

01 Feb 2022

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Attn: Grace Macdonald; Senior Planner

ABN: 81 168 423 872

RE: 327-355 Burley Road, Horsley Park (SSD-10436) – MOD 4 to Lot 204 (formerly 203) – Request for Additional Information - Transport Statement

Dear Grace,

I refer to your request to address the comments raised by Transport for New South Wales (TfNSW) dated 23/12/2021 and Fairfield City Council (Council) dated 10/01/2022 for Lot 204 located at 327-355 Burley Road, Horsley Park (the Site). The existing key roads near the vicinity of the Site are depicted below in **Figure 1**.



Figure 1: Existing Key Roads Near the Site

Comment 1:

'Lot 204 truck accesses

The Department notes the modification includes two truck entries / exits at Lot 204 adjacent to each other on Johnston Crescent. Given Johnston Crescent will carry two-way traffic and connects to Old Wallgrove Road in the future, the Department raises concerns about manoeuvrability and road safety at the proposed truck accesses at Lot 204. Should two 26 m B-Doubles associated with two tenants use the accesses concurrently, there is a potential conflict of movements at the accesses and potential impacts on other road uses travelling north-bound and south-bound on Johnston Crescent. Please clarify the manoeuvrability at the proposed truck accesses including swept path diagrams showing 26 m B-Doubles for both tenancies manoeuvring at the same time and any additional mitigation measures to ensure road safety where applicable.'

Ason Group's response:

In order to provide a detailed response, this comment has been divided into different items.

Item number 1.1

'The Department notes the modification includes two truck entries / exits at Lot 204 adjacent to each other on Johnston Crescent. Given Johnston Crescent will carry two-way traffic and connects to Old Wallgrove Road in the future, the Department raises concerns about manoeuvrability and road safety at the proposed truck accesses at Lot 204.'

With regards to the truck manoeuvrability at Warehouse A, it is noted that this building provides for a one-way circulation system, with the entry point being located towards the southern boundary of the Site and the exit point being located towards the northern end of Warehouse A. Therefore, there are no conflicts for truck entry and exit at Warehouse A.

Building B has a single entry / exit point.

A breakdown of the makeup of heavy vehicles that are expected to use the Site on an hourly basis throughout the day for Warehouse A is shown overleaf in **Table 1**. It is important to note that the volumes shown in the table overleaf are based on information provided to Ason Group as part of the previous Modification applications, noting that the Warehouse A is speculative at the moment.

Table 1: Daily and Hourly Heavy Vehicle Movement Breakdown – Warehouse A

FROM	TO	INBOUND MOVEMENTS				OUTBOUND MOVEMENTS				TOTAL
		8.8m MRV	12.5m HRV	20.0m AV	26.0m BD	8.8m MRV	12.5m HRV	20.0m AV	26.0m BD	
6:00 am	7:00 am		1	1						2
7:00 am	8:00 am		1	1	1					3
8:00 am	9:00 am	1	1							2
9:00 am	10:00 am		1	3						4
10:00 am	11:00 am									0
2:00 pm	3:00 pm									0
3:00 pm	4:00 pm							3	1	4
4:00 pm	5:00 pm					1	3	1		5
5:00 pm	6:00 pm									0
6:00 pm	7:00 pm						1	1		2
Total trips										22

Note: Ason Group has estimated the truck movements and % of HV for this warehouse through the review of our data source.

The following vehicles are likely to be parked at the loading facilities within Warehouse A on a daily basis:

- 1 x 8.8m Medium Rigid Vehicle (MRV);
- 4 x 12.5m Heavy Rigid Vehicles (HRVs); and
- 5 x 20.0m Articulated Vehicles (AVs).
- 1 x 26.0m B-double is expected to uncouple per day (if required).

Accordingly, Warehouse A with a provision of 6 Roller Shutter Doors (RSDs) and 4 recessed docks can sufficiently accommodate the proposed estimated traffic to this building every hour.

