

5 August 2020

P1427 JE 39 Enterprise Cres McDougalls Hill RFI

Jackson Environment and Planning Pty Ltd
Suite 102, Level 1, 25-29 Berry St,
North Sydney NSW 2060

Attn: Dr Mark Jackson

Dear Mark,

Modified Operations -39 Enterprise Crescent, McDougalls Hill

Further to your request we have reviewed the proposal to modify the proposed operations for the above project. We have considered these changes in conjunction with the traffic report and RFIs previously prepared by ourselves for the project and offer the following in response to the proposed change.

Proposed Changes to Site Operation

Monday to Friday operations:

- Only commercial skip bin collection vehicles will use the facility. Queueing will be avoided through the traffic management procedure and driver training requiring drivers to radio call ahead to ensure their arrival does not result in queueing.
- Skip bin collections will occur Mon-Fri 7am to 3pm. 3-6pm to sort, separate and process wastes received during the day.
- No passenger vehicles with or without trailers.

Saturday and Sunday operations:

- Householder vehicles with or without trailers will be provided access to the facility 8am – 2pm Saturdays and 10am – 1pm Sundays.
- No commercial skip bin collections on the weekends.
- 2pm -4pm Saturdays and 1pm to 3pm Sundays the facility will sort, separate and process wastes received during the day.

Updated Traffic Assessment

Traffic generation associated with the proposed development has been based on the operational information provided by the proponent (**Attachment B**) and reviewed against the data in the traffic assessments for two similar sites, Kembla Grange and Minto. This data has been applied to the proposed change in site operations and is detailed in Table 1.

Table 1– Predicted vehicles entering site each day

	Initial Vol's	Weekday 7am-3pm Daily	Hourly Vehicles	Weekend Sat 8am-2pm Sun 10am-1pm	Hourly Vehicles
Staff operational vehicles	15	15	15 (start and finish of day)	7	7 (start and finish of day)
Passenger vehicles with trailers	13			60(Sat) / 30 (Sun)	10
15 tonne hook lift bin truck with 10m3 skip (8.6t skip bin max)	10	14	1.75		
15 tonne hook lift bin truck with 12m3 skip (10.4t skip load max)	4	6	0.75		
15 tonne hook lift bin truck with 30m3 skip (26t skip load max)	8	11	1.4		
12 tonne capacity tipper truck (for product pickup)	3	4	0.5		
20 tonne capacity tipper truck (for product pickup)	8	11	1.4		
SUB TOTAL HEAVY VEHICLES		46	6-8		
TOTAL VEHICLES PER DAY	61	61		67	

This would equate to an additional 122 vehicle movements per day (61 inbound and 61 outbound) generated by the project site Monday to Friday with up to 134 vehicle movements of a Saturday (67 inbound and 67 outbound) and less of a Sunday.

Based on the TIA for the Minto facility, the peak day is likely to be a Monday with the first hour of opening seeing the highest demand equating to 16% of the total daily movements, with lower demands spread across the remainder of the day.

Applying this to the 46 daily arrivals relating to product disposal/pick up, would see a peak demand for 7-8 vehicles in this hour.

- 7 heavy vehicles delivering recycling
- 1 heavy vehicle collecting recycled product

Of a weekend all movements are light vehicles with the potential for trailers. A typical car and trailer combination measure less than the commercial waste vehicles with an average of 10 customers per hour.

Queuing Assessment

Considering the above, queuing associated with the site has been reviewed to understand the sites capacity to accommodate vehicles on site, particularly should a delay occur during unloading. Staff movements are exempt from the queuing analysis with staff having arrived to site prior to the start of operations and their vehicles to be stored within the basement parking on site, accessed via a separate entry than the waste operation.

The entry area within the site shall be marked to provide for two parallel entry bays. The width of the entry roller door shall be designed to provide easy vehicle entry from either of the bays onto the weighbridge, which shall be managed to enable a vehicle to hold while another vehicle is unloading. The weighbridge can be flush mounted with the pavement to enable suitable manoeuvring onto it. This would enable four vehicles to be waiting or unloading simultaneously, all contained

within the site. When the unloaded vehicle exits onto the outbound weighbridge the inbound vehicle shall then progress off the inbound weighbridge and the next waiting vehicle can then enter.

Whilst on the weighbridge loads shall be reviewed and assessed for suitability with staff able to then direct them to the most appropriate unloading bays or in the event of contaminated waste for them to be directed to instead drive through and exit the site.

