents raised the following issues:

Dust and Asbestos

- The dust generation from the project would result in significant impacts on the local area. With the nearby sensitive businesses and child care centre this will result in excessive dust impacts;

- The major soil stockpile will result in significant dust generation, which particularly during the summer and autumn period. Sensitive uses on Grand Avenue would experience impacts when the wind direction would be towards these areas;

- Construction - An Occupational Hygienist and a Third Party NSW EPA Approved Contaminated Site Auditor should be engaged to develop, review and monitor the construction phase works to ensure contaminated soil and potential dust emissions do not occur. Monitoring sites should be established;

- Section 7.5.2 Air Quality – No Asbestos Emissions but minimal dust emissions. Contradictory statement;

- Section 7.5.2 states that over a 6-8 week period "excavation and trenching activities" will occur below the seal. Part 7.5.2 then seems to provide contradictory statements as to whether or not asbestos dust will be released. Initially it is stated that "as the site contains asbestos. Appropriate management practices will be in place to ensure no off-site impacts from the material occur. This sentence suggests that "no" off site impact will occur, or in other words the asbestos will be contained. However in the very next sentence it states that "dust emissions are (to be) minimal. This following sentence indicates that there will be asbestos contamination. Just how much contamination will occur is not known;

- Section 7.5.2 also states that "dust mitigation measures will be utilised to reduce any off site impacts". The words mitigation and reduce are dangerous and ambiguous words. What do these words mean. It is noted that the author of the assessment has chosen not to use words such as "elimination" or 'eliminate". The author of the report gives no guarantees that asbestos dust will not escape from the site into neighbouring areas resulting in asbestos exposures to men, women and children; and

- The assessment speaks in terms of 'minimising' (rather than eliminating) the risk of asbestos dust escaping during development.

Odour

- The proximity of the facility to sensitive receivers including businesses and the child care centre would cause odour issues. Odours from the waste will affect the surrounding area despite best efforts to prevent this. There are 2 supermarkets, a number of restaurants and fast food establishments in close proximity to the site. The smell of an organic waste processing facility cannot be 100% contained and nearby residents, including the university will be impacted. This type of development belongs on the urban fringes not Parramatta, nor the Parramatta River next to a high growth residential and commercial space;

- Documented processes and procedures are required to minimise and manage odour impacts;

- Why was the NSW EPA Technical Notes: assessment and management of odour from stationery sources in NSW (Nov 2006) not referenced;

- Should a cumulative odour impact assessment be undertaken;

- Engagement of Independent Odour Specialist to oversee final design of the facility and verify biofilter design and performance;

- A report is to be prepared "Biofilter Pre-Commissioning study which includes final design parameters and actual stack parameters of the biofilter;

- Bio-filter Post Commissioning Study - Within 6 weeks of commencement of operation and again after 6 months, a recognised odour specialist is to report on, and undertake a program of odour control system testing, to quantify the odour abatement efficiency of the odour control system and the odour emission rate to atmosphere;

- Biofilter Monitoring and Maintenance plan must be prepared which is to include monitoring, maintenance and mitigation actions in the event of a breakdown of the biofilter system.

- The system must be capable of treating the extracted air from all odour sources in the waste handling and composting processes. Emissions must be emitted through a dedicated emission stack. The system must be operated and maintained in accordance with the manufacturer's specification, the facility odour management plan and as required to maintain the emissions controls of the system; and

- Proposed plant is expected to emit damp odour and we already know from Mauri Foods (located few blocks further from the proposed plant) that such odour travels strongly.

Monitoring

- Fumes and dust potentially impact on surrounding area with no proactive solutions to ensure continuous monitoring of odours and dust from the site. There is the need for the development and implementation of an Air Quality and Odour Management Plan;

- A meteorological station must be installed on site for continuous monitoring of meteorological conditions;

- The risk of unacceptable odour impacts is high if air control equipment is not appropriately designed and maintained. Accordingly it is imperative that the Proponent be required to engage an independent odour specialist to oversee final design of the facility and develop and implement a formal Air Quality and Odour Management Plan;

- The stench from this tip will most likely effect the businesses in the vicinity including a day care centre, the racecourse, university, bowling club and shopping centres (ALDIs and Woolworth's). Any waste treatment emits odours. Odour emissions can not be fully contained; and

- Maintenance records and monitoring data must be maintained and available for inspection.

Waste Facilities

- AWTs have odour issues, with a number already generating significant odour issues such as the UR-3R facility at Eastern Creek and Jacks Gully at Camden.

2.3.2 Response

PAE Holmes prepared an air quality assessment in relation to the construction and operation of the proposed RIRP. The results are presented in Technical Report No 4 of the EA. Air quality modelling has been carried out in accordance with the NSW EPA "*Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales*". The air dispersion modelling conducted for this assessment has been based on an advanced modelling system using the models TAPM and CALMET/CALPUFF (refer Technical Report No 4).

The modelling system works as follows:

- TAPM (v. 4.0) is a prognostic meteorological model that generates gridded three-dimensional meteorological data for each hour of the model run period;

- CALMET (v. 6.326), the meteorological pre-processor for the dispersion model CALPUFF, calculates fine resolution three-dimensional meteorological data based upon observed ground and upper level meteorological data, as well as observed or modelled upper air data generated for example by TAPM; and

- CALPUFF (v. 6.263) then calculates the dispersion of plumes within this three-dimensional meteorological field.

The Technical Notes provide information on classifying odour sources, ground level concentration (glc) criteria, odour assessment criteria, Level 1 odour impact assessment (for broiler chicken farms, intensive piggeries, cattle feedlots), odour sampling/analysis, meteorological data, dispersion modelling and odour complaints management. The sections of the Technical Notes that are relevant to the Air Quality Impact Assessment (AQIA) (refer Technical Report No 4) are odour assessment criteria, meteorological data and dispersion modelling. These sections of the Technical Notes specifically refer to requirements outlined in the Approved Methods, which the AQIA was conducted in accordance with.

The NSW EPA Technical Notes recognise that the potential for cumulative odour impacts are difficult to define and assess in highly populated urban areas and it is often not possible or practical to determine and assess the cumulative odour impacts al all odour sources that may impact on a receptor in an urban environment. The following clarifications for cumulative impacts are provided:

- The odour assessment criteria used in the AQIA take into account, among other things, the potential for cumulative impacts by nature of the more stringent criteria applied to urban areas;

- Modelling predictions indicate that odour would not be perceptible beyond the boundary and would therefore not be expected to add to the background level in any perceptible way; and

- In assessing odour impact in the context of background or cumulative odour impacts, it is important to consider the character and offensiveness of the odour. Odour emissions from the RIRP are expected to have a different odour character from other neighbouring sources.

With respect to the AB Mauri site the activities relate to the company's yeast and bakery ingredients business. Any odours from this activity would be distinguishable from odours associated with the proposed facility.

Dust and Asbestos

Dust emissions due to the construction activities have been estimated and presented in Technical Report No 4, Section 7.5 and Table 7.1 of the EA.

Activities undertaken during the construction stage (Stages 1 to 3) have the potential to temporarily generate dust. A Construction EMP will be in place for all stages of construction (refer Section 2.8). This plan will also be implemented for the stabilisation works to be undertaken prior to construction as described in Section 2.2.3. The plan will include a Dust and Odour Management Plan which will include procedures for management of day to day activities, monitoring, reporting and auditing requirements.

Grouting activities which will be undertaken prior to construction will be conducted within a tent structure as described in Sections 2.2 and 2.8. The use of a tent structure under negative pressure will provide a containment system for activities associated with disturbance to the site cap. An NSW EPA approved Air Quality Monitoring Programme will be supervised by the Occupational Hygienist. Real time monitoring will be undertaken which allows automatic detection of airborne fibres including asbestos. A visible and audible alarm will be triggered when the fibre concentration reaches a defined level. Samples will be collected for subsequent laboratory analysis which will be available within 24 hours. The time frame for this activity has been estimated to take approximately 8 to 10 weeks.

Construction of the platform and buildings has the potential to result in dust emissions from clean fill, building materials and construction activities. These dust emissions which will not contain asbestos will be minimised under the Construction EMP (refer Section 2.8).

The Construction Manager will be responsible for dust management. As described in Section 2.2 the following measures will be undertaken during construction to minimise dust impacts:

- Handling of material in a manner that minimises dust emissions;
- Placement of screening material on perimeter fences;
- Spraying dusty parts of the site with water;
- Use of Tarpaulins to cover incoming and outgoing loads;
- Restriction of stockpile height to below the fenceline; and
- Where visual inspection and or monitoring indicates that dust levels may be unacceptable work will cease until measures are taken to reduce emissions or until weather conditions improve.

The total amount of dust generated from the construction of this facility is predicted to be minor without any significant off-site impacts.

Odour

All RIRP operations including loading/unloading, sorting and separation, composting and product storage will be undertaken within the main building complex which is an enclosed facility.

The main objectives of the air management system within the main building complex are to:

- Retain odorous air inside the buildings;
- Remove odorous air from the various building areas to the tunnel composting system;
- Provide heated/cooled fresh air and extraction to the sorting cabins;
- Provide heated/cooled fresh air and extraction to the amenities areas; and

- Provide heat pump air conditioning and fresh air to the office areas and the control rooms.

The following integrated air management system will be installed:

- The main buildings for the CIRRF and SSORRF plants, the attached tunnel hallways and the loading building will be fully enclosed with a slightly negative pressure maintained in the building;

- A common fan for each plant delivers the air to a manifold along the rear of the tunnel complex, which connects to the tunnel ventilation systems. The balance of the air demand into the tunnels is automatically drawn from outside through process controlled damper regulation. This concept minimises total air volumes from the plant and guarantees high performance of the deodorisation unit;

- Roller doors for waste delivery will be only open during delivery times maintaining negative pressure and containing emissions within the building at most times. In case of temporary roller door failure the building ventilation system ramps up to maintain negative pressure inside the building;

- The fresh air demand for each tunnel will be automatically restricted to a minimum through the recycling of odorous air back into the tunnel. Exchange of exhaust air between the tunnels is controlled through a one-way valve in the discharge duct;

- The tunnel aeration systems for the CIRRF and SSORRF tunnels are not connected thus avoiding cross contamination and improving the contingency of the operation;

- Fresh air, recycling air and discharge air volumes will be automatically controlled for each tunnel via the central process control located in the control room and individually for CIRRF and SSORRF tunnel systems to individually determined process parameters;

- High specific aeration rates (m^3 of air applied per m^3 of material and hour) which can be applied to each tunnel module will ensure that aerobic conditions are maintained at all times during the process and across the material surface batch in each tunnel;

- The total exhaust air volume which may be discharged into the deodorisation units will not exceed 50,000 m^3/hour for each plant (total of 100,000 m^3/hr). The biofilter surface emission will not exceed the equivalent of 125 OU/m^3 (technology supplier performance guarantee);

- The biofilter design is based on proven technology and provides the most efficient solution for biological processes. Low operating costs and operational consistency are further design features of the system. Emissions from the deodorisation units are basically free of offensive odour, bio aerosols and dust; and

- Biofilter performance indicators are monitored via the central process control computer. The discharge limits will be established during the design stage and based on the site conditions (meteorology), and sensitive receptors in the neighbourhood.

Principles for the air management are:

- Real time processing of odorous feedstock materials will minimise odour emissions in the reception, pre-treatment and tunnel loading/unloading areas (raw material will not be stockpiled for more than a day under normal operating conditions);

- Areas which are a source for significant odour release will be either encapsulated (composting tunnels) or controlled close to the emission source (eg ventilation hood) with connection to the overall air management system;

- Odorous air (tunnel) will be recycled as far as possible to minimise the total air volume into the deodorisation biofilter / humidifier units and subsequently to the atmosphere;

- Stockpile heights of delivered green organics and other odorous feedstock materials will be managed in a way to facilitate natural ventilation in order to prevent anaerobic zones. The stockpile is under cover inside the building with slight negative pressure;

- Redundant and reliable equipment (i.e. fans, scrubber, ducts) will be installed to minimise down-times;

- Two stage deodorisation units will be employed for both plants. The process control systems will monitor, log and control in real time performance parameters of both units in order to enable management to identify and rectify defects or deficiencies; and

- No outdoor handling /maturation of stabilised / composted materials at any time. All output from tunnels will be loaded onto trucks inside the building area and transported to external treatment.

All frequently trafficked doors (truck delivery and pickup) will be equipped with fast speed roller doors, programmed to only open during delivery times, maintaining negative pressure and containing emissions within the building for the majority of the time. If required, an option to retrofit the system with additional air curtains mounted above each fast speed roller door entrance can be installed and operated in case of temporary roller door failure or during truck delivery to retain odorous air inside the building.

Each facility will include a biofilter, one for the CIRRF and one for the SSORRF. The deodorisation stage comprises a biofilter fan, humidifier and biofilter. The biofilters will be of concrete structure for the filter basement with either a perforated concrete or hardwood grate on a support frame over the basement over the biofilter area. The concrete basement will fall towards the connected humidifier chamber via an air distribution inlet channel. The humidifier and connection will be of reinforced concrete with manhole access. The filter bed structure will provide sufficient loading to enable bobcat operation (filter material replacement) and withstand the weight of the filter material layer. The perimeter wall around the biofilter will be structural to retain the filter material and be provided with an opening section to allow bobcat access. A pitched colour bond roof without insulation will be provided over the biofilter area. The structural support will provide for the installation of the filter sprinkler system. The roof will be fitted with a 1.5 m diameter vertical discharge stack to a height of 9 m. The stacks will be fitted with an exhaust fan to provide initial momentum.

Assessment

With the proposed air management system, the main buildings will maintain a negative pressure and high speed roller doors will operate in truck delivery and pickup areas to retain the odorous air inside the buildings. Therefore the main source of odour from the proposed operation will be the two biofilters located at the rear of the proposed buildings.

Modelling of the initial biofilter design and estimated maximum emission rate predicted exceedences of NSW EPA criteria at nearby sensitive receptor locations (Camellia Railway Station and the ALDI carpark). Therefore several iterative model runs were conducted to investigate other practical control options to achieve compliance with NSW EPA criteria at nearest sensitive receptors without changing the biofilter design. However model predictions showed that compliance with NSW EPA criteria could not be met using the initial biofilter design and an alternative design was necessary to comply with NSW EPA criteria.

Based on the outcomes of the iterative modelling analysis, the biofilter design was modified to a fully enclosed pitch roofed system with a vertical discharge stack to enhance dispersion of odour. The modified design (fully enclosed biofilter) was used in the modelling for this assessment. A fan provides the initial momentum flux for the odorous air from the stack.

It is noted that there is potential for other sources of fugitive odours to be generated on-site. These odours would generally occur from the receival of waste to the facility. Odour management principles considered in the design of the facility will minimise the potential for these fugitive emissions to be generated.

Management practices and the facility design features include:

- No outdoor handling of materials;
- Traffic management procedures will include co-ordination of the delivery schedule to avoid a queue of the incoming or outgoing trucks outside the building for an extended period of time;
- Spill management procedures will include immediate cleanup of any spill/leakage from the incoming and outgoing trucks, identify the cause and take appropriate action to prevent any future spill/leakage incidents;
- Maintain an odour complaint logbook. Once any complaint is received, the Site Manager will immediately investigate any unusual odour sources (including spill or leakage in the traffic areas) within the site boundary and take appropriate action to eliminate any unusual odour sources;
- Real-time processing of odorous feedstock material and raw materials will not be stockpiled for more than a day under normal operating conditions;
- The air management system will include ventilation hoods over emission sources;
- Odorous air will be recycled as far as possible through the tunnel composting system to minimise air volume into the deodorisation;
- Stockpiles will be managed to facilitate natural ventilation to prevent anaerobic zones;
- The air management system will ensure the building is under negative pressure; and
- If required additional air curtains mounted above each fast speed roller door entrance will be installed.

The proposed site is surrounded by several sensitive receptors including public places (Camellia Railway Station, Rosehill Racecourse), an ALDI supermarket and a childcare centre. Most of these receptors are adjacent to the site boundary.

Dispersion modelling has been used to predict off-site odour levels due to the activities of the proposed RIRP. The dispersion modelling took account of meteorological conditions and terrain information and used odour emission estimates to predict the odour impacts at surrounding sensitive receptors. Iterative dispersion modelling was conducted to find the optimal design parameters for biofilters. Based on the iterative dispersion modelling results, each biofilter was redesigned to comply with NSW EPA odour criterion at surrounding sensitive receptor locations. Results from the dispersion modelling show that odour levels at nearby residences comply with the EPA's odour criterion and the predicted maximum offsite odour levels will be less than 0.6 OU which is less than the minimum theoretical level at which odour can be detected.

Appropriate mitigation measures and management practices will be applied to minimise fugitive odour emissions. Based on the modelling results, it can be concluded that with the full enclosed biofilter design the proposed RIRP will comply with NSW EPA odour criterion at all locations.

The NSW EPA submissions states that

- *" A performance guarantee of an average odour concentration of 125 OU has been provided for the proposed facility in addition to test results for the biofilter at another waste facility a performance range of 32-203 OU"*

REMONDIS wishes to clarify this statement. The test results of the other facility designed and built by our manufacturer verifying a performance range of 32 – 203 OU has an average odour concentration of 106 OU which is below the performance guarantee given by the manufacturer. The modeling has been conducted on the maximum air volume discharged from the biofilter (i.e. 13.9 m/s equivalent to 50,000 m^3/hr). REMONDIS operational data show however, that the average air volume discharged from the biofilter during normal operation is around 70% of the designed air volume. REMONDIS consider the applied biofilter design data for the modelling as a worst case scenario.

Monitoring

The OEMP will include an Air Quality and Odour Management Plan which will include regular monitoring and maintenance of biofilters, tunnel fans, tunnel aeration trenches and ductwork, all other extraction fans, discharge stack, leachate holding tanks, rapid shut roller doors and any other equipment that, if not working optimally, may contribute to the generation of odour at the site.

The plan will include a Biofilter Pre-Commissioning Study which will provide final design parameters and actual stack parameters of the biofilter. In addition a Bio-filter Post Commissioning Study will be undertaken within 6 weeks of commencement of operation and again after 6 months. A recognised odour specialist is to report on, and undertake a program of odour control system testing, to quantify the odour abatement efficiency of the odour control system and the odour emission rate to atmosphere. The report will be prepared in accordance with NSW EPA requirements.

A Biofilter Monitoring and Maintenance plan will be prepared to include monitoring, maintenance and mitigation actions in the event of a breakdown of the biofilter system.

Waste Facilities

Unlike other AWTs the proposed RIRP involves a high level of control of air emissions with a fully enclosed technology that involves a high degree of automation and control in order to minimise the final exhaust air discharge volumes and air concentration levels. All operations occur within an enclosed building. There is no unloading/loading or stockpiling of materials outside the buildings. The technology involves the recycling of any leachate back into the composting process.

2.4 NOISE MANAGEMENT

2.4.1 Submission Numbers

Submission Nos 1 to 247, 250, 251 252, 255, 256, 259, 260, 261, 263, 266, 268, 269, 272, 273, EPA, Parramatta City Council

2.4.2 Issue Description

In summary the respondents raised the following issues:

Child Care

- Construction and operation will result in unacceptable noise impacts at the child care centre;
- No background noise level is provided for the child care centre;
- Project specific noise goal is not specified for the child care centre;
- Child care centre should be assessed as active recreation area;
- NIA calculates an intrusive noise level of 58dBA which is 3dBa above the 55dBA noise goal;
- Should an intrusive noise goal or amenity noise goal be applied;
- Child care centre will experience construction noise of up to 65 dBA and assumes a 20 dBA reduction inside the facility. However the child care has a large open area to allow for an open learning environment so the 20 dBA reduction would not be achievable and is therefore unacceptable and the relevant criteria would not be met;
- Operational noise including significant traffic accessing the site would result in noise levels up to 60dBA in the area including 58 and 59 dBA at the child care centre;
- The noise from the project would result in significant impacts on the local area and in particular an unacceptable impact to the sleeping regime and learning processes of the 80 odd children in the child care centre. This would clearly be detrimental to their development and an unacceptable impact to the local and regional area of Parramatta;
- Table 25 puts forward 60dBA noise goal based on achieving 40dBa assuming the child care centre has fixed and closed windows at all times. The child care centre includes an outdoor area and this would be better assessed as an active recreation area; and
- The proponent should carry out a more detailed analysis of the noise impact assessment to take into account the potential impacts on the closest sensitive receptors including the child care centre.

Impacts and Management

- Construction and operations will result in unacceptable noise impacts; and
- Traffic Noise Management System required addressing both construction and operational noise;
- Trucks coming during the night will disturb a relatively peaceful area;

- Construction will occur over an extended period and involves major truck movements and dumping of large volumes of soil on the site; and

- Noise impact from 300 trucks coming and out and pollution will impact on my family; and

- Noise Management Plan should be prepared.

2.4.3 Response

SLR Consulting Australia was commissioned to undertake a noise assessment for the construction and operation (including traffic noise) for the proposed RIRP. This report was included as Technical Report No 5. Section 7.6 of the EA presents the results of the assessment.

The study results were summarised as:

- An ambient noise survey was conducted and design criteria for operational noise developed in accordance with the EPA's Industrial Noise Policy (INP). For residences a daytime goal of 51 dBA to 55 dBA, evening goal of 51 dBA and night-time goal of 39 dBA to 50 dBA were set. Goals were also set for the nearby childcare centre, the University of Western Sydney and commercial and industrial receivers;

- The INP and Australian Standard AS/NZS 2107:2000 '*Acoustics – Recommended design sound levels and reverberation times for building interiors'* do not provide guideline values for internal noise levels in childcare centres. The Association of Australian Acoustical Consultants has a Technical Guideline - *Child Care Centre Noise Assessment* and this recommends an internal level of 40 dBA for playing and sleeping areas, which was adopted for the assessment;

- Predicted operational daytime evening and night-time noise levels comply with the design goals at existing residences, and also the childcare centre, the University of Western Sydney and commercial and industrial receivers;

- Changes to traffic noise levels as a result of the project comply with the NSW EPA Environmental Criteria for Road Traffic Noise; and

- Noise levels predicted for construction activities comply with design criteria developed in accordance with the NSW EPA Interim Construction Guideline.

Child Care Centre

Technical Report No 5 adopted the internal noise level of 40 dBA for the assessment of operational noise from the facility, and the internal noise level 45 dBA for construction noise. This is consistent with the EPA's (previously the DECCW) '*Interim Construction Noise Guideline'* (ICNG) as it is recognised that higher design goals are appropriate for construction noise when compared to operation noise. The EPA's ICNG sets an internal noise management level (NML) of 45 dBA for classrooms and other educational facilities and this level was adopted for the child care centre. It is noted the operational noise for classrooms and other educational facilities for the project was set at 35 dBA in accordance with the INP, being 10 dB lower than the ICNG NML. Hence setting the construction NML for the childcare centre at 5 dBA above the operational noise goal represents a conservative approach. Therefore the 44 dBA internal noise level complies with the NML based on the building providing a 20 dB outside to inside reduction. It is noted the building is of commercial/office construction and photographs of the façade indicate the windows are non-openable.

Consistent with the guidelines of the INP, the provision of background noise levels are used to '*control intrusive noise impacts in the short term for residences*'. For other sensitive receivers the INP provides Amenity criteria which are independent of the background noise level. For example

the INP recommends internal noise levels for school classrooms, and external levels for passive and active recreation areas which are not related to the background noise level. Furthermore neither the INP or Australian Standard AS/NZS 2107:2000 '*Acoustics – Recommended design sound levels and reverberation times for building interiors*) provide criteria for child care centres. The Association of Australian Acoustical Consultants (AAAC) has a Technical Guideline - *Child Care Centre Noise Assessment* and this recommends an internal level of 40 dBA for playing and sleeping areas. Technical Report No 5 adopted the internal noise level of 40 dBA for the assessment.