Furthermore, a breakdown of the makeup of heavy vehicles that are expected to use the Site on an hourly basis throughout the day for Warehouse B is shown overleaf in **Table 2**. As described above, it is noted that the volumes shown in the table overleaf are based on information provided to Ason Group as part of the previous Modification applications, noting that the tenant for Warehouse B is speculative at the moment.

Table 2: Daily and Hourly Heavy Vehicle Movement Breakdown – Warehouse B

FROM	TO	INBOUND MOVEMENTS			OUTBOUND MOVEMENTS			TOTAL
		8.8m MRV	12.5m HRV	20.0m AV	8.8m MRV	12.5m HRV	20.0m AV	
6:00 am	7:00 am							0
7:00 am	8:00 am	1	1					2
8:00 am	9:00 am		1					1
9:00 am	10:00 am			1				1
10:00 am	11:00 am			1				1
11:00 am	12:00 pm						1	1
12:00 pm	1:00 pm						1	1
1:00 pm	2:00 pm					1		1
2:00 pm	3:00 pm					1		1
3:00 pm	4:00 pm				1			1
Total trips								10

Note: Ason Group has estimated the truck movements and % of HV for this warehouse through the review of our data source.

The following vehicles are likely to be parked at the loading facilities at Warehouse B on a daily basis:

- 1 x 8.8m MRV;
- 2 x 12.5m HRVs; and
- 2 x 20.0m AVs.
- **1 x 26.0m B-double is expected to uncouple (if required once per week).**

Accordingly, Warehouse B with a provision of 3 Roller Shutter Doors (RSDs) and 2 recessed docks can sufficiently accommodate the proposed estimated traffic to this building every hour.

As noted above, it is not expected that there will be any considerable amount of 26.0m B-doubles uncoupling at Warehouse B on a daily basis. It is emphasised that Warehouse B only has a GFA of 5,512m² and is unlikely to attract such large trucks. Furthermore, the provision for B-double access at Warehouse B has been shown to ensure maximum flexibility for the operation of this warehouse in the future. However, such movements are quite infrequent during the week. Therefore, it is assumed that B-doubles will most likely enter / exit from Warehouse B once per week (if and when required) with prior notice by the future tenants.

Based on the data provided within **Table 1** and **Table 2** and Ason Group's significant experience with industrial sites, it is highly unlikely that B-doubles will be accessing Warehouses A and B at the same time. It is even noted within the design assessment that when B-doubles are entering / exiting from Warehouse B, there will be no other truck movements within this respective warehouse. Therefore, it can be inferred that the probability of two B-Doubles accessing Warehouses A and B simultaneously and at any given time is close to zero.

Moreover, there are sufficient sight lines at the Warehouse A exit point and at the Warehouse B entry / exit point to ensure when vehicles are entering / exiting from the respective warehouses, drivers will be able to sight oncoming vehicles easily and give-way as required. This ensures minimal road and traffic safety conflicts at the access points along Johnston Crescent.

To formalise this, additional signage and line-marking including a Give-Way sign can be implemented at the Warehouse A exit point to address this comment (and has also been shown within **Attachment A**).

Item number 1.2

‘Should two 26 m B-Doubles associated with two tenants use the accesses concurrently, there is a potential conflict of movements at the accesses and potential impacts on other road uses travelling north-bound and south-bound on Johnston Crescent. Please clarify the manoeuvrability at the proposed truck accesses including swept path diagrams showing 26 m B-Doubles for both tenancies manoeuvring at the same time and any additional mitigation measures to ensure road safety where applicable.’

Based on the data provided within **Table 1** and **Table 2** (described in item 1.1), it is highly unlikely that B-doubles will be accessing Warehouses A and B at the same time. Therefore, it can be inferred that the probability of two B-Doubles accessing Warehouses A and B simultaneously and at any given time is close to zero.

Furthermore, it is noted that both Warehouses A and B can accommodate B-doubles. Notwithstanding, although Warehouse B provides for this provision allowing maximum flexibility for the tenant, there will be infrequent B-double movements at this warehouse. This is reiterated within the design assessment (AG1839-03-v03.dwg) which states that when B-doubles are entering / exiting from Warehouse B, there will be no other truck movements within this respective warehouse.

