ABN: 79 168 115 679
Wurundjeri Woiworung Country
56 Down Street
COLLINGWOOD, VIC 3066
www.onemilegrid.com.au

24 August 2023

Harmer Architecture Pty Ltd'

c/- Hansen Partnership Pty Ltd

Via email: vcai@hansenpartnership.com.au

Attention: Victor Cai

51 Centre Road, Vermont

Traffic Engineering Review

INTRODUCTION

onemile**grid** has been requested by Hansen Partnership Pty Ltd to undertake a Traffic Engineering Review of the proposed administration building and associated car park works at the St James Primary School at 51 Centre Road, Vermont.

This report has been prepared in response to Department of Transport and Planning (DTP) request for additional information, specifically to address the comments listed below:

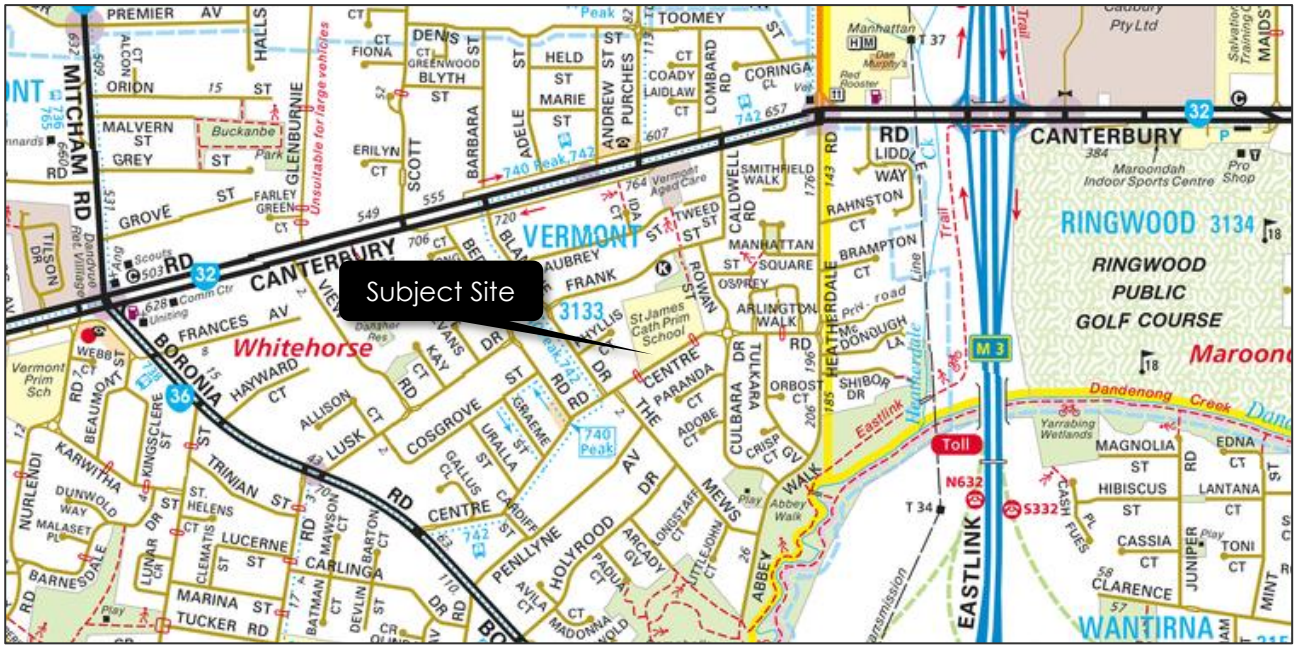
6. *Advice from suitably qualified traffic consultant on the proposed new car parking and access. This must include (but not be limited to):*
    a. *Confirmation as to whether the proposed car park layout is feasible and safe;*
    b. *A swept path assessment confirming that key car spaces are suitably accessible and revised waste collection arrangements remain appropriate for the class of collection vehicle;*
    c. *Assessment of any traffic impacts on Centre Road and surrounding streets;*
    d. *Assessment of any impacts in relation to the existing on-street drop-off and pick-up spaces on Centre Street;*
    e. *Assessment of operation of the proposed gate across the new accessway and any possible queuing impacts on Centre Road including any recommended measures to manage this.*

EXISTING CONDITIONS

Site Location

The subject site is located on the northern side of Centre Road and is addressed as 51 Centre Road, Vermont, as shown in Figure 1.

