Traffic Impact Assessment

68-70 Victoria Street, Smithfield NSW 2164

September 2024

APEX ENGINEERS

Type of Assessment: Traffic Impact Assessment

Site Location: 68-70 Victoria Street, Smithfield NSW 2164

Prepared for: D&N Rubber Refinery Pty Ltd

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1. Introduction

APEX Engineers were engaged by D&N Rubber Refinery Pty Ltd to provide a traffic impact assessment as a part of the development application for the proposed Tyre Recycling Facility at 68-70 Victoria Street in Smithfield.

This report has been structured into the following sections:

- **Section 2** Describes the existing transport conditions in the locality and provides an overview of the proposed development;
- **Section 3** Assesses the car parking provision requirements applicable for the subject development;
- **Section 4** Provides a review of the proposed on-site car parking spaces and the manoeuvrability conditions of heavy vehicles into and out of the site and within the on-site car park;
- **Section 5** Provides an estimate of the traffic impact anticipated to be generated by the proposed development on the surrounding local road network; and
- **Section 6** Provides the summary and conclusions of the study.

1.1 Consultation Summary

APEX Engineers have consulted twice with Transport for NSW in relation to this proposal.

Prior to obtaining the Planning Secretary's Environmental Assessment Requirements (SEARs)

A meeting was held via MS Teams on the 1st of February 2023 with the relevant stakeholders at Transport for NSW, to discuss the matters raised in the letter dated 7th December 2022 (ref: SYD22/01398/01). The following design requirements were mentioned in this meeting:

1. The driveway on 70 Victoria Street is to be configured as left-in access only (for both trucks and cars). This driveway should be designed on the basis of the swept path for the largest vehicle accessing the site.
2. The driveway on 68 Victoria Street is to be configured as left-out access only (for both trucks and cars). This driveway should be designed on the basis of the swept path for the largest vehicle exiting the site.
3. Signage should be provided at each driveway to indicate that they cater for left-in / left-out access only (no right turns into or out of Victoria Road).
4. The weighbridge should be located further into the site, away from the entry driveway, so that the largest vehicle entering the site can do so while the weighbridge is occupied by another vehicle.
5. All vehicles should exit the site in forward gear.

The current design caters for all the above requirements, as discussed in **Section 4** of this report.

<u>After obtaining the Planning Secretary's Environmental Assessment Requirements (SEARs)</u>

A meeting was held via MS Teams on the 22nd of September 2023 with the relevant stakeholders at Transport for NSW, to discuss any additional matters (beyond those already discussed in the first meeting) in light of the SEARs requirements.

In addition to the matters outlined above from the first meeting with TfNSW, the following comments were noted:

1) Both driveways should be designed to cater for the largest vehicle accessing through them. Details relating to any widening of the existing driveways should be provided to Transport for NSW.
2) Any impacts to the existing kerbside parking at the site frontage should be identified.

As demonstrated by swept path assessments in **Section 4.3**, the existing driveways can sufficiently cater for the movements of the largest vehicle into and out of the site, without the need for any widening. Further, no impacts are expected on the existing kerbside parking spaces at the site frontage.

1.2 Planning Secretary's Environmental Assessment Requirements

The Planning Secretary's Environmental Assessment Requirements (SEARs) for this proposal (dated 27 April 2023, ref: SEAR1774) included specific traffic and transport aspects to be addressed. Below is a summary of these SEARs requirements and the relevant sections where they are addressed within this report:

- Details of road transport routes and access to the site – See **Section 2.4**.
- Road traffic predictions for the development during construction and operation – See **Section 5**.
- An assessment of impacts to the safety and function of the road network and the details of any road upgrades required for the development – See **Section 5**.
- Detailed assessment of the suitability of the proposed heavy vehicle swept paths, including potential for conflicts with light vehicle and pedestrian movements – See **Section 4**.

1.3 Post Lodgement Information Requests – Set 1

This report also provides additional clarifications that address the following information request items from the EPA (letter dated 20th February 2024, ref: DOC24/124155-1) and Fairfield City Council (letter dated 22nd May 2024, ref: DA 3.1/2024):

3. *Weighbridge and Traffic Movement*

The EPA has reviewed the Traffic Impact Assessment provided at Appendix D of the EIS. The Applicant has proposed to only weigh vehicles entering the premises that fit on the weighbridge with larger trucks bypassing this process. The proposal also states that vehicles will exit the site via 68 Victoria Street with no mention of weighing the vehicles before they leave the premises.

Within the EIS the Applicant has stated that a 10m weighbridge will be installed with the average truck length of 12.5m and a maximum length of 13.9m entering the facility. The EPA advises that when any weighbridge is installed at a licenced facility it must be 'fit for purpose'. All vehicles which enter the premises must be weighed over the weighbridge upon entry and exit in accordance with clause 29 of the *Protection of the Environment Operations (Waste)* Regulation 2014.

The EPA requires the following to be addressed:

I. ***provide further information on how the Applicant has considered the most appropriate type of weighbridge to ensure accurate records can be collected for all vehicles entering and exiting the site.***

The above information request item by the EPA is addressed in **Section 4** of this report.

4. *Location of Weighbridge*

To facilitate the operations of the facility, the application seeks consent for the use of a weighbridge located towards the front of Lot 9, DP 239868. Concern is raised regarding the location of the weighbridge, as there is potential for vehicles to enter and exit the site whilst avoiding the weighbridge. The location of the weighbridge may result in the inaccurate documentation of waste received and forwarded onsite. The Applicant shall address this.

6. *Loading / Unloading Activities*

The Applicant shall provide further information / clarify the following issues in relation to loading/unloading activities:

- Where vehicles perform unloading and loading activities;
- Whether vehicles access the building from the rear;
- Reference is made on Page No. 12 of the EIS that "*semi-trailers will not use the weighbridge at the site (it will only be used by the 12.5m HRVs)*". Concern is raised regarding the accurate weight and documentation of waste receival and exportation;
- How many shipping containers will be stored onsite at any given time;
- The management practices to prevent additional storage containers to be imported onsite.

10. Pedestrian Movement

The subject Development Application seeks to amend the existing vehicular movements onsite, through the provision of additional car parking and changes to the use of servicing vehicles. Concern is raised as there are potential increased vehicular/pedestrian conflicts onsite. The Applicant shall demonstrate how pedestrian safety through car parking areas is maintained onsite in accordance with Clause 9.2.6 - Pedestrian Movement of the Fairfield City Wide Development Control Plan 2013 (FCW DCP 2013).

The above information request items from Fairfield City Council are addressed in **Section 4** of this report. For additional information about the specific operations of the proposed development, please refer to the Statement of Environmental Effects accompanying the application.

1.4 Post Lodgement Information Requests – Set 2

This report also provides additional clarifications that address the following information request items from the EPA (letter dated 26th July 2024, ref: DOC24/585207) and Fairfield City Council (letter dated 9th August 2024, ref: DA 3.1/2024):

4. Use of Weighbridge

It is stipulated within the Environmental Impact Statement that "*all vehicles will use the weighbridge upon entering and exiting the site*". However, no Swept Path Plans have been submitted demonstrating that vehicles exiting the site can access the weighbridge.

