RESPONSE TO SUBMISSIONS

RESOURCE RECOVERY FACILITY

SSD 5339

CONCRETE RECYCLERS PTY LTD

7 MONTORE ROAD

MINTO

NEXUS
Environmental Planning Pty Ltd

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7 MONTORE ROAD

MINTO

13 September 2021

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1. Introduction

1.1 Statement of the Proposal

Camolaw Pty Ltd (**Camolaw**) seeks the approval of the Minister for Planning and Public Spaces to establish a Resource Recovery Facility at No.7 Montore Road, Minto (**the Site**).

Camolaw is a company fully owned and operated by Concrete Recyclers. Concrete Recyclers will be the company building and operating the Resource Recovery Facility.

The objectives of the proposal are:

(a) To establish a commercially viable Resource Recovery Facility which is capable of recovering recyclable concrete, brick, asphalt, sandstone and sand from the waste stream for reuse.

(b) To assist the NSW State government in achieving its objectives for the recovery and recycling of waste as detailed in the *NSW Waste Avoidance and Resource Recovery Strategy 2014-2021*.

(c) To establish an environmentally responsible and sustainable industry which would create employment.

1.2 Description of the Site

The Site has an area of 2.35 hectares.

The legal description of the Site is:

Lot 52 , DP 618900
No.7 Montore Road
MINTO

Figure 1 shows the location of the Site.

The Site is located on the southern side of Montore Road to the west of the intersection of Montore Road with the Airds Road.

An extract from an aerial photograph of the Site is at **Figure 2**.

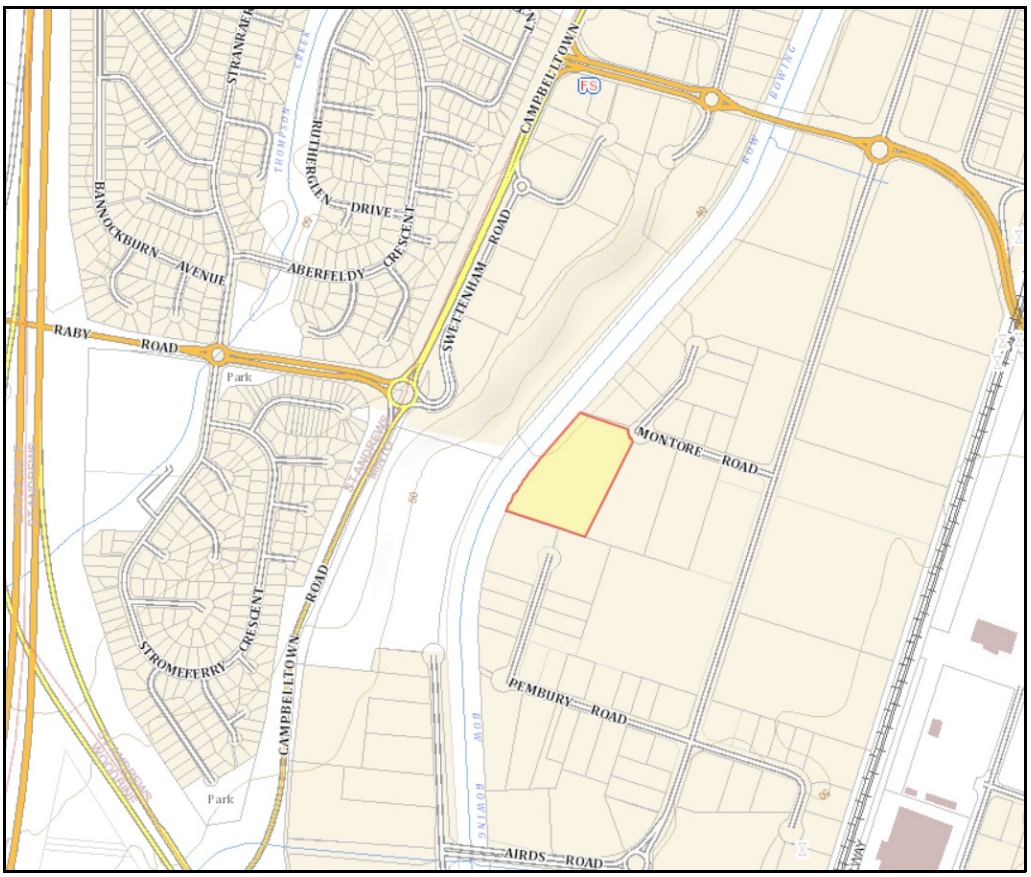

Figure 1: Site location map with the Site highlighted in yellow. © SIX Maps

Figure 2: Extract from an aerial photograph with the Site highlighted in yellow. © SIX Maps

The following development is located either adjoining the Site or in the vicinity of the Site:

- Industrial and warehouse development with frontage to Montore Road and also to the south of the Site.
- Bow Bowing Creek adjoining the Site to the west.
- Industrial development to the west of Bow Bowing Creek.
- Residential development to the west of the abovementioned industrial development and on the western side of Campbelltown Road.

1.3 Operational History of the Site

A review of the site history information undertaken as part of the *State Environmental Planning Policy 55 - Remediation of Land* assessment of the Site has indicated the following:

1. The aerial photographs and land title records suggest that the Site has been used for a mixture of residential and commercial purposes from 1899 to the present day.
2. The historical business directories search did not identify any particular land uses within a buffer of 150m of the Site which were considered to have had the potential to result in contamination of the Site.
3. Council records indicate that consent was granted for the erection of a waste recycling depot on the Site in 1989 and for storage, processing, cutting, sawing and selling railway sleepers, timber and firewood in 1998.
4. A review of the SafeWork NSW records did not identify any licences to store dangerous goods on the Site.
5. NSW Environment Protection Authority records indicated that the Site was formerly licenced/regulated under the POEO Act for waste storage, transfer, separating or processing.

A review of the Council files has determined the following history of the Site:

1. On 16 May 1989, a Development Application was lodged with Campbelltown City Council by M & C Pty Limited for:

   Construction and use of a waste recycling depot involving the delivery, sorting, treatment and storage of waste, including ancillary mechanical repairs and office uses.

   The Development Application was No.E3/89.

2. By letter dated 16 March 1990, Campbelltown City Council notified M & C Pty Limited

that:

> *The Development Application has been determined by the granting of Consent subject to conditions referred to in this Notice.*

3. By letter dated 18 February 1993, Campbelltown City Council notified Appleyard, Forrest and Associates that Building Application No.B3157/91 Southern had been approved subject to conditions.

4. By letter dated 5 June 1998, Campbelltown City Council notified Mr S Vincent of Waste Drive that, among things:

> *Development Consent E3/89 was granted approval by Council on 6 March 1990 for the erection of a waste recycling depot. A Building Approval was granted by Council for the construction of the buildings on the site on 18 February 1993.*
>
> *The development was commenced by construction of footings, however the works has never proceeded past this level.*

5. Pursuant to Section 55 of the *Protection of the Environment Operations Act 1997*, Licence No.4615 was issued for the operation of the approved development. Licence 4516 was surrendered subject to conditions by notice 1011398 on 19 October 2001.

A copy of all of the above documents is provided as **Appendix 16** of the Environmental Impact Statement.

1.4 Land Tenure

The Site is owned by Camolaw Pty Ltd. A copy of the Title search for the Site is contained as **Appendix 12** of the Environmental Impact Statement.

1.5 The Proposed Development

It is proposed to establish a Resource Recovery Facility on the Site with intended capacity of 450,000 tonnes per annum. The proposed facility would receive concrete, brick, asphalt, sandstone and sand from the building and construction industry as follows:

- Concrete and bricks would be sourced from the demolition industry. The maximum amount of processed material stored on the Site would be approximately 20,000 tonnes.

- Excavated sand would be sourced from sand extraction projects. The maximum amount of processed material stored on the Site would be approximately 5,000 tonnes.

Processed materials would include:

- Road base used in subdivisions, Council road works, main road upgrades and under slabs

on factory construction sites.

- 20mm aggregate which is used in drainage and landscape works.
- 10mm aggregate which is used in drainage and landscape works.
- Brick sand which is used in drainage and landscape works.
- Washed excavation sand which is used in drainage, asphalt and concrete manufacture.

The maximum amount of unprocessed material stored on the Site would be approximately 50,000 tonnes.

Waste material would be delivered to the Site by truck, usually with an average capacity of 18 tonne. Product from the Site will be transported in vehicles of average capacity of 20 tonnes.

Incoming trucks would stop at a receiving point where the load would be inspected to ensure loads comply with the materials which the facility is licenced to receive pursuant to the Environment Protection Licence.

