asongroup

Prepared for

FRASERS PROPERTY AUSTRALIA

Construction Traffic Management Plan

Lot 3, The Horsley Drive Business Park

Ref: 0315r02v2
05/10/2016

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1 Introduction

This Construction Traffic Management Plan (CTMP) has been prepared for the application at Lot 3, The Horsley Drive Business Park (HDBP) relating to the construction of a proposed warehouse/industrial facility. The purpose of this report is to detail a traffic management plan for the construction of the development which seeks to minimise the impact on public amenity and safety.

This CTMP contains the following:

- Make provision for all construction materials to be stored on site, at all times.
- Specify construction truck routes and truck rates. Nominated truck routes are to be distributed over the surrounding road network where possible.
- Provide for the movement of trucks to and from the site, and deliveries to the site. Temporary truck standing / queuing locations in a public roadway / domain in the vicinity of the site are not permitted unless approved by Council's Public Works.
- Specify that a minimum two (2) days notification must be provided to adjoining property owners prior to the implementation of any temporary traffic control measures.
- Include a site plan showing the location of loading zones, and anticipated vehicle access routes
- Should any impacts be identified, the duration of the impacts and measures proposed to mitigate these must be clearly explained and committed to being enforced.

It is expected that this plan will be updated should any necessary changes to the currently proposed arrangements arise in the future. Any special events (if required) would be subject to a separate request for a specific permit not covered by this report.

Please note, Ason Group is responsible for the preparation of this Plan only and not for its implementation, which is the responsibility of the project manager and/or builder.

2 Existing Conditions

2.1 Site Location

The subject site, located at Lot 3, HDBP (the Site), is generally bounded by vacant land to the north and west, with Lot 2 and Lot 4 located to the east and south, respectively. The site is irregular in configuration as shown on the Site Plan at **Figure 1**, and has a total area of approximately 43,976m^2.

The access to HDBP is provided via a roundabout controlled intersection at the intersection of Burilda Close with Cowpasture Road. Access to the Site is provided from Burilda Close, a local road that runs generally east-west to the east of the site.

2.2 Public Transport

The Site is located adjacent to the following bus services:

- Route 814 – Fairfield to Smithfield
- Route 835 – Smithfiled to Newton Road
- Route 813 – Prairiewood to UWS Penrith

Figure 1: Location and Site Plan

3 Overview of Construction Program

3.1 Staging and Duration of Works

3.1.1 Construction Program

The following is a breakdown of the estimated timing for each relevant phase of works:

- Phase 1 – Bulk earthworks and initial construction works (Period:1 -12 weeks)
- Phase 2 – Services rough-in, walls/ceiling and office fit out (Period:13 -24 weeks)
- Phase 3 – Service installation and external pavement preparation (Period: 25 - 36 weeks)
- Phase 4 – External walls, service fit-out, carpark construction (Period: 37 - 48 weeks)
- Phase 5 – Defect identification/mitigation, and handover (Period: 49 – 55 Weeks)

Having regard for these timings, the overall construction works are programmed to occur over a duration of approximately 55 weeks.

3.1.2 Bulk Earthworks and Initial Construction Works

The bulk earthworks and initial construction works are expected to occur over a 12-week period at the start of the construction program. This phase includes works for foundations, structural steel, concrete pre-casting, roofing, and external wall cladding. It is expected the largest vehicles on-site will be a 17m semi trailers (required for the delivery of structural steel and concrete precast), and a standard oversized semi trailer (required for the delivery of roofing materials).

3.1.3 Service Rough-In, Walls/Ceilings Installation and Office Fit Out

Service rough-in and office fit out works will commence shortly upon the completion of Phase 1. The primary construction activities taking place would be to identify the location of utility services (such as plumbing pipes and electrical wiring) and to complete the interior walls and ceilings. Upon the completion of interior walls and ceilings, the office fit-out can commence. Accordingly, light construction vehicles are expected for the various trades required within the Site. It is estimated that this phase would be completed over a 12 week period.