Further to the above reasons, with regards to potential conflicts for vehicles manoeuvring within the Site, tenants can manage heavy vehicle movements within the respective warehouses through a specific management plan. Operational management measures will take place to ensure potential conflicts will be minimised as much as practically possible.

Lastly, swept path diagrams showing B-doubles manoeuvring at the same time at Warehouses A and B is shown in **Figure 2** and within **Attachment A**.

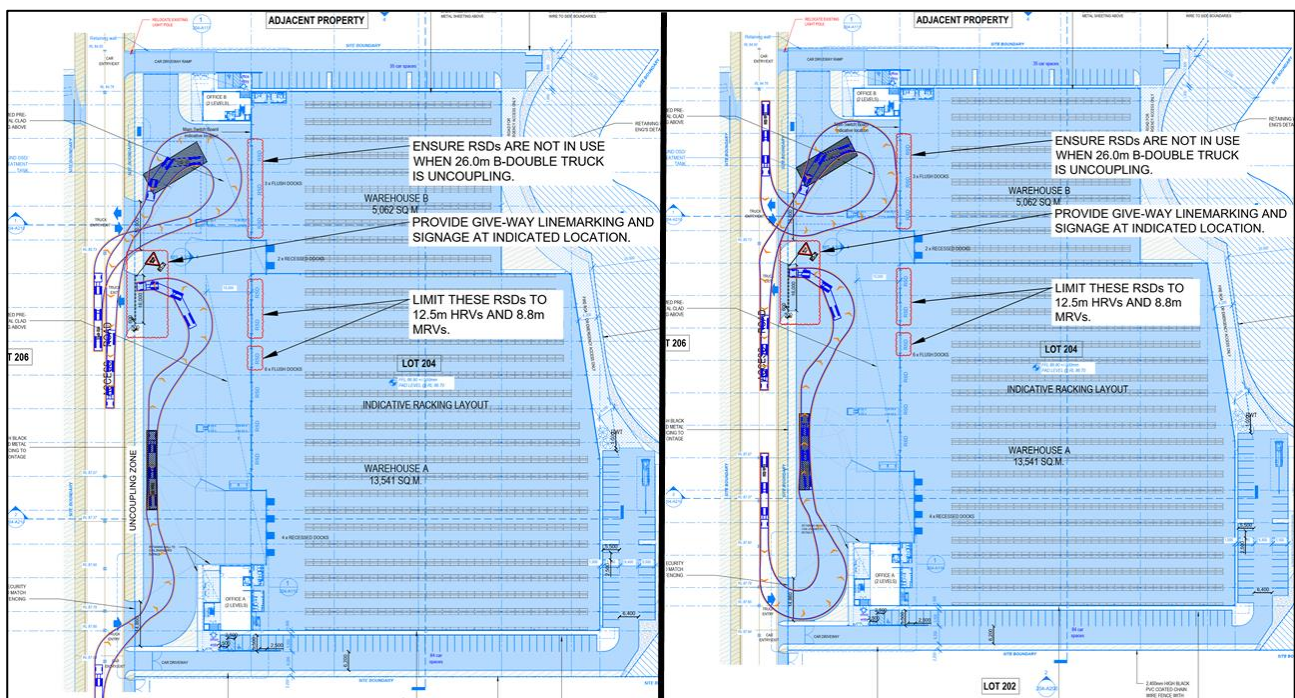


Figure 2: B-double Exit Movements at Warehouses A and B

Comment 1:

'The site does not make provision for a loading bay to accommodate 26m B-Double vehicles; Swept path diagrams (file names AG1839-03-v03.dwg sheets AG06 and AG07) indicate that a 26m B-Double vehicle manoeuvring within the site will be impacted by heavy vehicles parking at the recessed docks. Service vehicles shall only carry out loading and unloading activities from the designated loading areas and shall not obstruct the flow of traffic within the site. Additional information shall be submitted to address this concern;'

Ason Group's response:

AG06 and AG07 within the design assessment (AG1839-03-v03.dwg) is reproduced in **Figure 3**.