6. Pedestrian Movement

As previously advised, concern is raised regarding the potential vehicular and pedestrian conflict onsite. The Applicant has not demonstrated how pedestrian and vehicular conflict will be managed onsite.

The above matters are addressed in **Sections 4.3**, **4.4** and **4.5**.

2. Background and Existing Conditions

2.1 Site Description and Local Road Network

The subject site at 68-70 Victoria Street includes approximately 3,940 square metres of floor area (across two lots – 68 and 70 Victoria Street). The lot at 68 Victoria Street comprises a 2-storey industrial building with an attached 3-storey office block at the front. The lot at 70 Victoria Street is vacant and comprises a landscape strip to the front of the site, behind the front boundary.

The site vicinity is characterised predominantly by industrial and commercial land uses. At the site frontage, Victoria Street is a classified road with a posted speed limit of 60 km/hr, and it includes a double barrier median divided carriageway providing two traffic lanes in each direction with kerbside parking on either side of the carriageway. **Figure 1** illustrates the location of the subject site from an aerial perspective.

2.2 Crash History

The crash history of the site locality was investigated through the crash statistics made available by Transport for NSW's Centre for Road Safety through their website which provides crash data for the 5-year period between 2017 to 2021.

Figure 2 shows the crash map for the site locality. As can be seen, there have been 2 moderate injury crashes and 1 minor injury crash within the last 5 years, within the immediate locality of the site. These crashes have occurred at the intersections of O'Connell Street and Justin Street with Victoria Road. These many crashes are not considered unusual for a major road at intersections that see high levels of turning movements. Note that the crash history does not indicate any crashes at the midblock of Victoria Road between O'Connell Street and Justin Street, where the site access is located. As such, there exists no recurring crash themes or a history of an unusual number of crashes on Victoria Road within the immediate site locality.

Figure 1: Location of the Subject Site

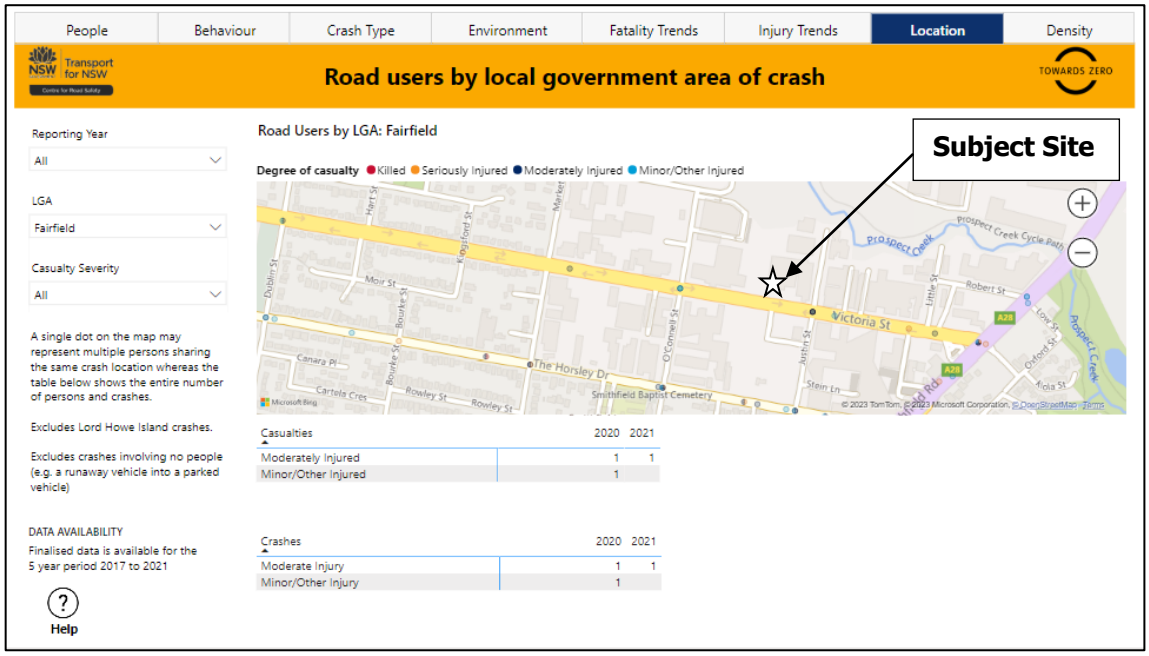

Figure 2: Crash History within Site Locality

2.3 Proposal Details

The proposal involves the use of the subject site at 68-70 Victoria Street as a tyre recycling facility. The site at 70 Victoria Street will provide a left-in entry-only driveway, a weighbridge, storage areas and 5 car parking spaces. The site at 68 Victoria Street will be used as an open warehouse and provide 7 car spaces (including a single disability-accessible car space) and a left-out exit-only driveway. Internal vehicle access between lots 70 and 68 will be provided through a new roller door to the building in lot 68. **Figure 3** shows the proposed site layout plan.

As a result of the proposed operations, the number of truck movements will be between 5-6 deliveries per day. Regular delivery activities will be via 12.5m long Heavy Rigid Vehicles (HRVs). The largest vehicle to access the site will be a 13.9m semi-trailer. The proposed development will be serviced by 8 staff members (maximum on-site, at any one time) and will likely attract at most 2 visitors per day.

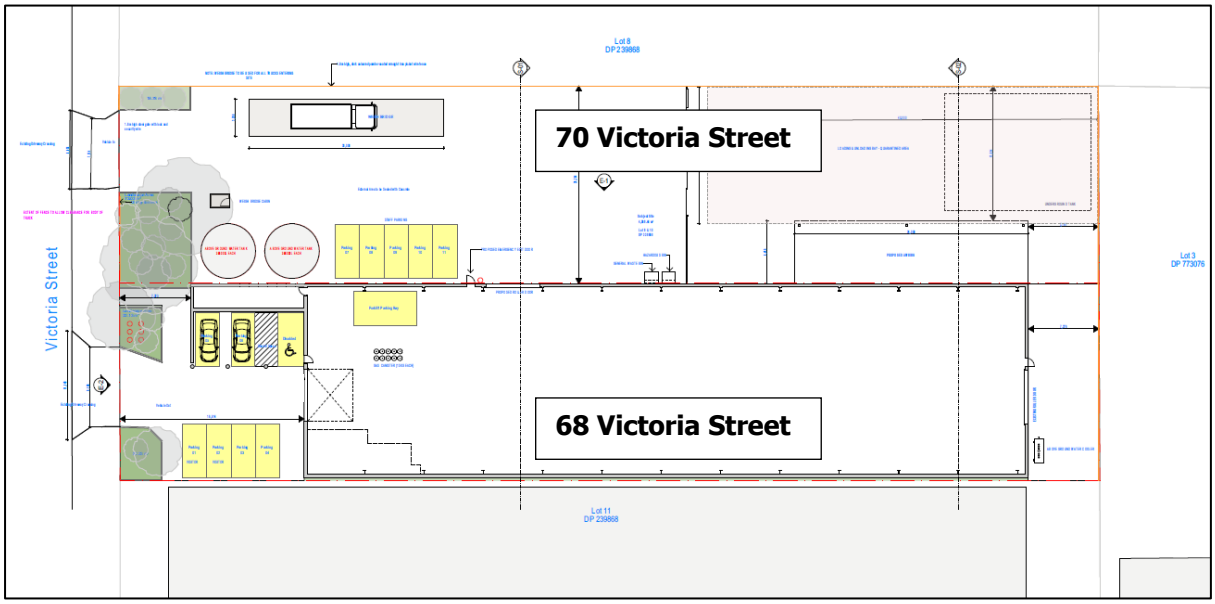

Figure 3: Proposed Site Layout Plan

2.4 Proposed Haulage Routes

Since the proposed development provides left-in and left-out vehicle access off Victoria Road, the following in and outbound haulage routes are nominated for all vehicles:

- Inbound vehicles from north, south and east – use Cumberland Highway, enter The Horsley Drive, turn right onto O'Connell Street, turn right onto Victoria Road, and turn left into the site at 70 Victoria Street.
- Inbound vehicles from the west – travel along Victoria Road and turn left into the site at 70 Victoria Street.

Figure 4 illustrates the above-mentioned inbound haulage routes.

- Outbound vehicles towards north, south and east – turn left out of the site (at 68 Victoria Street) onto Victoria Street.
- Outbound vehicles towards the west – turn left out of the site (at 68 Victoria Street) onto Victoria Street, turn right onto Cumberland Highway, and turn right onto The Horsley Drive for travelling towards the west.

Figure 5 illustrates the above-mentioned outbound haulage routes.

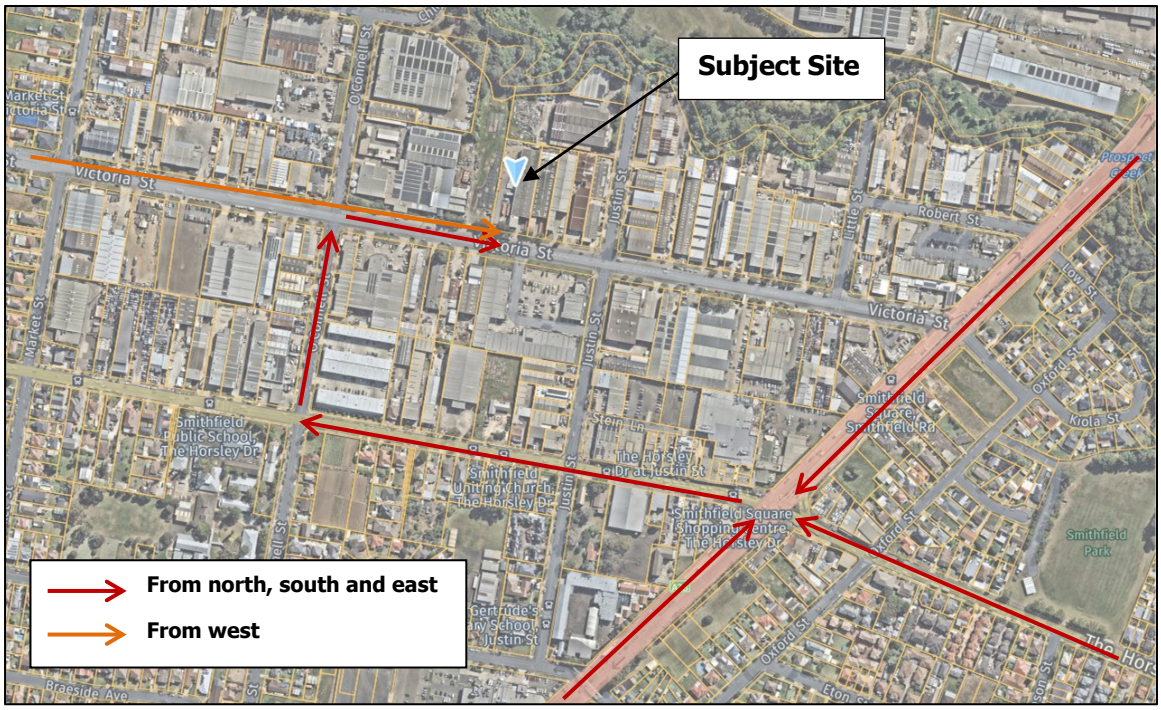

Figure 4: Proposed Inbound Haulage Routes

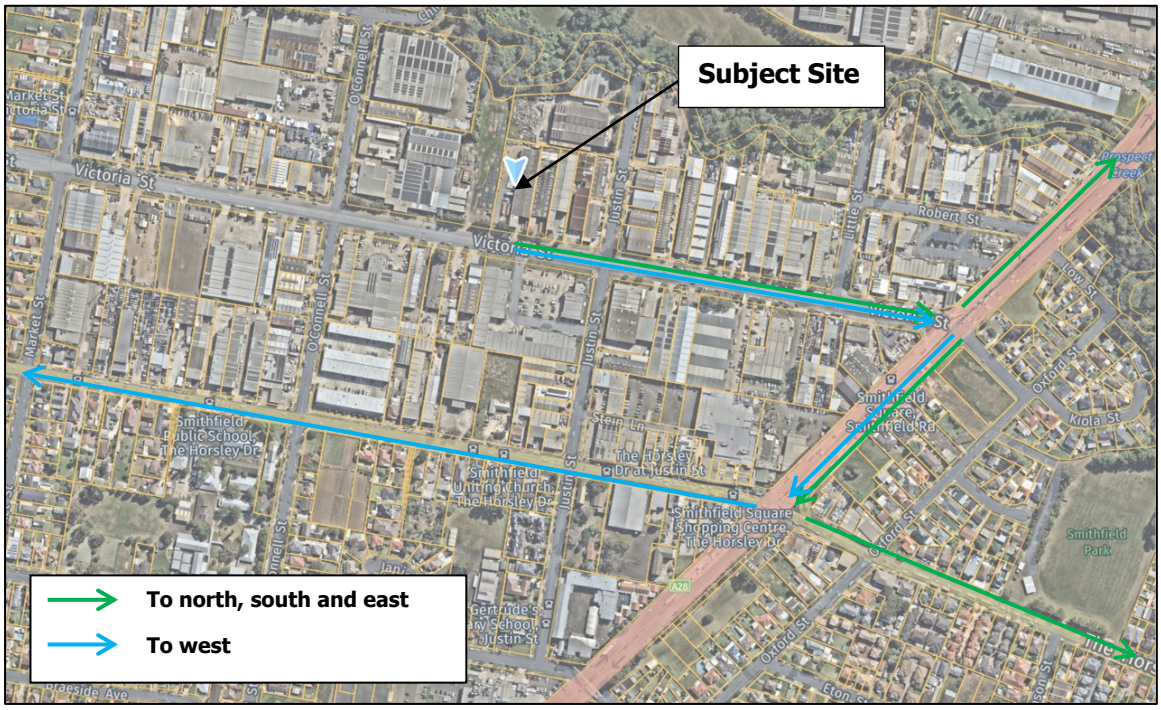

Figure 5: Proposed Outbound Haulage Routes

3. Parking Provision Requirements

The car parking provision requirements for the proposed development were determined in accordance with the parking rates prescribed in Table 1 in Chapter 12 (Car Parking, Vehicle and Access Management) of the Fairfield Citywide Development Control Plan (2013). In relation to resource recovery facilities, this policy states that the minimum number of car parking spaces required should be determined by a car parking survey of a comparable facility. Accordingly, the proposed parking provisions for resource recovery facilities reported in publicly available traffic assessment documents have been used to determine the number of required parking spaces for the subject proposal, as illustrated in **Table 1** below.