3.1.4 Service Installation and Pavement Preparation

The service installation and pavement preparation is expected to commence as the Phase 2 works near completion. The primary construction activity that takes place during this phase would be

finalising the installation of utility services, concurrently with the preparation of the external vehicle circulating areas. Consequently, the largest expected construction vehicle movements would generally consist of a concrete agitator truck. It is estimated that this phase would be completed over a 12-week period.

3.1.5 External Walls Installation and Completion of External Pavement Area

The primary construction activity that takes place during this phase would be commissioning the service and installing the external walls. The landscaping and line marling of the car parking area is also expected to occur during this phase. The largest expected construction vehicle movements would generally consist of a 12m rigid vehicle. It is estimated that this phase would be completed over a 12-week period.

3.1.6 Defect Identification/Mitigation and Handover

The final phase will involve identifying and mitigating defects during the construction methodology. It is expected that only construction light vehicles will be required for this phase. It is estimated that this phase will be completed within a duration of approximately 6 weeks.

3.2 Hours of Operation

The hours of operation are as follows:

- Monday – Friday (other than Public Holidays): 6.00AM – 7.00PM.
- Saturday: 7.00AM – 4.00PM.
- Sunday and Public Holidays: No work to be undertaken.

It is expected that truck movements are not subject to restrictions. However, this may change at a later stage to allow for safe heavy traffic volumes within the HDBP.

4 Implementation of the Plan

4.1 Construction Vehicle Access Routes

4.1.1 Movement on External Roads

It is proposed that construction vehicles enter and exit the Site via the routes shown in **Figure 2**. A copy of the truck routes shall be provided to all drivers prior to attending the Site. The proposed routes consist of:

Northern, Western and Southern Access Routes

- To / From the M7 Motorway: The Horsley Drive, Cowpasture Road, Burilda Close

Eastern Access Route:

- To / From the East: The Horsley Drive, Cowpasture Road, Burilda Close

Note: Internal truck routes once on-site will depend on the location of the unloading area required which is discussed in more detail in Section 4.1.2.

The above routes are to be utilised by all construction vehicles associated with the Site and represents the shortest route between the local and regional road network – hence minimising the impacts of the construction process. Access to the Site during all work phases will be monitored through vehicle gates on the Site boundary along Burilda Close.

No trucks are to queue on local roads. Mobile phones and two-way radios will be used to coordinate trucks arrivals.

Figure 2: Construction Vehicle Access Routes

4.1.2 Internal Truck Movements

A diagram of the general site plan for the overall construction program is shown in **Figure 3**. The key details of the plan are as follows:

- Vehicles will enter the Site via Burilda Close and travel to their designated Loading Zones, where they would undertake their relevant construction activity.
- All vehicles that leave the Site are to do so in a forward direction. Any reversing movements on-site are to occur under supervision.

- Deliveries to the Site are required to take the access route identified in Figure 3.