Figure 1 Site Location



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The site is generally trapezoidal in nature and is afforded a road frontage of approximately 170 m to Centre Road. The site is currently occupied by the St James Primary School, which contains a total site area of approximately 21,010 m².

Road Network

Centre Road is a local road generally aligned east-west, running between Heatherdale Road in the east, and Boronia Road in the west. Centre Road facilitates two-way movements in each direction adjacent to the site.

Indented Kerbside parking is provided on the north side of the road, which contains a mixture of unrestricted and time restricted parking. Timed restrictions are subject to P2min parking between the times of 8:15am and 9:15am, and 3:00pm to 4:00pm on school days. Parking along the southern kerbside is unrestricted.

A 40km/h speed limit applies to Centre Road in the vicinity of the site.

A supervised Childrens Crossing is provided on Centre Road to the west of the school.

Existing Car Parking and Vehicular Access

The St James Primary School currently operates at the subject site and is provided vehicle access from Centre Road via a double width crossover mid-way along the site boundary.

This access links to car parking area which provides 30 formal car parking spaces and some informal overflow parking. We understand that on-site parking is restricted to staff only, with all student pick-up/drop-off occurring on-street.

A view of the existing access point and gate is shown in Figure 2 below.

Figure 2 Existing Access Point – Centre Road

Pedestrian access is provided from this vehicle access, and from an additional pedestrian gate to Centre Road along the western boundary. An extra pedestrian connection is provided at the north-eastern corner of the school, linking through to Frank Street to the north.

PROPOSAL

It is proposed to construct a new administration building as part of upgrade works within the St James Primary School.

To facilitate the new building, the existing connection from the car park to the Centre Road access will be removed, necessitating a new site access to Centre Road towards the western site boundary. The existing Centre Road access will be retained, but only for occasional access.

In order to accommodate the new access arrangements, the existing car park will be reconfigured which will result in the relocation and adjustment to existing car spaces. A timber kerb will be installed to define the car parking area.

The proposal will result in no net change to parking provisions on-site (30 spaces total), including the provision of two accessible parking spaces. The new access will result in the loss of one car space on-street.

Furthermore, it is proposed to relocate the existing bin enclosure at the western end of the car park.

DESIGN ASSESSMENT

Whitehorse Planning Scheme – Clause 52.06

onemile**grid** has undertaken an assessment of the car parking layout and access for the proposed development with due consideration of the Design Standards detailed within Clause 52.06-9 of the Planning Scheme. A review of those relevant Design Standards is provided in the following sections.

Design Standard 1: Accessways

A summary of the assessment for Design Standard 1 is provided in Table 1.

Table 1 Clause 52.06-9 Design Assessment – Design Standard 1

Requirement	*Comments*
Be at least 3 metres wide.	Satisfied – Minimum width of accessway is 3.4 metres
Have an internal radius of at least 4 metres at changes of direction or intersection or be at least 4.2 metres wide.	Satisfied – Changes of direction between accessways are more than 4.2m wide
Allow vehicles parked in the last space of a dead-end accessway in public car parks to exit in a forward direction with one manoeuvre.	N/A – Private car park
Provide at least 2.1 metres headroom beneath overhead obstructions, calculated for a vehicle with a wheel base of 2.8 metres.	N/A – No overhead obstructions
If the accessway serves four or more car spaces or connects to a road in a Transport Zone 2 or Transport Zone 3, the accessway must be designed so that cars can exit the site in a forward direction.	Satisfied – All vehicles may exit forwards