Table 1: Car Parking Survey Results for Similar Existing Sites

Document	Site Considered	Survey/Proposal Details	Parking Rate
Environmental impact statement – Increase capacity for putrescible waste at Wetherill Park Resource Recovery Facility (Golder Associates, 2016)	SUEZ Recycling & Recovery Pty Ltd 20 Davis Road, Wetherill Park, NSW	A spot parking survey carried out at 9am on 10th September 2015 revealed that 11 out of 16 on-site car spaces were occupied – this occupancy level equated to the number of staff members on-site at the time.	1 car space per staff member
Traffic impact assessment (Traffix traffic and transport planners, 2015)	Energy from Waste Facility, Eastern Creek, NSW	There is a potential for up to 37 staff members to be on-site at any time. Accordingly, provision is made for 40 on-site car parking spaces.	1.1 car spaces per staff member
Geelong Resource Recovery Facility – Traffic Impact Assessment Report (SMEC, 2015)	Geelong Resource Recovery Facility, VIC.	There will be a maximum of 20 staff members on-site at any one time. A total of 26 car spaces are proposed.	1.3 car spaces per staff member

As per the information presented in the table above, it is evident that on-site parking provisions for similar developments are generally made to predominantly cater for the maximum number of staff members likely to be present on-site at any one time. However, in order to be conservative, the highest parking rate established from the information in **Table 1** has been used for the subject proposal. In this regard, 1.3 car spaces per staff member should be provided.

It is noted that the proposed operations will be serviced by 8 staff members (maximum on-site at any one time). Based on the rate of 1.3 car spaces per staff member, the proposal will require provision for 11 car spaces (rounded up). The proposed development provides a total of 12 on-site car spaces (5 spaces within 70 Victoria Street + 7 spaces within 68 Victoria Street, including a single disability-accessible car space). This provision conveniently satisfies the anticipated maximum parking demand.

4. Parking Design Review

Figure 6 illustrates the layout of the proposed on-site car parking design with key dimensions outlined.

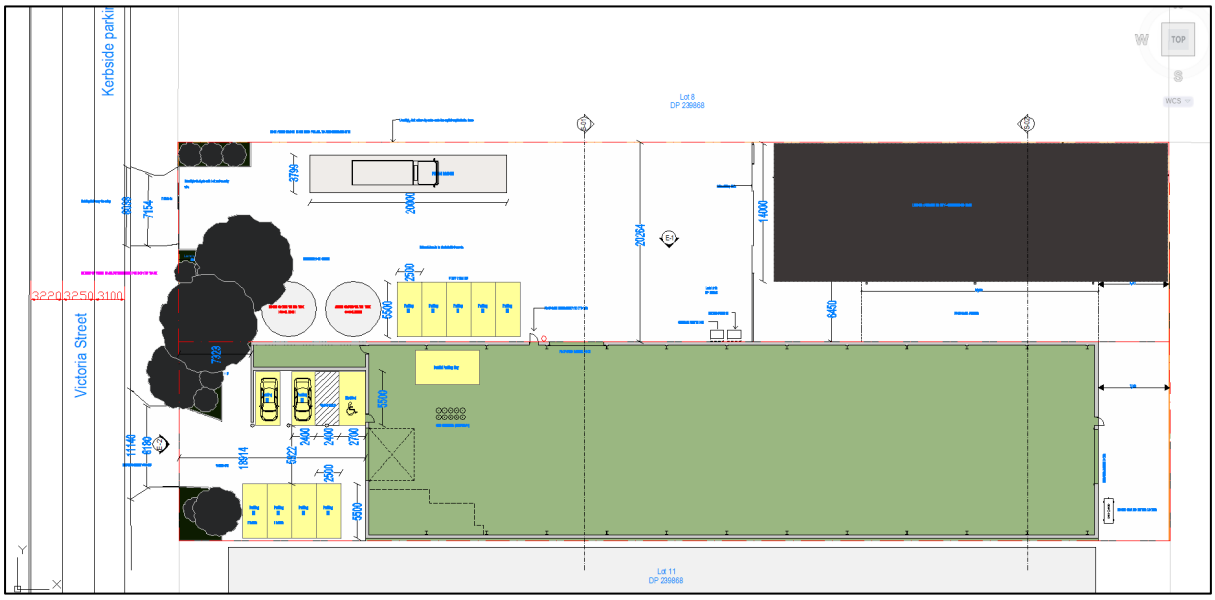

Figure 6: Key Dimensions of the Proposed Car Park

4.1 Proposed Car Spaces

All the car spaces have been designed to comply with the requirement relevant to user class 1A (employee parking) spaces under AS 2890.1:2004. User class 1A spaces should provide 2.4m width, 5.4m length and 5.8m aisle width. The proposed car spaces comply with the above-identified dimensions.

The disability-accessible car space design complies with the requirements in AS 2890.6. The car space and the adjacent shared space are both 2.4m wide by 5.4m long with a 5.8m wide aisle.

4.2 Lateral Clearances

When car spaces are located adjacent to vertical obstructions (like walls), a further 300mm clearance should be provided for door opening. This requirement has been satisfied in the proposed design of the car spaces located next to walls.

At blind aisles (end of an aisle), AS 2890.1 requires the aisle to be extended by an additional 1m in order to allow reverse exit manoeuvres by the vehicles parked in the corner spaces. This 1m extension is available within the proposed design, at relevant locations (note that the roller door to the building at 68 Victoria Street site is expected to be open during operations since all vehicles using the car spaces at this site will enter via this location – so the vehicle using the disability accessible car space can use this area as the blind aisle clearance or by simply reversing all the way back into the vacant space adjacet to car space 4).

4.3 Manoeuvrability of the Largest Vehicle

The largest vehicle that is expected to access the proposed site is a semi-trailer that is approximately 13.9m long. Accordingly, swept path tests have been undertaken to investigate the anticipated manoeuvrability conditions of this vehicle. This swept path assessment has been undertaken using AutoTURN software (the industry standard vehicle swept path assessment software).

To carry out the swept path test accurately, the key widths of the public domain (including the verge and the lanes on Victoria Street) were obtained from high-resolution aerial imagery (shown in **Figure 7**). These existing features were then incorporated into the site CAD plan for testing vehicle swept paths.