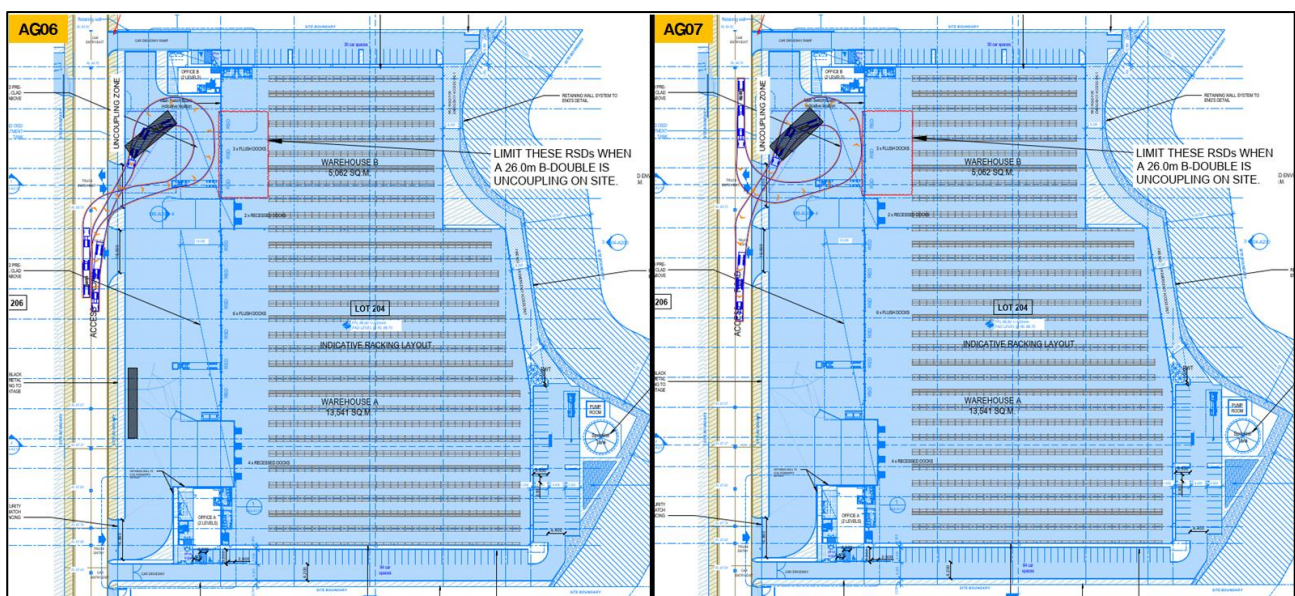


Figure 3: Pages AG06 and AG07 of AG1839-03-v03.dwg

To begin with, B-doubles will be able to uncouple within Warehouse B through the dedicated uncoupling zone.

Moreover, based on the information provided within **Table 2**, there is a very low probability that B-doubles will be accessing Warehouse B on a regular basis. Rather, B-doubles are expected to uncouple within Warehouse B once per week (if and when required). Therefore, it can be inferred that the likelihood of a B-double accessing Warehouse B is very low.

Through the implementation of an Operational Traffic Management Plan (OTMP), the tenant can ensure that when a B-double is entering / exiting from Warehouse B, **there would be no internal truck movements** within this building. This will guarantee that there will be minimal traffic conflicts between the B-double and other vehicles.

The OTMP or Loading Dock Management Plan (LDMP) can be provided via a suitable Condition of Consent at the Occupation Certification (OC) stage.