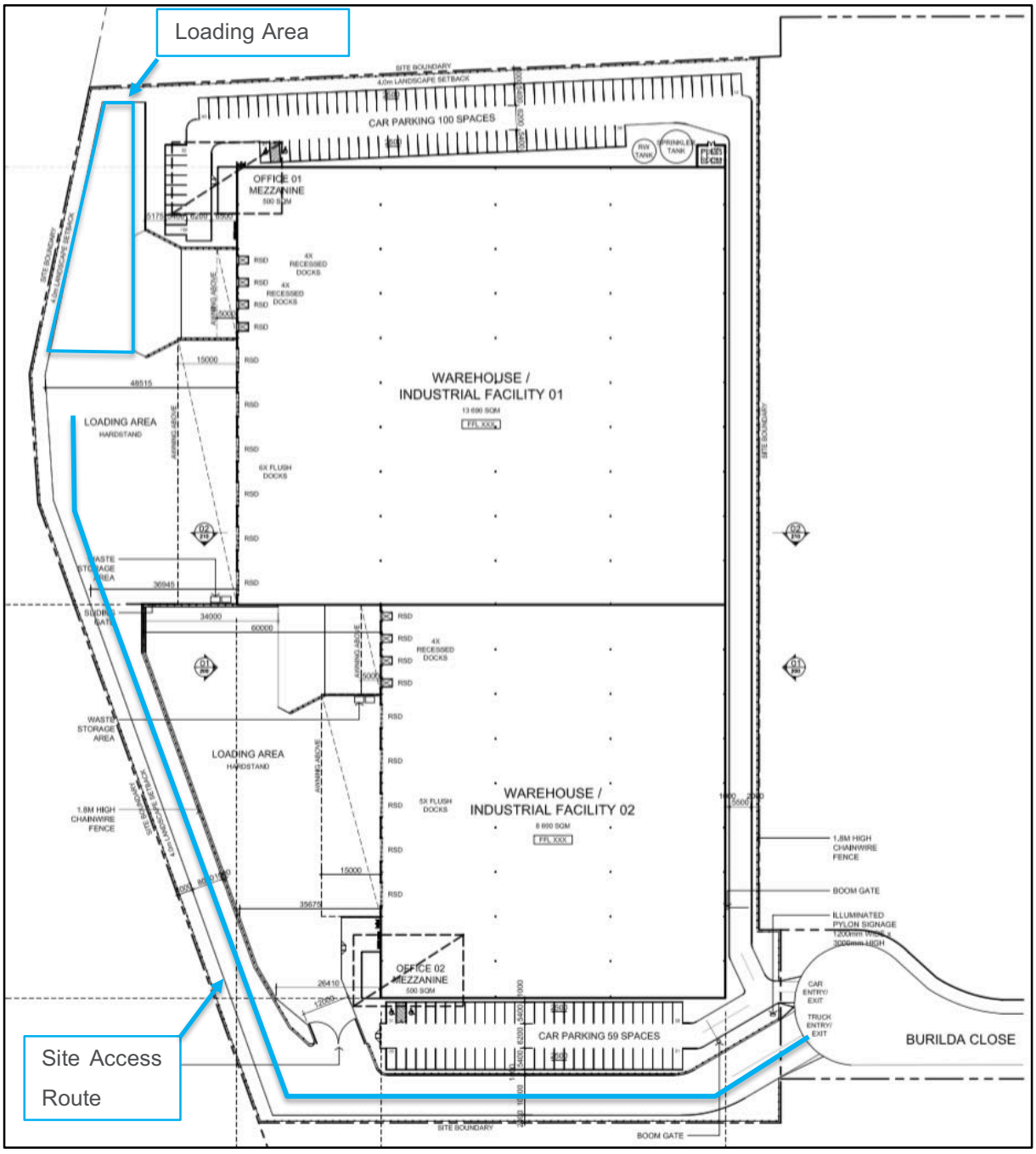

Figure 3: Materials Handling & Truck Loading Zones

4.2 Truck Standing

The truck waiting area for construction will be within the on-site Loading Zones, as shown in Figure 3. Should there be a need for trucks to wait on a public road then prior approval shall be sought and obtained from Council.

4.3 Work Zones

No Work Zones will be required within the public footpath or roadway. All loading and unloading will occur on-site at all times.

4.4 Traffic Control

No traffic control measures would be required on public roadways as the main access gate is within the Site boundary and sufficiently offset from any public roads or footpaths.

Notwithstanding the above, it is anticipated that accredited Traffic Controllers will be on-site to safely supervise traffic and pedestrian movements where on-site vehicle reversing movements are to occur. Traffic control may also be required where two-way flow is restricted over any length of the roadway, depending on the truck length and number of vehicular movements required. Nevertheless, these are on-site management matters and activity specific plans can be prepared if and when required.

4.5 Fencing and Site Security

Hoarding will be provided along the Burilda Close site boundary. A combination of timber and chain wire fencing along the remaining site boundaries will be maintained for the duration of the construction program. The fencing is to ensure unauthorised persons are kept out of the Site after hours. Site access gates have been provided which will control access between the work site and Burilda Close.