Figure 7: Key Dimensions of Public Domain at the Site Frontage

Figure 8 shows the swept path results obtained for the anticipated movements of the 13.9m long semi-trailer. The Blue and Cyan colour lines in the swept paths indicate the front and rear tyre tracks of the vehicle, respectively, while the Black colour of the swept paths indicates the vehicle body (the Green colour line indicated the centreline of the swept path while the Red colour lines indicate the 300mm vehicle body clearance envelop).

As can be seen from this swept path, a 13.9m semi-trailer can sufficiently manoeuvre into, within and out of the proposed car park. This swept path indicates the scenario where the semi-trailer enters the site by turning left in from Victoria Street and drives forward into the weighbridge. After being weighed, this vehicle will be driven towards the rear end of the site to undertake (un)loading activities (see **Figure 8 – top**). Subsequently, this vehicle will reverse onto the weighbridge to be weighed again and turn right into the building at the adjacent site through the roller door. Finally, it exits the 68 Victoria Street site by turning left out (see **Figure 8 – bottom**).

The swept path presented in **Figure 9** indicates that a semi-trailer is capable of entering fully into the site while the weighbridge is occupied by an HRV. Once the weighbridge is vacant, the semi-trailer can reverse into it from the front end (similar to the movement shown in **Figure 8 - bottom**). As such, no queuing is expected on Victoria Street due to weighbridge operations.

After weighing, the truck will move to unload at 68 Victoria Street site. If any extra or suspicious goods are found, the truck will move to the loading and unloading bay at 70 Victoria Street lot in-order to quarantine those goods.

All the goods between the building and loading area (outside) will be transported by forklifts.