Comment 2:

'Swept path diagram (file name AG1839-03-v03.dwg sheet AG06) indicates that 26m B-Double vehicle turn right into the site via the truck entry/exit driveway. It is anticipated that heavy vehicles would generally head south on Johnston Crescent to turn left into the site rather than making the right turn into the site. Clarification is required about this right-turn movement which is required to use the opposing traffic lane in order to turn into the driveway. Based on the applicant's swept path diagram (AG1839-03-v03.dwg sheet AG07), there is insufficient width at the entry/exit driveway to accommodate two-way simultaneous traffic movements i.e. left turn movement undertaken by a southbound 26m B-Double vehicle into the site and another vehicle waiting to exit the site. Concern is raised regarding 26m B-Double vehicle turning left from Johnston Crescent into the site via the entry/exit driveway which will conflict with other users;'

Ason Group's response:

In order to provide a more detailed response, this comment has been divided into different items.

Item number 2.1

'Swept path diagram (file name AG1839-03-v03.dwg sheet AG06) indicates that 26m B-Double vehicle turn right into the site via the truck entry/exit driveway. It is anticipated that heavy vehicles would generally head south on Johnston Crescent to turn left into the site rather than making the right turn into the site. Clarification is required about this right-turn movement which is required to use the opposing traffic lane in order to turn into the driveway.'

It is noted that AG06 (shown in **Figure 3**) indicates that a B-double would make a right turn in order to enter Warehouse B. This is mainly because for a temporary period of time until the signalised intersection (Old Wallgrove Road / Burley Road / Access Road 1) is constructed, vehicles will be utilising Johnston Crescent (from the south) in order to access the Site. In this regard, the swept path diagram shown within AG06 depicts a B-double turning right into Warehouse B and has been tested for conservativeness. Notably, during this temporary period, there will be no traffic conflicts with the opposing traffic lane as there will be no vehicles entering into the Site from the north.

Furthermore, it is noted that Council's comment regarding vehicles turning left into the Site does in fact apply to the Site when the signalised intersection (Old Wallgrove Road / Burley Road / Access Road 1) is constructed. In this regard, AG07 (shown in **Figure 3**) showcases vehicles turning left into the Site. This swept path diagram accounts for the ultimate truck entry movement strategies following construction of the signalised intersection in the future.

Finally, noting that B-Doubles movements from northbound and southbound along Johnston Crescent is possible, it can be concluded that the access design geometry is suitable and provides for future-proofing of the Site.

Item number 2.2

'Based on the applicant's swept path diagram (AG1839-03-v03.dwg sheet AG07), there is insufficient width at the entry/exit driveway to accommodate two-way simultaneous traffic movements i.e. left turn movement undertaken by a southbound 26m B-Double vehicle into the site and another vehicle waiting to exit the site. Concern is raised regarding 26m B-Double vehicle turning left from Johnston Crescent into the site via the entry/exit driveway which will conflict with other users;'

AG07 (shown in **Figure 3**) indicates that a B-double would make a left turn in order to enter Warehouse B.

Notably, based on the information provided within **Table 2**, there is a very low probability that B-doubles will be accessing Warehouse B on a regular basis. Rather, B-doubles are expected to uncouple within Warehouse B once per week (if and when required). Therefore, it can be inferred that the likelihood of a B-double accessing Warehouse B is very low and that there will be minimal traffic conflicts between the B-double and other vehicles within Warehouse B.

This is reiterated within the design assessment (AG1839-03-v03.dwg) which states that when B-doubles are entering / exiting from Warehouse B, there will be no other truck movements within this respective warehouse.

Further to the above reasons, through the implementation of an OTMP, the tenant can ensure that when a B-double is entering / exiting from Warehouse B, there would be no internal truck movements within this building. This will guarantee that there will be minimal traffic conflicts between the B-double and other vehicles.

The OTMP or a LDMP can be provided via a suitable Condition of Consent at the OC stage.

Comment 3:

'Swept path diagrams (file name AG1839-03-v03.dwg sheets AG04, AG05 and AG06) show the proposed uncoupling zone adjacent to the recessed loading docks would impact heavy vehicles turning into and out of the loading docks. Additional shall be submitted to Council to address this concern;'

Ason Group's response:

AG04 and AG05 within the design assessment (AG1839-03-v03.dwg) is reproduced in **Figure 4**.