Requirement	Comments
Provide a passing area at the entrance at least 6.1 metres wide and 7 metres long if the accessway serves ten or more car parking spaces and is either more than 50 metres long or connects to a road in a Transport Zone 2 or Transport Zone 3.	N/A – Does not connect to a Transport Zone and doesn't exceed 50 m. Notwithstanding, access will facilitate two-way movements at the boundary
Have a corner splay or area at least 50 per cent clear of visual obstructions extending at least 2 metres along the frontage road from the edge of an exit lane and 2.5 metres along the exit lane from the frontage, to provide a clear view of pedestrians on the footpath of the frontage road. The area clear of visual obstructions may include an adjacent entry or exit lane where more than one lane is provided, or adjacent landscaped areas, provided the landscaping in those areas is less than 900mm in height.	Satisfied – Sight triangle to be provided on the exit side of the access. Additionally, a motorised gate is proposed at the new access point.
If an accessway to four or more car parking spaces is from land in a Transport Zone 2 or Transport Zone 3, the access to the car spaces must be at least 6 metres from the road carriageway.	N/A – Does not connect to a Transport Zone

Design Standard 2: Car Parking Spaces

On-site car spaces are generally proposed with a minimum width of 2.6 m, length of 4.9 m and are accessed from aisles of no less than 6.4 m in accordance with the Planning Scheme requirements.

The accessible bays are provided with a length of 5.4 m and a width of 2.6 m, and an adjacent shared area of the same dimensions, in exceedance of the Australian Standard for Parking facilities, Part 6: Off-street parking for people with disabilities (AS 2890.6:2022).

Proposed Access

It is proposed to construct a new 6 m wide crossover to the car park from Centre Road, approximately 63 m to the west of the existing crossover. The proposed crossover will be constructed in accordance with the City of Whitehorse's standard drawing S100A.

RESPONSE TO RFI

Department of Transport and Planning (DTP) has undertaken a review of the application documentation and provided a series of comments in relation to a number of matters including traffic engineering. **one**mile**grid** has undertaken a review of those comments and provide the following responses.

Table 2 Response to Department of Transport and Planning (DTP) comments

Comment	*Response*
Confirmation as to whether the proposed car park layout is feasible and safe.	**one**mile**grid** are satisfied with the proposed car park layout.
A swept path assessment confirming that key spaces are suitably accessible and revised waste collection arrangements remain appropriate for the class of collection vehicle.	Swept path diagrams are provided attached demonstrating access to critical car spaces. It is noted that all spaces are designed in accordance with the Planning Scheme requirements. Consistent with the existing arrangements, forwards-in, forwards-out access for waste vehicles may be readily provided within the on-site car park. It is noted that five car spaces must remain empty to facilitate this in a single corrective manoeuvre, and thus waste collection should occur outside of busier periods within the car park. Swept path diagrams are provided illustrating potential waste collection with an 11.32m front loader waste truck.
Assessment of any traffic impacts to Centre Road and surrounding streets.	The proposal will result in no net change to on-site parking provisions, with 30 formalised spaces remaining for staff use only. One car space will be removed on-street to facilitate the crossing, which will not adversely impact the on-street pick-up/drop-off arrangements. The altered access location will not have any material impact to traffic conditions in the vicinity of the site.
Assessment of any traffic impacts in relation to the existing on-street drop-off and pick-up spaces on Centre Road.	As noted above, there is a loss of one on-street parking space as a result of the new access. Observations on-site during the critical pick-up period suggest there is ample parking availability in the vicinity to offset this loss. The proposed access location is not materially different from the existing access (being located on a straight section of Centre Road, away from any intersection roads), and is not expected to have any meaningful impacts on pick-up/drop-off. It is noted that on-site parking is allocated for staff use only, and is generally not utilised during periods of high pedestrian activity, noting that most staff will arrive before and depart after the school day.

Comment	Response
Assessment of operation of the proposed gate across the new accessway and any possible queuing impacts.	The proposed gate and crossover will operate with the same arrangement as the existing access, and is not expected to generating any additional traffic or queuing impacts. The gate will be setback behind the property boundary, offering a queueing area of 6.4m length within the crossover, allowing vehicles to prop clear of the traffic lanes on Centre Road.

Please do not hesitate to contact the undersigned, or Heshan Somaratne on (03) 9982 9747 or at heshan.somaratne@onemilegrid.com.au, should you wish to discuss the above.