SLR Consulting concurs with the 55 dBA noise goal, noting that the AAAC Technical Guideline – '*Child Care Centre Noise Assessment'* recommends '*intrusive noise level from road, rail traffic or industry at any location within the outdoor play or activity area during the hours when the Centre is operating shall not exceed 55 dBA'.*

SLR Consulting has applied the computer model referred to in Technical Report No 5 to predict noise levels at the child care outdoor play area. It is noted the outdoor play area is on the top level of the building and has a solid perimeter wall of typical height of 1 m with 1 m of glass/perspex above. This composite wall will provide shielding (and hence attenuation of noise) from the noise sources associated with the RIRP. The predicted noise levels in the outdoor play area are up to 48 dBA during operation of the RIRP which complies with the 55 dBA goal. Note the predicted noise level includes an air gap between the solid wall and glass above, which degrades the perimeter wall barrier performance. Sealing of the gap would be expected to reduce noise levels by typically 3 dB.

Notwithstanding, the solid perimeter wall does not extend fully up to the outdoor play area 'ceiling/roof', which consists of shade cloth for a large percentage of the outdoor play area. Therefore there may be reflection of noise passing over the top of the perimeter wall by the shade cloth to the play area below. The reflection of noise would predominantly be at high frequencies as the non rigid nature of the cloth effectively makes it acoustically transparent at low frequencies, and would only be where the cloth is present and where there is an angle to the ground. The increase in noise, should it occur as a result of reflection, is expected to be of the order of 3 dB to 5 dB with compliance with the outdoor noise goal maintained.

The 58 dBA predicted noise level is an external noise level at the building façade, and based on the external to internal noise reduction of 20 dBA for fixed (non-openable) windows results in compliance of the 40 dBA goal within the child care centre. The 58 dBA external noise level is also attenuated by the perimeter composite wall to the roof top childcare outdoor play area by typically 10 dBA, resulting in compliance with the 55 dBA design goal.

As outlined the design criteria for the childcare centre, (and for similar receivers such as universities and schools as recommended in the INP and ICNG) is based on specific amenity noise goals, which are not related to the background noise level.

The Parramatta City Council submission questions the 'splitting' or adoption of different INP Indicative Noise Amenity Areas for the residences west of James Ruse Drive, and those on James Ruse Drive. This approach is consistent with the guidelines of the INP. Furthermore the submission notes *the INP notes a 'worst case scenario' should be considered when reviewing an noise impact from a development*'. This approach was adopted, with worst case scenarios developed for modelling construction and operation of the facility. The worst case scenario does not however mean that if different Indicative Noise Amenity Areas are identified surrounding a development then the most sensitive area identified be applied to all receivers.

The construction and operational noise has been assessed in accordance with the relevant standards and guidelines and the facility is predicted not to result in unacceptable noise impacts. As outlined, the criteria developed for the outdoor area is expected to be met during construction and operation of the facility.

Management

Construction and Operational EMPs will be prepared for the site in accordance with the findings of the EA, Conditions of Approval, EPL conditions and any other relevant approvals (refer Section 2.8).

REMONDIS is committed to working with the operators of the child care centre with respect to developing any additional measures which will minimise impacts on children attending the centre. A draft of a Management Strategy aimed at addressing the concerns of the operators and parents of children attending the Centre is provided in Appendix B. This includes management of activities to reduce noise impacts during sleep periods scheduled for children attending the centre.

The plans will also incorporate management and monitoring requirements in relation to noise generated from the site including traffic noise.

A traffic noise management strategy will include:

- Driver training to ensure that noise practices such as the use of compression engine brakes are not unnecessarily used near sensitive receptors;
- Best noise practice in the selection and maintenance of vehicle fleets;
- Movement scheduling where practicable to reduce impacts during sensitive times of the day or evening;
- Communication and management strategies for non licencsee/proponent owned and operated vehicles to ensure the provisions of the TNMS are implemented;
- A system of audited management practices that identifies non conformances, initiates and monitors corrective and preventative action (including disciplinary action for breaches of noise minimisation procedures) and assessed the implementation and improvement of the TNMS;
- Specific procedures to minimise impacts at identified sensitive areas; and
- Clauses in condition of employment or in contracts, of drivers that require adherence to the noise minimisation procedures and facilitate effective implementation of the disciplinary actions for breaches of procedures

2.5 TRAFFIC AND SAFETY

2.5.1 Submission Numbers

Submissions 1 to 248, 251 to 256, 259, 260, 261, 262, 266 to 270, Sydney Regional Development Advisory Committee, Parramatta City Council

2.5.2 Issue Description

In summary the respondents raised the following issues:

Road Safety Grand Avenue North

- Road Safety Audit to be undertaken at the intersection of Grand Avenue/Grand Avenue North. Applicant should undertake an assessment of the exit from Grand Avenue to Grand Avenue North in regards the Safe Intersection Sight Distance and Guide to Road Design Part 4A Unsignalised and Signalised Intersection Section 3;

- Swept paths are required for vehicles turning right into and out of Grand Avenue North at its intersection with Grand Avenue;

- Grand Avenue North operates as a driveway and parking area for 1 Grand Avenue and was not designed or operated as a separate road. Since closure of the JH site and the development of a number of operators in the B3 zone along Grand Avenue, Grand Avenue North is akin to a driveway and parking area for the occupiers of 1 Grand Avenue. The existing use should preclude other users;

- No Stopping Sign on the eastern side of Grand Avenue North to be relocated. The Applicant to fund alterations to line marking at the intersection and construction of a concrete island on the north side of Grand Avenue immediately west of Grand Avenue North; and

- The proposal to share access to the site with other users would significantly increase the safety risks particularly with parents picking up/dropping off their children at the nearby day care centre. It is extremely unsafe and there is a conflict with light vehicles which would also use the driveway access and the people who park along and around Grand Avenue North, including some parents and their children leaving and returning to their cars.

Traffic Impact on Local Area

- Potential impact of the RIRP shift change at 2pm;

- Potential impacts on events at Rosehill Racecourse not discussed; and

- Traffic is already a significant issue in terms of traffic generation and safety along Grand Avenue.

Alternatives

- Access to the site from James Ruse Drive should be via north Grand Avenue across the railway line. Subject to this being allowed by Rail Corp, the road pavement should be upgraded appropriately to Council's satisfaction.

Site Access and Parking Arrangements

- Disabled car parking spaces should be modified in accordance with the dimensions and configuration as specified in AS 2890.6-2009; and

- Width of parking spaces 5 and 10 need to be widened to a min of 2.4m.

Traffic Study

- Were traffic surveys undertaken reflective of normal traffic conditions;
- Why was strategic analysis not undertaken;
- Should impact on Grand Avenue/Colquhoun Street intersection and Wentworth Road /Parramatta Road intersection;
- Has the proponent consulted with RMS;
- Proponent should consider options for improving the performance of the James Ruse Drive, Grand Avenue Hassall Street intersection;
- Traffic congestion with increasing heavy traffic movements and negative impacts during peak periods. The extra trucks will create further traffic delays and congestion along James Ruse Drive particularly during peak hours where traffic jam can sometimes be up to Victoria Road and commonly to the bridge over Parramatta River. Intersection of James Ruse Drive and Grand Avenue is already a busy intersection, especially in peak hour. Increasing this with more trucks will cause a gridlock that will feed back onto Hassall St into Harris Park and Parramatta. Not to mention more trucks coming during the night will disturb a relatively peaceful area;
- Exacerbating traffic problems – The Traffic report indicates that traffic on James Ruse Drive currently exceeds capacity, yet an additional 288 movements per day of garbage trucks, rigid and articulated vehicles 8.8 to 12.5m wide are not considered to warrant improvements to the road system;
- 300 more trucks a day using James Ruse Drive would be a terrible impact on residents;
- Significant concerns in relation to the impacts of the RIRP on Grand Avenue which provides access to the industrial area. Any further deterioration in the operation of the traffic access arrangement for the industrial area will severely and detrimentally impact the performance and security of Armaguard's operations. Of particular concern to Armaguard is the impact on the shift at 2pm, which coincides with the peak traffic generation from the proposed RIRP. Armaguard has a detailed understanding of the nature of traffic movements on the local traffic network and the efficiency of the network;
- Ingress and Egress of vehicles to and from the facility;
- One narrow bridge to cope with the extra number of vehicles would cause considerable traffic problems;
- To add to the number of large vehicles already servicing industrial establishments along Grand Avenue would be chaotic;
- Increased traffic congestion and parking;
- Access to the site from James Ruse Drive should be via Grand Avenue North across the rail line. Subject to this being allowed by RailCorp, the road should be upgraded appropriately; and

- The proposal is of concern for Parramatta residents and local businesses due to its adverse impacts including traffic congestion with increasing heavy traffic movements and the number and frequency of heavy vehicles and the negative impacts during peak.

2.5.3 Response

An assessment of road traffic associated with the construction and operation of the proposed RIRP has been undertaken by Traffix (refer Technical Report No 6 and Section 7.8 of EA). The report describes the site and its location, existing traffic conditions, the proposed RIRP, access and internal design aspects and assesses parking requirements and traffic impacts.

The traffic impact assessment found that the surrounding road network, particularly James Ruse Drive in the vicinity of the site, currently exceeds capacity resulting in significant delays for road users during peak periods. The proposed RIRP is a highly specialised and automated operation which results in a comparatively low traffic generation when considering other potential (and historic) uses of the site. The development will generate in the order of 288 vehicle movements per day with a peak hourly traffic generation of up to 70 vehicles per hour which does not coincide with on-street peak periods. Peak site related traffic is a result of shift changeover times which generally occur prior to on-street peak periods.

It was concluded that the proposed RIRP is supportable on traffic planning grounds and will operate satisfactorily.

RailCorp requested that a rail risk assessment be undertaken in relation to the proposed RIRP and the interface with the Camellia Level Crossing (refer Technical Report No 7 of EA and Section 7.11. The potential impact of the proposed REMONDIS operations on the safety of road and rail traffic movements at the Camellia Level Crossing location was reviewed in accordance with procedures in the RailCorp Safety Management System (SMS).

The report made the following recommendations which will be put in place prior to commencement of activities associated with the proposed RIRP (refer Section 4):

- Warning sign to be installed on the eastbound lane of Grand Avenue approaching the Grand Avenue North intersection alerting motorists of the crossing;
- High visibility reflective line marking to be provided on Grand Avenue North either side of the level crossing in accordance with RailCorp engineering standard ESC520;
- Line marking to be provided through the eastern commuter car park designating a pedestrian access route from Camellia Station to the level crossing across the Tilrox/ALDI building entrance gates to the footpath on Grand Avenue North;
- Lighting either side of the level crossing must ensure good visibility at night;
- Upgrade of subgrades and road surface along Grand Avenue North and through the level crossing;
- Induction and training of truck drivers on the site conditions - Implementation of Heavy Vehicle Driver Orientation Programmes; and
- Clearing vegetation on the eastern side of the crossing and installing signage to prevent car parking on south-east side of the crossing to improve visibility.

These recommendations are in line with the nominated safety targets and optimise:

- Sighting and visibility for motorists, truck and train drivers;

- Directional and warning signage for vehicles;
- Separation of pedestrians and road vehicles; and
- Minimise likelihood of unintentional and intentional (eg dangerous passing) vehicle driver errors using line and road markings.

The Proponent has committed to implementation of the recommended works.

Road Safety Grand Avenue North

Grand Avenue North provides access to the site of the proposed RIRP. Grand Avenue North is accessed via Grand Avenue. At present Grand Avenue North provides access for the current operations on the site, Camellia Railway Station commuters, the Tilrox ALDI parking area and the carpark across from the Tilrox/ALDI building.

An accredited road safety auditor was commissioned to undertake a Stage 5 Existing Road Safety Audit at Grand Avenue / Grand Avenue North Intersections (refer Appendix C). The audit provides an independent review of the existing road condition and concentrates on traffic signage, line marking and delineation in terms of its functional and safe operation for motorists and has particular regard to vulnerable road users (pedestrians / cyclists) on footpaths. The audit findings include:

- Queuing - At the time of the inspection undertaken for the audit vehicle queuing associated with the signal controlled intersection of James Ruse Drive / Grand Avenue extended well beyond Grand Avenue North with the tail of the queue ending near the roundabout intersection of Grand Avenue /Colquhoun Street;
- Line Marking and Regulatory Signage - Line marking on Grand Avenue North was not existent and is required to be updated. Double barrier (BB) lines need to be marked from the concrete median on Grand Avenue North intersection and extend north to the car parking areas so as to legally prohibit overtaking along this road element and to separate opposing traffic flows. The Proponents will fund these works.

  No intersection control is formalised at the Grand Avenue / Grand Avenue North intersection. Road users are not controlled by regulatory STOP or GIVE WAY signage, thus only the conventional T junction rule applies that is insufficient. Regulatory STOP control signage is required. During the inspection it appeared that there is a possibility that a STOP hold line was in place but possibly faded / removed by wear. The continuity line approximately 3.5 metres in front of the concrete median gives the car driver a conflicting message as to where they are required to yield. A compliant STOP hold line and STOP sign should be installed to control Grand Avenue North approach traffic. The Proponents will fund these works.

  The *Traffix* traffic report outlines a secondary route option if queuing on Grand Avenue is an issue for traffic (particularly trucks) turning right from Grand Avenue North into Grand Avenue. The secondary route involves a diversion by requiring truck traffic to turn left from Grand Avenue North into Grand Avenue and to travel onto Colquhoun Street, Unwin Street and Wentworth Street to Parramatta Road. Line marking on this road is deficient and in some cases non existent. Although this route is not the responsibility of the proposed development, improvements should be made by Council to maintain adequate delineation along this diversion route.
- Lane Width - Lane widths are adequate for the road use which involves a high percentage of heavy vehicles. Lanes do narrow on the overpass bridge however they are still of sufficient width;

- Geometric Design - AUTOTURN version 8.0 was used to verify the *Traffix* swept paths. The largest design vehicle to access the proposed site is a 12.5m Heavy Rigid Vehicle (HRV) and a Truck and Dog of approximately 18-19m in length.

  The left turn into Grand Avenue North can be completed at 20km/h. The car driver will not be wary of the tight corner required to be negotiated. The sign posted speed limit on Grand Avenue is 60km/h with the eastbound traffic travelling on a down grade of approximately 6.5% (1 in 15). The turning vehicle is required to slow down into an unsuspecting hairpin like corner.

  A Warning Sign W1-1 should be implemented facing eastbound motorists in Grand Avenue at a location 50m west of the Grand Avenue North junction to advise the car driver the type of corner and appropriate turning speed. The Proponents will fund these works.

  Further to the abovementioned, the HRV and Truck & Dog do not wholly fit into the auxiliary left turn lane and complete the turn while being half way in the turn bay and adjacent through lane. According to the Australian Road Rules, for vehicles greater than 7.5m, this type of manoeuvre is acceptable and is required because if the turn was completed from being wholly within the left turn bay, two-way passing on Grand Avenue North cannot be achieved.

  Sightline distance from the intersection to the crest of the overpass was measured as being approximately 100m with the crest having 6.5% grade. This sight distance complies with AUSTROADS Guide to Road Design Part 3: Geometric Design 2010 which requires 95m for truck stopping sight distance;

- Signposting - Existing kerbside restrictions are implemented on both sides of Grand Avenue North near the intersection. *"No Stopping"* sign posting is on the southern side of Grand Avenue North and extends for approximately 12m. This sign posting should be extended towards the intersection so that no kerbside parking occurs on the inside corner (southern side) of Grand Avenue North.

  "No Stopping" restrictions apply along the northern side of the road for approximately 12m. According to the *Traffix* swept paths, the *"No Stopping*" restriction on the northern side needs to be extended a further 5.6m towards the intersection to assist in the successful manoeuvring of the heavy vehicles from the site. Review of these swept paths suggests that the "No Stopping" on the northern side should be 10.6m from its current position (5m further than indicated in the *Traffix* report). The Proponents will fund these works.

  Further, a "Rail Crossing on Side Road" warning sign W7-12 should be implemented facing eastbound motorists in Grand Avenue at a location 80m west of the Grand Avenue North junction to advise the car driver the presence of the railway crossing on the side road;

- Speed Limit - The existing 60km/h sign posted speed limit sign on Grand Avenue facing eastbound traffic along that road and located between the Grand Avenue North junction and the crest in Grand Avenue above the railway line should be removed as this speed limit no longer applies to local roads under Parramatta City Council's control;

- Street Furniture - No street furniture was observed to be hazardous to the road users or pedestrians;

- Property Access - The proposed development access is located after a level crossing of the Sandown line which currently is an inactive train line which previously serviced the industrial area of Camellia. Although this line is closed, there is the possibility that it could be brought back into operation or require the odd service check. The prevailing signposting for the level crossing utilises superseded / damaged STOP and railway crossing warning signs. These signs need to be upgraded to suite current standards by the rail operators.

The Proponents will fund these works;

- Lighting - Existing lighting arrangements at the intersection of Grand Avenue / Grand Avenue North are adequate to maintain correct vision levels and appropriate operation of the intersection;

- Vulnerable Road Users - A shared footpath exists on the overpass bridge and continues to the intersection of Grand Avenue/ Grand Avenue North where it terminates. Pram ramps have been provided and direct pedestrians to cross the street via the concrete island which requires pedestrians to step up/ step down to pass;

  It appears that cyclists are directed to travel on-street to the east of the intersection. It is not clear whether this is the required outcome due to conflicting sign postage which indicates a shared paved path and weathered pavement markings showing bicycle;

- Drainage and Landscaping - These aspects were not considered to introduce any adverse risk to motorists using the intersection; and

- Accident Potential - According to the crash history of the intersection of Grand Avenue / Grand Avenue North, there are no clusters of any significance that would require corrective action of identified trend.

The audit report found that the introduction of increased heavy vehicles to the site and through the intersection of Grand Avenue / Grand Avenue North would not create adverse conditions, subject to the recommended actions / treatments being implemented.

An application will be made to Council's Service Manager-Traffic and Transport for the extension of the 'No Stopping' zone at least 3 months prior to the occupation of the RIRP, as required. The Proponents will fund these works.

The Proponents will fund alterations to line marking at the intersection and construction of a concrete island on the north side of Grand Avenue immediately west of Grand Avenue (north). Council will undertake the design of the work and manage the construction. The intention of the work is to set the vehicle holding lines for Grand Avenue (north) further into the intersection, therefore improving sight distance and reducing the effective travel lane width.

Alternatives

The alternative access referred to via Grand Avenue North and James Ruse Drive would require a level crossing to be provided across the existing Clyde-Carlingford Railway Line. Discussions with RailCorp have confirmed that this option would not be supported for the following reasons:

- RailCorp/Transport is trying to close as many rail crossings as possible for safety reasons;

- The area will be affected as part of the works for the proposed Parramatta to Epping rail line;

- Grand Avenue North would effectively become a through road/short cut connection to Grand Avenue which would increase traffic greater than that using the RIRP site; and

- It would require rail infrastructure to accommodate a new level crossing and the timing for planning and implementation would not meet the timing for the construction and operation of the RIRP.

Consequently access via Grand Avenue North and Grand Avenue is the only feasible option. Notwithstanding, it is noted that the proposed use is a low-order traffic generating use that distributes its traffic activity across the entire week and across the day.

Site Access and Parking Arrangements

With respect to site access and parking arrangements the following requirements will be certified as part of the Construction Certificate process (refer Section 4):

- The dimensions for parking spaces and aisle width will be in accordance with AS 2890.1-2004 (minimum of 2.4m wide x 5.4m long clear of columns plus 300mm clearance adjacent walls and 6.2m aisle width minimum. At blind aisle, the aisle is to be extended by 1.0m (minimum) beyond the last parking space). The internal design will comply with these requirements;

- The dimensions and configuration of the disabled parking spaces will be modified to comply with AS 2890.6-2009 (a dedicated space plus a shared space - 2.4m wide x 5.4m long each with a bollard installed on the shared space). The disabled spaces will comply with the requirements of AS2890.6-2009;

- The combined entry and exit driveway will comply with AS 2890.1-2004, AS 2890.2-2002 and Council's specifications;

- The driveway gradients will comply with AS 2890.1-2004;

- The driveway width at the concrete layback will comply with Council's Standard Heavy Vehicular Crossing plan;

- The applicant is prepared to apply for a Road Occupancy Permit through Council's Traffic and Transport Services, as may be required; and

- The applicant is prepared to apply for an Oversize Vehicle Access Permit through Council's Traffic and Transport Services, as may be required.

Traffic Study

All traffic surveys undertaken as part of the Traffic Impact Assessment were conducted on typical weekdays, outside of school holidays and were regarded as typical days of the week. A full list of the surveys and dates these were undertaken is provided in Table 2.3.

Table 2.3
Traffic Surveys

Date	Intersection	Time Period
Thursday 4 March 2010	James Ruse Drive, Grand Avenue and Hassall Street	7.00-9.00 am & 4.00-6.00pm
	James Ruse Drive, Berry Street and Parramatta Road	4.00 – 6.00pm
Thursday 19 August 2010	James Ruse Drive, Grand Avenue and Hassall Street	1.30-3.30pm
Thursday 14 April 2011	Grand Avenue and Grand Avenue North	4.00-6.00pm
Monday 9 May 2012	Grand Avenue and Grand Avenue North	1.45-2.45 pm

Rosehill Racecourse

It is noted that the peak period for traffic generation of the Rosehill Gardens racecourse typically occurs on weekends. These impacts are associated with short term peaks which occur prior to and after a race meeting. These short term peaks are extraordinary or 'nondesign' peaks that relate only to these occasional 'events', and this scenario is unsuited to the assessment of a development. These events are also likely to be subject to special traffic management

arrangements, potentially including the manual overriding of signal timings and phases in the locality.

That is, the Racecourse meetings reflect a scenario that is outside the ambit of an assessment that should properly be based on the 85th percentile demand level, not a special event that is managed. This is essentially the same principle whereby the design of a shopping centre should not be based on extraordinary peaks that occur relatively infrequently, such as prior to Christmas, Father's Day, Mother's Day etc.

The Traffic Impact Assessment properly focused on the traffic implications of the development during the critical weekday peak periods, as this will be the critical period for assessment when the development traffic impacts coincide with typical weekday commuter peaks.

Intersections

It is noted that during peak periods, the queue from the intersection of James Ruse Drive, Grand Avenue and Hassall Street extends past the intersection of Grand Avenue and Grand Avenue North. Notwithstanding this, detailed on-site inspections have been undertaken during these peak periods and it has been observed that vehicles queuing along Grand Avenue are sympathetic to vehicles turning right out of Grand Avenue North onto Grand Avenue, allowing them sufficient space to join the queue. The additional traffic associated with this right turn manoeuvre is moderate (less than one vehicle movement per minute) which can be accommodated without significantly altering this situation.

Notwithstanding this, the applicant is content for a suitable condition of consent to be imposed which requires all truck egress movements to utilise the alternative route via Colquhoun Street, Unwin Street and Wentworth Street to access Parramatta Road, during the 2pm to 6pm period which includes the critical PM peak period, negating the need for trucks to use the intersection of James Ruse Drive, Grand Avenue and Hassall Street (refer Section 4). The benefits of utilising this alternative route has been assessed using SIDRA Intersection which demonstrates that the development will create minimal impacts on the critical intersections of James Ruse Drive, Grand Avenue and Hassall Street & James Ruse Drive, Berry Street and Parramatta Road. In this regard, the proposal alternative route will have a minimal impact on existing operation of intersections in the vicinity of the site.

Strategic Analysis

The development will generate moderate traffic volumes and will have a minimal impact on the existing operation of intersections in the vicinity of the site, as demonstrated by the SIDRA Intersection analysis is included in the Traffic Impact Assessment. While there are increases in delays, these are incrementally small and not of sufficient concern to trigger the need for substantial road upgrades, for which there is no nexus.

For example, the development traffic accounts for an additional 50 veh/hr through the critical intersection of James Ruse Drive with Grand Avenue/Hassall Street. This represents less than one percent of traffic (0.9%) currently using this intersection (5,500 veh/hr) and in this regard, it might be reasonably assumed that this would reflect the degree of exposure of the applicant to any upgrades that might be considered by Council and/or RMS in discharging their responsibilities to attend to strategic planning matters in the locality.