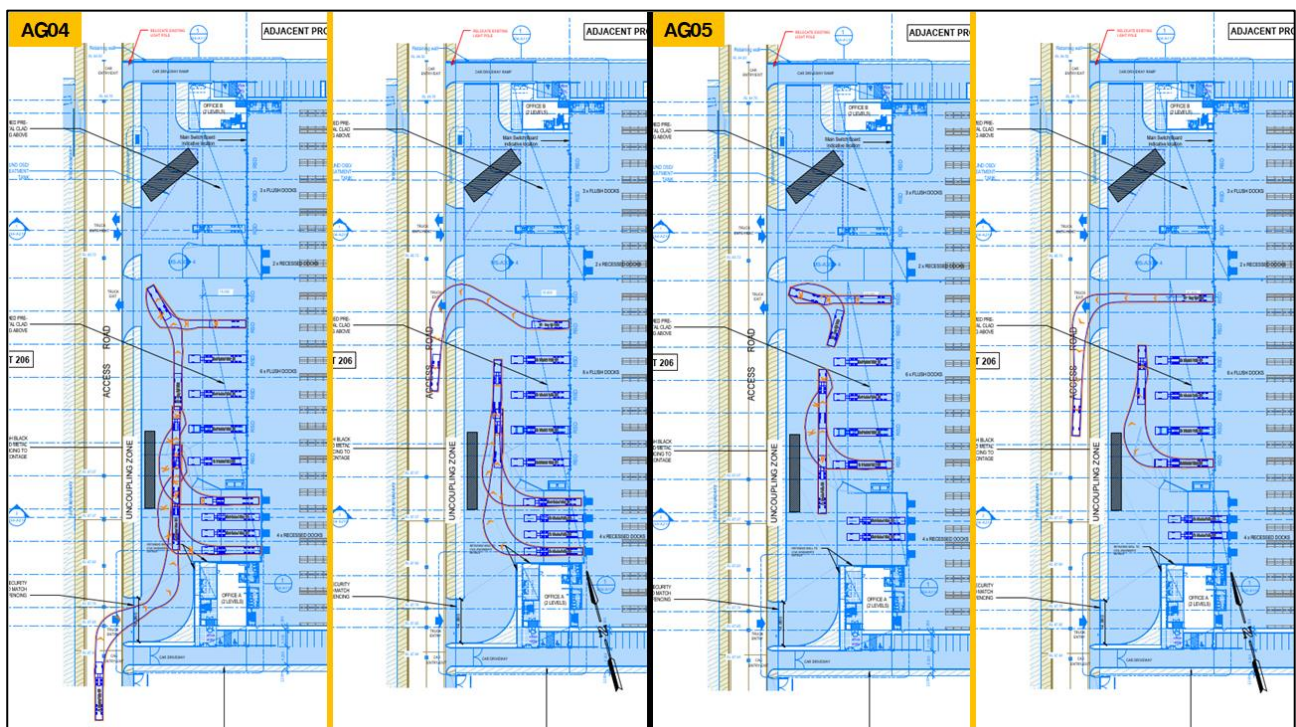


Figure 4: Pages AG04 and AG05 of AG1839-03-v03.dwg

AG04 and AG05 (shown in **Figure 4**) indicate the black hatched area as the uncoupling area for B-doubles within Warehouse A. Notably, the swept path diagram indicates that when vehicles are entering / exiting from the respective loading docks within Warehouse A, they will not be obstructed by the uncoupling zone. All the swept path diagrams are clear of the uncoupling zone.

Furthermore, based on the data within **Table 1**, the daily B-double volumes are very low (approximately one truck) for Warehouse A. It is noted that a B-double (if needed on a very rare occasion) will uncouple to the west of the proposed RSDs and recessed docks (as shown in **Figure 4**). Again, it is important to emphasise that during normal operation, there will be no frequent movements of B-doubles. Therefore, this occurrence will happen very infrequently.