If accepted, the driver would be instructed to proceed to the weighbridge office where a docket would be issued. Once a docket is issued, the truck driver would be directed to a designated stockpile depending on the type of waste the truck is carrying.

Stockpile heights range from:

- 6 to 8 metres for stockpiles of materials won from the crushing plant.
- 6 metres for the stockpiles adjacent to the boundary of the Site.
- 6 to 8 metres for stockpiles of materials won from the sand washing plant.

All trucks would leave the Site via the wheel wash.

The crushing plant is made up of a number of components. The primary crusher would be contained within a purpose built building. The crushing plant would be controlled by an employee in a control room on the primary crusher.

The sand washing plant would be used to produce washed free draining sand and aggregate.

The proposed hours of operation would be:

Monday to Friday	6:00 am to 7:00 pm
Saturday	7:00 am to 4:00 pm

The facility would not operate on public holidays or on Sunday. Typically, there would be fifteen (15) employees on-site comprising:

- One (1) Site Foreman.

- Three (3) Loader Drivers.
- Three (3) Excavator Drivers.
- Two (2) Weighbridge Attendants.
- Two (2) Fitters.
- Four (4) Labourers.

1.6 Structure of this Report

Part 2 A summary of the issues raised in submissions is provided together with the Applicant's response to issues raised in submissions.

Part 3 A revised Statement of Commitments is provided as a result of the Response to Submissions.

2. Response to Submissions

2.1 Respondents

Twenty two (22) submissions were received during the exhibition period of the Environmental Impact Statement. Each submission was reviewed and the issues identified.

Submissions comprised:

- Nine (9) submissions from the public authorities being:
  - Water NSW
  - Crown Lands
  - Transport for NSW
  - NSW Environment Protection Authority
  - NSW Department of Primary Industries
  - Fire and Rescue NSW
  - Water Group

- Campbelltown City Council
- Heritage NSW

- Two (2) submissions from the general public.
- Ten (10) submissions from organisations.

One (1) request for further information was received from the NSW Department of Planning, Industry and Environment (**the Department**)

It is noted that many submissions raise similar issues. Where an issue is raised in multiple submissions, the issue has been identified and responded to generally rather than repeating responses for all submissions. The responses given are considered to account for all submissions.

Copies of submissions from public authorities are contained in **Attachment 1**, copies of submissions from the general public are contained as **Attachment 2**, with submissions from organisations contained as **Attachment 3**.

In response to the submissions, changes have been made to the plans of the proposed development. Revised plans have been provided in **Attachment 14**.

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

- Air quality
- Remediation
- Waste Management
- Soil and Water Management
- Traffic
- Flooding
- Noise
- Heritage
- Updated plans
- Fire and Rescue.

General Comments Received

Origin Energy, in its 18 November 2020 submission, states:

> *In the initial request for SEARS the proposal was for a resource recovery facility capable of processing up to 250,000 tonnes per annum of construction and demolition waste. However, the current EIS is now proposing 450,000 tonnes*

> *per annum which is nearly double the throughput initially proposed. Origin questions whether the scope of the SEARS would have been more onerous had the initially application been for a throughput of 450,000 tonnes per annum*

Although the SEARs state that the proposed development is for a facility capable of processing 250,000 tonnes per annum, the application submitted to the Department indicates that the proposed facility is capable of processing 450,000 tonnes per annum.

The SEARs were prepared to cater for the impact the proposed development would have on the environment, regardless of the volume of material the facility is capable of processing. Indeed, it is clearly stated throughout the Environmental Impact Statement that it has been prepared on the basis that the facility will be capable of processing 450,000 tonnes per annum.

Origin Energy continues by stating:

> *There has been no consultation with Origin or, as it appears from the report, any of the other industrial sites that operate in the area;*

A comprehensive consultation process was undertaken as part of the preparation of the Environmental Impact Statement. A letterbox drop was conducted on the 16 May 2018 which included all surrounding industrial locations as well as the relevant residential development (refer to **Appendix 2** of the Environmental Impact Statement).

With regard to Origin Energy, the consultation letter was hand delivered to the office of Origin Energy as there was no letterbox on the site.

2.2 Air Quality

To address the issues raised in the submissions relating to air quality, a Revised Air Quality Impact Assessment, dated February 2021, has been prepared, a copy of which is at **Attachment 5**.

NSW Planning, Industry & Environment, in its 26 November 2020 submission, states:

- *Please confirm whether the AQIA considered that any crushing via mechanical pulverisor or hydraulic rock breaker would not be connected to the baghouse. Furthermore, please confirm if Table 6-1 in the AQIA, which provides the PM_{10} emissions for each activity per year, includes the mechanical pulveriser and hydraulic rock breaker.*
- *The contemporaneous assessment data has been provided in graph form which appears to indicate additional exceedances of the criteria, please provide the results of the contemporaneous assessment in a table format.*

Response

- Crushing dust emission estimates have been provided using USEPA AP-42 standard emission factors for controlled crushing which would include the pulveriser and the hydraulic rock breaker.
- The Revised Air Quality Impact Assessment includes the contemporaneous assessment in Chapter 7 in a table format.

NSW EPA, in its undated submission, states:

1. *No information provided regarding the modelled emission rates, and lack of clarity whether peak daily operations were modelled*

2. *Control of emissions from fugitive sources not benchmarked against best practice*

3. *Unclear whether wastes are stockpiled outside prior to crushing*

4. *Unclear how the Aermet data set was generated, and the validity of the Aermet generated meteorology data used in the modelling has not been demonstrated*

5. *Assessment of impacts at Next Generation Childcare Centre not provided.*

6. *Control factor used in the calculation of emissions from wind erosion not appropriate*

Response

- The site operations have been modelled in the Revised Air Quality Impact Assessment between 6:00am and 7:00pm and the wind erosion has been modelled 24 hours per day. Mass emission rates are provided in Appendix A of the Revised Air Quality Impact Assessment. Average day and maximum days have been modelled.

- Dust mitigation has been addressed in the Chapter 9 of the Revised Air Quality Impact Assessment. Crusher and sand washing plant are located in a shed. Crusher plant has water sprays and vacuum dust extraction into a baghouse.

- With regard to waste stockpiles, the Revised Air Quality Impact Assessment has been provided to clarify this issue in Chapter 6.

- Aermet data is clarified in Chapter 5 of the Revised Air Quality Impact Assessment.

- The Next Generation Child Care Centre has been included in the Revised Air Quality Impact Assessment as a sensitive receiver.

Campbelltown City Council, in its 14 December 2020 submission, states:

If approved, it is recommended that appropriately designed misting and odour suppression systems are installed around all areas of the site where waste is to be stored and/or relocated in addition to ensuring that they always remain operational for these purposes. It would also be in the operator's best interests to maintain these suppressions systems for their own occupational, health and safety requirements.

Any unloading in an open area is likely to result in the generation of high volumes of airborne particulate matter as vehicles during these operations.

As a result, it is also recommended that a condition be imposed requiring all unloading and loading operations proposed on site be conducted from within inside an enclosed or covered area, fitted with an adequate misting system.

Response

- With regard to odour, the Site does not accept organic or similar waste. No significant odour sources have been identified for the normal operations of the facility. Therefore, no qualitative odour assessment has been conducted. It should be noted, however, that

the Revised Air Quality Impact Assessment contains an odour management process and a review of construction dust impacts.

- The imposition of conditions of consent is a matter for the Minister.

Origin Energy, in its 18 November 2020 submission, states:

> *Given the nature and scale of the operation, the potential for wind-blown dust is a key concern for Origin's staff who spend a lot of time outdoors in their day to day work. The EIS appears to have proposed a number of measures for managing dust such as the 6m high walls around the perimeter of the site, restriction on stockpile heights and mention of a water cart and sprinklers. However, it is unclear where and how each of these measures will specifically be implemented to provide an effective control for dust.*

When discussing the air quality impact assessment, the **Origin Energy** submission states:

> *The report concedes that here are no monitoring devices near the Proposal site and that the OEH monitoring station is located at Campbelltown West is 2.2km away from the site. It is submitted that the lack of site specific data renders the report assessment of existing air quality incomplete namely because the report omit to undertake any site specific readings.*
>
> *The potential health impacts from exposure to crystalline silica is a key concern for Origin's staff and the Applicant needs to provide more information or a more thorough assessment to demonstrate that the impacts of PM10, PM2.5 and respirable silica do not pose an unacceptable risk to offsite receptors.*

Response

- The Revised Air Quality Impact Assessment contains a management process and a review of construction dust impacts.
- A description of how the air quality modelling is consistent with the Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales is presented within the Revised Air Quality Impact Assessment.
- Chapter 4 of the Revised Air Quality Impact Assessment presents the process of how 2017 was chosen for the air dispersion modelling.
- AERMOD was used for the air quality modelling. Mass emissions are present in Appendix A of the Revised Air Quality Impact Assessment and were modelled using volume sources.
- 50% control was used for water/fogging and 70% control was used for the reduction provided by a shed.
- All major loading / unloading / transferring of material was included in the air quality modelling.
- Sand washing and screening has been included in the air quality modelling.
- The Revised Air Quality Impact Assessment describes the pugmill process. The pugmill process is a wet mixing process which does not generate dust. Unloading and loading for the pugmill has been included in the modelling.