Alternative Route

The alternative route that is referred to is proposed to accommodate a total additional 19 veh/hr which is minimal and does not warrant further assessment. In the event that trucks are required to turn left into Grand Avenue during the PM peak as suggested, this would add a further 11 veh/hr, resulting in a total additional 30 veh/hr. This level of traffic activity is very moderate (less that one additional vehicle during each signal phase at the intersection of Wentworth Road with Parramatta

Road and will have no unacceptable impact on the operation of either of the above intersections. Accordingly, no further analysis is considered necessary.

Consultation

Discussions have been held with the RMS. The RMS has advised that there is no current proposal to upgrade the intersection of James Ruse Drive, Grand Avenue and Hassall Street. For the reasons discussed above, this raises no further issues.

2.6 ENVIRONMENT PROTECTION ZONE

2.6.1 Submission Numbers

Submission 260, Parramatta City Council

2.6.2 Issue Description

In summary the respondents raised the following issues:

- Council's longterm vision is to have public access along both sides of the river as a shared use pathway;
- Use of moveable containers would require high levels of maintenance. Suggest replace the proposed containers with non-movable contained raised mound covering the majority of the Environment Protection Zone (EPZ);
- Concern regarding erosion on the northern edge of the site under the concrete slab as a result of the Parramatta River. Should investigate and implement appropriate measures to minimise impact of erosion on the river bank;
- Waste material and runoff to Parramatta River;
- Strong concerns regarding the integrity of the existing capping. Capping does not appear to be a surface of acceptable quality to sufficiently and securely seal the contaminated area. Erosion occurring on the northern side of the Parramatta River potentially exposing contaminated soil. Capping should be audited and upgraded immediately;
- Improved treatment of and increased landscaping within the EPZ; and
- Investigation and implementation of appropriate measures minimising impacts of erosion.

2.6.3 Response

The area along the banks of the Parramatta River is zoned Environment Protection under the SREP No 28 and is covered by Parramatta Local Environmental Plan (LEP) (2011) Clause 6.9 Environmental Protection.

The objective of this clause is to manage and maintain the integrity of identified riparian land and waterways, and area of terrestrial and aquatic biodiversity significance, which includes:

- Protecting water quality within waterways;
- Protecting natural water flows;
- Protecting stability of the bed and banks of waterways;
- Protecting the hydrological and ecological functions of riparian land and wetlands; and
- Biological diversity, native flora and fauna and their habitats.

Before determining a development application to which this clause applies, the consent authority must consider whether the development will have an adverse effect on:

- The quantity of natural water flows to receiving waters;

- The water quality of receiving waters including aquifers;
- The waterway's natural flow paths;
- The stability of the waterway's bed, shore and/or banks;
- The hydrological and biological function of the waterway, riparian zone or wetland;
- Native flora and fauna, their habitat, and their relationship with the environment; and
- The movement and dispersal of native flora and fauna.

The Parramatta Development Control Plan (DCP) provides Overall Precinct Objectives for Camellia. These include:

- Require development along the foreshore to be of a scale and character that is in keeping with its foreshore location, protection and enhancement of the unique visual and ecological qualities of the waterways and foreshore; and
- Improve public access along the foreshore to create a pedestrian and open space network.

In response to concerns relating to the proposed use of movable containers for the proposed landscape works within the Environment Protection Zone the Landscape Plan has been amended to incorporate use of non-movable containers. The use of non-movable containers as opposed to planting directly in the capping layer ensures that the cap is not breached reducing the potential for water to enter the contaminated material under the site capping layer. The revised landscaping works within the Environment Protection Zone will provide a more natural landscape effect providing filtered screening from the Parramatta River and enhancing the aesthetic value of the site (refer Figures 5 and 6). The Landscape Plan also makes provision for future pedestrian and cycleway assess through the area. At present Council does not have any detailed plans for the future use of the Environment Protection Zone along this section of the Parramatta River. The proposed landscaping provides flexibility for incorporation into any future plans.

Technical Report No 3 and Section 7.4 of the EA provide detail of the condition of the riparian land located adjacent to the site on the northern boundary of the site. The assessment found that small patches of riparian vegetation represented by Mangrove Forest occur on the Parramatta River foreshore. These areas have undergone substantial disturbance due to previous land uses and ongoing erosion largely resulting from turbulence (e.g. from the Rivercat) within the boat wash and tidal zone. The narrow patches of Mangrove Forest ranged between one and four metres in width along the river foreshore with some Mangroves actively collapsing into the river. Large stretches of the foreshore no longer included a vegetated riparian zone with the river being in direct contact with the constructed wall on the northern boundary of the site.

The site has completely altered drainage patterns as a result of previous land uses. Given that the proposal includes the re-use of stormwater collected on site, alterations to the existing stormwater drainage infrastructure are likely to decrease the amount of flows from the site into the adjoining Parramatta River. This is likely to have a positive effect on the receiving waters and Mangrove Forest located in proximity of the existing stormwater outlet.

The Site Management Plan requires an annual visual inspection of the embankment of the Parramatta river boundary for visible evidence of erosion (and after flood events).

1. Existing mangroves along retaining wall.

2a. Future access available for pedestrians & cyclists.

2b. Proposed landscape screen in non-movable contained raised mounded area. Planters to be arranged in groups with pathway ranging from 3m - 3.5m between them. This vegetated area comprises of grasses and tree species from the Cumberland Plain Woodland plant list - *Lomandra longifolia, Eucalyptus sp.*

3. Proposed staff car parking (24 spaces).

4. Proposed 6m wide grassed embankment with tall native shrubs and grasses to screen views of proposed structures and vehicle movements from areas north of the Site. Indicative species include: *Acacia spp, Elaeocarpus reticulatus, Callistemon spp, Melaleuca decora.*

5. Proposed rain water tanks and buildings screened with medium sized native shrubs and groundcovers.

6. First Flush System for stormwater runoff.

7. Informal raised open deck areas with in-built seating for staff and visitor amenity. Native groundcover planting level with road edge with soil for native screening shrubs and shade trees mounded with timber retaining setback from roadway. Raised screen planting to provide shelter and privacy from site operations.

8. Informal grassed staff outdoor picnic area with medium sized trees for shade and enclosed by low shrubs and groundcover planting.

9. Proposed staff and visitor car parking (20 spaces).

10. Signage information panel located in landscaped area at intersection. Garden beds surrounding parking areas with small ornamental shade trees over low water use native feature shrubs and groundcover planting. Indicative species include: Banksia

12. Site accessway and entrance gates.

13. Aldi Building - Explore and Develop Child Care Centre Level 4 Terrace

14. Native trees and tall screening shrubs along southern boundary with understorey of low water use native feature planting to buffer views from rail corridor and adjacent buildings. Indicative species include *Acacia parramattensis, Acmena smithii, Elaeocarpus reticulatus, Callistemon spp, Doryanthes excelsa, Melaleuca decora, Lomandra longifolia.*

15. Significant existing trees along site boundary to be retained and protected where appropriate to maintain screening and sightlines to surrounding areas.

16. Low water use native feature shrubs and groundcovers to screen building. Indicative species include Banksia spinulosa, *Callistemon spp, Dianella spp., Doryanthes excelsa, Grevillea spp, Lomandra longifolia, Microlaena stipoides, Themeda australis.*

17. Proposed grassed embankment along eastern boundary from roadway to boundary. Existing tall screening shrubs to be retained or replaced as appropriate to maintain privacy.

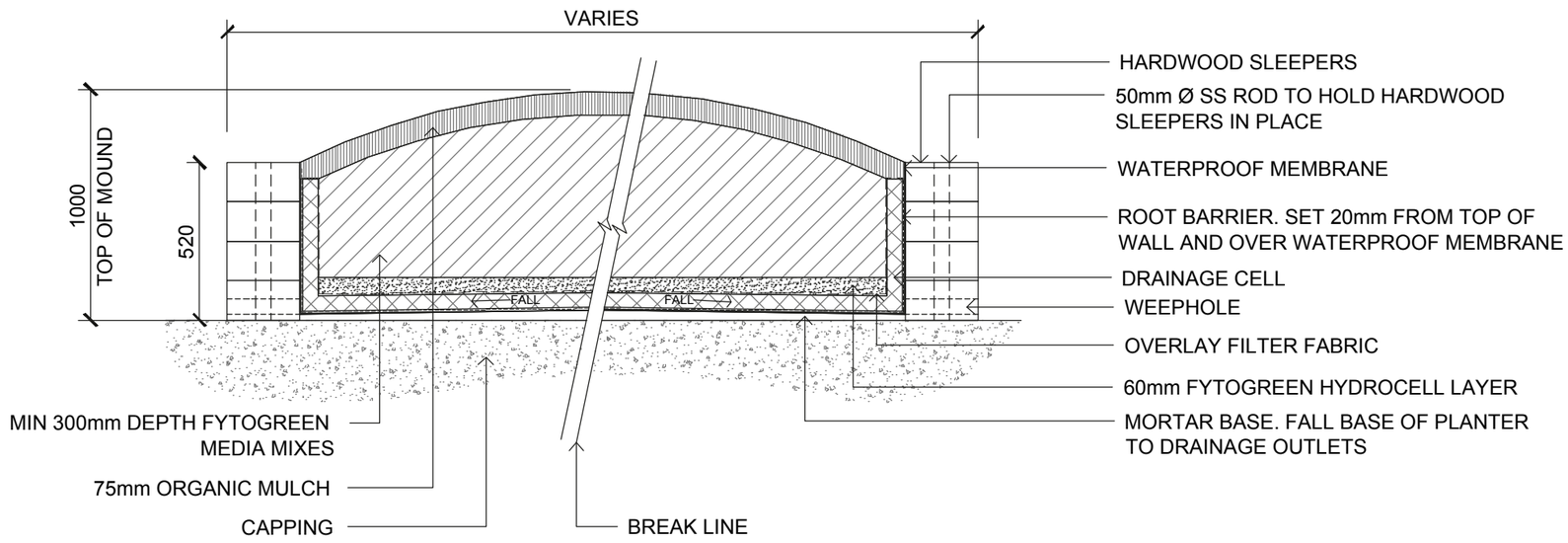
18. Existing Casuarina trees on neighbouring property to be protected from works.

19. Existing large trees along western Site boundary to remain to provide screening from rail corridor.

Legend

- Existing Trees retained
- Existing trees removed
- Proposed shade trees
- Proposed ornamental trees
- Proposed native trees in non-movable raised planter bed
- Proposed tall screening shrubs
- Proposed feature planting
- Proposed groundcovers
- Proposed grassed embankment
- Environmental Protection Zone EPZ
- Non Lease Area
- Lease Boundary
- Existing Retaining Wall to River
- Steel Mesh Security Fence
- EPZ Setback Boundary
- 12m Height Restriction Boundary

Figure 5 **Revised Landscape Plan**



RAISED PLANTER

SCALE 1:20 @ A3

Figure 6 **Planter Detail**

2.7 FLOODING

2.7.1 Submission Numbers

- Parramatta City Council.

2.7.2 Issue Description

In summary the respondents raised the following issues:

- Review classification of Land Use Category - Although the applicant has undertaken an assessment against Council's floodplain risk management policy, it is unclear whether the correct land use type has been adopted for that assessment. Another assessment is to be undertaken using the Critical Utilities and Uses classification; and

- Effect on PMF level – The extent of cross sections used to assess the PMF levels do not extend into the area to be developed.

2.7.2 Response

Land Use Category

The objective of the Flood Study (refer Technical Report No 2 of the EA) by Cardno was to undertake an assessment of the site and the proposed facility in accordance with the requirements of the then Draft DCP (now DCP 2011) Clause 2.4.2.1 Flooding which incorporates the Category Definitions and Planning and Development Controls from the Parramatta Local Floodplain Risk Management Policy 2006. It is noted that there are some differences in the land use definitions used to defined the Land Use Categories between the Policy and the DCP as they relate to waste management and recycling and recovery operations.

Table 2.4 sets out the land use category definitions in the DCP 2011 as they apply to the proposed development.

Table 2.4
Land Use Category Definitions

Land Use Category	Identified Land Uses in the DCP 2011
Critical Utilities and Uses	Hazardous industries, Hazardous storage establishments, Offensive industries, Offensive storage establishments, Liquid fuel depots, Public utility undertakings which may cause pollution of waterways during flooding, are essential to evacuation during periods of flood or if affected during flood events would unreasonably affect the ability of the community to return to normal activities after flood events. Telecommunications facilities, Waste management facilities
Commercial and Industrial	Bulky goods premises, Business premises, Carparks, Food and drink premises, Freight transport facilities, Funeral chapels, Funeral homes, Function Centres, Hardware and building supplies, Heavy industries, Hotel accommodations, Industries, Landscape and Garden supplies, Light industries, Material recycling or recovery centres, Medical centres, Mixed use development, Office premises, Passenger transport facilities, Places of public worship, Public administration buildings (other than an essential community facility), Pubs, Recreation facilities (indoor), Registered clubs, Restricted premises, Retail premises, Service stations, Sex service premises, Shop top housing, Tourist and visitor accommodation, Vehicle body repair workshops, Vehicle repair stations, Vehicle showrooms, Veterinary hospitals, Warehouse or distribution centres.

The Parramatta LEP (2011) contains the following definition of a resource recovery facility:

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

Within the Parramatta LEP (2011), a waste or resource management facility is a group term which includes a number of different types of waste or resource management facility as follows:

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

Elton Consulting planners provided planning advice as on the land use classification under the LEP and DCP as it applies to the proposed development. It was concluded that there is ambiguity in the definitions in relation to a resource recovery facility and a waste or resource management facility as they apply to the proposed RIRP. In addition there is no specific definition of a Material recycling or recovery centre in the LEP. Based on the assessment it was concluded that the proposed development could theoretically be categorised as Commercial and Industrial or Critical Utilities and Uses.

In the Flood Study Cardno adopted the land use classification as Commercial and Industrial. Parramatta City Council's submission concludes that it was unclear as to whether the correct land use type was adopted for the assessment.

Because of the ambiguity in respect to the land use classification, Cardno has undertaken a further review/assessment based on the Critical Utilities and Uses Classification.

The DCP sets out the three steps to determine the design standards which apply to the proposed development. The first step identifies the land use category in this instance Critical Utilities and Uses.

The second step is to determine which flood risk category applies to the land. Based on the Flood Study in the EA Cardno assessed that the development is located within a Low Flood Risk Precinct. Council's submission also classified the site as being within a Low Flood Risk Precinct.

The third step is to apply the eight development controls under Council's Floodplain Matrix.

The considerations set out in Council's submission are set out below (in italics) together with comments in relation to each consideration:

(i) Floor Level Item 3 which requires all floor levels to be equal to or greater than the PMF level plus freeboard. (Comment.' However it is noted that this requirement is more likely related to flood time impacts associated with proposed "public utility undertakings" which also fall within the Critical Utilities and Uses category.)

It is agreed that this requirement is more likely related to flood time impacts associated with "Public Utility Undertakings" where it is imperative that operations can continue uninterrupted during a flood event. In the case of the proposed RIRP all waste deliveries destined to the facility will be diverted to alternative disposal areas including landfill for the duration of inundations and cessation of facility operations. In addition Land Use definitions highlighted the issue of the presence of significant volumes of hazardous material (liquid, solid) which in a flooding event would affect the community's ability to return to normal activities or may cause pollution of waterways. Both are not applicable as:

- In such an event no material in the composting tunnels will float away into waterways because the tunnels are hermetically sealed during production. Material cannot escape and would be retained within the facility;

- Leachate is recirculated in a closed loop collection and recirculation system and will also be contained within the facility in such an event; and

- No product is stored on site on a daily basis.

(ii) Building Components Item 2 which requires all structures to have flood compatible building components below the PMF;

Flood compatible building components are incorporated in the facilities design below the PMF level.

(iii) Structural Soundness Item 2 which requires certification that the structure can withstand all the flood related forces up to and including a PMF level. (Comment: It might also be considered that this requirement is more related to the flood time impacts on "public utility undertakings" which also fall within the Critical Utilities and Uses category. However for this site there would appear to be the possibility that the proposed Main Building may need to also serve as a flood evacuation centre for the project and in that scenario it would be essential for the building to withstand the worst possible — i.e. PMF – flood forces.);

Cardno has provided the following advice in relation to PMF levels and water velocities:

> At Cross Sections Parramatta R 4987 and Parramatta R 4823 the PMF level are 7.99 m AHD and 8.36 m AHD. The location of cross sections in the floodplain model in relation to Lot 1B, Camellia is given in Figure 2 of the Flood study report (refer Technical Report No 2 of EA).
>
> While the site is subject to inundation in a PMF event it is noted from Figure 4 of that report that the extent of cross sections used to assess the PMF levels do not extend into the area to be developed. Consequently the 2005 Lower Parramatta River Floodplain Risk Management Study/Plan does not report PMF velocities for the site. The average peak PMF velocities reported in the Parramatta River are 1.9 m/s and 3.1 m/s respectively.
>
> An indicative estimate of the PMF velocity across the site would be 0.6 m/s – 1.0 m/s based on the assumption that the site is largely ineffective at conveying PMF flows and acts more as a flood storage.

Based on this information, Engineering and Management Services (EMS) Pty Ltd has certified that the building form, structural layout and elements are capable of achieving adequate structural soundness to withstand all flood related forces up to and including a PMF level (refer Appendix D).

It is agreed that this requirement is more related to flood time impacts on “Public Utility Undertakings”.

(iv) Evacuation Item 2 requires access for pedestrians and vehicles to a publicly accessible location during the PMF flood. (Comment: As noted in Section 3.1 in this memo there are "island" impacts for the Camellia peninsula at the peak of the 100 year event. We have sighted mapping of the PMF event (reference Figure 7-2 in this memo's Section 3.1) and it shows that essentially the whole of the Camellia peninsula is inundated in the PMF flood level and therefore the potential for finding a local "accessible location" would appear to be unlikely.);

Section 3.1 of the Memo has not been sighted. Based on Council's assessment the requirements for the evacuation of the proposed RIRP site would be the same as for other developments on the Camellia Peninsula.

A draft outline Flood Evacuation Plan has been prepared for the construction and operation phases of the proposed development and is attached at Appendix E.

(v) *Evacuation Item 6 requires adequate flood warning to achieve evacuation without increased reliance on SES, etc. (Comment: As already identified in this memo (reference Section 3.1) the local area which includes the project site becomes "an island" at the peak of the 100 year flood. It follows that issues related to flood warning — and the potential/likely need to evacuate all on-site persons out of that "island" before the floodwaters continue to rise — may be significant for the project.);*

The level of the flood warning for the proposed RIRP would be similar to any flood warnings for surrounding properties. The issues related to flood warnings are comparable to those faced by other development in Camellia. The draft outline Flood Evacuation Plan is relevant to this consideration.

(vi) *Management and Design Item 2 relates to a flood plan being prepared for a 100 year flood affected site. (Comment: This item is not relevant to this project site since it sits above the 100 year flood level.);*

It is agreed that this item is not relevant to this project site since it sits above the 100 year flood level.

(vii) *Management and Design Item 3 relates to capacity to store goods above the 100 year plus freeboard level. (Comment: Given the significant freeboard that is available relative to the existing slab/surface level at the project site, it is evident that this item can be readily satisfied.);*

It is agreed with Council's comment that given the significant freeboard that is available relative to the existing slab/surface level at the project site, it is evident that this item can be readily satisfied.

(viii) *Management and Design Item 4 relates to no storage of materials below the 100 year level. (Comment: Given that the existing slab/surface level is well above the 100 year flood level at the project site, it is evident that this item can be readily satisfied.)*

It is agreed with Council's comment that given that the existing slab/surface level is well above the 100 year flood level at the project site, it is evident that this item can be readily satisfied.

Effects on PMF Levels

The Council submissions states:

But for one exception, we concur (on their assumed basis that it should be treated as a Commercial or Industrial land use) with the Cardno floodplain development assessment of the project. The exception relates to their deduction that the project will have nil effect on the PMF event since "the extent of cross sections used to assess the PMF levels do not extend into the area to be developed" and in that extension area the site area has been assumed "to be hydraulically ineffective". It is our contention that since the depth of calculated PMF flood water is about three metres throughout the project site it is a flood modelling error not to have extended the cross sections further rather than any suggestion that the area beyond the cross section limits is not hydraulically effective. Nonetheless we would anticipate that the local area PMF flood levels would drop substantially if the cross sections were to be extended and

hence the potential impact of the project on extreme flood events would be likely to be reduced.

Cardno agree that if the cross sections in Council's floodplain model were extended then it would be expected that the estimated PMF level would be lowered substantially. However any re-assessment of the PMF would require not only the cross sections in the immediate vicinity of the site to be extended as appropriate but also all cross sections downstream to Silverwater Road (around 3.4 km downstream of the site). If the cross sections through the site only are extended then any reduction in the PMF level would be controlled by the PMF level at the next downstream cross section (which is not extended). Under this circumstance the reduction in PMF level is likely to be only minor.

2.8 ENVIRONMENTAL MANAGEMENT PLAN

2.8.1 Submission Numbers

Submissions 1 to 247, 249 to 256, 259 to 261, 263, 265 to 270, 273, EPA, WorkCover, Parramatta City Council

2.8.2 Issue Description

In summary the respondents raised the following issues:

- Documented processes and procedures are required to minimise and manage impacts. Procedures to include odour control and emergency evacuation;

- Documented community engagement plan mechanisms to keep the local resident and business community informed on progress of the development. Documented processes and procedures for the surrounding community and key stakeholders to report concerns with operations should they arise including provision of a 24 hour contact number;

- Implementation of a heavy vehicle driver orientation programme to cover the site and surrounding area, potential risks and risk times;

- Completion of pathway upgrades and vegetation clearance to support safer pedestrian travel and better amenity;

- Construction EMP to include:
    - Site Induction programme;
    - Construction hours;
    - Traffic Noise Management Strategy;
    - Noise and Vibration Construction Management Plan;
    - Construction Contaminated Land Management;
    - Waste Management Plan;
    - Hazards and Risks Plan;
    - Traffic – Driver Orientation;
    - Erosion and Sediment control plans (progressive plans to be submitted to EPA);
    - Monitoring Programme – Establishment of monitoring sites;
    - Construction Commitments as outlined in Table 8.1 of EA; and
    - Community Engagement Programme.

- Construction - An Occupational Hygienist and a Third Party NSW EPA Approved Contaminated Site Auditor should be engaged to develop, review and monitor the construction phase works to ensure contaminated soil and potential dust emissions do not occur. Monitoring sites should be established;

- Operational EMP must include:
    - Site induction;
    - Operating hours for machinery;
    - Traffic Noise Management Strategy;
    - Air Quality and Odour Management Plan;
    - Noise Management Plan;
    - Waste Management Plan;
    - Hazard and Risks Plan;
    - Erosion and Sediment Control Plans;
    - Monitoring programme;
    - Final Operational Commitments as set out in Table 8.2 of EMP;
    - OEMP must includes details of regular monitoring and maintenance of biofilters, tunnel fans, tunnel aeration trenches and ductwork, all other extraction fans.

Discharge stack, leachate holding tanks, rapid shut roller doors and any other equipment that, if not working optimally, may contribute to the generation of odour at the site;
  - Emergency Response Plan; and
  - Landscape Plan

- Appropriate management and auditing of the site during construction - Preparation of Environmental Impact Audit – Construction;

- Appropriate management and auditing of the site during operation - Preparation of Environmental Impact Audit – Operation; and

- Recent response to problems in Stockton do not engender confidence.

2.8.3 Response

Based on the company's environmental management policies, the findings of the EA and this report, Conditions of Approval, EPL conditions and other approvals REMONDIS will prepare and implement:

- A Construction Environmental Management Plan; and

- An Operational Environmental Management Plan.

Construction Environmental Management Plan

All construction activities undertaken on the site would be undertaken in accordance with a Construction Environmental Management Plan. The plan would incorporate the requirements of Conditions of Approval and the EPL. The Construction Manager will be responsible for implementation of the plan. The plan would address management of activities undertaken during the course of construction including:

- Installation of site services;

- Construction of the platform; and

- Construction of the RIRP.

The Environmental Goals of the Construction EMP will aim to:

- Ensure compliance with Conditions of Approval and the EPL;

- Prevent Asbestos being released into the environment;

- Prevent the generation of dust nuisance to the local community;

- Management of odour;

- Avoidance of noise nuisance to the local community;

- Avoidance of surface water pollution;

- Management of waste water;

- Management of groundwater;

- Avoidance of disturbance to heritage sites;
- Minimisation of disruption to the local community associated with traffic movements;
- Amelioration of visual impacts of the facility by commencing landscaping as soon as possible; and
- Minimisation of waste generation and correct disposal of material.