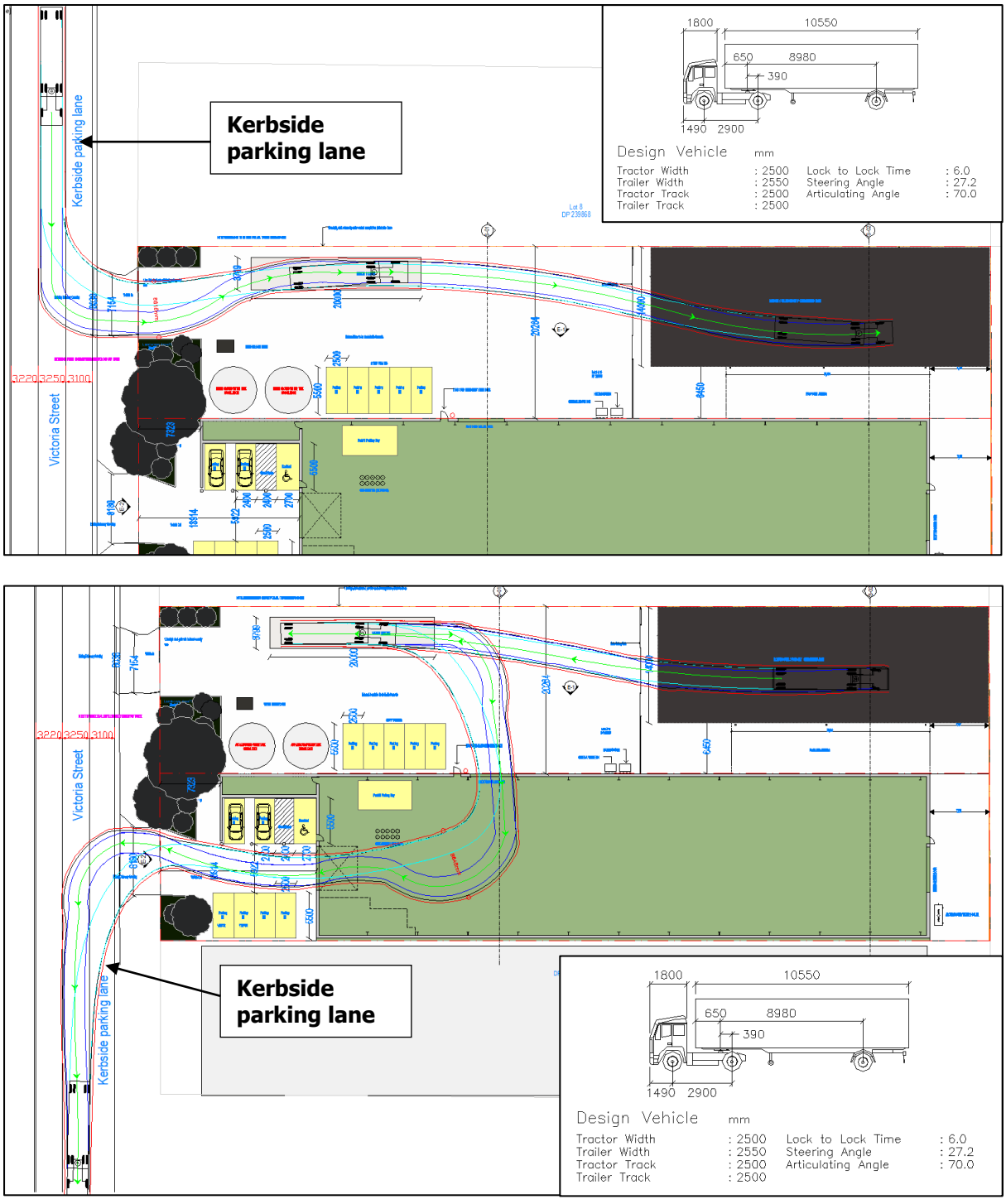

Figure 8: Swept Path of the 13.9m Semi-Trailer

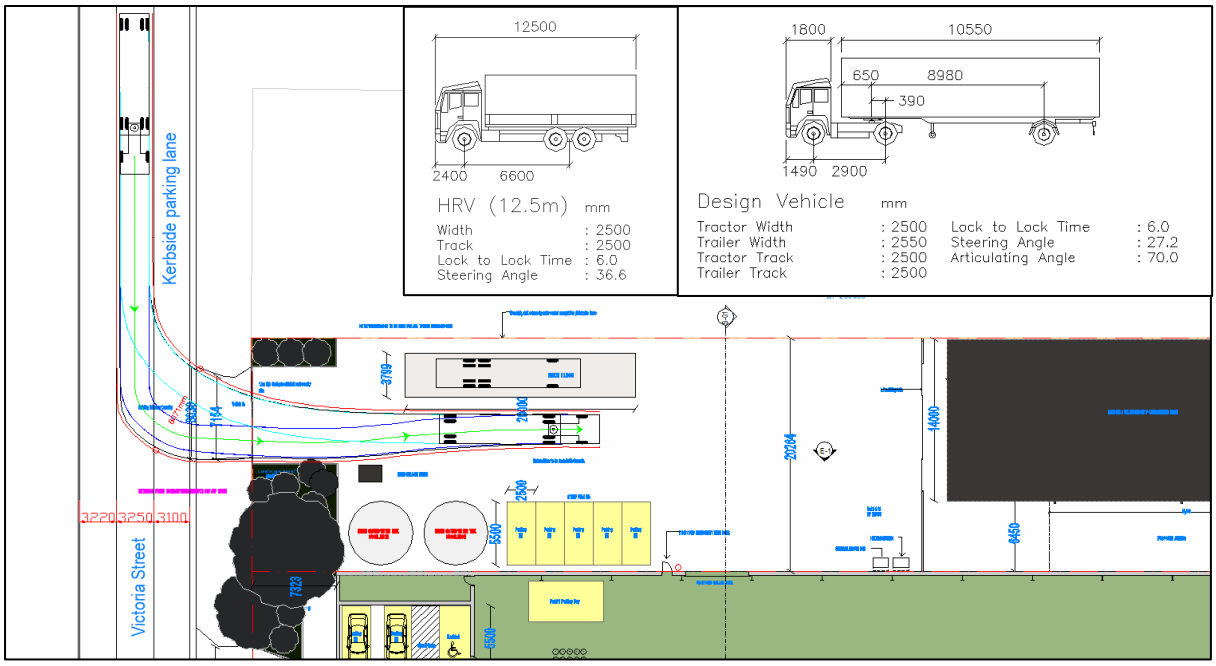

Figure 9: Swept Path of the 13.9m Semi-Trailer when the Weighbridge is occupied

Figure 10 illustrates the expected maneuvers by an HRV within the site (the same movements as the semi-trailer vehicle). The result demonstrates sufficient manoeuvrability levels for this vehicle into, within (including across the weighbridge) and out of the site.

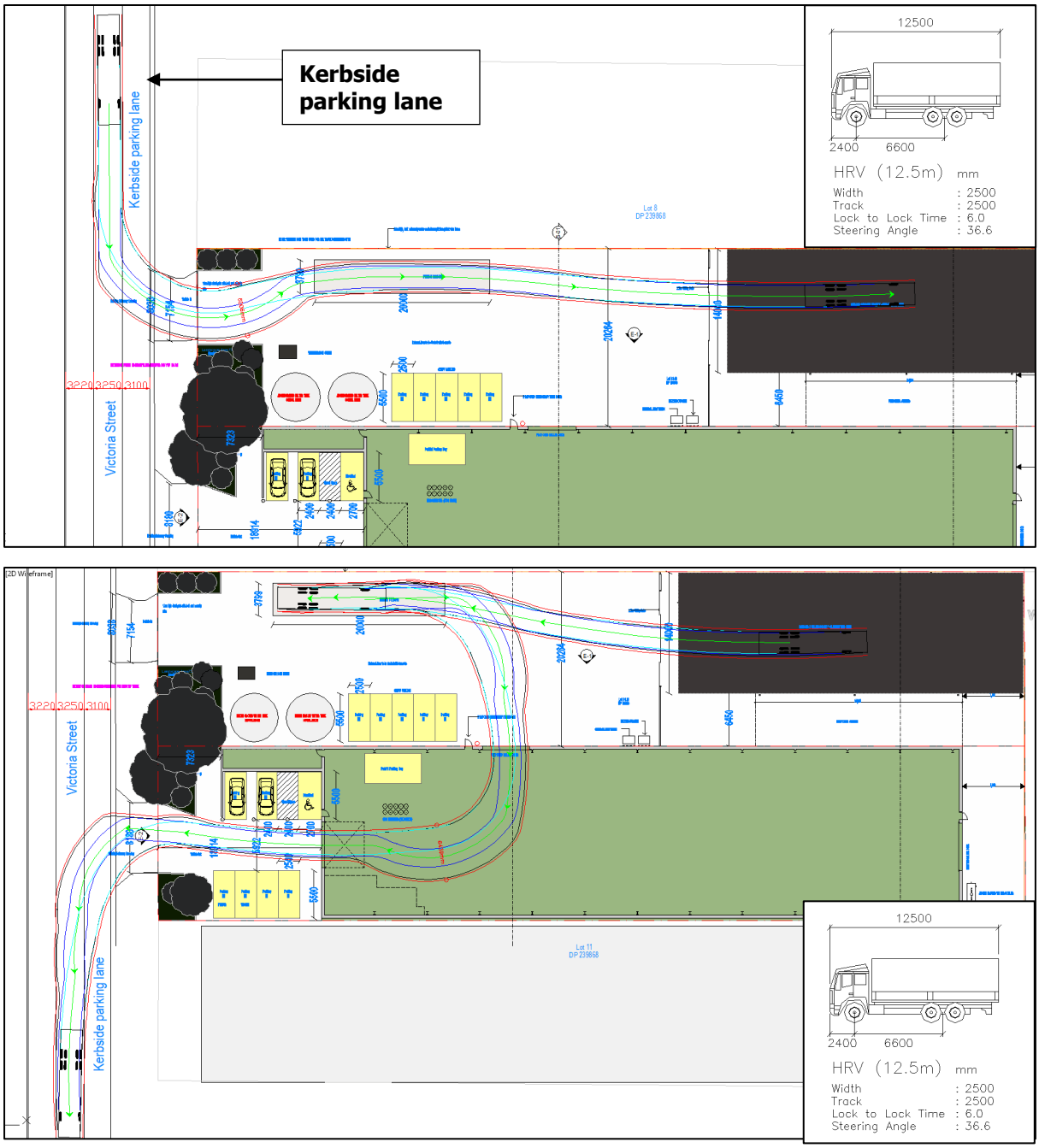

Figure 10: Swept Path of the 12.5m HRV

Based on the above swept path results, it is evident that the largest vehicle accessing the site can do so via the existing driveways without the need for widening them. As a result, there will be no impact on the existing kerbside parking spaces at the site frontage.

Figure 11 shows a passenger vehicle using the weighbridge in the same manner as described above. This information is provided as a response to Comment 2(i) of the EPA NSW RFI letter. However, in reality, the passenger vehicles accessing the site will not require weighing.