It is possible that vehicles purchasing or loading outbound product can also be within the site. The loading area for outbound product is separate to the unloading area and as such these vehicles can be loaded and then permitted to exit whilst other vehicles are unloading.

All such movements will be subject to the Operational Management Plan which is part of the Environment Management Plan and EPA licence for the premises.

As acknowledged by Council the commercial truck movements can be managed with communications by two way radio ensuring that vehicle arrivals can be coordinated throughout the day.

Whilst there is no certainty around the time required to unload a truck or trailer, as a worst-case scenario most loads can be processed within 10 minutes. Of a weekend, staff on site will help direct public users to avoid confusion and delay. This approach is in place at many Council Community Recycling Centres across NSW which helps reduce the time required for the deposit of materials. This minimises delays and ensures vehicle turnover on site. The predicted time for a truck arriving with a skip bin to unload, be inspected and depart the site is more likely to be 6-8 minutes. Similarly, light vehicles with trailers can be processed in a similar time frame with assistance by staff within the facility. On this basis the site can manage the unloading of 6-10 large loads each hour, with the site layout to allow for 3 vehicles to hold whilst a vehicle is unloading on site.

The operational analysis for the site indicates 6-8 trucks arriving per hour with trucks relating to outbound product able to be accommodated within the facility at the same time as a disposal vehicle. Therefore, the capacity of the site during the week is adequate to accommodate the peak demands at the disposal access (6-10 vehicles per hour) without the need for queued vehicles to impact the local roads.

Of a weekend the demand for 10 vehicles per hour, some of which may include trailers, can also be managed without impacting the local roads. Four customers with trailers will operate on site in a manner consistent with the commercial operator vehicles with queuing provided for two car/trailer combinations whilst a further one is unloading, and one is on the weighbridge. Single vehicles will require less queuing space and have the potential for two cars/utes to hold in the area otherwise taken by a single car/trailer combination. Similarly, the space required within the site for a single vehicle to manoeuvre upon entry or exit will enable more than one vehicle to be within the site at any point in time.

In the event of a significant delay on site or should multiple vehicles (more than four) all arrive simultaneously, further consideration has been given to the impact of this on the safe operation of the adjoining road network. Should four vehicles with trailers already be on site, an overflow waiting bay has been provided across the site building frontage but within the site. In this way a vehicle can be directed to enter the site and hold there until a vehicle exits the site. The vehicle can then manoeuvre into one of the entry bays and enter as required. This overflow bay is designed to cater for occasional deliveries to the office on site and so shall be empty of a weekend. No loading or unloading of recycled product shall occur in this space.

Whilst queuing by car and trailer combinations on a weekend is not expected, we recommend this be monitored as part of the Traffic Management Plan for the facility. Should queuing occur with car and trailer combinations consistently at peak times on the weekend, consideration may be given to introducing an on-line booking system for scheduling the arrival and drop off of waste materials by all households. This will help to further mitigate and avoid any queuing occurring at the site. As part of this management approach, educating customers on the process for scheduling a visit to the facility will help ensure that traffic in and around the development is managed well at all times.

The width of Enterprise Crescent (12-13m) allows for kerbside parking with the exception of a small section of designated No Stopping to the north of the site on the opposite kerbside. The site is positioned on a straight section of road with good forward visibility. A review of Nearmap aerial imagery for a weekend (Sunday 18/8/19) shows no vehicles parked along Enterprise Crescent near the subject site. This would ensure that in the unusual event of more than five vehicles with trailers all arriving simultaneously of a weekend, that a vehicle could pass safely on the left hand side a propped vehicle waiting to enter the site.

Conclusion

In conclusion the proposed modifications to the operations for the site can provide for the separation of commercial/contractor waste deliveries and local community demands. The layout of the site is suitable to provide for the hourly throughput of the facility allowing for the additional daily vehicle demands and provide for the efficient operation of the site throughout the week and of a weekend.

The holding areas will provide for up to four heavy vehicles on site at any one time dropping off waste with the potential for a further truck collecting recycling within the site. As car and trailer combinations are similar in length to waste trucks, the site can operate in a similar manner of a weekend. Light vehicles such as utes will further increase weekend capacity as they require less waiting space and manoeuvring area compared with vehicles with trailers. The utilisation of an additional on site holding bay of a weekend can further support the operation of the site and reduce the risk of queuing onto the local road network.