The Construction EMP will include:

- A plan view of the site and frontage roadways indicating:
    - Dedicated construction site entrance and exit, controlled by a certified traffic controller, to safely manage pedestrians and construction related vehicles in the frontage roadways;
    - Turning areas within the site for construction and spoil removal vehicles, allowing a forward egress for all construction vehicles from the site;
    - Locations of proposed work zones;
    - Location of any proposed crane standing areas;
    - Dedicated unloading and loading point within the site for all construction vehicles, plant and deliveries;
    - Material, plant and spoil bin storage areas within the site, where all materials are to be dropped off and collected; and
    - The provisions of an on-site parking area for employees, tradesperson and construction vehicles.
- Site Induction programme;
- Construction hours;
- Safe Work Plans;
- Erosion and Sediment Control Plans (progressive plans to be submitted to EPA);
- Traffic – Driver Orientation Programme;
- Air Quality and Odour Management Plan including an Air Monitoring Program;
- Traffic Noise Management Strategy;
- Noise and Vibration Construction Management Plan;
- Waste Management Plan;
- Hazards and Risks Plan;
- Environmental Inspection Procedures;
- Monitoring Programme – Establishment of monitoring sites including those for air quality and groundwater and installation of a meteorological station on site;
- Construction Commitments as outlined in the Statement of Commitments; and
- Community Engagement Programme.

Records will be maintained of any material bought on site for filling which must comply with relevant Resource Recovery Exemption. Records will be provided to the NSW EPA when requested.

All works associated with grouting of the site would be undertaken in accordance with the Site Work Plan.

Prior to construction of the platform, voids below the site cap will be treated in accordance with the requirements of a Work Method Statement. In addition the Grouting Contractor will be required to comply with relevant NSW EPA Goals.

During construction of the platform and the facility specific measures will be in place to address dust, noise, surface water drainage, visual amenity, waste disposal and traffic.

The Construction Manager will be responsible for ensuring the EMP is implemented and that any incidents are addressed and mitigated immediately. Regular inspections and monitoring of activities will be undertaken to ensure compliance with all requirements.

Stakeholders including users of Camellia railway station and adjoining businesses including the child care centre will be advised of activities being undertaken during construction to ensure they are aware of the nature and extent of activities during construction. The Construction Manager will be identified as the primary point of contact.

Operational Environmental Management Plan

An Operational Environmental Management Plan (OEMP) will be prepared for the site. The OEMP will identify responsibilities for the operation, environmental and OHS performance of the RIRP. The document will incorporate the requirements of the REMONDIS Environmental Management System. The Site Manager will be responsible for the implementation of the Plan.

The OEMP would be updated periodically in light of ongoing monitoring results, site audits, EPL requirements and Conditions of Approval. It will:

- Outline legislative and management requirements;
- Identify key environmental risks;
- Outline procedures for managing and mitigating risks;
- Identify roles and responsibilities;
- Outline monitoring, audit and reporting requirements;
- Provide a contingency plan for handling emergency events;
- Outline procedures for handling complaints; and
- Provide a summary of environmental commitments.

Environmental aspects/issues addressed by the OEMP will include:

- Air quality;
- Noise;
- Water;

- Flooding;
- Subsidence Management;
- Visual amenity;
- Waste Control;
- Traffic and access;
- Flora and fauna;
- Environment Protection Zone;
- Pest control;
- Litter management; and
- Site security and fire management.

The Operational EMP will include:

- Site induction procedures:
    - The aim is to ensure that all personnel on the site are aware of their responsibilities in relation to the ongoing operational and environmental management of the site; and
    - The procedures will also ensure the safety of personnel in terms of awareness of the need to prevent penetration of the site cap.

- Air Quality and Odour Management Plan
    - The plan will contain an odour management strategy, air quality monitoring plan, communications strategy and system performance reviews.
    - The odour control system will be aimed at achieving no detectable odours at the boundary of the site and prevention of degradation of local amenity; and
    - The OEMP will include details of regular monitoring and maintenance of biofilters, tunnel fans, tunnel aeration trenches and ductwork, all other extraction fans, discharge stack, leachate holding tanks, rapid shut roller doors and any other equipment that, if not working optimally, may contribute to the generation of odour at the site.
    - A report will be prepared “Biofilter Pre-Commissioning study which includes final design parameters and actual stack parameters of the biofilter. The report will be prepared in accordance with NSW EPA requirements;
    - Bio-filter Post Commissioning Study - Within 6 weeks of commencement of operation and again after 6 months, a recognised odour specialist will report on, and undertake a program of odour control system testing, to quantify the odour abatement efficiency of the odour control system and the odour emission rate to atmosphere. The report will be prepared in accordance with NSW EPA requirements; and
    - Biofilter Monitoring and Maintenance Plan which will include a method for monitoring biofilter performance that can be monitored via the process control systems, detail all proposed actions for the maintenance of the biofilter including replacement of the biofilter material. Mitigation measures are to be identified for the event of a breakdown of the biofilter system.

- Noise and Vibration Management Plan;
    - The aim of this plan will be to prevent noise pollution and degradation of local amenity;
    - Noise monitoring will be undertaken in accordance with the requirements of the Conditions of Approval and the EPL;
    - Operating hours for machinery and equipment; and
    - The aim is to ensure compliance wiith EPL and Conditions of Approval.

- Traffic Control Plan:
    - This plan will ensure all traffic movements on site are undertaken in a safe and controlled manner; and
    - Drivers will be made aware of the need for safe entry and movement along Grand Avenue North with particular reference to users of the Tilrox/ALDI building, Camellia Railway Station and associated parking areas. Drivers will be made aware of the movement of vehicles, cyclists and pedestrians. A Transport Code of Conduct will be prepared for drivers of waste vehicles delivering to the site and drivers of vehicles collecting product. This Code will apply to REMONDIS drivers and contractors.

- Traffic Noise Management Strategy;
    - The aim is to minimise degradation of local amenity;
    - Driver training will ensure that noise practices such as the use of compression engine brakes are not unnecessarily used near sensitive receptors;
    - Best noise practice will be a consideration in the selection and maintenance of vehicle fleets;
    - Movement scheduling will where practicable aim to reduce impacts during sensitive times of the day or evening;
    - Communication and management strategies will be implemented for non licencsee/proponent owned and operated vehicles to ensure the provisions of the TNMS are implemented;
    - A system of audited management practices will identify non conformances, initiate and monitor corrective and preventative action (including disciplinary action for breaches of noise minimisation procedures) and assess the implementation and improvement of the TNMS;
    - Specific procedures will be developed to minimise impacts at identified sensitive areas; and
    - Clauses in condition of employment or in contracts, of drivers will require adherence to the noise minimisation procedures and facilitate effective implementation of the disciplinary actions for breaches of procedures.

- Water Management Plan:
    - The aim of this plan is to ensure prevention of pollution of surface waters; and
    - Operational procedures will be established to ensure monitoring of the water management system in terms of surface water and leachate management.

- Landscape Plan
    - The aim of this plan is to ensure the benefits of the landscaping are maximised through maintenance of the landscaped areas; and
    - The landscape works undertaken within the site and the EPZ will be maintained and monitored to ensure the stabilisation of finished profiles, maintenance of vegetation and weed control.

- Litter Control;
    - The aim of this plan will be to prevent surface water contamination and degradation of local amenity; and
    - Daily inspections will be undertaken to monitor site litter and remove any identified material.

- Waste Control Plan:
    - The aim of this plan is to ensure that the site does not accept wastes that are prohibited;
    - A computerised weighing and recording system will be installed at the weighbridge;
    - All incoming waste loads will be screened;
    - Staff will receive adequate training to recognise and handle hazardous or other unapproved waste; and
    - Weighbridge staff will ensure waste is delivered to the correct area within the facility ie the CIRRF or SSORRF.

- Product Management Plan:
    - All outputs must be biologically stabilised before leaving the site;
    - All vehicles carrying outputs must be sealed of otherwise the load fully covered prior to leaving the negative pressures controlled buildings; and
    - All outputs that leave the site must be recycled, disposed or applied to land in accordance with the relevant provision of the *Protection of the Environment operations Act 1997* and its associated Regulations and relevant Australian Standards.

- Hazard and Risks Plan including Spill management procedures;
    - This plan will identify the potential for on site emergencies, set out emergency responses and procedures for responding to events.

- Erosion and Sediment Control Plan:
    - The aim of this plan is to prevent pollution of surface waters and prevention of surface waters; and
    - This plan will relate specifically to landscaped areas as all other areas on the site will be sealed pavement.

- Pest, Vermin and Weed Management:
    - The aim is to prevent degradation of local amenity;
    - Control will be through limiting sources of food and habitat;
    - Professional Exterminators will be employed in the event of an outbreak; and
    - Landscape contractor will be required to undertake weed control as part of the maintenance programme.

- Subsidence Management Plan:
    - Monitoring will be undertaken to identify any movement of the platform and structures. The monitoring will facilitate identification of any areas where there has been excessive ground movement. It is not expected that significant amounts of movement will occur. The plan is to be prepared in the event that any subsidence is monitored and/or observed;
    - Repair and ongoing monitoring would be undertaken in the event that any subsidence was observed or monitored.

- Monitoring programme:
    - Weather station;
    - Groundwater levels and quality;
    - Leachate management;
    - Dust;
    - Odour; and
    - Noise.

- Final Operational Commitments as set out in the Statement of Commitments; and

- Preparation of a Pollution Incident Response Management Plan (Section 153A of the *POEO Act*).

Community Consultation and Complaint Management

REMONDIS has initiated a community engagement programme with the local community with a study group having been established. It is proposed that this group would be the basis for a Community Liaison Committee which would meet on a regular basis to review environmental performance of the RIRP. REMONDIS will nominate a Community Engagement Officer within its management team. The role of Community Engagement Officer will be to facilitate all site community engagement and communication activities.

Any complaints received would be responded to quickly and efficiently. The EPL for the facility would require REMONDIS to keep a record of all complaints made in relation to pollution arising from any activity to which the Licence applies. The EPL would specify the details to be provided in the record and a complaint handling procedures. A 24 hour telephone complaints line would be operating for the purpose of receiving any complaints from members of the public and that number would be notified to the community. Complaints received would be recorded.

REMONDIS will keep a legible record of all complaints in relation to the operation of the RIRP. The record will include details of the following:

- The date and time of the complaint;
- The method by which the complaint was made;
- Any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
- The nature of the complaint;
- If no action was taken by REMONDIS the reasons why no action was taken; and
- A record of the complaint will be kept for at least four years.

The Site Manager would organise an immediate investigation into the cause of the complaint and any corrective actions required to mitigate its effect. If necessary, the Site Manager would initiate further corrective action, such as introducing changes in operational procedures, work instructions or modification to equipment etc which may be required to reduce the possibility of further incidents.

Environmental Incidents

An Emergency Response Procedure would be developed for the operations. The ERP would describe the general policy and approach to be adopted when dealing with an emergency or incident at the site. As described in Section 2.7 a Flood Evacuation Plan will be developed for the construction and operational phases of the facility. Response to fire would be in accordance with the Fire Safety Plans in the Emergency Procedures. Response to other emergencies would be detailed in an Emergency Plan. Emergency procedures would be located throughout the facility.

Any environmental/pollution incidents on the site will be reported and dealt with in accordance with the EPL and the Operational EMP.

In accordance with the requirements of the *Protection of the Environment Legislation Amendment Act 2011*, a pollution incident on the site will be notified immediately to all authorities. These comprise the EPA, the Ministry of Health, WorkCover, Parramatta City Council and Fire and Rescue NSW. This will be done promptly and without delay to ensure that the authorities have the information required to respond within an appropriate time. The Site Manager will be responsible for Incident Reporting and liaison with the relevant authorities.

Environmental Monitoring

The Site Manager would be responsible for ensuring any monitoring is undertaken in accordance with the EPL and Conditions of Approval. Implementation of the OEMP would be the basis for compliance with monitoring requirements which would be reported to the NSW EPA and DoPI as required.

Staffing and Training Requirements

An environmental training programme would be prepared and implemented for the site to provide all employees and contractors with information about their environmental responsibilities. The programme would focus on:

- Environmental legislation and the concept of due diligence;
- Environmental impacts of activities;
- REMONDIS Environmental Policy;
- Reporting of incidents; and
- Site environmental management.

Training would be by site induction workshops.

Audit and Review

This OEMP will be audited on a yearly basis for five years of operation. Depending on findings, this may later be extended to a two yearly interval. Where adherence to the requirements in the OEMP are found to be unsatisfactory, action will be taken to investigate the cause, install appropriate controls, make amendments to the OEMP if required, and implement appropriate preventative and corrective strategies.

Closure Plan

At the cessation of operations at the site the proponent shall decommission the project and rehabilitate the site to the satisfaction of the relevant authorities.

2.9 GREENHOUSE GAS EMISSIONS

2.9.1 Submission Numbers

Parramatta Council Submission

2.9.2 Issue Description

In summary the respondents raised the following issues:

- Investigate options for converting waste to energy from the composting process;
- Investigate additional /alternative renewable energy sources to supply electricity to the site; and
- Provide details of all other energy efficiency measures for the site.

2.9.3 Response

Section 7.12 and Technical Report No 4 of the EA provide details on estimated greenhouse emissions in relation to operation of the RIRP. On an annual basis it has been estimated that the proposed RIRP would release approximately 0.002 Mt/y of additional CO2-e (Scope 1 (excluding composting) and 2 emissions). The annual greenhouse emissions in NSW for 2008 were 164.7 Mt CO2-e. Therefore the facility represents approximately 0.001% of the total NSW greenhouse emissions.

Australia's total greenhouse gas emissions were estimated at 581.9 Mt CO2-e (refer Technical Report No 4). Comparing the annual emissions for the proposed facility, the predicted increase is approximately 0.0003% of the total Australian emissions in 2008.

Greenhouse Gas Emissions and Waste to Energy

Greenhouse emissions from aerobic processes cannot be converted to energy because methane is not produced. Composting of organics always releases Carbon Dioxide and in International and Australian greenhouse conventions, it is classified as biogenic as opposed to anthropogenic. Biogenic means the same carbon dioxide absorbed in organics is naturally released to the atmosphere. This cycle of absorption and release of CO2 continues and does not add to the greenhouse inventory and therefore is not considered in greenhouse emissions. However, for every tonne of composted materials that is applied to land, it will achieve 6 tonnes of CO2-e abatement for one year. This benefit has not been factored in the greenhouse calculations. Other benefits include nutrients substituting chemical fertiliser and water retention properties;

The facility also treats putrescible fractions in the C & I waste stream. The CO2 saving by aerobic treatment in the tunnels abates 68 kg CO2 –e for every tonne of this material. However if it was landfilled instead of recovery proposed by REMONDIS, it will emit 100 kg CO2 –e /tonne of putrescible material. This benefit has not also been reflected in the calculations;

REMONDIS has technology that can convert waste to energy .The future outlook for this plant is to produce engineered fuel from the residue that this plant will initially landfill. This will be developed as the NSW Government develops suitable waste to energy policies. Engineered fuel has a calorific value of 12 to 15 MJ/kg which is equivalent to brown coal. This fuel can be substituted for coal in power plants and cement kilns. This will further abate Greenhouse emissions from these plants.

REMONDIS has other process technologies for producing electricity using anaerobic processes but it will not be suitable technology given the constraints on the site.

Additional/Alternative Renewable Energy Sources for Supplying Electricity to the Site

REMONDIS has committed to purchasing electricity from green sources.

Energy Efficiency Measures

The following energy efficiency measures are included within the design of the proposed RIRP:

- Efficient and process integrated air ventilation systems for the main building areas which result in reduced air volume requirements and ultimately the reduction in power consumption;
- Air conditioning systems are only applied to critical work areas;
- The concrete tunnel structure provides thermal storage to regulate temperature and minimise aeration requirements;
- Appropriate thermal rating is applied to roofs and tunnels;
- Building glazing is kept to a minimum;
- Reduced wattage of installed lighting and the provision of natural lighting plus protection of excessive sunlight. Appropriate timing switch controls and low consumption lamps;
- Size and length of hot water supply optimised to reduce friction losses. Insulation for heat losses. Hot water for amenities is provided with hot run heaters to provide instant hot water to reduce electricity consumption; and
- External doors have storm seal protections.

2.10 WASTE MANAGEMENT

2.10.1 Submission Numbers

Submissions 1 to 246, 258, 260, 261, 264, 266, 271

2.10.2 Issue Description

In summary the respondents raised the following issues:

- No justification for the project other than to claim that the RIRP is an appropriate response to the recycling and resource recovery targets at a National and State level and that to do nothing would to lose an opportunity to contribute to meeting such targets by not recovering and utilising materials from the specified waste stream and educing landfill demand;
- Achieving the waste management objectives should not come at the expense of unacceptable local impacts;
- Sydney needs more facilities like this to assist with state goals and objectives of reducing waste to landfill, increased recovery and reuse of materials as well as meeting the diversion targets of C&I and MSW waste;
- Pleased to see alternate technology being planned to assist in the diversion of organic waste from landfill. The reuse of organic material is a growing market and technologies that can improve the quality of material via effective source separation to produce high quality organic fertiliser and compost is good for the environment;
- Need to clarify “Mass Loss” calculations;
- Hazards associated with the treatment and delivery of waste in such close proximity to children; and
- Waste material and runoff to Parramatta River;

2.10.3 Response

Section 2.4 of the EA documents the need for and role of the proposed RIRP. The Australian National Waste Policy: Less Waste, More Resources was finalised in November 2009. It sets the agenda for waste and resource recovery in Australia over the next 10 years and includes strategies to monitor and address organic waste. The aims of the Policy are to:

- Avoid the generation of waste, reduce the amount of waste (including hazardous waste) for disposal;
- Manage waste as a resource;
- Ensure that waste treatment, disposal, recovery and re-use is undertaken in a safe, scientific and environmentally sound manner; and
- Contribute to the reduction in greenhouse gas emissions, energy conservation and production, water efficiency and the productivity of the land.

The proposed RIRP would support the National Waste Policy and address growing demand for the treatment and processing of organic material by:

- Providing and supporting the development of markets for potential wastes;

- Providing access to knowledge and expertise;
- Reducing the amount of biodegradable material in landfill; and
- Providing a source for the re-use of recycled C&I waste.

The NSW *WARR Act* established the strategic direction for waste management and resource recovery in NSW. The objectives include:

(b) To ensure that resource management options are considered against a hierarchy of the following order:

i) Avoidance of unnecessary resource consumption;

ii) Resource recovery (including reuse, reprocessing, recycling and energy recovery);

iii) Disposal.

The Waste Avoidance and Resource Recovery Strategy sets out waste reduction, resource recovery and diversion of waste from landfills targets for NSW. Of relevance to the proposed RIRP the target for increasing recovery and use of secondary resources is by 2014 to:

- Increase recovery and utilisation of materials from municipal sector from the current 26% to 66%;
- Increase recovery and utilisation of materials from the commercial & industrial sector from the current 28% to 63%; and
- Increase recovery and utilisation of materials from the construction & demolition sector from the current 65% to 76%.

In this policy context REMONDIS considers that the proposed RIRP is an appropriate response to the recycling and resource recovery targets at a National and State level.

The site of the proposed RIRP is located on land to which SREP No 28 applies. The proposed development is permissible with consent under the SREP zoning. Parramatta City Council has adopted a new Parramatta LEP (2011) supported by Parramatta DCP (2011). Under the LEP the site is zoned Heavy Industrial and waste storage, processing and recycling facilities are permissible with consent. This EA addressed the objectives of both the SREP and LEP zonings in the context of the proposed RIRP.

The proposed RIRP will result in less waste material being disposed of in landfills serving the Sydney region and improved recycling and resource recovery. Non-putrsecible waste generated by the proposed RIRP will be disposed of at a licensed general solid waste (Non-putrescible) landfill in the Western Sydney Region or licensed landfills in other areas subject to an assessment of commercial viability of these disposal options by the Proponent.

The environmental assessment undertaken concludes that the environmental impacts associated with construction and operation of the proposed RIRP are minor and can be effectively managed through REMONDIS commitments to the RIRP management measures described in the EA.

The operation of the proposed RIRP is in accordance with the principles of ESD, the National Waste Policy and the NSW State Waste Avoidance and Resource Recovery Strategy.

Location

There is an extensive network of waste facilities including landfill sites, waste transfer stations and recycling centres which service the Sydney Region. Facilities in Western Sydney are located at Eastern Creek, Camellia, Chullora, Penrith and St Marys. The closest landfill to the site is located

at Eastern Creek. Transportation of waste is one of the main greenhouse gas emission sources associated with waste management. Localised solutions are preferable from a sustainability perspective than long-hauling waste to distant facilities.

There are other waste and recycling facilities located on Grand Avenue including:

- Veolia Environmental Services Camellia Liquid Treatment Plant – 37 Grand Avenue Camellia ;
- Earthpower Technology Food Waste to Energy Plant – 35 Grand Avenue Camellia;
- KLF Holdings – 16 Grand Avenue Camellia – Building Waste Recycling Facility; and
- SITA Camellia Resource Recovery Facility – (Opp Thackeray Street, Entrance via Patricks Container Yard.

Mass Loss

Mass Loss happens in all aerobic processes. REMONDIS has based the moisture loss calculations on 30 years experience with international plants and the REMONDIS Port Macquarie facility. This is propriety information and is based on technology developed and used by many resource recovery companies.

Environmental Controls

As identified in Section 2.8, Construction and Operational Environmental Management Plans will be prepared for the site. Section 4 of the EA provides further detail of environmental controls particularly with respect to air and water management.

The EMPs will also include procedures for waste receival and handling and management of site activities to prevent or minimise impacts on the local environment.

With respect to the water management system the procedures include:

- No contaminated water will be discharged or allowed to flow from the site;
- Surface stormwater will be contained and directed to a first-flush system;
- Diversion drains will be installed around the perimeter to protect the site from external run-off water;
- Provision of a separate and enclosed system for leachate and process water collection and storage, to ensure no contaminated water can enter the stormwater or groundwater systems; and
- All roof water will be collected into rainwater tanks and used for various purposes.

The site is substantially sealed at the surface with concrete and bituminous concrete pavements and as such, precipitation falling on the site runs off, ultimately to the Parramatta River to the north of the site. There is an existing stormwater system on the site with a drainage channel located to the west of the REMONDIS site boundary. This drainage channel has an outlet on the outer surface of the retaining wall which runs parallel with the northern boundary of the site along the Parramatta River. Billbergia is to install a connection from the REMONDIS Lease area to this drainage channel.

The stormwater system for the RIRP has been designed to collect all surface run-off excluding roof water and direct it to a collection and retention system which will incorporate a first flush unit with an oil interceptor and gross pollutant trap.

Section 2.8 provides further details of environmental management strategies including those related to waste control and site management.

2.11 LAND USE CONFLICTS

2.11.1 Submission Numbers

Submissions 1 to 246, 247, 248, 250, 254, 255, 256, 258, 259, 260, 261, 267, 268 269, 270, 272, 273, Parramatta City Council.

2.11.2 Issue Description

In summary the respondents raised the following issues:

- The proposed use of the site is not sympathetic to the preferred use of the site and future plans for the Camellia Precinct. Potential redevelopment opportunities for the Camellia precinct over its 20 year lease period;

- The subject site is considered to be a gateway site for Parramatta and the proposed use would present a poor image for Parramatta. Location of an organic waste processing facility at this location is inappropriate;

- Land Use conflict with nearby and adjacent businesses. Conflict of use for this area – Why have a waste treatment facility located so close to a day care centre, an ALDI, the racecourse and university;

- The day care centre at Level 4, 1 Grand Avenue Drive, Parramatta looks directly into that property. When the child care centre was opened the proposed site was presented as a possible public parkland area. As such the location of the service appeared to be appropriate. child care centre -Currently service 137 families and 105 children. Concerns for children and families include:
    - Hazards associated with the treatment of waste in such close proximity to children.
    - Hazards associated with the delivery of waste material in such close proximity to children.
    - Odour that will emulate from managing waste material in such close proximity to children.
    - Construction of the facility on land that has been previously been capped due to asbestos contamination.