4.6 Materials Handling

It is proposed that all materials loading and unloading will occur within the site boundary. No loading or unloading is proposed to occur outside of the site boundary. Should materials handling be required from the public roadway (other than the approved areas) then prior approval shall be sought and obtained from Council. Rumble grids will be located at the site access gates to reduce the impact of spoil on the surrounding road network.

4.7 Contractor Parking

A small amount of on-site parking for key contractors and staff will be provided throughout the construction works. The number and location of this temporary on-site car parking will change throughout the various construction phases, depending on the surplus area available not required for truck loading and turning areas. Notwithstanding, contractors and other site staff will be encouraged to use public transport or to car-pool when accessing the Site at all times with the intent to minimise, as far as practicable, the use of private vehicles.

5 Assessment of Traffic Impacts

5.1 Construction Vehicle Traffic Generation

5.1.1 Traffic Generation Summary

The traffic volume estimates have been based on the construction methodology in Section 3.1, and are summarised in **Table 1** below.

Table 1: Summary of Construction Traffic Generation

Phase	Daily Movements (in & out combined)		
	Cars	Trucks	Combined
Phase 1	100-120 vehicle movements	60 – 80 vehicle movements	160 – 200 vehicle movements
Phase 2	40 – 60 vehicle movements	0 vehicle movements	40 -60 vehicle movements
Phase 3	40 – 60 vehicle movements	40 – 60 vehicle movements	80 – 120 vehicle movements
Phase 4	40 – 60 vehicle movements	40 – 60 vehicle movements	80 – 120 vehicle movements
Phase 5	40 – 60 vehicle movements	0 vehicle movements	40 – 60 vehicle movements

NOTE: as outlined in Section 3.2 there are no truck movement restriction placed at this stage, and heavy vehicle restrictions are expected to change at a later stage

It can be seen from Table 1 that the proposed construction works will generate up to 200 vehicle movements which is expected to occur during Phase 1. During Phase 2 approximately 40 - 60 light vehicle movements from various trades are expected. Phase 3 and 4 will generate approximately 80 – 120 vehicle movements, while phase 5 is expected to generate approximately 40 - 60 vehicle movements. The construction traffic generated from the Site is expected to be lower than that generated when the Site is in operation (approximately 996 vehicles per day), therefore there are no further upgrades required to the road network during the construction stage.

5.2 Parking

The use of public transport and car-pooling will be actively encouraged by the builder and all sub-contractors to reduce the reliance on private vehicles and minimise parking demands.

It is anticipated that the construction activities will result in an average of 100 – 120 vehicle movements for contractors on-site during Phase 1. Accordingly, it is anticipated that approximately 60 parking spaces will be required for the use of contractors.

Having regard for the above, it is recommended that temporary car parking be provided on-site where possible. Future car parking area may be used for contractor parking after Phase 3 i.e. when the car parking area is complete. The location and number of spaces provided will be dependent on the surplus space not required for truck loading and manoeuvring and may vary during the course of the construction works.

5.3 Emergency Vehicle Access

Emergency vehicle access to and from the site will be available at all times. This process would be implemented through emergency protocols on the site, which would include a requirement for site personnel to assist with emergency access, as required.

5.4 Pedestrian Access

Pedestrian access to public transport infrastructure, such as the bus stops on Newton Road, and The Horsley Drive shall be maintained throughout the duration of works. At no stage are the construction works to occupy the verge or footpath areas on public roads. As such it is anticipated that there would be no impact on pedestrian access.

5.5 Public Transport

The construction activities will have no material impact on the existing public transport services within the vicinity of the Site, with all bus services to continue as currently occurs.

6 Conclusions

This Construction Traffic Management Plan has been prepared as part of the overall construction works for the site at Lot 3, The Horsley Drive Business Park. It seeks to minimise the impact of construction activities on the surrounding community, in terms of vehicle traffic, public transport and pedestrian amenity adjacent to the site.