- Chapter 7 of the Revised Air Quality Impact Assessment includes an updated contemporaneous assessment including a table format which shows that the proposal does not cause any additional exceedances of the air quality criteria.

- Chapter 9 of the Revised Air Quality Impact Assessment clarifies air quality issues and includes a summary of proposed air quality mitigation and management including proposed dust monitoring. A permanent and continuous monitoring system has not been proposed.

- The Site is designed so there are no stockpiles on the boundaries to neighbouring properties to the south, east or north. The only stockpile on the boundary is on the western side of the Site which backs onto Bow Bowing Creek. The sprinklers are directed from the fence line to the stockpile to eliminate spray drift.

- The stockpiles all have fixed and/or portable sprinklers. The remainder of the Site will use the water cart for dust suppression along with polymer dust suppression additives.

- External conveyors have dust covers and high-pressure foggers at discharge points. The materials have water sprayed on them during the crushing process to eliminate dust generation during discharge.

- The baghouse will be connected to the jaw crusher, cone crusher and conveyors to control the dust within the crushing plant. It will be of suitable design for the size of crushers and processed materials. The baghouse will be interlocked within the crushing plant control equipment to always ensure the correct operation.

- Road base is made in one continuous process of primary and secondary crushing. The separation occurs during the process to enable efficient crushing with the re-mixing of material happening on the screen which is in the crushing shed prior to discharge.

- The screening process as part of the sand washing process is a wet system so no dust will be generated. The Generator set shown on the plans is an error. The plant will be connected to grid sourced electricity.

- The facility does not accept asbestos waste. The applicant will operate the Site to comply with the NSW EPA's Standards for managing construction waste in NSW where loads are inspected before tipping and then after tipping. If asbestos is found in the load, even in very small quantities, then the entire load is rejected from Site. An Asbestos Management Plan is provided as **Attachment 6**.

- A letterbox drop detailing the development was conducted on the 16 May 2018. The letter was hand delivered to the office of Origin Energy at 26 Pembury Road, Minto.

Submissions from organisations states:

The proposal has numerous serious implications on air quality contamination and levels of dust to be produced.

The AQIA Report did not address the potential impacts from construction of the Proposed Waste Facility, nor how they would be managed.

The EIS document indicates that small sections of the Proposed Waste Facility will be partially undercover and that

there will be unsealed tracks and other surfaces within the Proposed Waste Facility. This does not reflect current best practice for waste recycling facilities, which requires that waste recycling operations occur within purpose-built enclosed and undercover facilities, on sealed surfaces.

Response

Issues raised by organisations have been addressed in response to the submissions from statutory authorities.

2.3 Remediation

NSW Planning, Industry & Environment, in its 26 November 2020, submission states:

- *The site is currently contaminated with asbestos containing material and a Remedial Action Plan has been prepared which proposes to remediate the site through the removal of asbestos contaminated soil. However, the RAP also states that on-site consolidation and or capping of impacted materials would be considered if economic constraints dictate. Please update the RAP to provide further details of the alternate remediation method including depth of the fill, consistency of marker later and details of any EMP to manage remaining on-site contamination. Please also provide a justification for using the encapsulation option.*

- *It is noted that the development site requires remediation prior to construction, please describe how long remediation would take and how much contaminated soil would be removed. The EIS states that 500 vehicles would be required for fill removal, this number appears high, please clarify.*

- *Following remediation, how long would construction take and how much fill would be imported?*

A submission from an organisation states:

A plan to manage and monitor asbestos would provide confidence in the proposed remediation process.

Origin Energy, in its 18 November 2020 submission, states:

Origin requests that the applicant adequately address the potential for asbestos to be bought on site (including the potential for it to enter the crushing and screening plant) and to propose some appropriate mitigation measures. At the very least, there should be an enclosed bin where any asbestos waste could be safely stored until such time that it is removed for off- site disposal.

Response

An Asbestos Management Plan has been prepared and is contained in **Attachment 6**. The recommendations of the Asbestos Management Plan have been included in the revised Statement of Commitments Table at **Attachment 4**.

The 500 trucks listed in the Environmental Impact Statement is for removal of contaminated material and the importation of road base which is an approximation based on the estimated largest amount of both the export and import of material.

The Site is to be remediated in accordance with the Remedial Action Plan. Based on the current site investigation, a minimum removal of 520m^3 of material would be required with a maximum of 1,900m^3 which will require between 20 and 80 truck movements.

Approximately 6,400m^3 of road base will be imported for the hardstand on the Site after the remediation and bulk earthworks are completed which will require approximately 310 trucks to deliver. The fill removed during remediation will be replaced with road base and will require between 20 and 80 truckloads of material.

The site remediation is expected to be completed over a four (4) week period with construction of the proposed development taking an estimated six (6) months.

2.4 Waste Management

NSW Planning, Industry & Environment, in its 26 November 2020, submission states:

- *The Site Plan identifies numerous external waste and product stockpiles, please describe the stockpile management measures that would be implemented to ensure wastes are managed appropriately including maintaining their separation distances and heights.*
- *Please provide the size and volume of the individual stockpiles.*
- *The EIS explains that there would be some residual waste generated by the facility, and this waste would either be disposed of or sent for further processing. It is recognised that the metal waste storage area has been shown on the Site Plan, however, please also show where other wastes would be stored and explain how often they'd be taken offsite.*
- *The site plan shows one large stockpile for sand/sandstone and pugmilled material, please describe how this stockpile would operate to avoid the mixing of different products.*

NSW EPA, in its undated submission, states:

d. Waste storage

The EPA notes that the proponent is proposing that 75,000 tonnes of waste will be stored at the facility. ... It is recommended that the applicant demonstrate that the proposed storage capacity of 75,000 tonnes is practical and achievable.

It is also recommended that the applicant identify the quantity of waste to be stored in each dedicated storage area.

Campbelltown City Council, in its 14 December 2020 submission, states:

... it is difficult to determine how the proponent will undertake an effective screening process to ensure that every truck laden with waste is completely free of potentially contaminating material.

... the applicant has failed to provide or outline a suitable recovery regime which ensures that every truck hauled to the proposed facility will also be screened free of any toxic waste, there is potential risk of contaminated groundwater having an adverse impact on the water quality and sensitive environs around the Bow Bowing watercourse.

Response

All waste received at the Site would be source separated Construction and Demolition material not mixed waste. Waste would be sorted at the source, before being transported to the Site.

Materials to be received at the Site are non-combustible and, therefore, the Fire Safety Guidelines do not apply to the facility.

The waste received is, after inspection in accordance with the EPA Guidelines, stockpiled in the following groups as shown on the Site plan:

- Concrete in bulk
- Brick/concrete
- Sandstone/rock
- Sand.

Waste may contain other materials which are suitable for recycling such as asphalt, road base, rock, terracotta etc. Although these materials are typically kept separate, they are also mixed with each other to make the required products.

Stockpile separation distances are not a requirement in the facility and stockpiles will touch each other. Stockpile heights will be controlled by visual height makers on walls/fences and buildings.

Stockpiles are shown on the Plan PS02-A401 A and are the approximate sizes and volumes shown below:

Stockpile A 60m long, 20m wide, 8m high with volume 8,000 tonnes

Stockpile B 50m long, 40m wide, 8m high with volume 20,000 tonnes

Stockpile C 60m long, 40m wide, 8m high with volume 25,000 tonnes

Stockpile D 70m long, 15m wide, 8m high with volume 12,000 tonnes

Stockpile E 60m long, 10m wide, 6m high with volume 5,000 tonnes

Stockpile F 25m long, 10m wide, 6m high with volume 2,000 tonnes.

A volume of approximately 3,000 tonnes would be located under the discharge conveyors at any one time.

The above quantities will vary depending on waste available for disposal.

Based on the above volumes, there would be a maximum of 75,000 tonnes of material on the Site at any one time.