Page AG06 (shown in **Figure 3**) indicates the black hatched area as the uncoupling area for B-doubles within Warehouse B.

To begin with, it is noted within **Table 2** that there is a very low probability that B-doubles will be accessing Warehouse B on a regular basis. Rather, B-doubles are expected to uncouple within Warehouse B once per week (if and when required). Therefore, it can be inferred that the likelihood of a B-double accessing Warehouse B will be infrequent and that there will be minimal traffic conflicts between the B-double and other vehicles within this building.

Furthermore, when a B-double is uncoupling within Warehouse B, the flush and recessed docks located at Warehouse B will be unoccupied to facilitate this activity and provide for flexibility of truck manoeuvres on site, through a specific management plan and under pre-scheduled orders by the proposed tenants. Operational management measures will take place to ensure potential conflicts will be minimised as much as practically possible. This will ensure there are minimal (if any) conflicts with internal vehicle movements.

The OTMP or a LDMP can be provided via a suitable Condition of Consent at the OC stage.

Comment 4:

‘Swept path diagram (file name AG1839-03-v03.dwg sheet AG11) shows that heavy rigid vehicles entering the southernmost and northernmost driveways of the site will potentially conflict with other road users. The width of the driveways is not sufficient to cater for the simultaneous movements of a HRV and another vehicle. Additional information shall be submitted to Council to address this concern; and’

Ason Group’s response:

It is noted that the 12.5m Heavy Rigid Vehicle (HRV) represent fire trucks entering the car park from the northernmost driveway and exiting from the southernmost driveway will only do so during an emergency event and on a very rare occasion. This swept path has been shown to confirm that during such emergency events, fire trucks can access the proposed development with no issues. Otherwise, these driveways will only be utilised by light vehicles on a regular basis.

It is also important to consider that light vehicles are unlikely to try to enter nor exit the Site during this event. Therefore, there is little possibility for potential conflicts at the northernmost and southernmost car park access driveways (as this event only happens during an emergency and is not a regular occurrence).

Comment 5:

'A loading management plan providing a summary of the types and the frequency of vehicles servicing the site on a daily basis throughout the day shall be submitted to Council for assessment.'

Ason Group's response:

An OTMP or a LDMP addressing the above concerns can be provided to Council via a suitable Condition of Consent at the OC stage.

To conclude, the responses provided above further clarify and respond to the comments raised by TfNSW and Fairfield City Council. We trust the above is of assistance and if you have any questions, please do not hesitate to contact the undersigned or Dr. Ali Rasouli.

Sincerely Yours,



Osama Hashmi

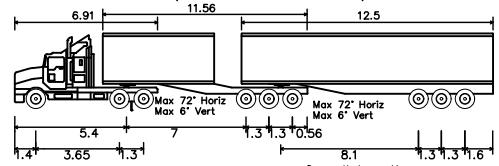
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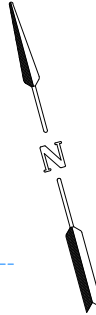
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Attachment A

Additional Swept Path Assessment and Design Commentary



Overall Length	26.000m
Overall Width	2.500m
Overall Body Height	4.300m
Min Body Ground Clearance	0.540m
Track Width	2.500m
Lock to Lock Time	6.00 sec
Curb to Curb Turning Radius	15.000m



This drawing is provided for information purposes only and should not be used for construction.
Base Plan prepared by HL Architects, received 02.11.2021.
Swept path assessments completed at 10 km/h and 300mm clearance.

DESIGNED Osama Hashmi	PAPER SIZE A3
APPROVED BY A. RASOULI	DATE 28.01.2022
SCALE 1:1000	

CLIENT	ESR AUSTRALIA
PROJECT	1839 LOT 204, HORSLEY PARK

DOCUMENT INFORMATION	
DESIGN ASSESSMENT	
SWEPT PATH ASSESSMENT	
FILE NAME	SHEET
AG1839-04-v01.dwg	AG02

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