- Child Care Centre - Under the Children Services Education and Care Services Regulations the Approved provider is required to comply with the regulations at all times.

- Hazardous place and we have a child who goes to school a few streets away. There are 4 preschool and a public school close to the site;

- Council sees the site being used in a more positive fashion, similar to other signature developments in the immediate area, such as the University of Western Sydney and Rosehill Racecourse;

- Impact on Rosehill Racecourse and potential for expansion to the area - Rosehill Racecourse is a major entertainment venue in the Parramatta and Camellia area that may be potentially affected by foul odours potentially affecting patrons and further traffic congestion on race days which may cause delays. Rosehill Racecourse across the road holds continuous events throughout the year;

- A 24 hour AWT in close proximity to other significant activities will inevitably result in tensions with surrounding stakeholders and should be located in a more suitable environment or a site entirely surrounded by industrial development; Residential properties are situated within 500m of the proposed development and would be impacted by the 24 hour operation of the site, foul/putrid odours, extra noise outside 7am and 6pm and remote

possibility of air borne asbestos contamination if an incident/accident were to occur in the future;

- The current strategic aim for Parramatta is to increase its capacity to be the second CBD of Sydney, building more office and retail sites. In the past few years more and more residential apartment buildings have been built in Harris Park and Rosehill to assist with this goal. I find putting a waste site near this expansion contrary to Council's aims. It may increase employment in the area by a small amount but decrease people willing to live in the area. This will decrease the value of our properties;

- Impending closure of the Shell Refinery;

- Close to Shell Refinery increasing risk of disaster;

- Value of properties will drop and residents should be compensated;

- Inappropriate to develop an organic waste processing facility in such a densely populated area. It is a waterfront property located next to a major residential area with close access to public transport and work/business in the Parramatta CBD;

- The area offers a significant opportunity for redevelopment. The 20 year lease period for the RIRP stymies any potential that could be gained from the $250 million development of Rosehill Racecourse and the impending closure of the Shell refinery at Clyde to provide a catalyst for business and residential development to cater for the expected 20,000 new jobs forecast for Parramatta over the next 20 years;

- These facilities are more suited to being treated within a broader waste facility, given the separation from other sensitive receivers and the fact they need to dispose of a residual component at landfill eg SITA AWT is located at Kemps Creek landfill, the Kimbriki AWT is at a landfill and the Woy Woy AWT is at a landfill;

- This is a built up area which will be affected by the additional trucks required to transport waste to and from the facility, odour from the facility and the trucks transporting waste and noise impacts;

- Proposed recycling plant does not bring any advantages to Parramatta City by being this close and will increase the traffic congestion by big trucks;

- During last federal government election current labour government confirmed development of Parramatta to Epping rail line; and

2.11.3 Response

The site is surrounded by a range of industrial and commercial uses, consistent with its history and zoning of the area. To the east are large industrial/commercial warehouses. To the south are the Tilrox/ALDI Building and Grand Avenue. Grand Avenue separates the Camellia industrial area from the large area of open space comprising Rosehill Gardens Racecourse and the Parramatta City Raceway precincts.

The proposed site for the RIRP is zoned Heavy Industrial under the Parramatta LEP 2011. The following provides the objectives of the zone, developments permitted without and with consent and prohibited development.

1. Objectives of Zone

- To provide suitable areas for those industries that need to be separated from other land uses.

- To encourage employment opportunities.
- To minimise any adverse effect of heavy industry on other land uses.
- To support and protect industrial land for industrial uses.
- To allow a wide range of industrial and heavy industrial uses serving the Greater Metropolitan Area of Sydney and beyond.
- To ensure that opportunities are not lost for realising potential foreshore access on land that is contaminated and currently not suitable for public access.

2. Permitted without Consent

Nil

3. Permitted with Consent

Agricultural produce industries, Building identification signs, Business identification signs, Depots, Freight transport facilities, General industries, Hardware and building supplies, Hazardous storage establishments, Heavy industries, Horticulture, Kiosks, Medical Centres, Offensive storage establishments, Pubs, Roads, Rural supplies, sawmill or log processing works, takeaway food and drink premises, timber yards, warehouse or distribution centres, water storage facilities, any other development not specified in item 2 or 4

4. Prohibited

Agriculture, Air transport facilities, Airstrips, Amusement centres, Boat launching ramps; Boat sheds, Camping grounds, Caravan Parks, Cemeteries, Charter and Tourism boating facilities, Child care centres, Commercial premises, Community facilities, Eco-tourist facilities, Educational establishments, Entertainment facilities, Exhibition homes, Exhibition villages; Farm buildings, Forestry, function centres. Health service facilities; Helipads, Highway services centres, Home-based child care, Home businesses, Home industries, Home occupations, Home occupations (sex services) Industrial retail outlets, Information and education facilities, Jetties, Marinas, Mooring pens, Moorings, Open cut mining, Port facilities, Registered clubs, Research stations, Residential accommodation, Respite day care centres, Rural industries, Signage, Tourist and visitor accommodation, Water recreation structures, Water supply systems, Wharf or boating facilities, Wholesale supplies.

Under the zoning waste storage, processing and recycling facilities are permissible with consent.

Sydney Regional Environmental Plan (SREP) 28

This SREP applies to the land known as the Parramatta Primary Centre, which is predominantly within the City of Parramatta and partly within the City of Holroyd. It creates eight Precincts, including Camellia Precinct, and establishes regional planning aims for the entire Parramatta Primary Centre, and aims for development and detailed development controls for each Precinct.

The aims of this SREP for the Camellia Precinct are:

a) To protect and support the integrity of the Camellia Precinct as one of Sydney's significant industrial hubs;
b) To maintain and improve existing access to major public transport links outside the area;
c) To promote industrial development in the Camellia Precinct that demonstrates innovation and environmental management best practice;
d) To maintain long-term opportunities for future investment in eco-industrial development in the Camellia Precinct;

e) To promote the development of mutually supportive relationships between industries including processes, practices, products, energy use and waste;
f) To ensure that development along the foreshore is of a scale and character in keeping with its foreshore location and that the unique visual and ecological qualities of the waterways and foreshore are protected and enhanced;
g) To seek opportunities to provide public access to the foreshore at appropriate locations and improve the connectivity of the foreshore open space network;
h) To maintain existing racecourse uses and facilitate expansion of the existing racecourse and other uses that are ancillary or associated with the racing industry in the Camellia Precinct;
i) To develop a mixed use centre of retail, commercial, transport and community services at the railway station node serving the Camellia Precinct;
j) To encourage industry that can capitalise on the Camellia Precinct's accessibility, particularly the use of the rail freight line;
k) To achieve environmental management best practice that protects and promotes the natural assets of Camellia;
l) To improve environmental performance that minimises energy and resource use as well as off-site air quality, noise, odour, dust, water, soil and contamination impacts;
m) to protect and enhance local and regional biodiversity, particularly maximising the extent and integrity of aquatic and natural land areas along the Parramatta River, Duck River, Duck Creek and A'Becketts Creek corridors.

Under the SREP 28, the site of the proposed development is zoned primarily for Regional Enterprise. A narrow section of the site bordering the Parramatta River is zoned for Environmental Protection. The site boundary to the west is delineated by the suburban railway line, with Camellia Railway Station located at the site's south west corner. A disused rail spur forms the site's southern boundary.

The Regional Enterprise zone covers the great majority of the Camellia Precinct between the Parramatta River and the Duck River. However, immediately adjacent to the proposed development site, to the west and south west of the railway lines, is an area zoned as Business and Transport Centre. This includes a triangular shaped commercial development, known as the Tilrox Building, between the disused rail spur and the northern side of Grand Avenue, immediately east of Camellia Station. The Tilrox Building contains numerous tenants, including the Explore and Develop child care centre, an ALDI store, a training academy, a call centre for the Transfield engineering company, and offices for the Tilrox development company.

The Regional Enterprise Zone is suitable for a variety of industrial and heavy industrial activities serving the Greater Metropolitan Area of Sydney and beyond.

The objectives of the Regional Enterprise zone are:

a) To achieve a prosperous and efficient regional eco-industrial estate that continues to capitalise on Camellia's strategic location and accessibility;
b) To allow a wide range of industrial and heavy industrial uses in Camellia serving the Greater Metropolitan Area of Sydney and beyond;
c) To ensure that development is carried out in a manner that does not detract from the amenity enjoyed by residents in neighbouring localities, the conservation of identified views, the commercial viability of the Parramatta City Centre or the efficient operation of the road system;
d) To ensure that development applies current environmental management best practice;
e) To maintain long-term opportunities for the future investment in development of Camellia as an eco-industrial precinct;
f) To ensure that the scale, design and materials of construction, and the nature of development, contribute positively to the visual quality of the locality;
g) To allow for and improve public access along the waterways, where natural values will not be diminished;

h) In the case of contaminated land that is currently not suitable for public access, to ensure that opportunities are not lost for future potential foreshore access,
i) To comply with the controls for Special Areas as set out in this Part.

The aims of SREP 28 and the objectives for the Regional Enterprise Zone support regional level eco- industrial uses and best-practice environmental management, such as that proposed for this site.

Parramatta Twenty25

This Strategic Plan, developed in consultation with Parramatta's diverse community, aims to guide the city's growth over the next 20 years (refer Technical Report No 10). The concept of sustainability underpins the strategy. Meeting sustainability objectives, such as those expressed in the Parramatta Twenty25 strategic plan, is dependent on facilities, such as the proposed RIRP, to recycle a wide range of wastes. The proposal represents an innovative means of achieving greater levels of sustainability for Parramatta and the wider Sydney metropolitan area.

Streamline Sustainable Business Program

Parramatta City Council supports a number of programs "to encourage sustainable business practice and to enable businesses to access affordable, practical initiatives which will provide economic benefits, enhance reputation and promote our city as a Sustainable City of the future".

Programs are tailored to a range of company sizes and activities, including manufacturing enterprises. Following advice from the Institute for Sustainable Futures in 2009, Parramatta and Auburn City Councils have developed a joint initiative which aims to empower local businesses to become environmentally and socially responsible. Businesses in Camellia, Rosehill, Clyde, Granville, Rydalmere, Silverwater, Auburn and Lidcombe, within the Duck River Catchment, have been invited to join the Streamline Sustainable Business Program. Those participating will receive benefits including a free electricity walkthrough assessment, a tailored action plan and the opportunity to apply for a rebate of up to $5000 for energy efficiency improvements.

The proposed development is in accordance with the objectives of Eco Industrial Development set out in the Parramatta DCP 2011 for the Camellia precinct, namely:

- Promote and achieve the principles of eco-industrial development in the Camellia Precinct;
- Capitalise on the potential that exists in the Camellia Precinct for eco-industrial development; and
- Identify all opportunities to move from a traditional industrial system to a cyclical system whereby the energy, by-product or waste produced by a local industry are reused by another local industry

The proposed RIRP is consistent with work undertaken by Council in the Camellia Peninsula which identified waste as the major concern for businesses in the area. A web based tool has been developed to provide resource recovery options for their wastes that present alternatives to landfill and focus on using local holding/processing facilities or facilitating resource exchange with another local business. In this context the proposed RIRP meets the need of businesses located directly in the Camellia Peninsula. It will also provide an opportunity for Council to utilise the facility in its municipal waste collection service in relation to the diversion of all organics in the waste stream. The location of such a facility would reduce transport costs associated with the disposal of waste.

Parramatta is a major business and commercial centre located to the west of the Site. Parramatta has a range of economic development including many commercial and residential developments and several significant industrial areas of which Camellia is included.

Camellia is now an industrial suburb (formerly residential) approximately 1.2km east of Parramatta city centre, on the south bank of the Parramatta River. The suburb is defined by Clay Cliff Creek to the west, Duck River to the east and Grand Avenue to the south. Since release of the EA, Shell have announced that its Camellia refinery is to be closed. However the site will be used as a fuel/oil import storage facility.

The major roads dissecting the suburb are Grand Avenue (east-west) and James Ruse Drive (north-south). Another major feature is the rail link between Rydalmere and Clyde and the spur line from it to Camellia railway station which were important transport links, as are the roads that opened the suburb for industrial use.

The Site boundaries are defined to the west by the Clyde-Carlingford railway line and vacant land beyond, the goods rail line to the south with a mixture of offices, retail and industrial premises beyond accessed off Grand Avenue, industrial premises to the east and the Parramatta River to the north.

Access to the Site is through a major signalled intersection on James Ruse Drive and across an overbridge with heavy vehicle and pedestrian access which crosses the Clyde-Carlingford railway line. The entrance is located to the southwest corner of the Site between the Clyde-Carlingford railway line and a spur goods rail line to the south. The Site entrance is accessed by a road linking with Grand Avenue at the eastern end of the overbridge.

There are already a number of waste facilities located on Grand Avenue including:

- Veolia Environmental Services Camellia Liquid Treatment Plant – 37 Grand Avenue Camellia ;
- Earthpower Technology Food Waste to Energy Plant – 35 Grand Avenue Camellia;
- KLF Holdings – 16 Grand Avenue Camellia – Building Waste Recycling Facility; and
- SITA Camellia Resource Recovery Facility – (Opp Thackeray Street, Entrance via Patricks Container Yard.

Impacts

The assessment of specific impacts associated with the proposed RIRP documented in the EA, specifically in relation to air quality, noise and traffic, demonstrate that there are no environmental conflicts with adjacent and nearby land uses. The extent of disturbance to the site cap has been reduced as a result of revisions to the design for installation of services. No excavation of contaminated material will be required.

Air Quality

- The total amount of dust generated from the construction of the proposed RIRP was predicted to be minor without any significant off-site impacts;
- The potential of generating off-site dust impacts due to the operational activities are minimal; and
- It was concluded that the proposed RIRP will comply with NSW EPA odour criterion at all locations.

Noise

- Predicted operational daytime, evening and night-time noise levels comply with the design goals at existing residences, and also the childcare centre, the University of Western Sydney and commercial and industrial receivers;

- Changes to traffic noise levels as a result of the project comply with the EPA's Environmental Criteria for Road Traffic Noise; and

- Noise levels predicted for construction activities comply with design criteria developed in accordance with the EPA's Interim Construction Guideline.

Traffic

- The surrounding road network, particularly James Ruse Drive in the vicinity of the site, currently exceeds capacity resulting in significant delays for road users during peak periods. The proposed RIRP is a highly specialised and automated operation which results in a comparatively low traffic generation when considering other potential (and historic) uses of the site; and

- Delays at surrounding intersections will remain relatively unchanged by the proposed RIRP during the peak site traffic and morning on-street periods. Increased delays at the intersection of James Ruse Drive and Grand Avenue are not considered to warrant works to this intersection on behalf of REMONDIS as there is the ability to redistribute site traffic to less congested intersections during these times.

With respect to the child care centre and the requirement that the provider complies with the Education and Care Services National Regulations at all times, the regulations have been reviewed in the context of the proposed RIRP construction and operation.

Part 4.2 of the Regulations relate to children's health and safety. Under Part 4.2, Regulation 77(1) requires that the approved provider of an education and care service must ensure that the nominated supervisor and staff members of, and volunteers at, the service implement adequate health and hygiene practices and safe practices for handling, preparing and storing food to minimise the risks to children being educated and cared for by the service.

The design of the proposed RIRP including environmental controls for air, noise and water will ensure that the construction and operations of the facility do not impact on the ability of the provider to meet these requirements.

In addition Regulation 81 (1) requires that the approved provider of an education and care service must take reasonable steps to ensure that the needs for the sleep and rest of children being educated and cared for by the service are met, having regard to the ages, development stages and individual needs of the children.

The noise assessment predicts that the construction and operation of the proposed RIRP will comply with regulatory requirements and the Proponent is seeking to work with the provider to ensure that requirements of the regulation are satisfied.

Potential Socio-economic Impact on Child Care Centre Operations

The environmental assessment undertaken concludes that the environmental impacts associated with construction and operation of the proposed RIRP are minor and can be effectively managed through REMONDIS commitments to the RIRP management measures described in the EA.

Issues raised in submissions indicate that there is a perception that the impacts of the construction and operation of the RIRP will result in more intense impacts on the child care centre than predicted in the EA and the technical studies. As a result of this perception there is a potential socio-economic impact on the child care centre and the families utilising the centre. The child care centre operator would be impacted if parents chose to withdraw their children from the centre as a result of the perceived impacts associated with construction and operation of the proposed RIRP.

REMONDIS has committed to working with the operators of the child care centre to resolve any issues resulting from the construction and operation of the proposed RIRP which may impact on the business and its customers. The operator of the child care centre has indicated she will not facilitate consultation between REMONDIS and the parents of the children attending the child care centre pending determination of the project.

REMONDIS and the operator of the child care centre have discussed options with respect to minimising the potential socio-economic impact on the child care centre including:

- Temporary Relocation during the construction phase for the proposed RIRP;
- Financial Compensation for any loss of business incurred as a result of the construction activities on the child care centre; and
- Permanent Relocation.

The operator of the child care centre has indicated that perceived risks associated with the penetration of the site cap layer will potentially heighten the concerns of parents and staff and that many customers would cease to use the centre once construction commenced. The Operator of the child care centre has indicated a preference for the Centre to be relocated to a nearby safer location.

Due to cost and timing issues associated with a temporary or permanent relocation of the child care centre REMONDIS considers these relocation options would make the project commercially unviable.

REMONDIS considers that it has designed the proposed RIRP to be a world class waste and resource recovery facility that adopts best practice design. In addition the precautionary principle has been applied to the construction phase in that activities associated with breaching the site cap have been reduced and there will be no requirement to excavate and disturb asbestos contaminated material.

REMONDIS proposes that a compensation package be developed that meets the concerns of both the Operator of the child care centre and the families attending the centre. The basis of the package would be that:

- Families are offered the opportunity to maintain and fund their current enrolment at the Centre with REMONDIS financing reasonable costs associated with an alternative placement or child care arrangement for the child/children attending the Centre for a period not exceeding 3 months when penetration of the cap occurs; and
- REMONDIS provides compensation to the Operator of the child care centre for any loss of permanent enrolments due to parents choosing to remove their child/children from the Centre as a result of the perceived risks associated with the construction of the RIRP. REMONDIS would expect that the Operator of the child care centre in good faith would seek to find new enrolments for the vacant places attributed to the impact of the project during the period of disturbance to the site capping layer.

These proposals would need to be developed through consultation with the operators, staff and customers of the child care centre in relation to their concerns, the proposed safeguards and any temporary relocation requirements. Parents would be provided with information regarding amendments to the proposal and additional management measures aimed at reducing the risks associated with breaching the site cap during the construction phase. Parents would need to be provided with an opportunity to discuss the project with REMONDIS and technical specialists. This would allow them to make a more informed decision.

2.12 VISUAL

2.12.1 Submission Numbers

Submission 251, 254, 260, 266, Parramatta City Council

2.12.2 Issue Description

In summary the respondents raised the following issues:

- A safe and sympathetically landscaped pedestrian pathway be created between Camellia railway station and the proposed site entrance;
- Two landscaped recreational eating areas are created for staff;
- Visual amenity of the area;
- Will dominate the sky line;
- Council's longterm vision is to have public access along both sides of the river as a shared use pathway. Completion of pathway upgrade and vegetation clearance;
- This plant is almost part of the Elizabeth Farm Heritage View which is described in the DCP for this area and prohibits such developments; and
- The proponent should provide a detailed assessment of the visual impacts resulting from the height of the proposed buildings, with consideration of the height of the adjacent buildings, and the nature of the surrounding land uses. The Proponent should justify the proposed exceedances of the height limit with consideration of the outcomes of the detailed assessment.

2.12.3 Response

The visual impact of the proposed RIRP is assessed in Technical Report No 8 and Section 7.7 of the EA. A Landscape Master Plan has been prepared for the site with landscaping and the design of the buildings aiming to minimise visual impacts of the facility.

The methodology for the visual analysis and assessment involved the following steps:

- Desktop analysis of the baseline data, proposed RIRP, site and regional context, definition of study area and Zone of Visual Impact (ZVI) (area potentially visually affected by the proposal);
- Identification of potential key receptors and viewpoints;
- Definition of visual impact criteria - receptor/landscape sensitivity and magnitude of potential change;
- Site visit and photographic study for landscape character analysis and visual impact assessment;
- Review of key receptors and viewpoints against visual impact criteria;
- Assessment and definition of potential visual impacts of proposal on key receptors;
- Review of preliminary assessment outcomes with relevant parties;

- Identification of options for mitigation against visual impacts; and
- Conclusion - summarising visual outcomes and proposed mitigation measures.

Potential receptors and potential viewpoints were identified for on-site assessment as:

- University of Western Sydney - Rydalmere Campus;
- Parramatta River Corridor;
- James Ruse Drive;
- Residential Dwelling - Grand Avenue;
- ALDI Supermarket, Offices and Carpark - Grand Avenue;
- Explore and Develop Child Care Centre - Level 4, 1C Grand Avenue;
- Camellia Railway Station;
- Pedestrian and Vehicle Overbridge - Grand Avenue;
- Rosehill Racecourse; and
- Rosehill Residential Area.

Two key criteria which relate to “sensitivity to change” and “magnitude of change” were used to assess the level of potential visual impact.

Sensitivity includes both that of the receptor or viewer and of the landscape in which the viewer experiences a change. To determine the sensitivity of a receptor to the proposed development and the magnitude and nature of potential effects experienced by a receptor, a range of quantitative and qualitative factors were identified. The factors determining sensitivity include:

- Number of potential viewers (a receptor may represent a population base or an individual);
- Type of receptor – e.g. private dwelling, commercial building, road, waterway, public facility, conservation area, tourist route etc;
- Quality of view from receptor – i.e. obstructions, existing landscape character and quality;
- Current and future landscape trends; and
- Ability of landscape to absorb the effects of the proposed development

The magnitude of visual impact on the landscape can change over time as mitigating effects such as planting and habitat restoration proposals mature, and as landscapes external to the development change over time. Factors determining the magnitude of the potential change imposed by the proposed development on each of the key receptors include:

- Nature of change - e.g. road, structure, removal of vegetation, combination;
- Scale of change (height and spread of visible development in the landscape);
- Duration or degree of permanence of effect; and

- Proximity of receptor to proposed effect.

The anticipated level of visual impact was determined by directly cross referencing sensitivity and magnitude criteria:

- Major Impact: where the Proposed Development could be expected to have a very significant impact (either positive or negative) on the existing landscape and visual resource;

- Moderate Impact: where the Proposed Development could be expected to have a noticeable impact (either positive or negative) on the existing landscape and visual resource;

- Minor Impact: where the Proposed Development could be expected to have a small, barely noticeable impact (either positive or negative) on the existing landscape and visual resource; and

- Negligible: visible change may be present however no relevant or meaningful impact is expected to occur as a result of the proposed development.

Technical Report No 8 provides further detail on the assessment methodology.

Landscape Character

There are few vantage points outside the site and within visible range to provide vistas or extended views of the proposed development. This is mainly due to the bulky built form and relatively flat topography of the area. Most significant high-rise development is located far away and of a scale that most views are screened by existing trees or adjacent buildings.

The site and immediate surroundings are flat however there is approximately 4-5m change in elevation to mean river level. Areas to the south and west of the site rise gently towards the Western Motorway to the south.

Many vistas and long range views throughout the area are limited or completely obscured by industrial development. These elements are typically large and imposing structures that would be widely considered to be of poor visual quality.

Impact Assessment

The visual assessment was undertaken in terms of views from the key viewpoints. Technical Report No 8 provides a detailed assessment. The assessment identified the impacts from the viewpoints as:

- Viewpoint 1 - University of Western Sydney Campus - Southeast Carpark

  This view is dominated by the built structure of the existing bridges in the foreground, which contrast strongly with the extensive vegetation of the river corridor and the drainage line to the east. This receptor has a low sensitivity due to its primary use for parking, immediate proximity to passing trains and the visual intrusion created by the bridges and overhead wires. As the proposed RIRP would make up a small proportion of the view area from this location, the magnitude of change would be initially low and then potentially negligible once the existing Casuarinas along the riverbank and existing carpark planting in the foreground becomes established.