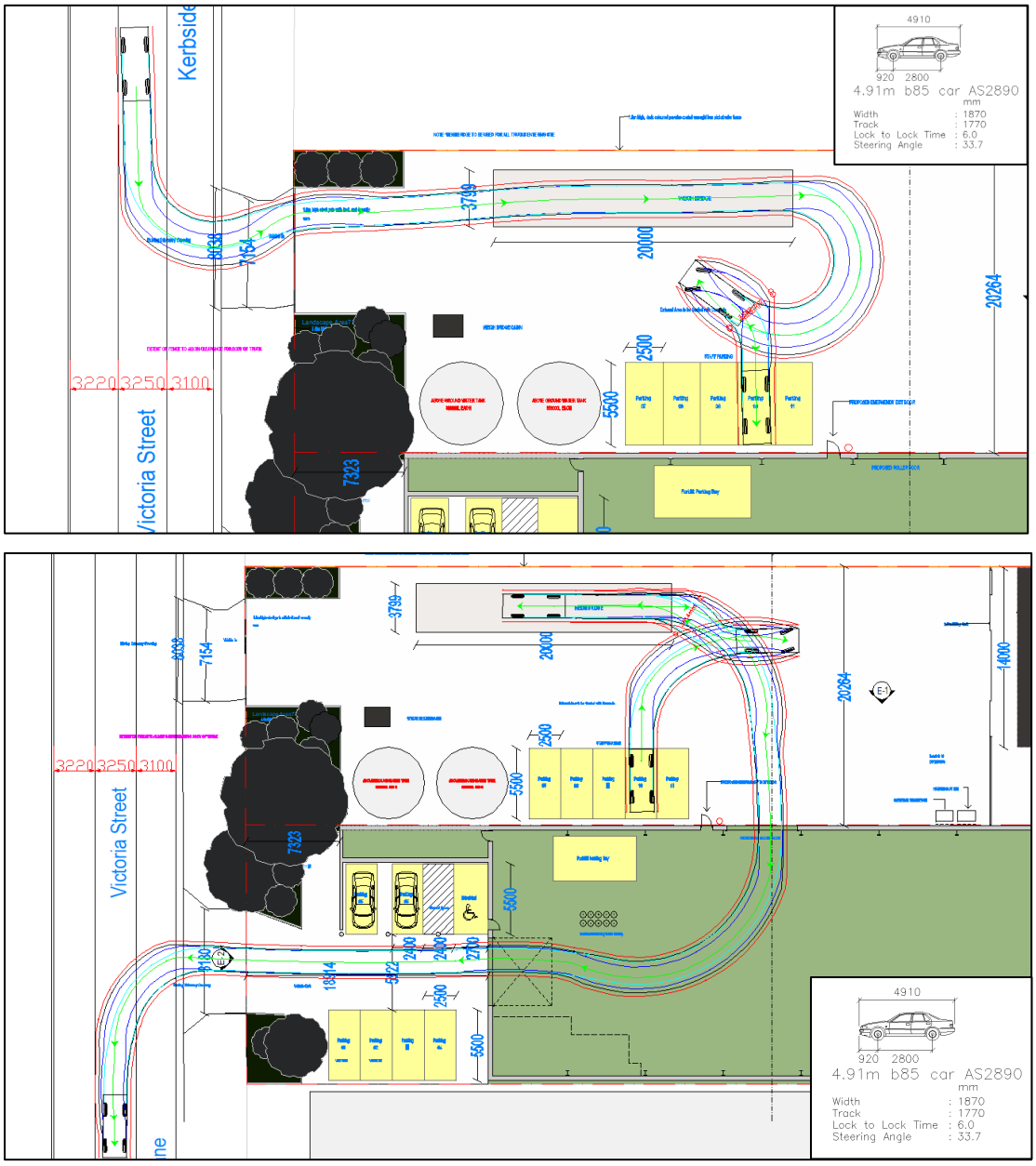

Figure 11: Swept path of a Passenger Vehicle

4.4 Pedestrian Management

The proposed on-site passenger car spaces will be predominantly used by staff members who work on the site. The pedestrian desire lines for those using the staff and visitor car parking spaces are shown in Blue colour in **Figure 12**.

- Those using the staff car parking area – can use the parking aisle to enter the building through the roller door.
- Those using the visitor parking area – can use the pedestrian door to enter the building.

It is noted that the proposed site operations do not expect any material level of visitor trips. As such, demarcated pedestrian paths are not considered required in this instance. However, to ensure pedestrian safety, the following measures are recommended:

1) Provide a half dome convex safety mirror (at the location outlined in **Figure 12**) within the building to enhance the sight lines of any pedestrians and on-coming vehicles from Lot 70.
2) Provide a 5 km/h / shared zone sign at the vehicle entry point to the building (as shown in **Figure 12**) to raise the awareness of the drivers.

4.5 Signage Requirements

In accordance with the comments received by Transport for NSW during the consultation meeting, the following aspects have been incorporated into the design:

1) The weighbridge is sufficiently offset from the entry driveway into the 70 Victoria Street site so the largest vehicle accessing the site can enter the site when the weighbridge is occupied by an HRV.
2) Both driveways can accommodate the movements of the largest vehicle accessing the site without the need for any widening.
3) 'No Right Turn' signs facing east should be provided within the site at both driveways, as shown in **Figure 12**. These signs should be provided at a sufficient height and should be clearly visible to the drivers travelling westbound on Victoria Street.

4) A sign identifying the driveway at 70 Victoria Street as the entry driveway along with another sign indicating 'No Entry' for the driveway at 68 Victoria Street should be provided within the site (as shown in **Figure 12**). These signs should be provided at a sufficient height and should be clearly visible to the drivers travelling eastbound on Victoria Street.

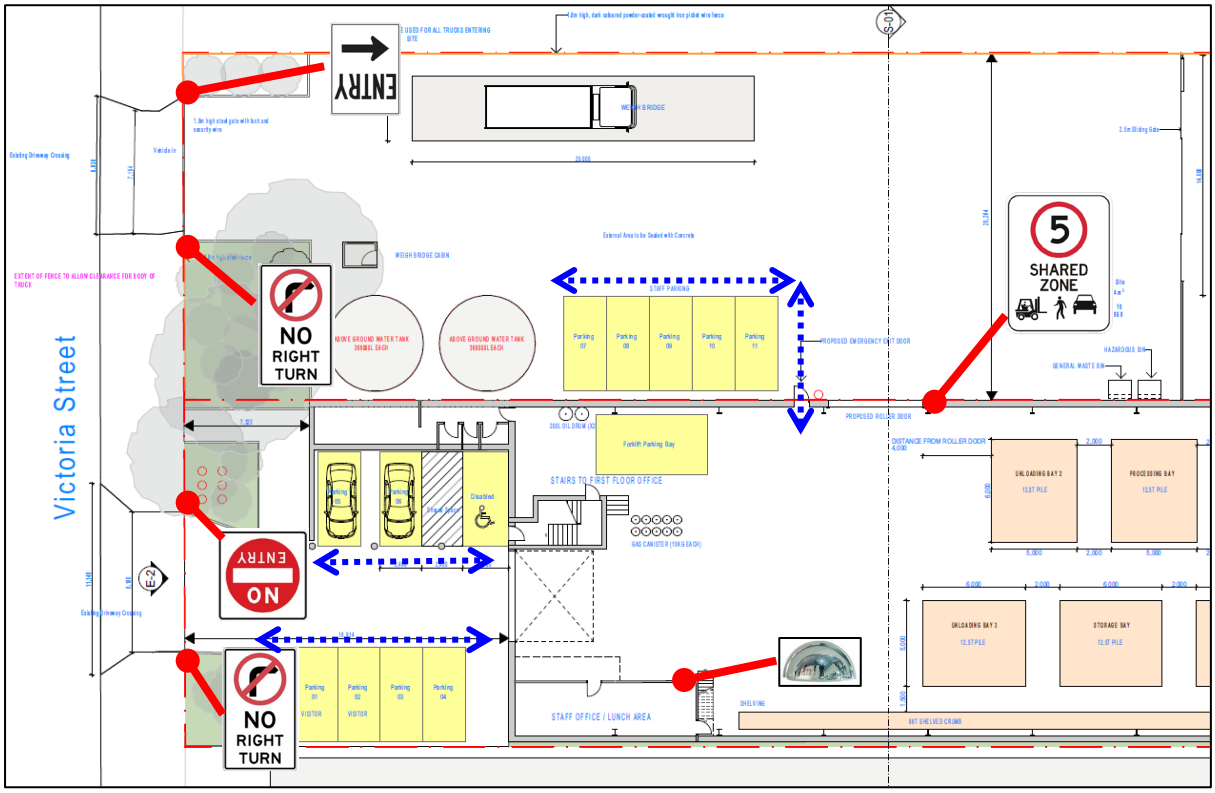

Figure 12: Proposed Access Management Measures

5. Traffic Impact Assessment

5.1 Construction Traffic Impact

The construction stage of the proposal is expected to generate at most 2-3 vehicle movements per hour. The largest vehicles expected to access the site during construction are not expected to be longer than the 13.9m long semi-trailer and the 12.5m HRVs nominated during typical operations. All construction vehicles will be accommodated within the site at all times and follow left-in / left-out access arrangements into and out of the site and the haulage routes specified in **Section 2.4**.