Page 2-20 of the Environmental Impact Statement states:

> *Little waste would be generated in the operation of the proposed development. The proposed development has been designed such that the vast majority of materials delivered to the Site are recycled. Approximately 0.1% of the material delivered to the Site is material which cannot be recycled.*
>
> *Material is either:*
>
> - *processed on-site for reuse,*

- *placed in a bin in the case of waste metal and wood, and transported off-site for recycling, or*

- *in the case of general waste, stored in an appropriate waste bin for either recycling or transportation off-site for disposal at landfill.*

During the processing of bricks and concrete the following waste streams are created:

- ***Plastic and timber*** *Approximately 0.012% by weight of processed material which is disposed of at a licenced landfill. The material will be stored in hook lift bins in the crushing shed before removed from the Site. A maximum storage on-site of 15 tonne.*

- ***Metals*** *Ferrous and non ferrous metal of approximately 1% by weight of material processed. Metals are disposed of at a licenced scrap metal processing facility for further recycling. The metals are stored in the south eastern corner of the crushing shed. There will be a maximum storage of 60 tonne on the Site.*

The waste material is removed by labourers (pickers) during the processing and is held in a hook lift bin which is housed in the crushing shed.

With regard to the stockpile shown adjacent to the Pugmill, sometimes there will be a shortage of some wastes which is why the site plan shows the stockpile next to the Pugmill being either sand or sandstone. There will be no mixing of sand and sandstone.

2.5 Soil and Water Management

NSW Planning, Industry & Environment, in its 26 November 2020, submission states:

- *The EIS explains the site would discharge water to Bow Bowing creek in storm events greater than 1 in 10 ARI (southern catchment) or 1 in 100 ARI (northern catchment). It is noted the EIS states that, as sediments will be captured, water quality of Bow Bowing creek would not be affected. This must be quantified by characterising the water quality at the point of discharge to surface and/or groundwater against the relevant water quality criteria (including details of the contaminants of concern that may leach from waste into the wastewater and proposed mitigation measures to manage any impacts to receiving waters) and assessing impacts on Bow Bowing Creek.*

- *Provide a comprehensive water balance which includes water to be discharged to Bow Bowing creek.*

- *The EIS states that sediments captured by the sediment basins will be reused in the recycling process. Please describe how this would occur.*

- *Although it is acknowledged the northern and southern sediment basins are the same size, explain why in the southern catchment the pit/pipes are only sized for a 10 year ARI event whereas the northern pit and pipes are designed for the 1 in 100 year ARI event.*

Response

To provide additional information regarding water quality associated with the proposed development, **Environmental Risk Sciences Pty Ltd (ERS)** has prepared a report titled *Water Pollution Impact Assessment – Minto Resource Recovery Facility, 7 Montore Road, Minto, NSW*. A copy of the ERS report is at **Attachment 7**. A revised Soil and Water Management Plan has also been prepared, a copy of which is at **Attachment 16**.

The objectives of the ERS report are:

- *Review the available information in relation to the management of water at the proposed facility. Based on the available information water is expected to be reused/recycled on the site with discharges off-site only occurring during periods of heavy rainfall. The use of water on the site and the circumstances in which water will be discharged will be clearly outlined.*

- *Review the available information from related facilities and calculate potential concentrations of pollutants in water that would discharge from the site. This would be expected to include runoff calculations relevant to the circumstances where water discharges may occur.*

- *Understand the NSW Water Quality Objectives relevant to the waterway in which water will be discharged. These are expected to include recreational use and protection of aquatic environments.*

- *Assess risks to human health and the environment associated with the discharge of water from the site (when this would occur) to determine if the water quality objectives are met.*

- *If elevated risks are identified, calculate criteria relevant to discharge water that would need to be met, and may be considered as licence limits for water discharges.*

The ERS report:

- Characterises the expected quality of the water to be discharged from the Site.

- Assesses the quality of the discharge using the National Water Quality Guidelines and the relevant NSW Water Quality Objectives for the waterway(s) which might receive the discharge.

- Proposes licence limits for relevant chemicals which may be present in the discharge for consideration.

TH ERS report concludes:

> *The proposed facility is one that recycles common construction materials including concrete, bricks, sand and sandstone. These materials are not likely to contain pollutants that are not already common in stormwater in urban areas.*
>
> *The site is designed, in line with government requirements, to appropriately manage all*

stormwater that falls on the site. In fact, collecting that water is an important part of operations as it provides water for dust suppression and sand washing at the site. If such water was not available at all, dust suppression and sand washing would need to always be undertaken using reticulated water – a costly and non-preferred use of potable water. The system to collect stormwater at the site will minimise the need for using potable water at the site making the site more water efficient – again, in line with government requirements.

To ensure the most effective operation of the site, collection and storage of stormwater will be maximised at the site.

This means the only time water will leave the site and enter Bow Bowing Creek will be during large rain events. Given that the stormwater from this site is largely the same as stormwater from other urban areas, loss from the site into the creek will be minimised as much as possible and there will be a large volume of water in the creek already during such events, it is not expected that the occasional discharge of stormwater from this site will have any impacts on ecosystems or people.

The two sediment basins will have their water pumps controlled by an automated system using level sensors in the basins, which will pump the water to the tank farms. Each basin will have two (2) pumps installed in the case of a failure of one of the pumps and telemetry for alarm when the Site is unattended.

Both of the northern and southern sediment basins have been sized to captured the 10 year flows and discharge to the creek via the proposed pipe outlets.

The southern basin has been designed to allow water ponding above the tank in the 100 year storm event and discharge to the creek via an emergency overland path (<200mm deep of water). As such, the outlet pipes are only required to be sized for the 10 year event.

On the other hand, due to the lower elevation of the northern basin, a 100 year overland flow path from the basin to the creek is not possible. Therefore, the outlet pipe has been sized to convey the 100 year flow to the creek.

NSW EPA, in its undated submission, raises issue with:

b. Water pollution impact assessment

c. Sediment basin monitoring and management

Response

The ERS report at **Attachment 7** and the Revised Soil and Water Management Plan at **Attachment 16** respond the concerns of the EPA.

Campbelltown City Council, in its 14 December 2020 submission, states:

The subject site sits on the interface with Bow Bowing Bunbury Curran Creek and needs to ensure the water quality is being protected.

Response

The ERS report at **Attachment 7** and the Revised Soil and Water Management Plan at **Attachment 16**

respond the concerns of the Council. To further assist in the response to the concerns raised by the Council, the following table has been provided.

Council Comment	Response
The subject site sits on the interface with Bow Bowing Bunbury Curran Creek and needs to ensure the water quality is being protected.	Stormwater discharges to Bow Bowing Creek were analysed as part of the water quality model. Modelling demonstrated that the efficiency of the treatment train is well above Campbelltown City Council pollution reduction criteria. Hence, impact to Bow Bowing Creek has been minimised. Plan: P1203464PS02R20 (E700). Report: Attachment 16 Section 3.5.
Not all of the runoff is directed towards the sedimentation basins. Considering the use of the site, this is not acceptable and will lead to a high level or sediment being discharged.	Rainwater tanks (2 kL and 3 kL), stormwater storage tanks (2 x 450kL) and a thickener are proposed on site to prevent overflow from the site from discharging to Bow Bowing Creek during the minor storm event. Based on the water balance calculation, there would be negligible impact from the proposed development to Bow Bowing Creek. Plan: P1203464PS02R20 (E100). Report: Attachment 16 Section 4.4.
The emergency overflow weirs have no treatment preventing sediment and other contaminants being washed from the site.	Based on the water balance calculation, there will be no untreated stormwater discharging from the operational areas to Bow Bowing Creek. Therefore, no sediment and other contaminants will be conveyed from the site without treatment.
Considering the nature of the site, all flows to be treated prior to discharge.	Runoff from the site will be directed to stormwater storage tanks and a thickener for treatment. The only site area bypassing the treatment is the proposed grass batter. As it is not within the operational area, there would be negligible water quality impact from bypassing the batter flows.
The following water quality targets must be met: *- Total Suspended Solids – 85% Reduction* *- Total Nitrogen – 45% Reduction* *- Total Phosphorus – 45% Reduction*	MUSIC modelling presented in plan (P1203464PS02V02) demonstrate that TSS, TP and TN to Bow Bowing Creek are reduced by 92%, 71% and 62% as a result of the proposed treatment devices. Plan: P1203464PS02R20 (E700). Report: Attachment 16 Section 3.5.
Appropriate pollutant generation rates for the development must be used to ensure appropriate pollutants are present in the modelling and the treatment devices are working accordingly.	MUSIC modelling has been undertaken in accordance with current NSW modelling standards (NSW Local Land Services Greater Sydney (2015), NSW MUSIC modelling Guidelines). The treatment devices are modelled as per the drainage design. Plan: P1203464PS02R20 (E700).
Only sedimentation basins are proposed, these are not sufficient to treat TN and TP.	Rainwater tanks, stormwater storage tanks and a thickener are proposed to provide treatment though reuse, detention and sedimentation. Section 3.4 (Attachment 16) describes the proposed water quality treatment devices.