  A minor negative visual impact may occur in the short term and during construction however the visual impact would likely reduce to negligible in the long term.

- Viewpoint 2 - University of Western Sydney Campus - Level 1 Library Building

  This view is dominated by the cars and built elements in the foreground which contrast strongly with the extensive surrounding vegetation. Vertical light poles dissect the view beyond to the site and would significantly reduce the impact of any visible change resulting from the proposed RIRP. This receptor has a moderate sensitivity due to the relatively high number of potential viewers, however they would be viewing through a window and their attention would be unlikely to be focussed towards the proposed RIRP site.

  The elevated position of the view increases the visual range however the visual intrusion created by the bridges, lighting poles, overhead wires and existing vegetation which partially obscure the view to the site, in combination with the 400m+ distance further reduce any potential change in visual character. The magnitude of change would therefore initially be low and potentially become negligible in the long term. Proposed vegetation on the site will provide partial screening of the proposed RIRP from this location.

  Viewers at this location would experience only a minor negative visual impact that is likely to reduce over time.

- Viewpoint 3 - University of Western Sydney Campus - Cafe Outdoor Seating Area

  This view is dominated by the bridges in the middle distance which contrast strongly with the extensive surrounding vegetation and maintained lawns. Glimpses of industrial structures and high rise buildings in the far distance further reduce visual sensitivity to the proposed RIRP. This receptor has a high sensitivity due to the relatively high number of potential viewers and outward visual perspective. The elevated position of the view increases the visual range however the visual intrusion created by the bridges, lighting poles, overhead wires and existing vegetation which partially obscure the view to the site, in combination with the 400m+ distance further reduce any potential change in visual character. The magnitude of change from the proposed development would therefore be negligible, or potentially fully mitigated once the existing planting in the foreground becomes established.

  Viewers at this location would potentially be visually unaffected by the proposed development.

- Viewpoint 4 - University of Western Sydney Campus - Riverbank Pathway

  This view is focussed down the river corridor towards the proposed RIRP. A sense of semi enclosure and privacy is created by the vegetation lining the bank and heightened by the adjacent rail bridge and tall vegetation behind. This viewpoint has a moderate sensitivity due to the frequency of passers by utilising the pathway and evidence of stationary viewers at the time of assessment. This sensitivity rating also considers the viewers proximity to the rail bridge and passing ferries. The magnitude of change would be low due to the low elevation of the viewer relative to the site and the screening provided by existing vegetation along the river corridor and the relatively small visible area of the site. The proposed buildings and vegetation will obscure existing industrial buildings presently visible in the background. The form and visible bulk of the structures will be reduced by proposed vegetation once it matures.

  Viewers at this location would experience a minor visual impact from the proposed development that would potentially reduce over time.

- Viewpoint 5 - Residential Dwelling - Grand Ave

  Due to the considerable existing vehicle movements surrounding the viewpoint in addition to the current use of the site, the sensitivity of this receptor to vehicle movements

associated with the proposed RIRP is reduced. Therefore this receptor has a moderate sensitivity due to its residential nature. The site entrance is partially obscured by weed growth and the mesh fence along the rail corridor. Proposed screening vegetation along the southern boundary and the large existing trees to be retained along the west boundary would significantly restrict views into the site from this location. As views to the site and access road are not possible from inside the dwelling due to the fence around the property the magnitude of change would be low.

Viewers at this location would experience a minor visual impact from the proposed development, primarily related to an increase in heavy vehicle movements through the site entrance.

- Viewpoint 6 - Camellia Railway Station

  This viewpoint is predominantly focussed around the access way, platform and building of Camellia Station. The Tilrox/ALDI building and Grand Avenue overbridge restrict views to the east and south. Significant heavy vehicle movements are already visible from this location along Grand Avenue as well as trains regularly stopping at Camellia Station. The present use of the site and the surrounding car parking further reduces the sensitivity of this receptor to vehicle movements associated with the proposed development. Therefore this receptor has a low sensitivity rating. The proposed development would be partially obscured by fencing and large trees around the site. Additional proposed planting would potentially provide further screening of on-site activities.

  Viewers at this location would experience a minor to moderate negative visual impact from the proposed development, primarily due to their close proximity to increased vehicle movements through the site entrance.

- Viewpoint 7 - Top of Overbridge - Grand Avenue

  This elevated position of this receptor allows panoramic views of the surrounding areas. The adjacent Tilrox/ALDI building and Grandstand at Rosehill Racecourse restrict some views to the east and south, however there are distant views to the southeast, west and northwest. Stacks of the Shell Refinery site are clearly visible to the southeast. Significant heavy vehicle movements visually dominate this location and pedestrians also view trains regularly passing below to stop at Camellia Station. Therefore this receptor has a low sensitivity rating due to the visual dominance of existing heavy traffic and industrial character of the area. Remaining trees and proposed shrubs along the southern boundary would screen much of the proposed development on site. The development is similar in scale and form to existing surrounding landscape elements, therefore this would not facilitate a significant change in the wider landscape character.

  Viewers at this location would experience a minor visual impact from the proposed development, due to their close proximity to increased heavy vehicle movements to and from the site.

- Viewpoint 8 - Explore and Develop Child Care Centre - Level 4, 1C Grand Avenue

  The visual sensitivity of this receptor is moderate as the terrace is primarily an inward ‘play’ focussed space. The proposed development will potentially have a moderate negative visual impact on views from the Level 4 terrace during the short term construction phase. During operation these moderate negative visual impacts would potentially become minor in the mid to long term once proposed vegetation becomes established. The proposed development would potentially have a minor positive visual impact in the long term and provide some improvement to the existing landscape character as proposed vegetation matures.

- Viewpoint 9 - Parramatta River Ferry

  This receptor has a moderate sensitivity due to the high number of tourists present on the ferries however the high visibility of industrial elements and modification throughout the river corridor would reduce the visual expectation of pristine natural character for ferry passengers. The retaining wall would potentially obscure views of the proposed development from ferries immediately adjacent to the site, and existing and proposed planting along the northern roadway within the site would partially screen the proposed structures and vehicle movements from locations further along the river in both directions. The magnitude of visual change would be low as the form and scale of the proposed structures are similar to the surrounding area and buildings are set back from the river corridor.

  The visual impact of the proposed development on viewers from the Parramatta Ferry would only be minor once construction is completed. As the proposed planting within the site including the Environment Protection Zone matures, this would further reduce visual impacts and enhance the visual appearance of the area.

Landscaping

A Landscape Master Plan has been prepared for the proposed RIRP site and is described in Section 4 of the EA. The plan addresses recommended visual mitigation measures including preserving significant existing trees, increasing the density of planting along the site boundaries and provision of extensive screen and feature planting and shade trees around proposed structures where appropriate. The proposal to use movable concrete containers within the Environment Protection Zone has been revised in response to concerns raised by Council in their submission. The use of non-movable containers as opposed to planting directly in the capping layer ensures that the cap is not breached reducing the potential for water to enter the contaminated material under the site capping layer. Figures 5 and 6 show the revised proposal for landscaping works within the Environment Protection Zone. The proposal allows for future pedestrian and cycleway access as envisaged by Council as part of future planning for the Camellia Peninsula.

Key principles of the landscape design include:

- Retain and protect significant existing trees where possible along the site boundaries to ensure sightlines and screening acknowledged in the visual assessment outcomes are maintained;

- Reduce the volume of site runoff by minimising hard surface areas and maximising planted surface area. Raised mounded areas with groves of Cumberland Plain Woodland/Sydney Coastal River Flat Forest tree and shrub species over the existing capping slab;

- Tree and shrub screen planting of Cumberland Plain Woodland/Sydney Coastal River Flat Forest species where appropriate along the site boundaries to reinforce existing boundary planting as required;

- Extensive planting of native trees, shrubs and groundcovers along the southern boundary extending from the site access point to the south eastern corner of the site;

- Native trees and grasses in non-movable raised planters in the 30m wide Environmental Protection Zone to provide filtered screening from the Parramatta River and also to enhance the aesthetic value of the site;

- Native low water-use groundcover and shrub feature planting to the site entrance and around proposed carpark margins to enhance aesthetic value and a more human scale arrival area for visitors;

- Reduce the hard surface area and heat island effect, balance the visible mass of proposed buildings with surrounding groupings of native tree and shrub planting; and

- Provide outdoor amenity for staff and visitors by providing raised informal outdoor decking areas with seating, screening vegetation to provide shade and privacy from site activities and operations.

Council has suggested additional outdoor amenity areas be provided for staff within the Environment Protection Zone. REMONDIS propose to locate a boundary fence along the southern border of the Environment Protection Zone so it becomes a management zone removed from daily operations. In addition this will assist in maintaining site security. There is already provision for outdoor eating areas on the site on the eastern and western ends of the main buildings.

In addition REMONDIS will work with Council to provide landscaping on the pedestrian area between the site entrance and Camellia railway station.

Environment Protection Zone

The landscape works proposed within the EPZ have been revised as outlined in Section 2.6 (refer Figures 5 and 6). Provision has been made for future public access through this area. The landscaping will provide screening of the facility and improve the amenity of the area**.**

Building Height

The proposed RIRP will introduce new industrial buildings and additional regular heavy vehicle movements to the site and areas along Grand Avenue. The surrounding region has an extensive history and ongoing development of a wide range of industrial and commercial facilities. The land on which the proposed development is located is a predominantly cleared and contaminated site, covered extensively by an existing hardstand capping and weed growth.

There is a moderate to high level of existing modification and industrial development visible from all of the key receptors and viewpoints identified. The area around the site is bisected by major transport corridors with significant existing heavy vehicle traffic and rail activity. The existing visual character of the site is poor due to its recent use as an industrial and freight vehicle storage facility.

As outlined in Technical Report No 8 the key receptors will generally experience a negligible to low magnitude of change from the proposed development and some will experience minor to moderate negative visual impacts in the short term.

SREP No 28 imposes controls on the height of buildings in the Camellia Precinct aimed at ensuring that buildings do not overshadow the vegetated riparian areas and do contribute to the appearance of the foreshore. A building height limitation of 9 metres (m) applies to part of the site with a 12 m limitation for the remainder of the site. Parramatta DCP provides planning controls in relation to height of buildings and sets out building design objectives and principles for heights of buildings.

The height of the facility exceeds the height limitations as a result of the need to construct a platform on which the facility will be located. This has significant environmental benefits in terms of removing the need for disturbance to the site cap for the construction of the facility other than for provision of site services. The visual assessment has been undertaken on the basis of the height limitation being exceeded and determined a negligible to low magnitude change for key receptors with a minor to moderate short term negative visual impact. The proposed site landscaping and landscaping within the Environment Protection Zone will further reduce impacts and enhance the visual amenity of the site.

2.13 CONSULTATION

2.13.1 Submission Numbers

Submission No 247, 250, 251, WorkCover, Parramatta City Council

2.13.2 Issue Description

In summary the respondents raised the following issues:

- We just live over 1km from the site and given the close proximity to the development are disappointed with the level and thoroughness of the community consultation undertaken with none of our neighbours being consulted either whom may be most affected if ever an asbestos contamination accident were ever to happen.

- Local residents within 400-1km of the site were not advised of this proposal.

- WorkCover has not been previously consulted about the exposure to asbestos and other hazardous substances that could be released from this site during construction and use stages of the development. Before any approval WorkCover would like to be informed and consulted on the following matters:
    - The manner of construction of the service trenches so that no asbestos fibres are released into the atmosphere that could cause adverse health effects to the workers and general public. This may required complete enclosure of the work areas;
    - The methodology for ensuring the integrity of the capping layer during construction and use of the site, as well as the ongoing assessment of the capping layer to ensure no breaches occur in the future; and
    - Comprehensive air monitoring programme not just of the site but the neighbouring area to ensure no asbestos fibres migrate beyond the development.

2.13.3 Response

Twyford Consulting were engaged by REMONDIS to develop the consultation programme for the project and to facilitate its implementation.

The key elements were:

- Confirm and clarify the interested stakeholders- Council, business, community;

- Identify and communicate initially to key stakeholders about the project, the approvals process and the opportunity to participate;

- Brief key stakeholder groups as appropriate (eg Camellia business group, local businesses, resident groups);

- Establish a small study group of representative stakeholders to work with project team during the assessment process to understand and contribute to the studies that make up the assessment and to act as a two way communications conduit to the broader stakeholders;

- Provide opportunities for local stakeholders to review the proposal, discuss with project team and provide comment; and

- Regular written communication to stakeholders as approvals process proceeds.

Research identified the most likely affected stakeholders as neighbouring businesses, including tenants in an adjacent office building, other businesses located along Grand Avenue and the Sydney Turf Club at Rosehill Racecourse. Others potentially interested or affected were businesses along James Ruse Drive, and residents to the west of James Ruse Drive and businesses and residents to the north across the Parramatta River.

The Camellia Business Group - a group representing the major businesses in Camellia industrial area - was also identified as potentially interested. This group has been active previously on major issues like traffic flow, but had not been active during 2010 and were not able to be used as an information conduit.

The broader Parramatta community were also identified as likely to be interested in the project.

A letter was initially hand delivered to all the neighbouring businesses along Grand Avenue (approx 500m radius, including all tenants in the adjacent Tilrox/ALDI building), outlining the project, providing an opportunity for input and questions by meeting, email, phone or fax, as well as an invitation to participate in the study group process.

A couple of the Tilrox/ALDI building tenants, as well as the building owner, accepted the invitation to participate. There were no responses from any of the other neighbouring businesses.

To broaden the representation to include residents' views, invitations were sent to a group of residents representing the closest areas to the site. This tapped into Parramatta Councils community panel – i.e. residents who had expressed interest in assisting Council consider issues that might impact the area. Two residents accepted the invitation and were able to contribute to the process.

The group identified and discussed a range of key issues, which they considered needed to be addressed as part of the assessment and approvals process. The key issues raised and discussed by the group included:

- Traffic impact on the local roads, and access to the Tilrox/ALDI building. This involved both traffic congestion and safety issues around truck access to the proposed site;
- Reduction in air quality due to emissions from the plant – i.e. the likelihood of odour affecting local businesses and residents;
- The use of the site which had been previously contaminated by asbestos. There was a good understanding about the contamination and the concerns centred on how construction at the site could be managed to eliminate any health concerns;
- The visual impact of the proposed facility as changing the current landscape;
- The potential for plant breakdown or accident during operation impacting on neighbours and broader community;
- The noise impact of plant operation and truck movements, especially on the tenants of the Tilrox/ALDI building, particularly the children attending the child care centre;
- Health concerns associated with waste operations - e.g. vermin, birds, rubbish overspill, poor air quality, etc;
- Adverse impact on the commercial viability of the neighbouring businesses, as well as potential impact on residential land values; and
- The location of a waste recycling facility in close proximity to commercial premises and shops.

The design of the facility, the technical studies and impact assessment included in the EA addressed these issues with the aim of mitigating and minimising impacts on the stakeholders and surrounding community.

As discussed in Section 1.2 the EA was placed on public exhibition by the Department of Planning (DoP) for the period Thursday 23 February 2012 until Tuesday 10 April 20012. Copies of the EA were available at:

- Department of Planning (Head Office);
- Nature Conservation Council; and
- Parramatta City Council.

A copy of the EA was also made available on the DoP website.

At the commencement of the Public Exhibition period for the EA REMONDIS undertook a programme to advise stakeholders of the release of the EA and provide information in relation to the findings of the EA and provide the opportunity to contact REMONDIS regarding the proposal. The programme involved providing information to:

- All stakeholders who had been identified during the initial consultation programme;
- Parramatta City Councillors;
- NSW Member for Parramatta – Dr Geoff Lee. A meeting was held on March 20, 2012 to discuss the project. Dr Lee subsequently submitted a submission to the Department of Planning and infrastructure;
- Letterbox drop to businesses within the ALDI/Tilrox building including the child care centre, neighbouring businesses along Grand Avenue, nearby businesses on James Ruse Drive;
- Letterbox drop to residences bounded by James Ruse Drive, Hope Street, Arthur Street and River Road West;
- Letterbox drop to businesses on the opposite side of the Parramatta River to the site.

In response to the issues raised by parents a draft Management Strategy has been prepared aimed at specifically addressing the concerns identified (refer Appendix B). An offer to meet with the parents of families attending the child care centre to discuss the draft strategy was declined by the Operator who indicated she would not facilitate this discussion unless/until the project was approved.

REMONDIS has committed to working with the operators and parents of children attending the child care centre to resolve any issues resulting from the construction and operation of the proposed RIRP which impact on the business and its customers.

Negotiations between REMONDIS and the Operator of the child care centre are ongoing.

Meetings were held with:

- Unions NSW – Monday 30 April, 2012

  The meeting was attended by representatives of the Proponent and the Secretary and Assistant Secretary of Unions NSW. A briefing was provided. Aspects discussed included:
  - What the project involves;
  - Employment numbers;

- Company profile;
- James Hardie site issues;
- Alternatives;
- Other potential uses for the site including a Memorial Park;
- History of contamination;
- Asbestos health issues; and
- Safety issues associated with asbestos.

It was agreed that engagement would continue.

- Camellia Business Group – Wednesday 2 May, 2012

The meeting was attended by representatives of the Proponent, local businesses including AB Mauri, Computrans, Shell and representatives of Parramatta City Council. A briefing of the status of the project was provided. Aspects discussed included:

- Traffic including number of movements per day, scheduling of truck movements and traffic flows;
- Management of parking;
- The approval process;
- Source of waste;
- Council vision for Camellia Precinct – no detailed plans in place at this stage; and
- Whatever use is proposed for the site traffic will still be an issue.

- Asbestos Diseases Foundation of Australia (ADFA) – Wednesday 9 May, 2012

The meeting was attended by representatives of the Proponent and representatives of ADFA including the President, Vice President, Secretary, Treasurer and Public Officer. Aspects discussed included:

- ADFA objection to the proposed development in relation to the site being contaminated;
- Breaching of the site cap;
- Safety issues in relation to asbestos and how activities will be managed;
- How will trenching occur and what precautions will be in place;
- Status of the site at present;
- What will the site look like;
- Approvals process;
- Ownership of the land;
- Truck movements;
- Waterfront – What will happen; and
- Employee numbers.

As a follow-up to the meeting ADFA has provided correspondence in which they indicate the meeting addressed their concerns and that they would like to be involved in the ongoing engagement process and be updated on progress (refer Appendix F).

- WorkCover NSW – Friday May 11, 2012-07-02

The meeting was attended by representatives of the Proponent and a representative of WorkCover NSW. Aspects discussed included:

- Effect of the breach of the cap whereby excavation could expose asbestos;
- Management of proposed activities associated with breaching of the cap; and
- Proponent committed to preparation of a procedure of an Asbestos Handling Procedure (refer Appendix A).

- Bernie Banton Foundation – Monday 4 June, 2012

The meeting was attended by representatives of the Proponent and the Bernie Banton

Foundation. Aspects discussed included:

- History of impact of asbestos related disease including mesothelioma and impact on families;
- Understanding the concerns of parents of children attending the child care centre;
- Why was this site was selected;
- Alternatives;
- Breaching of the cap;
- Excavation works and the need to use tent structures;
- Insurance requirements and the need for a register of everyone who goes on site;
- Management of the entire site at present and the impact of existing truck movements on the cap;
- Need assurance that there will be no impacts rather than reduce or minimise;
- What monitoring will be put in place;
- Longterm plans for the entire site;
- Some form of Memorial to be included on the site; and
- Proposed use may improve existing safeguards on the site.

It was agreed that the engagement process should continue.

2.14 OTHER ISSUES

2.14.1 Health

Submission Numbers

Submission No 1 to 246, 250, 251, 253, 256, 260, 261, 263, 273

Issue Description

In summary the respondents raised the following issues:

- Increasing the capacity of exposure of a number of health hazards (such as dust, noise, foul smells), which will can have adverse impacts on our wellbeing;
- Impact on sleeping regime of children which would be detrimental to their development; and
- Health risk associated with breaching of the site cap

Response

The Conditions of Approval, NSW EPA Licence, the SMP and Construction and Operational EMPs will all incorporate measures associated with the management of potential hazards associated with the RIRP. This includes management of known risks and potential risks, implementation of Standard Operating Procedures, development of emergency procedures and implementation of monitoring programmes. All incidents will be reported immediately to the NSW EPA and key stakeholders advised. This will also include follow-up actions.

The design of the facility has been aimed at minimising disturbance to the site cap and ensuring safeguards and protective measures are in place to protect workers and the surrounding community. The SMP and associated SWPs provide management measures for activities associated with breaching the site cap. Sections 2.2, 2.3 and 2.8 provide details of work practices and the commitment to an occupational hygienist being on site for activities associated with breaching of the cap. Works associated with disturbance to the site cap will be undertaken within a tent structure. An air quality monitoring programme will be put in place prior to any works commencing of the site.

The design of the facility includes measures to contain odourous emissions within the RIRP facility. The Air Quality Assessment predicts that there will be no odourous emissions beyond the site boundary. In addition an Air Quality and Odour Management Plan will be implemented to monitor the performance of the biofilters.

The environmental assessment has shown that off-site impacts of the facility will largely be related to traffic which is an existing issue for the local area. The impact of the traffic associated with the construction and operation of the facility is not expected to change existing traffic conditions. A Traffic Control Plan will be implemented with the aim of minimising risk to users of Grand Avenue North. The plan will address issues associated with provision of safe access for vehicles, cyclists and pedestrians.

The Noise Impact Assessment indicates that the construction and operation of the proposed RIRP will comply with NSW EPA requirements. There will be restrictions on construction hours and limitations on use of machinery during operation. REMONDIS has committed to working with the operators of the child care centre to identify procedures which can be implanted to minimise impacts on the sleep regime of children attending the centre.

2.14.2 Alternatives

Submission Numbers

Submission No 250, 253, 258, 266

Issue Description

In summary the respondents raised the following issues:

- Option of locating facility closer to a landfill/composting facility;
- Option of transporting waste by rail;
- Suitable sites outside Western Sydney should have been considered. We are effectively being burdened with a large number of waste treatment facilities at Lidcombe, Granville, Eastern Creek, Kemps Creek. Who is taking responsibility for the National Waste Policy if another plant to treat waste is to be located in Western Sydney. The commercial waste is being generated and collected from small businesses across the Sydney CBD and the green and food waste is being collected by groups of Councils;
- Consideration of Alternatives - Level of analysis of alternatives by the Proponent is inadequate for the purposes of or carrying out meaningful assessment of the proponents evaluation of alternatives;
- Significant constraints seem not to have been taken in to account in the evaluation of alternatives; and
- Why is Western Sydney becoming the dumping ground for NSW – and if this has be the case than why can't the facilities be located together away from the general population – Rosehill/Camellia is a built up area – Why not put it at Eastern Creek with an existing waste facility.

Response

REMONDIS has evaluated a range of alternative sites for the proposed RIRP. The site was selected on the basis of proximity to demand for C&I and organic waste recovery, access to major motorway and road links, appropriate zoning and the ability to minimise and contain environmental impacts. In addition, the proposed development is not in conflict with the use of the site in the context of its history of contamination.

REMONDIS has carefully selected this site on commercial and technical imperatives including the restrictions on this site:

- The site is central to our collections of material for recycling. This avoids these vehicles traversing considerable distances to landfills. This minimises the number of vehicles needed to provide the collection service and improves service delivery. Close proximity to the incoming material is significantly more critical than location at distant landfills. The output materials are bulk loaded in larger vehicles to various end destinations. Location at a landfill does not provide the right cost structures for the business;
- Current quantities to landfill are interim steps while waste to energy polices which are underway are developed and formalised. This material will be further recovered to produce engineered fuel to replace coal that is used in power stations and as fuel for cement manufacture;

- Organics from the plant will be pasteurised so that other composters can use this material to value add without the use of technology. Location at a landfill does not mean it will be close end users of the product; and

- Rail transport is not a solution that REMONDIS considers a viable proposition.

REMONDIS has designed the facility on the basis of identified site constraints which largely relate to the historical use of the site and the interface with other users of Grand Avenue North. The studies undertaken for the EA demonstrate that air quality and noise impacts can be contained within the site boundary. The design of the RIRP includes extensive landscaping within the site and the EPZ. The benefits of the landscaping include limiting visual impacts of the facility and enhancing the visual amenity of the site.