If a work zone is required on Victoria Road at the site frontage, the relevant permit would be sought by the applicant through Council and Transport for NSW through a detailed construction traffic management plan.

5.2 Operational Traffic Impact

The traffic impact arising from the current proposal has been determined on a first-principles basis. It is noted that this proposed expansion will be serviced by 8 staff members (maximum on-site, at any one time) and will likely attract at most 2 visitors per day. Furthermore, the proposed operations are expected to generate 5-6 truck deliveries per day.

As per the above, the peak hour traffic generation of this proposal will likely be in the order of approximately 8 trips, which reflects the vehicle movements generated by staff (8 trips entering the site in the AM peak hour and 8 trips exiting the site in the PM peak hour). Throughout the day, the site will generate vehicle movements related to visitors and deliveries. However, these activities will at most generate 4 trips in a given hour.

It is noted that all vehicles will follow left-in / left-out access arrangements into/out of the site and the haulage routes specified in **Section 2.4**.

As per the above, the anticipated peak hour and daily traffic generation potential of the proposed development is considered minimal and is therefore unlikely to eventuate into any material impacts on the existing local traffic conditions.

It is noted that both the construction and regular operation stages will utilise the existing crossovers for vehicle access. As such, no additional impacts are expected on the pedestrian movements at the site frontage, since no new crossovers or any crossover widening are being proposed.

6. Conclusions

APEX Engineers were engaged by D&N Rubber Refinery Pty Ltd to provide a traffic impact assessment as a part of the development application which seeks to develop a Tyre Recycling Facility at 68-70 Victoria Street in Smithfield.

The review of historical crash information revealed 2 moderate injury crashes and 1 minor injury crash within the last 5 years, within the immediate locality of the site. These crashes have occurred at the intersections of O'Connell Street and Justin Street with Victoria Road. These many crashes are not considered unusual for a major road at intersections that see high levels of turning movements. As such, there exists no recurring crash themes or a history of an unusual number of crashes on Victoria Road within the immediate site locality.

Since the proposed development provides left-in and left-out vehicle access off Victoria Road, specific in and outbound haulage routes are nominated for all vehicles, as outlined in **Section 2.4** of this report. These haulage routes should be implemented during both the construction stage and operations of the site.

A parking provision assessment for the proposed development was undertaken by comparing the parking provisions of development of a similar nature, as reported in publicly available traffic assessment reports. It is evident that on-site parking provisions for similar developments are generally made to predominantly cater for the maximum number of staff members likely to be present on-site at any one time. However, for this proposal, the highest parking rate observed from similar existing developments (which is 1.3 car spaces per staff member) has been adopted, considering the likelihood of visitors entering the site. Based on this rate, the proposal will require provision for 11 car spaces (rounded up). The proposed development provides a total of 12 on-site car spaces (5 spaces within 70 Victoria Street + 7 spaces within 68 Victoria Street, including a single disability-accessible car space). As such, this provision conveniently satisfies the anticipated maximum parking demand.

The proposed on-site car park design was also assessed with reference to AS 2890.1 and AS 2890.6. The car parking design was found to be compliant with the relevant standard requirements.

The proposed on-site car spaces will be predominantly used by staff members who work on the site (who can access the building from the roller door via the car parking aisle). The site operations do not expect any material level of visitor trips. As such, demarcated pedestrian paths are not considered required in this instance. However, a number of signage items are recommended in **Figure 12** – these signage requirements should form a condition of the development consent.

The largest vehicle expected to access the proposed development is a 13.9m semi-trailer. The swept path assessment undertaken confirms that this vehicle can sufficiently manoeuvre into, within and out of the proposed car park. This swept path indicates the scenario where the semi-trailer enters the site by turning left in from Victoria Street and drives forward onto the weighbridge – once weighed, it will drive towards the rear end of the site to undertake (un)loading activities, then it reverses into the weighbridge to be weighed again. Then, it will turn right into the building at the adjacent site (Lot 68) through the roller door. Finally, it exits the 68 Victoria Street site by turning left out. The swept path results also indicate that the semi-trailer is capable of entering fully into the site and carrying out the required maneuvers while the weighbridge is occupied by an HRV. As such, no queuing is expected on Victoria Street due to weighbridge operations.

Additional swept path tests were carried out to investigate the expected maneuvers by HRVs and passenger vehicles within the site. The results demonstrate sufficient manoeuvrability levels for these vehicles into, within (including across the weighbridge) and out of the site.

The swept path results for both the 13.9m semi-trailer and the 12.5m HRV indicate that the existing driveways can sufficiently accommodate their movements without

the need for any widening. As such, no additional impacts are expected on the existing kerbside parking spaces at the site frontage.

'No Right Turn' signs facing east should be provided within the site at both driveways. These signs should be provided at a sufficient height and should be clearly visible to the drivers travelling westbound on Victoria Street. In addition, a sign identifying the driveway at 70 Victoria Street as the entry driveway along with another sign indicating 'No Entry' for the driveway at 68 Victoria Street should be provided within the site. These signs should be provided at a sufficient height and should be clearly visible to the drivers travelling eastbound on Victoria Street. These signage requirements, along with those relevant to pedestrian safety, are outlined in **Figure 12**. These signage requirements can be addressed through a suitably worded consent condition.

The construction stage of the proposal is expected to generate at most 2-3 vehicle movements per hour. The largest vehicles expected to access the site during construction are not expected to be longer than the 13.9m long semi-trailer and the 12.5m HRVs nominated during typical operations. All construction vehicles will be accommodated within the site at all times and follow left-in / left-out access arrangements into and out of the site and the haulage routes specified in **Section 2.4**. If a work zone is required on Victoria Road at the site frontage, the relevant permit would be sought by the applicant through Council and Transport for NSW through a detailed construction traffic management plan.

The proposal is expected to have an operational peak hour traffic generation level of some 8 trips with a traffic generation potential of at most 4 trips in every other hourly period. This level of traffic generation is considered minimal and is therefore unlikely to eventuate into any material impacts on existing local traffic conditions.

It is noted that both the construction and regular operation stages will utilise the existing crossovers for vehicle access. As such, no additional impacts are expected

on the pedestrian movements at the site frontage, since no new crossovers are being proposed.