	MUSIC modelling results demonstrate TP and TN reduction criteria has been achieved. Report: Attachment 16 Section 3.4.

2.6 Traffic

NSW Planning, Industry & Environment, in its 26 November 2020 submission, states:

- *It is recognised the traffic assessment undertook a Sidra analysis of existing conditions with and without the development. Please also provide Sidra analysis for future conditions (2030) accounting for background traffic growth.*
- *It is noted that a one-way system for traffic has been provided, however, the swept path analysis Drawing PS02-DZ01 indicates heavy vehicles would occasionally undertake a U-Turn, please demonstrate that this movement will not interfere with the unloading/loading operations.*
- *Please clarify the time taken for waste drop off, as it appears to be underestimated. If a revised estimation is provided, please update the queueing assessment to demonstrate the site has capacity to accept 1 truck every 2 min 42 seconds in peak operating periods.*
- *The site has been designed to accommodate 19 m heavy vehicles yet it is acknowledged other vehicles would be used as well. Please quantify how many rigid vehicles would access the site.*

Response

Roads and Maritime Services' *NSW Combined Higher Mass Limits (HML)* and *Restricted Access Vehicle (RAV) Map* adopted by Transport for NSW (TfNSW) outlines that Montore Road is an approved 25m/26m B-Double Route indicating that Montore Road is accessible and suited for heavy vehicles.

SIDRA analysis within the McLaren Traffic Engineering (**MTE**) report dated 5th March 2019 (as contained in the Environmental Impact Statement), showed little to no impacts on the performance of the surrounding intersections during the morning (8:00am-10:00am) and afternoon (2:00pm-5:00pm) peak periods.

Network traffic flow is expected to be lower outside of commuter peak periods. It is noted that 19 vehicles per hour is equivalent to one (1) vehicle approximately every three (3) minutes.

As assessed within the MTE report dated 5th March 2019 SIDRA analysis, the addition of the proposed Resource Recovery Facility will not have any significant impacts to the surrounding road network.

SIDRA INTERSECTION 9.0 has been used to assess the 2030 future road conditions with background growth as per the TfNSW strategic traffic forecasting model shown in **Attachment 8**. The results of the baseline 2030 growth and 2030 growth with the proposed development is summarised in Table B5 in **Attachment 8** with the detailed results also reproduced in **Attachment 8**.

As shown in Table B5 of **Attachment 8**, the traffic generation of the Site has little to no impact on the performance of all intersections in the 2030 scenario. There are some intersections which have a low LoS in the 2030 scenario, however, the proposed development does not exacerbate the issue which would occur with or without the development.

The requirement of 500 truck movements associated with earthworks and 280 truck movements associated with construction is detailed in a number of Parts of the Environmental Impact Statement. It is also detailed that 21 daily truck movements would be required during the earthworks stage and 5 daily truck movements during the construction stage based on a 6-day working week. This level of traffic is significantly lower than the operational traffic and, therefore, is not expected to negatively impact the surrounding road network. The duration and total number of truck movements would be confirmed by the builder of the proposed facility as part of the issuing of a Construction Certificate.

The purpose of the traffic surveys was not to record the daily traffic volumes. Rather, they were used to determine the peak hour traffic volumes along the surrounding road network. The referenced 160 vehicle movements associated with Origin would occur throughout the day and would not all occur during the network peak hour.

A truck can utilise the one-way system if loading/unloading operations are being undertaken as shown in the swept path tests within the MTE report dated 5th March 2019. Using the one-way system for traffic allows for successful circulation within the Site ensures that the need for a U-turn movement is not required. Revised swept path diagrams are provided as **Attachment 12**.

In addition, the Department has provided the following comments by email:

- *Please confer with Council to establish 2017 baseline data, traffic volume and growth factor, or data otherwise as agreed with Council on all impacted roads and intersections.*
- *The RTS states that using the one-way system for traffic allows for successful circulation within the Site (and) ensures that the need for a U-turn movement is not required. However, the swept path analysis Drawing PS02.DZ01 indicates heavy vehicles would occasionally undertake a U-Turn, please demonstrate that this movement will not interfere with the unloading/loading operations.*
- *The swept path diagrams indicate that a truck cannot exit the site if a truck is entering and vice versa, please describe how these movements would be managed.*
- *To enable the Department to assess the flow of heavy vehicles through the site and methods to avoid queuing, please show, on a single plan, swept paths as set out in AS 2890.2.2018, stockpile locations, unloading areas, (including appropriate areas for design loader vehicle manoeuvring areas adjacent to the truck), tip and spread areas, and swept out locus of the design truck(s) and trailer(s) between the site entrance, accessing all unloading and loading points, and site exit, on the plan.*
- *To assess peak hour capacity, calculate timespans for various activities to be undertaken on site including truck access, manoeuvring, tip and spread, loading, traverse and exit.*

Response

Notwithstanding attempts to obtain Council traffic data for 2017 the Council was unable to provide that data. As such, intersection turning movement count surveys were undertaken on Wednesday 5th May 2021 at the following intersections:

- Airds Road / Montore Road, Airds Road / Ben Lomond Road.
- Ben Lomond Road / Pembroke Road.
- Pembroke Road / Rose Payten Drive / Smiths Creek Bypass.
- Rose Payten Drive / Campbelltown Road.

The intersection turning movement count surveys were undertaken to provide an updated survey of the existing traffic environment.

The detailed survey results are provided in **Attachment 11** for reference.

The previous traffic volumes surveyed in 2018 have been compared to the updated traffic volumes surveyed in 2021 in both the AM and PM peak hour. The results of this comparison is presented in **Table 1** below.

TABLE 1: COMPARISON BETWEEN 2018 AND 2021 SURVEY DATA

Intersection	Peak	Year		% Difference
		2018 (13/12/2018)	2021 (05/05/2021)	
Airds Rd / Montore Rd	AM	554	587	+6%
	PM	696	821	+18%
Ben Lomond / Airds Rd	AM	2275	2308	+1%
	PM	2637	2747	+4%
Pembroke Rd / Ben Lomond Rd	AM	2616	2933	+12%
	PM	3153	3338	+6%
Pembroke Rd / Rose Payten Dr	AM	2777	2937	+6%
	PM	3130	3308	+6%
Campbelltown Rd / Rose Payten Dr	AM	3949	3802	-4%
	PM	4015	4375	+9%
Average	-	-	-	**+6%**

As shown above, the traffic volumes at the surrounding intersections have increased slightly on average from 2018 to 2021 during the AM and PM peak period. The average increase in traffic volume is 6% which represents a growth of 2% per year which is a typical growth rate. Therefore, the traffic volumes surveyed in 2018 can be expected to represent a typical weekday.

In any case, SIDRA INTERSECTION 9.0 has been used to assess 2021 traffic volumes and the 2031 future road conditions with background growth as per the TfNSW Strategic Traffic Forecasting Model shown in **Attachment 8**. The results of the baseline 2031 growth and 2031 growth with the proposed development are summarised in Table C3 in **Attachment 8** with the detailed results also reproduced in **Attachment 8**.

As shown in Table C3, the traffic generation of the Site has little to no impact on the performance of all intersections in the 2031 scenario. There are some intersections which have high average delays in the 2031 scenario, however, the proposed development does not exacerbate the issues which would occur with or without the development.

A U-turn movement is not required to be performed on-site as a vehicle can circulate in a clockwise direction around the Site unobstructed. The results of updated swept path tests are presented in **Attachment 12**.

The probability of a truck entering the Site such that it is required to utilise the full width of the driveway to enter the rear waiting bays while a vehicle is exiting the Site at the same time will be low. In any case, there is adequate sightlines between an entering vehicle and an egressing vehicle such that the egressing vehicle can momentarily stop on the driveway to allow a vehicle to enter. Signage can be installed stating "Give Way to Entering Vehicles" on the egress side of the driveway. Swept path testing has been undertaking shown an egressing vehicle can be stopped at the property boundary while another vehicle is entering, the results of these swept path tests are presented in **Attachment 12**.