2.14.3 Amenity

Submission Numbers

Submission No 252 260, 270

Issue Description

In summary the respondents raised the following issues:

- Detrimental impact on the image of the racecourse;

- Visual amenity of area;

- Impact on nonindustrial uses in the adjoining area;

- Land to the west of the proposed site is zoned to accommodate open space, event, retail and commercial development with linkages to Camellia rail station. The close proximity of the AWT would introduce amenity impacts many of which would be hard to mitigate against. Impacts such as odour and noise, the only solution would be that of separation and therefore the site is not considered suitable for the development; and

- Property values.

Response

With respect to potential impacts on adjoining properties and the surrounding area the EA found that:

- The proposed RIRP will be screened by existing vegetation and buildings in relation to views from Rosehill Racecourse;

- Traffic generated from the RIRP is not predicted to impact on the activities associated with the raceway;

- The site is located within an industrial zone and adjacent to existing commercial and industrial facilities associated with Camellia Peninsula;

- Odour emissions will be contained within the site boundary; and

- Noise emissions will comply with NSW EPA Noise Goals.

Management of site includes implementation of Construction and Operational EMPS as outlined in Section 2.8.

2.14.4 Heritage

Submission Numbers

Submission 267, Parramatta City Council

Issue Description

In summary the respondents raised the following issues:

- Interference of the historic grave site of Eleanor McGee on the adjacent site;
- Site is adjacent to other heritage items and its use may have an impact on these heritage items; and
- Known Aboriginal sensitivity and archaeological potential of the affected ground is to be considered.

Response

An *Aboriginal Archaeological and Non-Aboriginal Cultural Heritage Impact Assessment* has been prepared by Dominic Steele Consulting Archaeology. A copy of the report was presented in Technical Report No 11 of the EA.

It was concluded that in terms of Aboriginal archaeological heritage, the study area appears to be potentially of relatively low sensitivity due to previous historic uses and disturbances with the likelihood that future works will extend to minimal depths below the current capping surfaces that seal the site.

In terms of the site comprising an area of potential historical '*Aboriginal association'* available documentary records indicate that areas in and around Camellia were the focus of post-Contact visitation and use by Aboriginal people, particularly during the Macquarie period. This use of the local landscape appears to have continued up to the mid 1830s at which time the available historical records become largely silent. Whether any tangible (physical) archaeological evidence documenting this period of Aboriginal history is present and/or survive within the RIRP footprint is unknown. Recognition however of the importance this area of the Camellia Peninsula may have played in the lives of the traditional Aboriginal owners is acknowledged.

It was concluded that the proposed RIRP is unlikely to have a significant adverse impact upon the Aboriginal archaeological heritage values of the place and that no clear or obvious Aboriginal archaeological constraints are apparent.

European Archaeological & Cultural Heritage Impact Statement

The background European archaeological and cultural heritage research, site inspection, analysis and assessment of the site indicate that:

- No previously documented European archaeological sites, features or deposits relative to the historically recorded use and occupation of the proposed RIRP site have been identified;

- The site is listed on the Parramatta 1996 LEP in respect to the proximity of the historic grave of Eleanor Magee and child that dates to c.1793. The grave location and its curtilage will not be affected by the proposed RIRP;

- No additional areas of potential European archaeological heritage sensitivity have been identified in any other areas of the proposed RIRP site during the course of the research, site inspection, and assessment program documented here; and

- The potential for as yet undocumented European archaeological features or deposits of significance to be present on the property relative to the scale of works associated with the RIRP proposal is assessed to be low.

It is concluded that the proposed RIRP is unlikely to have a significant adverse impact upon the non-Aboriginal archaeological heritage values of the place and that no identified constraints are apparent for the proposal proceeding as planned.

It was assessed that the proposed RIRP is unlikely to have an adverse impact upon the Aboriginal and European archaeological and cultural heritage values of the place.

3. PREFERRED PROJECT

3.1 PROPOSED CHANGES

Billbergia the land owner proposes to provide the necessary utility services to the proposed RIRP. Services to be provided include potable water, sewerage, electricity, telephone services and connection to the existing stormwater system. The provision of these services as described in the EA required installation of service trenches. Site works included excavation, removal of excavated material, installation of drainage and service components, filling of the trenches and the replacement of site capping.

The Proponents have amended the project with respect to the installation of these services removing the need to breach the site cap and excavate material below the site cap for provision of service trenches. Billbergia has reviewed the design and the provision of services will now involve:

- **Stormwater**

The stormwater plan presented in the EA has been reviewed and opportunities identified to lift the stormwater line so it is located within the platform above the existing cap and under the raised floor of the proposed building and access road. The design included in the EA utilised a number of large diameter pipes. These pipes will be substituted with shallow and wide box culverts that have the same capacity but can be laid at a flatter grade therefore lifting the invert levels above the existing cap level which is generally at RL 5.3.

A Gross Pollutant Trap will be installed closer to the existing culvert adjacent to the western boundary of the REMONDIS site. The proposed GPT will be an Ecosol RSF4300 which is a shallow unit.

The modified design of the stormwater system means that there will be no requirement to breach the site cap or excavate below the site cap for installation of the stormwater system.

- **Services**

The services comprising potable water, telecommunications, gas and electricity will need to come to the site from Grand Avenue North. These services were to be located in a common trench approximately 1m deep extending from the site entry along the southern site boundary to the edge of the proposed building platform.

It is now proposed to use a thrust boring technique to install conduits for services along the southern boundary of the site and then to lay the services in the new fill under the access road and within the constructed platform.

The modified design for the provision of services means that there will be no requirement to excavate below the existing cap for the provision of these services.

- **Sewer**

In the EA it was proposed to connect the sewer by gravity to an existing manhole on the south western boundary of the site. It is now proposed to utilise a pumped sewer system and install a rising main from the building platform to the sewer manhole (refer Figure 7).

In order to collect the sewage two small pump stations will be installed which can be contained within the building platform. A 65mm diameter HDPE rising main will be laid in the new concrete pavement of the access road through to the site entrance. Connection to the sewer system will be through an existing inlet previously used for the site.

Proposed Management

All works associated with the provision of services and the stormwater system will be incorporated within the Construction EMP for the proposed RIRP.

Timing

The changes to the activities associated with the provision of services and the stormwater connection mean that the provision of services will be incorporated in the construction of the platform. Approximately 1200m^3 of spoil was originally predicted to be removed as a result of provision of services and connection to the stormwater system due to excavation activities. This requirement is no longer included in the proposal. The original proposal also included 80 truck loads of contaminated soil being removed from the site. This requirement is no longer included in the proposal.

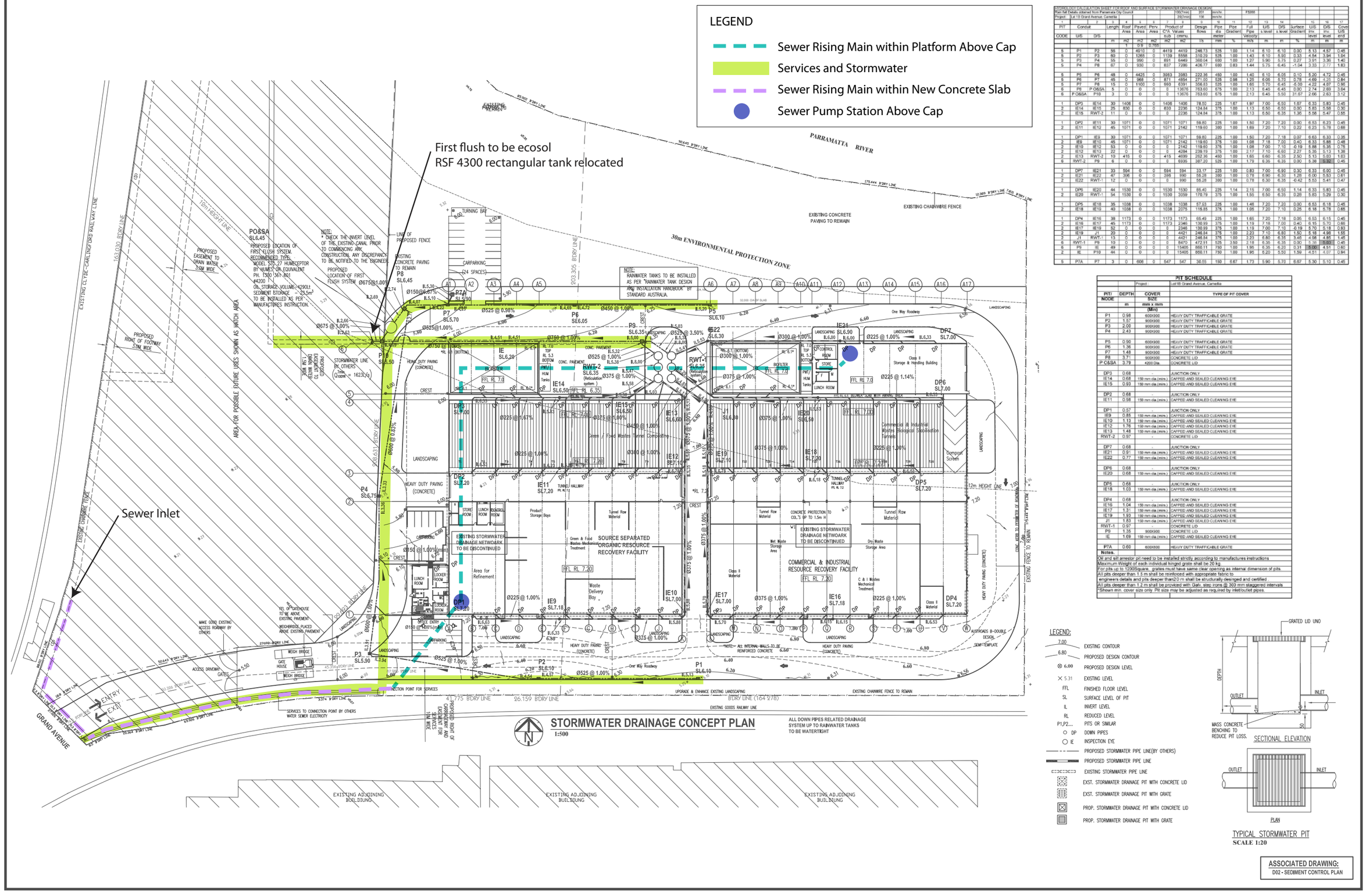
3.2 ENVIRONMENTAL ASSESSMENT OF PROPOSED CHANGES

Section 7 of the EA provides an environmental assessment of the proposed RIRP. The impacts associated with the proposed changes primarily relate to potential impacts associated with disturbance to the site cap and removal of asbestos contaminated material. The Proponents have committed to implementation of a SWMS and an Asbestos Handling Procedure. The only works now proposed which involve breaching of the site cap relate to drilling of holes for grouting of voids below the concrete cap. An Occupational Hygienist will supervise activities associated with breaching site cap which will be undertaken within a tent structure under negative pressure. Continuous monitoring will also be undertaken and reported.

The potential environmental impacts of the proposed changes relate to reducing the risk for impacts associated with the provision of services. This has been achieved by removing the need for excavation of material below the site. There will be a reduction in the extent of dust emissions however the EA predicted the dust emissions during the construction phase would be minor as a result of the proposed management regime. The amount of traffic generated would also be reduced.

Minimising activities associated with disturbance to the site cap and the inclusion of strict management measures and monitoring is a direct response to concerns regarding the risks associated with breaching the site cap and exposure of asbestos contaminated material.

The potential environmental impact of the proposed design refinement is considered to be less than that originally identified in the EA.



PIT SCHEDULE

Project : Lot 19 Grand Avenue, Camellia

PIT/ NODE	DEPTH m	COVER SIZE mm x mm (Min)	TYPE OF PIT COVER
P1	0.98	600X900	HEAVY DUTY TRAFFICABLE GRATE
P2	1.57	900X900	HEAVY DUTY TRAFFICABLE GRATE
P3	2.00	900X900	HEAVY DUTY TRAFFICABLE GRATE
P4	2.43	900X900	HEAVY DUTY TRAFFICABLE GRATE
P5	0.90	600X900	HEAVY DUTY TRAFFICABLE GRATE
P6	1.36	900X900	HEAVY DUTY TRAFFICABLE GRATE
P7	1.48	900X900	HEAVY DUTY TRAFFICABLE GRATE
P8	3.71	900X900	CONCRETE LID
P COSA	3.79	4200 Dia.	CONCRETE LID
DP3	0.68	-	JUNCTION ONLY
IE14	0.68	150 mm dia.(min.)	CAPPED AND SEALED CLEANING EYE
IE15	0.93	150 mm dia.(min.)	CAPPED AND SEALED CLEANING EYE
DP2	0.68	-	JUNCTION ONLY
IE11	0.98	150 mm dia.(min.)	CAPPED AND SEALED CLEANING EYE
DP1	0.57	-	JUNCTION ONLY
IE9	0.85	150 mm dia.(min.)	CAPPED AND SEALED CLEANING EYE
IE10	1.13	150 mm dia.(min.)	CAPPED AND SEALED CLEANING EYE
IE12	1.76	150 mm dia.(min.)	CAPPED AND SEALED CLEANING EYE
IE13	1.48	150 mm dia.(min.)	CAPPED AND SEALED CLEANING EYE
RWT-2	0.97	-	CONCRETE LID
DP7	0.68	-	JUNCTION ONLY
IE21	0.91	150 mm dia.(min.)	CAPPED AND SEALED CLEANING EYE
IE22	0.77	150 mm dia.(min.)	CAPPED AND SEALED CLEANING EYE
DP6	0.68	-	JUNCTION ONLY
IE20	0.68	150 mm dia.(min.)	CAPPED AND SEALED CLEANING EYE
DP5	0.68	-	JUNCTION ONLY
IE18	1.03	150 mm dia.(min.)	CAPPED AND SEALED CLEANING EYE
DP4	0.68	-	JUNCTION ONLY
IE16	1.04	150 mm dia.(min.)	CAPPED AND SEALED CLEANING EYE
IE17	1.31	150 mm dia.(min.)	CAPPED AND SEALED CLEANING EYE
IE19	1.93	150 mm dia.(min.)	CAPPED AND SEALED CLEANING EYE
J1	1.83	150 mm dia.(min.)	CAPPED AND SEALED CLEANING EYE
RWT-1	0.97	-	CONCRETE LID
P9	1.35	900X900	CONCRETE LID
IE	1.69	150 mm dia.(min.)	CAPPED AND SEALED CLEANING EYE
P7A	0.60	600X600	HEAVY DUTY TRAFFICABLE GRATE

Notes.

Oil and silt arrestor pit need to be installed strictly according to manufactures instructions
Maximum Weight of each individual hinged grate shall be 20 kg.
For pits up to 1200Square. grates must have same clear opening as internal dimension of pits.
All pits deeper than 1.5 m shall be reinforced with appropriate fabric to engineers details and pits deeper than2.0 m shall be structurally designed and certified .
All pits deeper than 1.2 m shall be provided with Galv. step irons @ 300 mm staggered intervals.
*Shown min. cover size only. Pit size may be adjusted as required by inlet/outlet pipes.

TYPICAL STORMWATER PIT
SCALE 1:20

ASSOCIATED DRAWING:
D02 - SEDIMENT CONTROL PLAN

Figure 7 **Revised Plan Provision of Services**

Source : ALGORY ZAPPIA & ASSOCIATES 2010

4. STATEMENT OF COMMITMENTS

This section provides a revised Statement of Commitments in relation to the construction activities, operations, environmental management and monitoring of the proposed RIRP. The draft Statement of Commitments included in Section 8 of the EA has been updated to take account of comments and issues raised in submissions received following public exhibition of the EA.

Table 4.1 summarises the commitments made in relation to construction of the proposed RIRP. These commitments will be incorporated in the Construction EMP.

Billbergia will undertake all works associated with the installation of services and stormwater connections.

REMONDIS will construct the platform and the facility.

Table 4.2 summarises the commitments in relation to operations of the proposed RIRP. These commitments will be incorporated in the Operational EMP.

Table 4.1
Construction Commitments

Objective	Commitment
ENVIRONMENTAL MANAGEMENT – CONSTRUCTION	
• *Suitably qualified and experienced personnel will develop and implement project specific environmental management plans and procedures in consultation with relevant government agencies. The Construction EMP will include:* o *Site Induction programme;* o *Construction hours;* o *Traffic Noise Management Strategy;* o *Air Quality Management – Dust and Odour;* o *Noise and Vibration Construction Management Plan;* o *SWP, SWMS and Asbestos Handling Procedure;;* o *Waste Management Plan;* o *Hazards and Risks Plan;* o *Traffic – Driver Orientation;* o *Erosion and Sediment control plans (progressive plans to be submitted to EPA);* o *Monitoring Programme and environmental inspection procedures; and* o *Community Engagement Programme.* • *The Construction EMP will include a plan view of the site and frontage roadways indicating:* o *Dedicated construction site entrance and exit, controlled by a certified traffic controller, to safely manage pedestrians and construction related vehicles in the frontage roadways;* o *Turning areas within the site for construction and spoil removal vehicles, allowing a forward egress for all construction vehicles from the site;* o *Locations of proposed work zones;* o *Location of any proposed crane standing areas;* o *Dedicated unloading and loading point within the site for all construction vehicles, plant and deliveries;* o *Material, plant and spoil bin storage areas within the site, where all materials are to be dropped off and collected; and* o *The provisions of an on-site parking area for employees, tradesperson and construction vehicles.*	
Consultation to minimise impacts on the local community	• The Study Group established during preparation of the EA will form the basis of a community liaison group to encourage open dialogue with potentially affected local stakeholders, providing a channel through which concerns can be voiced directly; • Unions NSW, Camellia Business Group, the Asbestos Diseases Foundation of Australia and the Bernie Banton Foundation will be invited to participate in the ongoing consultation and community engagement process; • WorkCover, the EPA, Parramatta City Council, RailCorp, RMS and the DoPI will be consulted throughout the construction process with respect to meeting regulatory requirements and to ensure they are aware of the status of site works; • The Construction Management Plan will identify the potential risks and will include a community engagement plan so that local concerns are addressed;

Objective	Commitment
	• A 24 hour contact point will be established and notified to neighbours; and • Stakeholders including users of the Tilrox/ALDI building including the child care centre operators and parents, Camellia railway station and adjoining businesses will be advised of activities being undertaken during construction to ensure they are aware of the nature and extent of activities during construction. The Construction Manager will be the primary point of contact.
Management of area of contaminated materials	• The geophysical survey of the site to be completed prior to final design and construction of the platform; • Statutory notifications shall be made and approval sought from the NSW EPA to carry out the work associated with drilling of holes for grouting as required by the SMP and NSW EPA approved SWP/SWMS; • Treatment of identified voids to be completed prior to construction of the platform in accordance with the requirements of a SWP and NSW EPA approved SWP/SWMS prepared in accordance with the SMP; • As a precautionary measure grouting activities will be undertaken within a contained tent structure; • Procedures will be established for appropriate handling and supervision of the contaminated soil as outlined in the Safe Work Method Statement. An Asbestos Handling Procedure has been prepared; • WorkCover will be consulted to ensure all work on the site is in accordance with the *Work Health and Safety Act and Regulation 2011* and the code of practice *How to Safely Remove Asbestos 2011;* • An Occupational Hygienist will be on site during activities associated with breaching of the site cap; • An Air Quality Monitoring programme include real-time monitoring programme will be prepared by the Occupational Hygienist implemented prior to commencement of construction activities; • All grouting works will be undertaken in accordance with the SMP and SWPs; • Monitoring of site activities and management systems will be undertaken to ensure all activities meet the requirements of the SMP, SWPs and Work Method Statements; and • Progressive Erosion and Sediment Control Plans will be prepared for the 3 stages of construction.
Minimise socio-economic impacts	• REMONDIS will prepare and implement a compensation package that meets the concerns of both the Operator of the child care centre and the families attending the centre.
Minimise water quality impacts	Erosion and sediment controls will be designed, installed, maintained and managed in accordance with the principles in the Site Management Plan (NSW EPA 2004) and Managing Urban Stormwater – Soils and Construction (Landcom 2006) and would include: • Conduct of all site works which involve breaching of the cap in accordance with the SMP and SWPs; • Installation and maintenance of silt fences around the site boundary for the duration of construction activities; • Containment of spills and treatment of affected areas; and • Daily monitoring of site activities.
Protection of flora and fauna	• All vegetative waste and materials potentially containing noxious weed propagules would be removed and disposed of at an appropriate waste disposal facility;

Objective	Commitment
	• Noxious and environmental weeds occurring within the proposed RIRP site will be controlled and suppressed during and post construction; • Tree removal and protection will be undertaken in accordance with the Conditions of Approval and in consultation with Parramatta City Council; • The REMONDIS CEMP will include measures for protection of the Environment Protection Zone and envrions on the Parramatta River; and • The Environment Protection Zone will be clearly identified and marked on site. .
Minimise air quality impacts off the site	A detailed Air Monitoring Programme will be initiated prior to commencement of site works; Dust suppression and avoidance measures will be implemented to minimise impact on air quality including, where appropriate: • Disturbance of the minimum area necessary; • Placement of screening material on perimeter fences; • Conduct of grouting activities within a tent structure; • Implementation of air quality monitoring programme including real-time monitoring and implementation of remedial measures; • Watering of any exposed materials and heavily trafficked areas; • Covering stockpiles of clean fill during platform construction; • Use of Tarpaulins to cover incoming and outgoing truck loads; • Restriction of stockpile height to below the fenceline; • Where visual inspection and or monitoring indicates that dust levels may be unacceptable work will cease until measures are taken to reduce emissions or until weather conditions improve; • Limit vehicle speeds; • Rehabilitation of completed sections of the site; and • If odours are detected at the boundary of the site the following procedures may be engaged to minimise odours: o Covering of stockpiles; o Use of fine mist sprays and hydrocarbon mitigating agent on impacted areas and material; and o Adequate maintenance of equipment and machinery to minimise exhaust emissions.
Protection of heritage values	• Known heritage sites including the grave located on the north western corner of the Billbergia site will be identified on construction maps with protection measures identified; • Prior to the commencement of future works on the site if approved, all planners and contractors involved would be made aware of the possibility (albeit limited) that as yet undiscovered Aboriginal archaeological materials may exist within (beneath) the footprint of the proposed RIRP activity areas. This would be undertaken through a site induction, which would notify all involved of their obligations under the *National Parks and Wildlife Act 1974*; • Prior to the commencement of future works on the site, all planners and contractors involved would be made aware of their obligations and responsibilities under the *NSW Heritage Act 1977* (as amended); and • In the (largely) unexpected circumstance that any Aboriginal or European objects are unearthed as a result of future

Objective	Commitment
	works, activities would temporarily cease within the immediate vicinity of the find locality, be relocated to other areas of the site, and NSW EPA would be contacted to advise on the appropriate course of action to allow the identified item(s) in a timely fashion to be recorded/conserved to ensure works schedules are maintained and balanced with statutory heritage requirements.
Monitoring of environmental impacts	• Groundwater monitoring will be carried out prior to the commencement of construction activities; • A weather station will be installed on site prior to commencement of operations; • Management of these activities will include monitoring which will include Environmental inspections and daily surveillance inspection which will be documented and kept on record within a register; and • Monitoring will be undertaken during construction to assess the effectiveness of the mitigation and management measures. Where required, additional feasible and reasonable mitigation and management measures will be used.
Minimise noise impacts off the site	• Only equipment with appropriate noise shielding will be employed during construction; • REMONDIS is committed to working with the operators of the child care centre with respect to developing any additional measures which will minimise impacts on children attending the centre; and • Construction hours will be restricted to 7am to 6pm Monday to Friday, 8am to 1pm Saturdays with no construction work on Sundays or public holidays.
Minimise traffic disruption during construction	• Completion of works associated with upgrade of parking area and level crossing within 3 months of project approval; • Line marking - The Proponents will fund the following works: o High visibility reflective line marking to be provided on Grand Avenue North either side of the level crossing in accordance with RailCorp engineering standard ESC520; o Line marking to be provided through the eastern commuter car park designating a pedestrian access route from Camellia Station to the level crossing across the Tilrox/ALDI building entrance gates to the footpath on Grand Avenue North; o Double barrier (BB) lines need will be marked from the concrete median on Grand Avenue North intersection and extend north to the car parking areas so as to legally prohibit overtaking along this road element and to separate opposing traffic flows. • Intersection of Grand Avenue/Grand Avenue North - The Proponents will fund the following works: o Alterations to line marking at the intersection and construction of a concrete island on the north side of Grand Avenue immediately west of Grand Avenue (north). • Regulatory Signage - The Proponents will fund the following works: o Warning sign to be installed on the eastbound lane of Grand Avenue approaching the Grand Avenue North intersection alerting motorists of the crossing; o A compliant STOP hold line and STOP sign will be installed to control Grand Avenue North approach traffic; o A Warning Sign W1-1 should be implemented facing eastbound motorists in Grand Avenue at a location 50m west of the Grand Avenue North junction to advise the car driver the type of corner and appropriate turning speed; o The “No Stopping” on the northern side will be moved 10.6m from its current position; o A “Rail Crossing on Side Road” warning sign W7-12 will be implemented facing eastbound motorists in Grand

Objective	Commitment
	Avenue at a location 80m west of the Grand Avenue North junction to advise the car driver the presence of the railway crossing on the side road; o The prevailing signposting for the level crossing utilises superseded / damaged STOP and railway crossing warning signs will be upgraded to suite current standards. • Employees of the site be required to park on-site; • All trucks departing the site will be required to turn left onto Grand Avenue; and • Drivers of heavy vehicles and others accessing the site will be trained or receive specific briefings to avoid conflicts with pedestrians, other drivers and rail carriages.
Minimise impacts from accidents	• Emergency Response Plan will be prepared: • Spills will be contained immediately; and • Bunded areas will be used for storage of oils, chemicals, toxic substances, flammable and combustible liquids and contained spills.
Protection of Local Amenity	• Any local construction impacts including traffic, air and noise impacts would be minimised through implementation of control measures; • During construction the extent of clearing would be kept to a minimum to maximise the screening effect of existing vegetation; • Measures to reduce visual impacts during the construction period will relate to maintenance of the construction areas in a neat and orderly state and adhering to approved vehicle movement guidelines; and • Consultation will be maintained with the local community during this phase to ensure issues are managed effectively.