Please feel free to contact me on 4032 7979, should you have any queries.

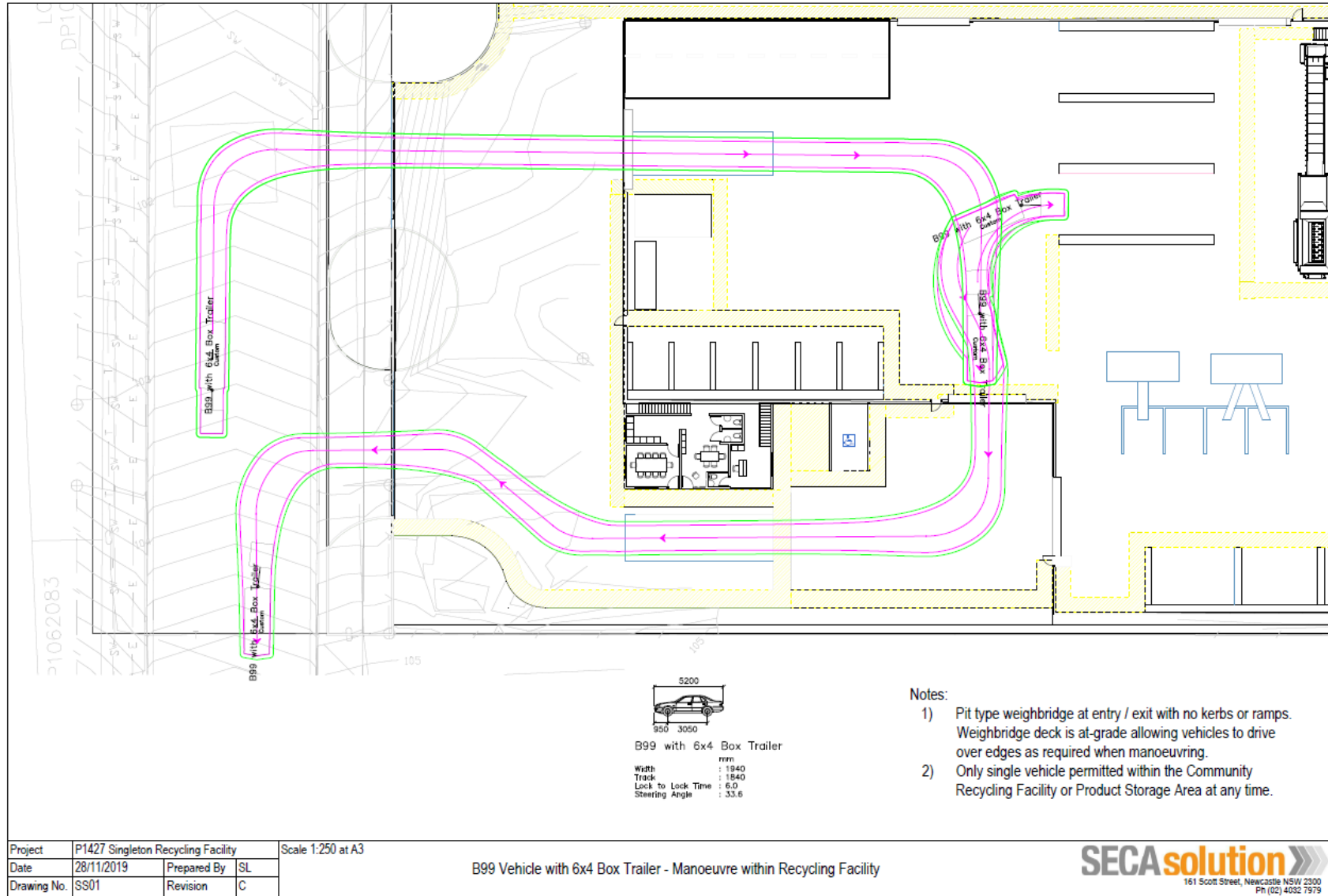
Yours sincerely

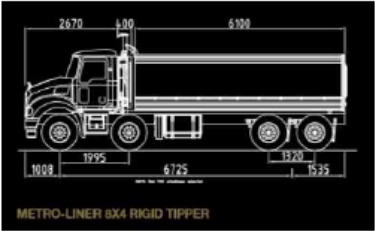
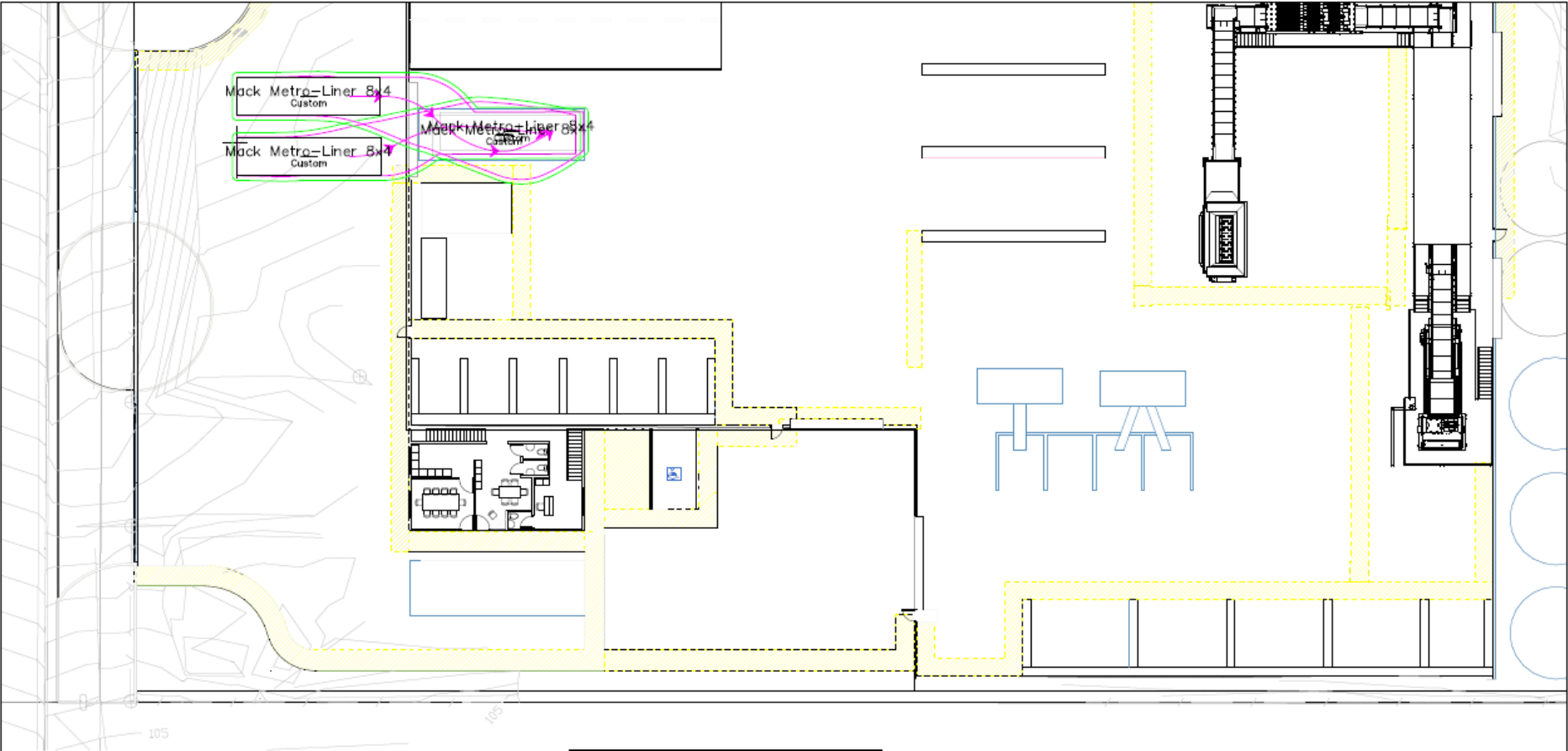


Cathy Thomas

Director

Attachment A – Swept Paths





- Notes:
- 1) Pit type weighbridge at entry / exit with no kerbs or ramps. Weighbridge deck is at-grade allowing vehicles to drive over edges as required when manoeuvring.
 - 2) Only single vehicle permitted within the Community Recycling Facility or Product Storage Area at any time.

Project	P1427 Singleton Recycling Facility		
Date	28/11/2019	Prepared By	SL
Drawing No.	SS02	Revision	C

Scale 1:250 at A3

Mack Metro-Liner 8x4 Tipper - Queued vehicles accessing weighbridge