Additionally, it is relevant to note that the driveway width is similar to the requirements of AS2890.2:2018 for a two-way driveway, noting that Montore Road is a minor public road under the definitions of that Standard and that separated entry and exit driveways are not practical. The proposed driveway will use the entire width of the road frontage available and cannot be further widened.

The following timing/operational information has been advised for the purposes of queuing assessment:

- Average time to weigh a vehicle on the weighbridge = 1 minute.
- Average time of a vehicle to unload = 1 minute.
- Average time for a vehicle to be loaded = 3 minutes.
- Average time to spread material = 4 minutes.
- Number of vehicles which can be unloading at one time = 6 vehicles.
- Number of vehicles which can be loaded at one time = 2 vehicles.

In addition to the above, it has been advised that, on average, it would take a vehicle approximately 5 minutes to enter the Site, unload, circulate the Site, inspect the tipped material and leave the Site. The material can be inspected while the vehicle is circulating the Site towards the waiting area located on the eastern side of the Site before exiting the Site, therefore, multiple operations are occurring at the same time, reducing the potential for queuing.

Considering the above information, the operation which is most likely to cause queuing is loading of vehicles with this operation taking the longest. A queuing assessment has been undertaken with the results presented in **Attachment 13** showing that the 98th percentile queue is 4 vehicles which can be accommodated wholly on-site.

Transport for NSW, in its 9 November 2020 submission, states:

1. *The proposed inbound and outbound truck routes indicate that the development traffic would pass through the intersection of Ben Lomond Road/Campbelltown Road. However, this intersection has not been included in the traffic survey/assessment.*

2. *Section 2.2 of the EIS states that waste material would be delivered onsite by truck with an average weight of 16 tonnes. However, in section 2.9 states the average weight load would be 18 tonnes (daily capacity of 1,600 tonnes/89 loaded trips). Clarification should be provided whether this may result in number of trips generated being underestimated, should trucks with a 16 tonne payload be utilised.*

3. *Section 10.5.4 of the EIS and Section 5.4 of the TIA suggests that 95% of outgoing trucks will be empty and do not require to be weighed as the weight is known. However, based on data presented in Table 2-4 in the EIS, it appears that around 48% (82 out of 171 inbound trips) of inbound trucks will arrive empty. Clarification should be provided to confirm that this will not result in queuing onto the public road.*

4. *Table 2 (page 16) of the TIA indicates a larger number of outbound trucks (51) than inbound trucks (20) during 6-8am. If approximately 30 trucks will be onsite after operating hours, clarification should be provided regarding the parking capacity for these trucks.*

5. *The site is located within the approved 25/26m B-Double area, however, the design vehicle for the site is limited to 19m semi-trailer only. The applicant may consider whether the internal road network should be designed to accommodate 25/26m B-Double to improve efficiency.*

Response

The only inbound and outbound truck routes which utilise the Ben Lomond Road / Campbelltown Road intersection are trucks between the masses of 32 tonnes and 40 tonnes. All empty vehicles will be less than 32 tonnes, 45% of full trucks will be greater than 40 tonnes, and 55% of full trucks will be less than 32 tonnes. The traffic modelling has been undertaken on this basis. The truck routes do include the routes for trucks which have masses between 32 tonnes and 40 tonnes for completeness, however, it is not expected to occur on a regular basis and, as such, the proposed development will not significantly impact the Ben Lomond Road / Campbelltown Road intersection.

The average truck load inbound will be 18 tonnes and, as such, the number of trucks indicated within Part 2.9 of the Environmental Impact Statement and within the traffic report is correct.

The roads connecting the Site and adjacent sites are TfNSW B-Double approved routes within an industrial zone. As such, it is expected that they can accommodate heavy vehicle movements.

The 95% reference within Part 10.5.4 of the EIS and Section 5.4 of the Traffic Impact Assessment relates to empty vehicles only i.e. 95% of empty vehicles will not be required to be weighed. Nevertheless, the queuing analysis which was provided within the traffic report was undertaken on the basis that all entering vehicles had to be weighed for a conservative assessment. The result of this assessment was no queuing onto the public road.

The traffic generation of the Site will adopt a 50/50 split over the day in accordance with the table below.

Period	Trucks Tipping Waste		Trucks Collecting Material	
	Inbound Full	Outbound Empty	Inbound Empty	Outbound Full
6:00am – 8:00am	13	13	22	22
8:00am – 10:00am	**19**	**19**	**23**	**23**
10:00am – 12:00pm	18	18	19	19
12:00pm – 2:00pm	**19**	**19**	**13**	**13**
2:00pm – 5:00pm	20	20	5	5
Daily Total	**89**	**89**	**82**	**82**

The total number of daily truck trips (entering and exiting the Site) will, therefore, continue to be 342 on any given weekday. The morning peak period occurs between 8:00am and 10:00am with a total of 84 truck trips. The afternoon peak period will occur between 12:00pm and 2:00pm with a total of 64 truck trips.

For the purpose of analysis, and as a worst-case scenario, peak hour rates of 42 vehicle trips for the AM (21 inbound and 21 outbound) and 32 for the PM (16 inbound and 16 outbound) are adopted.

While the above peak hour traffic generations for the proposed development are similar to the assessed traffic generation within the traffic report, for the purpose of consistency, the updated traffic generation has been assessed in SIDRA 9.0 including an assessment accounting for 2030 background growth. The results of the SIDRA 9.0 assessment are presented in Table B4 and Table B5 in **Attachment 8**.

It can be seen that the traffic generation of the Site has little to no impact on the performance of all intersections in both the 2018 the 2030 scenario. There are some intersection which have a low LoS in the 2030 scenario, however, the proposed development does not exacerbate the issue which would occur with or without the development.

No trucks which are used to transport material will be parked on-site after operating hours.

Queuing analysis was undertaken within the submitted traffic and parking impact assessment and found to operate satisfactorily without queuing occurring onto the public road.

There are a total of 342 daily heavy vehicle trips generated by the proposed development. Rigid vehicles are included within the heavy vehicle traffic generation estimate. As a worst-case situation, all heavy vehicle trips generated by the Site are assumed to be 19m length Articulated Vehicles.

NSW EPA, in its undated submission, states:

> ***a. Inspection of incoming waste***
>
> *The Traffic Impact Assessment that accompanies the EIS indicates that the average unloading duration of incoming vehicles carrying waste is 180 seconds. McLaren Traffic Engineering also indicate that there are six proposed unloading locations at the facility. The EPA's Standards for Managing Construction Waste in NSW require all incoming waste from construction and demolition sources to be tipped and spread for inspection. The material must then be turned and inspected again prior to proceeding for processing. The standards include requirements that the tip and spread area must meet, including its size. I note that the Traffic Impact Assessment has not specifically referred to the standards and how they will be met.*
>
> *The EPA is concerned that the number of incoming truck movements, along with the short inspection time estimated, would not allow enough time to carry-out a genuine assessment of waste received. Consequently, any non-conforming waste (e.g. asbestos) present in incoming loads may not be identified. If the proposal is approved and a licence issued, the licensee must be able to comply with the standards at all times.*

Response

The proposed time for waste drop off is presented in the MTE Letter of Advice dated 18th June 2020 (see Appendix 8 of the Environmental Impact Statement) which details the queuing requirements for an unloading service time of 180 seconds and an inbound flow of 30 trucks per hour. The proposed loading and unloading times were found to operate satisfactorily.

In relation to the Site being able to accept 1 truck every 2 minutes and 42 seconds, **page 2-6** of the Environmental Impact Statement states:

> *After the material is tipped, the loader spreads it for further inspection. If the load contains waste which the facility is not licenced to receive, the material is loaded back onto the truck and the driver would be instructed to turn around and leave the Site. The estimated average loading duration per truck is 65 seconds and two (2) trucks can be loaded at the same time. The estimated average unloading duration per truck is 180 seconds and there are six (6) locations to unload concurrently.*

There are separate tipping locations for concrete, brick/concrete, sandstone/rock and sand. As such, there are four (4) tipping locations on-site.

The Applicant has advised that the time taken for material drop off is approximately 5 minutes per truck in total which allows for both tipping and inspection of the deposited materials in accordance with the EPA inspection standards and equates to twelve (12) trucks per hour per location or 48 trucks per hour in total or 96 trucks in a two hour period. A more detailed traffic generation for the proposed development has been prepared and is presented below.