Table 4.2
Operational Commitments

Objective	Commitment
ENVIRONMENTAL MANAGEMENT – PROJECT APPROVAL / DETAILED DESIGN PHASE	
The operation of the RIRP will be undertaken in such a manner that external impacts are minimised and internal impacts are managed appropriately. Suitably qualified and experienced personnel will develop and implement project specific environmental management plans and procedures in consultation with relevant government agencies. *The Operational EMP will include:* • *Site induction procedures:* • *Air Quality and Odour Management Plan* • *Noise and Vibration Management Plan;* • *Traffic Control Plan:* • *Traffic Noise Management Strategy;* • *Water Management Plan:* • *Landscape Plan* • *Litter Control;* • *Waste Control Plan:* • *Product Management Plan to ensure:* • *Hazard and Risks Plan including Spill Management and Emergency Response procedures;* • *Erosion and Sediment Control Plan:* • *Pest, Vermin and Weed Management:* • *Subsidence Management Plan:* • *Monitoring programme:* • *Preparation of a Pollution Incident Response Management Plan (Section 153A of the POEO Act);* • *Audit and Review Plan; and* • *Community Consultation and Complaint Management.*	
Site Operations	
Operational Activities to comply with Conditions of Approval and the EPL	• All activities on site will be undertaken in accordance with the requirements of the Conditions of Approval and the EPL; • Any changes to site operations will be reviewed to ensure they are consistent with the site approvals; • Any incidents will be managed and reported in accordance with the requirements of the Conditions of Approval and EPL. Site procedures will be reviewed and revised in response to any incidents; and • Emergency procedures will be developed as part of the OEMP.

Objective	Commitment
Social	
Consultation to minimise impacts on the local community	• The community liaison group would encourage open dialogue with potentially affected local stakeholders, provide a channel through which concerns can be voiced directly and facilitate the integration and acceptance of this development into the local area; • Community Engagement Officer to be nominated and notified to the local community and stakeholders; • 24 Hour contact telephone number to be established; • Procedures would be developed to monitor and report on odour and other impacts, in the event of emissions occurring; • A Management Strategy will be in place for the interaction of the facility with users of the child care centre; • Unions NSW, Camellia Business Group, the Asbestos Diseases Foundation of Australia and the Bernie Banton Foundation will be invited to participate in the ongoing consultation and community engagement process; and • The OEMP will address the potential risks to the local community and include a consultation plan.
Flooding	
Minimise impacts of flooding	• Emergency Evacuation Plan will provide measures to ensure that site activities are managed during major flood events and that as appropriate workers are evacuated in a safe and timely manner.
Surface Water and Drainage	
Minimise water quality impacts	• The stormwater system is designed to collect all surface runoff (excluding roof water) and direct it to the collection and retention system which incorporates a First-flush system with an oil interceptor and a gross pollutant trap; • No leachate will be allowed to discharge from the site; and • Post construction inspections of the stormwater infrastructure would be undertaken to ensure their integrity.
Contaminated Soil Management	
Management of area of contaminated materials	• Implementation of a Subsidence Management Plan; • In the event that additional subsurface works are required they would be undertaken in accordance with the SMP (NSW EPA 2004) and a SWP; and • Site capping will be regularly reviewed in accordance with the requirements of the SMP.
Flora and Fauna	
Protection of flora and fauna	• All vegetative waste and materials potentially containing noxious weed propagules would be removed and disposed of at an appropriate waste disposal facility; • Noxious and environmental weeds occurring within the site would be controlled and suppressed; • Maintenance of landscaping and management of weeds; • The REMONDIS OEMP will include measures for protection of the Environment Protection Zone and envrions on the Parramatta River; • The Environment Protection Zone will be clearly identified and marked on site; and • Monitoring of the EPZ in accordance with the requirements of the SMP.

Objective	Commitment
Air Quality	
Management of dust and odour emissions to prevent off site impacts	• Implementation of Air Quality and Odour Management Plan including Biofilter Pre and Post Commissioning Studies; • A Biofilter Monitoring and Maintenance plan will be prepared to include monitoring, maintenance and mitigation actions in the event of a breakdown of the biofilter system; • No outdoor handling of materials; • Traffic management procedure will include co-ordination of the delivery schedule to avoid a queue of the incoming or outgoing trucks outside the building for an extended period of time; • Spill management procedures will include immediate cleanup of any spill/leakage from the incoming and outgoing trucks, identify the cause and take appropriate action to prevent any future spill/leakage incidents; • Use of the rapid roller doors to minimise the escape of odour; • All operations including waste delivery and processing are undertaken in an enclosed areas; • Real-time processing of odourous feedstock material and raw materials will not be stockpiled for more than a day under normal operating conditions; • Air management system will include ventilation hoods over emission sources; • Odorous air will be recycled as far as possible through the tunnel composting system to minimise air volume into the deodorisation; • Stockpiles will be managed to facilitate natural ventilation to prevent anaerobic zones; • Air management system will ensure building is under slight negative pressure; • Additional air curtains mounted above each fast speed roller door entrance will be installed (if required); • Procedures will be implemented for waste removal, disposal and diversion in the event of disruption to Facility operations; and • Maintain an odour complaint logbook. Once any complaint is made, the Site Manager will immediately investigate any unusual odour sources (including spill or leakage in the traffic areas) within the site boundary and take appropriate action to eliminate any unusual odour sources.
Noise	
Management of noise emissions to prevent off site impacts	To minimise the noise emissions from the proposed RIRP and not exceed noise limits, the on-site management measures shall comprise a combination of: • REMONDIS is committed to working with the operators of the child care centre with respect to developing any additional measures which will minimise impacts on children attending the centre; • Implementation of Traffic Noise Management Strategy: o Driver training to ensure that noise practices such as the use of compression engine brakes are not unnecessarily used near sensitive receptors; o Best noise practice in the selection and maintenance of vehicle fleets; o Movement scheduling where practicable to reduce impacts during sensitive times of the day or evening; o Communication and management strategies for non licensee/proponent owned and operated vehicles to ensure the provisions of the TNMS are implemented;

Objective	Commitment
	o A system of audited management practices that identifies non conformances, initiates and monitors corrective and preventative action (including disciplinary action for breaches of noise minimisation procedures) and assessed the implementation and improvement of the TNMS; o Specific procedures to minimise impacts at identified sensitive areas; and o Clauses in condition of employment or in contracts, of drivers that require adherence to the noise minimisation procedures and facilitate effective implementation of the disciplinary actions for breaches of procedures. • Fitting and maintenance of appropriate mufflers on mobile equipment; • Installation of noise hoods on engines and enclosure of noisy equipment; • No operation of shredders after 10 PM on weekdays or on the weekend; • If necessary, noise generating activities will be restricted when wind and weather conditions are unfavourable; • Monitoring of noise levels in accordance with Conditions of Approval and the EPL.
Heritage	
Minimise impact on Aboriginal and Non-Aboriginal heritage sites	• In the (largely) unexpected circumstance that any Aboriginal or European objects are unearthed as a result of future works, activities would temporarily cease within the vicinity of the find locality, be relocated to other areas of the site, and NSW EPA be contacted to advise on the appropriate course of action to allow the identified item(s) in a timely fashion to be recorded/conserved to ensure works schedules are maintained and balanced with statutory heritage requirements.
Visual and Landscaping	
Maintenance of existing visual and landscape values Integrate urban design scheme for the project	• The lighting design for the site will aim to avoid highlighting prominent built form such as the main buildings, minimise the spill of light into surrounding sites and ensure that all lighting associated with the development complies with *Australian Standard AS4282 (INT) 1995 - Control of Obtrusive Effects of Outdoor Lighting;* • Implementation of the site Landscape Master Plan which includes mitigation measures in relation to visual impact; • Tree planting would be undertaken at strategic locations around the site and along boundaries adjacent to potentially affected properties where possible; • Colours for built elements would be recessive or neutral where possible and overall be sympathetic with the tone of the surrounding landscape character; • Site revegetation and landscaping will predominantly incorporate native endemic species; and • Maintenance of landscaped areas.
Monitoring	
Ensure compliance with legal requirements Ensure activities are not impacting on the local environment or the local community	Regular monitoring will be undertaken in accordance with the requirements of the EPL and Conditions of Approval; and • Monitoring results will be reported to the Community Liaison Group and other interested Stakeholders.

Objective	Commitment
Waste	
Management in accordance with government policies	• The objective of the RIRP is to meet the objectives of national and NSW government policies particularly in relation to minimising waste to landfill and monitoring resource recovery; • Any residual waste materials will be disposed at the appropriate waste facility; • Compliance with The Raw Mulch Exemption 2008; • Compliance with The Food Waste Compost Exemption 2008; and • Compliance with General Resource Recovery Exemption for derived outputs from mixed wastes.
Traffic	
Management of RIRP traffic flows on and off the site	• Site Access and Parking o The access road will be one way to facilitate traffic flows; o Traffic controls (give-way, keep clear signage etc) will be installed as appropriate; o Employees of the site be required to park on-site; The following requirements will be certified as part of the Construction Certificate process: o The dimensions for parking spaces and aisle width will be in accordance with AS 2890.1-2004; o The dimensions and configuration of the disabled parking spaces will be modified to comply with AS 2890.6-2009. The disabled spaces will comply with the requirements of AS2890.6-2009; o The combined entry and exit driveway will comply with AS 2890.1-2004, AS 2890.2-2002 and Council's specifications; o The driveway gradients will comply with AS 2890.1-2004; o The driveway width at the concrete layback will comply with Council's Standard Heavy Vehicular Crossing plan; o The applicant will apply for a Road Occupancy Permit through Council's Traffic and Transport Services, as may be required; and o The applicant will apply for an Oversize Vehicle Access Permit through Council's Traffic and Transport Services, as may be required. • Implementation of Driver Code of Conduct: o Traffic management procedure will include co-ordination of the delivery schedule to avoid a queue of the incoming or outgoing trucks outside the shed for an extended period of time; and o Trucks leaving the site will be instructed to turn left onto Grand Avenue. • Implementation of Heavy Vehicle Driver Orientation Programmes: o Drivers of heavy vehicles and others accessing the site be trained or receive specific briefings to avoid conflicts with pedestrians, other drivers and rail carriages. • During the 2pm to 6pm period all trucks will be required for egress movements to utilise the alternative route via Colquhoun Street, Unwin Street and Wentworth Street to access Parramatta Road, negating the need for trucks to use the intersection of James Ruse Drive, Grand Avenue and Hassall Street.

Objective	Commitment
Hazards	
Management of operations to minimise hazards	• Spill management procedure will include immediate cleanup of any spill/leakage from the incoming and outgoing trucks, identify the cause and take appropriate action to prevent any future spill/leakage incidents; • An Emergency Response Procedure would be developed for the operations; • Response to fire would be in accordance with the Fire Safety Plans in the Emergency Procedures; • Ongoing consultation with RailCorp, Billbergia, the RMS and Parramatta Council in relation to proposed works in the area adjacent to the site entry; • Flood Evacuation Plan to be implemented; and • In accordance with the requirements of the *Protection of the Environment Legislation Amendment Act 2011*, a pollution incident on the site will be notified immediately to all authorities. These comprise the EPA, the Ministry of Health, WorkCover, Parramatta City Council and Fire and Rescue NSW.
Consultation	
Consultation will be maintained with stakeholders to ensure issues are being managed and legal requirements are being met	• 24 Hour Contact Point to be maintained; and • Consultation will be maintained with: o Parramatta Council; o DoPI; o EPA; o RMS; o RailCorp; o WorkCover; and o Adjoining property holders including the parents and operators of the child care centre.

5. DRAFT CONDITIONS OF APPROVAL

The EPA, Parramatta City Council and RailCorp all provided draft Conditions of Approval. With respect to the proposed conditions the following comments or amendments are proposed:

5.1 Parramatta City Council

Hours of Work and Noise

15. All work including building, demolition and excavation work; and activities in the vicinity of the site generating noise associated with preparation for commencement of work (eg loading and unloading of goods, transferring tools etc) in connection with the proposed development must only be carried out between the hours of 7am and 5pm Mondays to Fridays inclusive and 8am to 5pm Saturday with no work on Sundays or public holidays.

Note Council may allow extended work hours for properties located on land affected by Parramatta City Centre LEP 2007 in limited circumstances and upon written application and approval being given by Parramatta City Council at least 30 days in advance.

Such circumstances where extended hours may be permitted include:

- *Delivery of cranes required to the site outside of normal business hours;*
- *Site is not located in close proximity to residential use or sensitive land uses;*
- *Internal fit out work.*

Reason : To protect the amenity of the area.

This condition should be amended to be consistent with the proposed construction hours in the EA and the NSW EPA draft Condition of Approval No 2 which identifies construction hours of 7am to 6pm Monday to Fridays and 8am to 1pm Saturdays and no work on Sundays and Public Holidays. The NSW EPA has published guidelines in its "*Interim Construction Noise Guideline*", 2009 (Guideline) for the management of construction works noise. The Guideline recommends confining permissible work times as outlined in Table 7.5 of the EA which are consistent with the NSW EPA requirements. In addition propose replace excavation with drilling as a result of the proposed change to provision of site services.

15. All work including building, demolition and drilling work; and activities in the vicinity of the site generating noise associated with preparation for commencement of work (eg loading and unloading of goods, transferring tools etc) in connection with the proposed development must only be carried out between the hours of 7am and 6pm Mondays to Fridays inclusive and 8am to 1pm Saturday with no work on Sundays or public holidays.

Note Council may allow extended work hours for properties located on land affected by Parramatta City Centre LEP 2007 in limited circumstances and upon written application and approval being given by Parramatta City Council at least 30 days in advance.

Such circumstances where extended hours may be permitted include:

- Delivery of cranes required to the site outside of normal business hours;
- Site is not located in close proximity to residential use or sensitive land uses;
- Internal fit out work.

38. The No Stopping Zone on the eastern side of Grand Avenue North by 6m to the south of its existing position to allow simultaneous passing of an HRV and B85 car on this section of Grand Avenue North. All costs associated with the relocation of the appropriate signage are to be paid for by the Applicant. The Applicant is to apply to council's Service Manager –

Traffic and Transport for the extension of the No Stopping Zone at least 3 months prior to the occupation of the building.

This condition should be amended to take account of the Road Safety Audit which recommends the zone be 10.6m from its current position.

38. The No Stopping Zone on the eastern side of Grand Avenue North by 10.6m to the south of its existing position to allow simultaneous passing of an HRV and B85 car on this section of Grand Avenue North. All costs associated with the relocation of the appropriate signage are to be paid for by the Applicant. The Applicant is to apply to council's Service Manager – Traffic and Transport for the extension of the No Stopping Zone at least 3 months prior to the occupation of the building.

42. An assessment of the exit from Grand Avenue (north) to Grand Avenue in regards the Safe Intersection Sight Distance and Minimum Gap Site Distance for cars and trucks as set out in Austroads Guide to road Design Part 4A Unsignalised and Signalised Intersection Section 3 shall be undertaken. The assessment is to include the proposed improvements to line marking detailed in the above condition. This Information is to be provided to and approved by Council to determine if any turn bans for traffic turning right from Grand Avenue (north) are to be installed.

This requirement has been addressed in the Road Safety Audit (refer Appendix C) which has been reviewed by SRDAC. Recommend condition deleted.

5.2 RailCorp

No proposed amendments/changes.

5.3 EPA

Air Quality and Odour

Biofilter Pre-Commissioning study
Prior to commencement of operations, a report must be submitted to the DG that includes the final design parameters and actual stack parameters for the biofilter.

Prior to commencement of operations the proponent must appoint an independent recognised odour control specialist to review and approve the odour control system and odour management plan in conjunction with the EPA. The proponent must provide the DG with a written report that includes a review and approval of the odour control system and the odour management plan that has been undertaken and given by a recognised odour control specialist.

Biofilter Post-Commissioning Study
Within 6 weeks of commencement of operation and again after 6 months of operation, the proponent must appoint a recognised odour control specialist to report on, and undertake a program of odour control system testing, to quantify the odour abatement efficiency of the odour control system and the odour emission rate of the discharge to atmosphere. The report must include but is not limited to the NSW EPA requirements as per submission (NSW EPA Submission).

It is proposed that the conditions be amended to reflect that all design work will be undertaken by the proponent with review by a recognised independent odour control specialist and approval by the EPA.

The design of the odour control system will be undertaken by the 'manufacturer' using state of the art technology and design criteria (such as the German Engineering Guideline VDI 3477 – Biological Waste Gas Purification biofilters). The selected manufacturer has the necessary expertise and know how to undertake the design of the odour control system for this project to the required standards with a number of odour control systems in operation at similar waste plants in Australia and New Zealand. The manufacturer will also work closely with REMONDIS's design department in Germany which operates a number of similar plants compliant to very stringent odour emission limits as applicable in Germany and parts of Europe. The manufacturer (and REMONDIS) are concerned with the potential loss of intellectual property through a third party involvement in the design. Given that REMONDIS will require a solid commercial security from any third party which would be involved in the design of such a critical item. The company sees practical problems in settling on acceptable commercial terms between REMONDIS and such a third party.

REMONDIS recognises the valid concern of the NSW EPA and believes that the NSW EPA is within its rights to set appropriate standards of performance. REMONDIS does not agree with a third party intervention in proprietary design of the odour control system. However recognising the NSW EPA concern REMONDIS agrees that a recognised "odour expert" will review and approve the design of the odour control system with reference to best practice emission control techniques. This person can then submit a written report that has reviewed the odour system and management plan.

REMONDIS agrees that after 6 months of operation, the same odour expert will report on the emissions and any rectification required to minimise odour impacts

Suggested that condition is changed to:

Biofilter Pre-Commissioning Study

Prior to manufacturing/construction, a Biofilter Design Report is to be prepared by the proponent, with review by an approved independent recognised odour control specialist and approval by the EPA, which includes final design and actual stack parameters of the biofilter.

Prior to manufacturing/construction the odour control system and associated Odour Management Plan is to be prepared by the proponent in a written report for review by an independent recognised odour control specialist with approval by the EPA. The written report that includes the review and approval must be provided to the DG.

Biofilter Post-Commissioning Study
Within 6 weeks after wet commissioning completion and again after 6 months of operation, the proponent must appoint a recognised odour control specialist to report on, and undertake a program of odour control system testing, to quantify the odour abatement efficiency of the odour control system and the odour emission rate of the discharge to atmosphere. The report must include but is not limited to the NSW EPA requirements as per submission.

Odour Control System

- *The design of the odour control system must be undertaken by a recognised independent odour control specialist with reference to best practice emission control techniques.*

Suggested change to reflect that all design work to be undertaken by the proponent with review by a recognised independent odour control specialist nominated by the Proponent and approved by the EPA.

- The design of the odour control system must be reviewed by a recognised independent odour control specialist with reference to best practice emission control techniques.

Noise

With respect to the proposed noise monitoring requirements in the draft NSW EPA Conditions L6.1 to 6.8 and M7.1 specify monitoring requirements in relation to noise it is requested that an additional Condition be included.

Table 6.1 of Technical Report No 5 presents noise limits for three residential locations and the University of Sydney. For the three residential receivers RR1, RR2 and RR3 of 48 dBA, 38 dBA and 35 dBA for night-time. These noise limits are based on the predicted noise level from the facility. For the University, the limit is 35 dBA within a classroom with the nearest building being 450 m from the facility. Night-time LAeq ambient noise levels were measured as part of the EA, and at RR1 were measured to be 60 dBA, and based on measurements are estimated to be the order of 60 dBA at RR2 and 49 dBA at RR3. The LAeq noise level from the facility is therefore likely to be well below the ambient noise level and therefore difficult, if not impossible to measure. Also, during the daytime the ambient will be higher, further complicating the difficulty of direct measurement.

Given the likely difficulty of measuring the noise levels from the facility, it is requested that the following condition be inserted between conditions L6.7 and L6.8:

<u>L6.8 Where it can be demonstrated that direct measurement of noise from the premises is impractical, the NSW EPA may accept alternative means of determining compliance. See Chapter 11 of the NSW Industrial Noise Policy.</u>

REMONDIS considers that the measurement requirements in the draft conditions are extremely onerous. They are required at the three residential locations as well as in university classrooms, and are required to be conducted for 1.5 hours during the day, 30 minutes during the evening and 1 hour during the night, and on three consecutive nights.

Traffic Noise Management System

TNMS must include but not be limited to the following:

- *Driver training to ensure that noise practices such as the use of compression engine brakes are not unnecessarily used near sensitive receptors.*
- *Best noise practice in the selection and maintenance of vehicle fleets.*
- *Movement scheduling where practicable to reduce impacts during sensitive times of the day or evening (trucks shall be contained to day and evening operations only).*
- *Communication and management strategies for non licensee/proponent owned and operated vehicles to ensure the provisions of the TNMS are implemented.*
- *A system of audited management practices that identifies non conformances, initiates and monitors corrective and preventative action (including disciplinary action for breaches of noise minimisation procedures) and assesses the implementation and improvement of the TNMS.*
- *Specific procedures to minimise impacts at identified sensitive areas; and*
- *Clauses in condition of employment or in contracts, of drivers that require adherence to the noise minimisation procedures and facilitate effective implementation of the disciplinary actions for breaches of procedures.*

REMONDIS operation requires disposal facility during night operations, truck numbers will however be significantly reduced (as per traffic study, which show compliance with regulations) and movements reduced where practicable.

Suggest change dot point No 3 to:

<u>Movement scheduling where practicable to reduce impacts during sensitive times of the day or evening.</u>

D. General

6. The Proponent shall not operate equipment (apart from the biofilter fans and tunnel fans) outside the following hours:
Monday to Sunday 6am to 10pm.

In principle agreed, but needs to consider process controlling system operation (24/7).

The Proponent shall not operate equipment (apart from auto-controlled equipment from the composting process) outside the following hours:
Monday to Sunday 6am to 10pm.