Period	Trucks Tipping Waste		Trucks Collecting Material	
	Inbound Full	Outbound Empty	Inbound Empty	Outbound Full
6:00am – 8:00am	13	13	22	22
8:00am – 10:00am	**19**	**19**	**23**	**23**
10:00am – 12:00pm	18	18	19	19
12:00pm – 2:00pm	**19**	**19**	**13**	**13**
2:00pm – 5:00pm	20	20	5	5
Daily Total	**89**	**89**	**82**	**82**

Campbelltown City Council, in its 14 December 2020 submission, states:

> *The Design vehicle (AV) used in Traffic report and swept paths is taken as 19.0m long, however as per AS2890.2:2018 table 2.1 AV is a 20.0m long vehicle. Traffic report and all swept paths shall be revised to comply with Australian standard*
>
> *Ensure that the vehicle crossing profile complies with Council's standard drawing SD-R09 Sheets 1 & 2 available on Council's website under Appendix K of the Council's Engineering Guide for Development*
>
> *Vehicle crossing shall be designed to provide safe clearance from streets' light pole as per Australian and Endeavour Energy standards*
>
> *Council has completed traffic surveys in 2017 and traffic modelling on some of the intersections included in this proposal. Council's modelling identified levels of service significantly lower than those identified in this proposal for the existing conditions. The modelling needs to be addressed by the applicant to better represent the site conditions*
>
> *Incoming and outgoing truck numbers provided suggest 31 trucks will remain on site overnight. It does not appear there is sufficient room on site to accommodate this. This requires further clarifications. It is not considered acceptable to have a significant number of vehicles parking on the surrounding public streets.*
>
> *The timeframes provided in the report as justification for no queuing of the trucks only account for loading and unloading times, not vehicle movements through the site. While more than one truck may be able to be loaded or unloaded at a time, only one vehicle can manoeuvre the site at a time and this does not appear to have been considered and therefore requires further information.*

Response

The swept path tests have been updated with 20m long articulated vehicles with the results presented in **Attachment 12**.

There is a single street light pole located in close proximity to the Site driveway on the eastern side of the driveway. The proposed driveway follows the same path as the existing driveway along the western side of the Site with the widening of the driveway occurring to the west.

As such, the proposed driveway will not be any closer to the street light. Nevertheless, swept path testing shows that a 20m articulated vehicle can successfully access the Site driveway. The vehicle crossing will be designed to provide safe clearance from the light pole as per Australian and Endeavour

Energy standards.

The issue relating to Council's 2017 traffic survey is discussed above.

No trucks which are used to transport material will be parked on-site after operating hours.

With regard to material drop off, in the morning peak (8:00am - 10:00am) there will 38 truck movements in that two (2) hour period which equates to 19 trucks or 9.5 trucks per hour. With a capacity to accommodate 48 trucks per hour on-site (96 per two hour period), there is amply capacity to receive 38 trucks for depositing of material in the morning peak period.

The Site provides a one-way circulation path throughout the Site, therefore, queuing as a result of vehicle movements through the Site will not occur. If two (2) trucks were to finish loading at the same time and wanting to leave, the two (2) trucks would follow each other to the exit at the same time similar to any roadway. Queuing analysis of the loading, unloading and weighbridge operation has been undertaken and shown to satisfy the requirements of the operation.

Origin Energy, in its 18 November 2020 submission, states:

> *The assessment of existing traffic condition is based off a single day, 13 December 2018, see exact of section 2.3 of the report below. There is no evidence to suggest that this day is a typical weekday. The observed vehicle movement on this day appear low noting the significant number of industrial and commercial operations that utilise the roads through this area. Origin alone has around 160 vehicle movement through this area on any given weekday. The applicant should be required to undertake a longer observation period and present the results;*

Response

No major events were recorded or detailed within the surrounding area to identify that 13 December 2018 was not a typical day. Obtaining a single day of traffic data for developments is normal practice and widely accepted to determine the traffic impact.

2.7 Flooding

NSW Planning, Industry & Environment, in its 26 November 2020 submission, states:

- *Clarify whether the upgrade of the existing pipe within the presumably Council-controlled Drainage Easement (that drains Pembury Rd to Bow Bowing Creek), requires land owner's consent from the owners of 25 Pembury Road and consent from Council under s68 Local Government Act 1993.*
- *Explain how workers and drivers would be affected by deep flood water that occurs within Montore Road during the 100 year ARI flood. If the site is inaccessible at peak flood times due to excessive water depths and velocities as determined by the Floodplain Development Manual, provide details of an emergency flood management plan.*

Campbelltown City Council, in its 14 December 2020 submission raises a number of concerns. To assist, responses are provided in the table below.

Council Comment	Response
The Site Earthworks Plan, completed by Martens & Associates Consulting Engineers, dated 26/06/2020 does not include chainages on the plan sections. This makes interpreting the information presented in the cross and long sections difficult. The changes should be labelled to facilitate more detailed review.	Now provided. Plan: P1203464PS02R20 (C105).
Following review of Preliminary Flood Assessment: Minto Resource Recovery Facility 7 Montore Road, Minto, NSW by Martens Consulting Engineers dated March 2020 the following comments are provided: *a) Council would normally review modelling as well as the report. As no modelling has been provided, comments can only be provided based on the information contained in the report.*	The updated flood model file is provided now.
Council does not accept any adverse impacts on neighbouring properties in 1% AEP event.	The updated flood modelling result indicated there are no offsite impacts above 20 mm in the 1% AEP flood, hence, the impacts are considered acceptable. Plan: P1203464PS03R03 (K300). Attachment 10: Section 3.7.3.
There are issues with the proposed pipe upgrade identified in Attachment D.	There is no longer a proposed upgrade of Council's pipe.
There are issues with stormwater connections. The two new stormwater connections to the channel are not supported by Council. High velocities occur in the channel, exceeding 3m/s in the proposed discharge locations. Works in the channel have the potential to alter flow behaviour and impact adversely on the channel. The site drainage must be connected to the stormwater pipe in the easement on 25&27 Pembury Rd and the stormwater pipe in the walkway between the subject property and 9 Montore Rd, prior to the pipes entering the channel to minimise the number of connections and reduce impacts on the channel.	Council indicated concern regarding the stormwater outlet at Bow Bowing creek headwalls: 1. High velocity flows at the stormwater outlets may cause flow instability and scour. Response: - The northern headwall has been removed. Flows from northern catchment will be pumped to the southern catchment for treatment prior to discharging. - The southern site drainage line has been amended to connect to the stormwater line in the easement via a buried junction pit. - Based on the water balance calculation, there is no overflow from the northern and southern catchments discharging to Bow Bowing Creek during the minor storm event. Plan: P1203464PS02R20 (E100). Report: Attachment 16 Section 4.4.
There are issues with the flood modelling.	Pit blockages of 20% for on-grade pits and 50% for sag pits have been adopted on existing stormwater pits along Pembury Road and Montore Road based on Council's requirements for pit blockage factors in Table 4.3 of the Campbelltown DCP 2009 Volume 2 Engineering Design for Development. Report: Attachment 16 Section 3.5

The pipe upgrade in the drainage easement may not be implemented. The applicant should model the proposed development, with the existing pipe network in the easement and demonstrate the impacts as it is likely this will exacerbate the increase in flooding in 25&27 Pembury Rd.	Upgrading of Council's pipe network has been removed from the proposal and it is no longer required. The proposed development has been amended and modelled to show no adverse impacts on neighbouring sites. Report: Attachment 16 Section 3.5.

In order to provide additional detail regarding the flooding of the Site and its impact, a revised document titled *Preliminary Flood Assessment: Minto Resource Recovery Facility, 7 Montore Road, Minto, NSW*, dated February 2021, has been prepared, a copy of which is at **Attachment 10**.

2.8 Noise

NSW Planning, Industry & Environment, in its 26 November 2020 submission, states:

- *Please confirm whether the use of a mechanical pulverisor and hydraulic rock breaker been considered by the noise assessment.*
- *Please confirm whether any machinery be located or operate on top of the stockpiles. If so, please confirm this been accounted for by the noise assessment.*

One (1) submission from an organisation states:

There is an acoustic report provided by Wilkinson Murray, this report only assesses residential areas to the west of the site and does not include any assessment of the impacts to businesses within the vicinity of the proposal.

Within the proposal there is proposed to be a 6m high wall along the northern and western boundary, but not on the southern or eastern boundary.

Origin Energy, in its 18 November 2020 submission, states:

The Noise Assessment Report dated January 2019 prepared by Wilkinson Murray and submitted by the applicant as part of the Proposal does not assess the noise impact on Origin LPG Terminal. The Noise Assessment provides a detailed study of the potential impacts on surrounding residential areas but provides little detail of impacts on industrial areas around the Proposal.

One (1) submission from an organisation states:

- There are no management measures nor noise monitoring proposed during operational activities for the Proposed Waste Facility.
- A Noise and Vibration Management Plan was not proposed for the Proposed Waste Facility.

Response

The use of a hydraulic rock breaker is not included quantitatively in the typical worst case noise scenario, but a pulverisor attachment has been considered.

The expected need to use a rock breaker is minimal in any one day and, furthermore, the duration of use is only likely to be for a few minutes at a time. On an $LA_{eq,15min}$ basis, the noise levels would be no higher than the overall noise emissions predicted.

The height of machinery when located on stockpiles has been accounted for in the noise assessment. One (1) of the excavators used to feed the crusher is modelled at a height of 6m to account for the time in an elevated position over a 15 minute period.

The following mitigation measures are included:

- The main noise generating activity is housed in a shed.
- A 6m acoustic wall is provided to the entire Site boundary.
- Non tonal reversing alarms for mobile plant permanently on site.
- Use of modern well maintained plant / equipment in line with noise levels documented in the Environmental Impact Statement.

Since **Origin Energy** adjoins part of the southern boundary of the Site, it has correctly interpreted the noise report which predicted an $LA_{eq,15min}$ level of 70dBA along this boundary which meets the industrial noise limit from the NPfI.

Closer review of the site plans shows the common boundary with the Origin Energy site (eastern end) is actually adjacent to the workshop building. The predicted $LA_{eq,15min}$ level of 70dBA relates to the western part of the southern boundary nearer to the sand washing plant and associated mobile plant operating in this area.

In light of submissions regarding noise to industrial neighbours, the full extent of the southern and eastern boundaries will now match the western boundary and incorporate a 6m high concrete / Hebel panel wall. The wall comprise of a 1800mm high concrete panel 200mm thick at the base of the wall with the remaining section of the wall being Hebel block.

In relation to construction noise impacts, the applicant concurs with the requirement to provide a Construction Noise and Vibration Management Plan as a necessary condition of consent and also consultation with the neighbours prior to construction.

There is no requirement to consider the lawful use of the local road network to assess the impacts of truck noise on industrial premises.

The Wilkinson Murray assessment does consider the ongoing operational noise to industrial neighbours at all four boundaries in Section 4.4. The assessment has considered the typical operations used to assess potential impacts at the residential receivers (described in Section 2.3 and 4.2 of the noise report) to also predict the noise levels at the surrounding industrial receivers. As correctly noted, this is predicted as an $LA_{eq,15min}$ level of 67dBA at the eastern boundary to 5 Montore Road, which complies with the 70dBA limit in the NPfI.

Construction noise has a Noise Management Level of 75dBA at industrial boundaries and the detailed methodology is not known at this stage to assess noise levels in such close proximity to the Site boundary which is why the applicant concurs with the requirement for both preparing a Construction Noise and Vibration Management Plan once a contractor has been selected and the need to liaise with neighbours prior to construction.

2.9 Heritage

Heritage NSW, in its 4 December 2020 submissions raised concern with the level of detail in the documents provided in the Environmental Impact Statement and recommends:

- *The Statement of Commitments in the EIS should be updated to include provisions for managing Aboriginal cultural heritage values.*
- *Any Aboriginal cultural heritage awareness inductions would benefit from the involvement of Aboriginal community representatives.*
- *An Unexpected Finds Protocol for Aboriginal objects needs to be included as part of any Construction Environmental Management Plan (CMP) prepared for the development works.*

Response

An Aboriginal Objects Due Diligence Assessment has been included as **Attachment 17**.

Recommendations of Heritage NSW above have also been included in the revised Statement of Commitments at **Attachment 4**.

2.10 Updated Plans

NSW Planning, Industry & Environment, in its 26 November 2020 submission, and Transport for NSW, in its 9 November 2020 submission, state:

- *Although it is noted the Crushing Plant (Drw: 1509-0001) and Washing Plant (also Drw: 1509-0001) plans label individual stockpiles, the Site Plan does not, instead the stockpiles are labelled as uncrushed material and crushed material or sand/sandstone/pugmilled material. Please update the Site Plan to include accurate labels.*
- *The concrete block bays, which can be seen on the Site Plan are not labelled on the Site Plan or described, please address.*
- *It is noted a large stockpile of "crushed material" would be located on the northern boundary of the site, please clarify why the stockpile covers the northern storage tanks and update the Site Plan to address.*
- *It is understood that a new driveway/access way would be required to accommodate the development. Please describe the new access and provide the relevant engineering drawings.*
- *Provide architectural drawings including elevations of the workshop, sand shed and any other permanent structure on site.*
- *Please label the tip and spread area on a plan to demonstrate that it will be separated from the larger waste stockpiles and that its size will be sufficient to meet the requirements of the EPA's Standards for Managing Construction Waste.*

Response

The plans of the proposed development have been revised, with a copy of the revised plans contained as **Attachment 14.** Plans of the buildings to be erected on the Site are provided as **Attachment 15**.

2.11 Fire and Rescue

NSW Fire and Rescue, in its 19 November 2020 submissions, raises concern relating to the operation of the Site having regard to the Fire and Rescue Fire Safety Guidelines.

Response

As stated in the Environmental Impact Statement:

> *Fire Safety Guideline. Fire Safety in Waste Facilities (the Guideline)*
>
> *Fires at waste facilities may pose special problems for firefighting, including:*
>
> - *large amounts of combustible waste.*
> - *poor storage and separation, creating fire risks and reducing firefighting access.*
> - *inadequate hydrants, fire water management, fire suppression systems and smoke hazard management.*
>
> *The Guideline helps waste facilities reduce and manage the risk of fires starting and spreading, to protect employees, emergency services, the community, businesses and the environment. The Guideline will also be considered by consent authorities in determining development applications and can be used by regulatory authorities in licensing.*
>
> *The Guideline outlines standard approaches for fire risk management, fire safety systems, storage, stockpiles and planning at waste facilities.*
>
> *The Guideline applies to any premises (existing or proposed) used for the storage, treatment, processing, sorting or resource recovery of combustible waste material.*
>
> ***Combustible waste material** is any solid waste material which can readily ignite and burn under normal conditions including:*
>
> - *wood and wood-based products*
> - *paper and cardboard*
> - *plastic*
> - *textiles*
> - *rubber*
> - *waste-derived fuels such as refuse derived fuels, solid recovered fuels and processed engineered fuels*
> - *metal with combustible contaminants*

- *any other waste material that may pose a notable fire risk.*

The Guideline does not apply to sites with less than 50m^3 of combustible waste or areas of a waste facility used for:

- *composting and green waste*
- *liquid waste treatment*
- *special and hazardous waste treatment*
- *waste tyre treatment*
- *sites that are landfills only.*

The proposed Resource Recovery Facility will not accept combustible waste for processing on the Site. As such, the Guideline does not apply to the proposed development.

Swept Path diagrams, including that of a fire truck, are included as **Attachment 9**.

As stated in the Environmental Impact Statement:

Firefighting Water Containment Measures

Both of the proposed sediment basins/tanks (Northern and Southern) will be fitted with a manual shut-off valve on the outlet pipe. In the event of a firefighting emergency, the shut-off valve will activated, preventing water being released from the sediment basins/tanks and ensuring no release of fire hydrant water from the Site. The proposed site storage volume of 200 kl is sufficient to contain 108 kl of fire hydrant water based on a hydrant flow rate 20L/sec (two hydrants simultaneously) for 90 minutes. Fire hydrant water stored within the site basins/tanks is to be collected by a licensed wastewater contractor following a fire event.

All buildings on the Site will comply with the BCA requirements on a "deemed to satisfy" rather than an engineered solution. Any deviation from this would involve the engagement of the FRNSW.

The applicant agrees to a condition of consent if a Fire Engineered Solution is required and that clause E1.10 and E2.3 will be addressed.

Conditions recommended are acceptable to the applicant.

3. Revised Statement of Commitments

In response to the modifications which have been made to the documentation in response to submissions, a Revised Statement of Commitments has been prepared, a copy of which is at **Attachment 4**.

The Revised Statement of Commitments incorporates the additional management measures recommended in the Response to Submissions and also includes recommendation management measures provide by agencies who have made submissions.

Modifications include:

- Addition of Asbestos Management procedures.
- Addition of Aboriginal Heritage procedures.
- Modified remediation procedures.
- Modified air quality management procedures.
- Additional acoustic impact mitigation procedures.
- Additional water quality management procedures.
- Modified erosion and sediment controls procedures.
- Modified stormwater management procedures.