Yours sincerely

James Dear

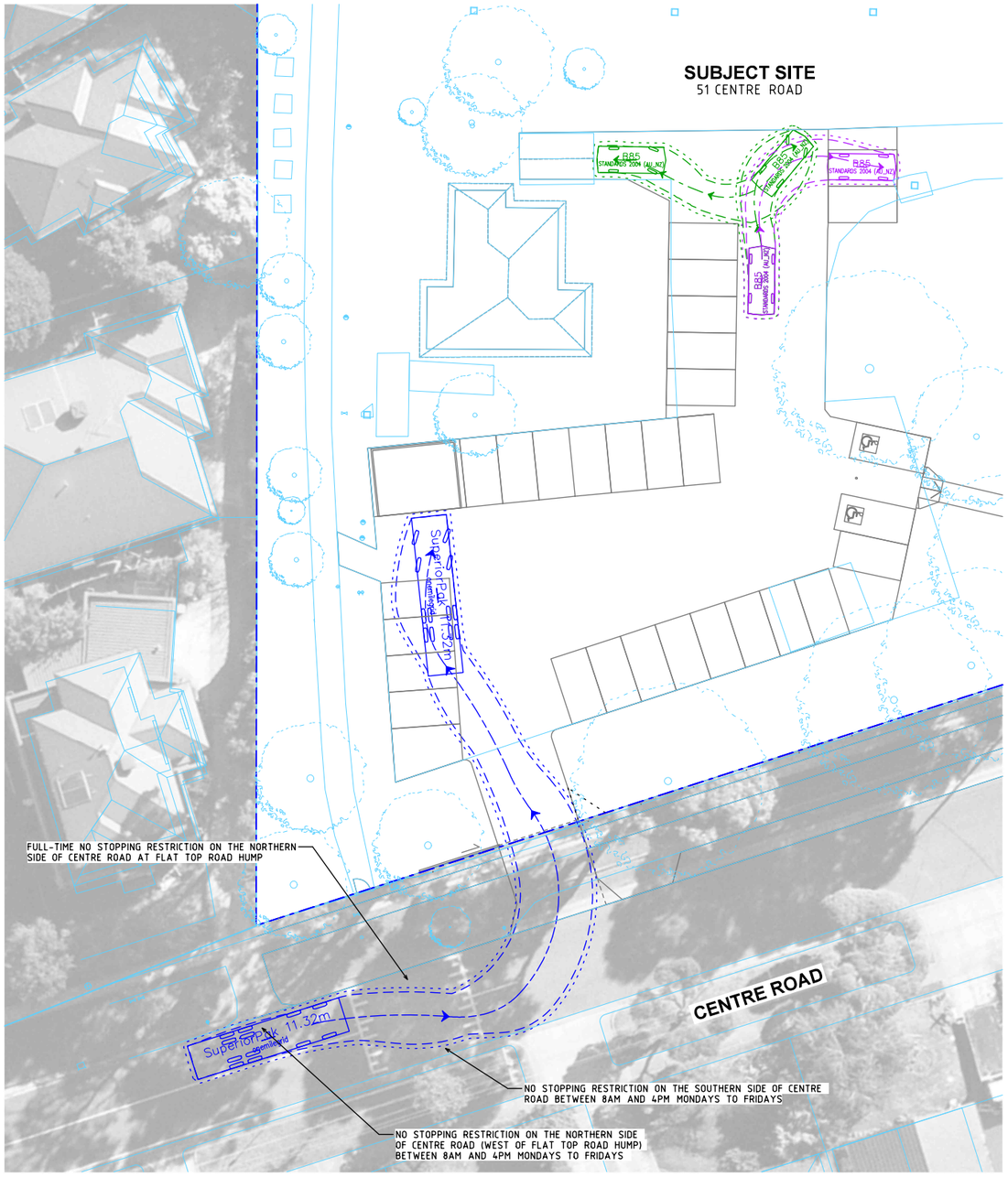
Director

onemilegrid

m: 0481 110 642
d: (03) 9982 9717
e: james.dear@onemilegrid.com.au

P/R: Heshan Somaratne/Julian Stone

att: Swept Path Assessment



ENTRY MANOEUVRES

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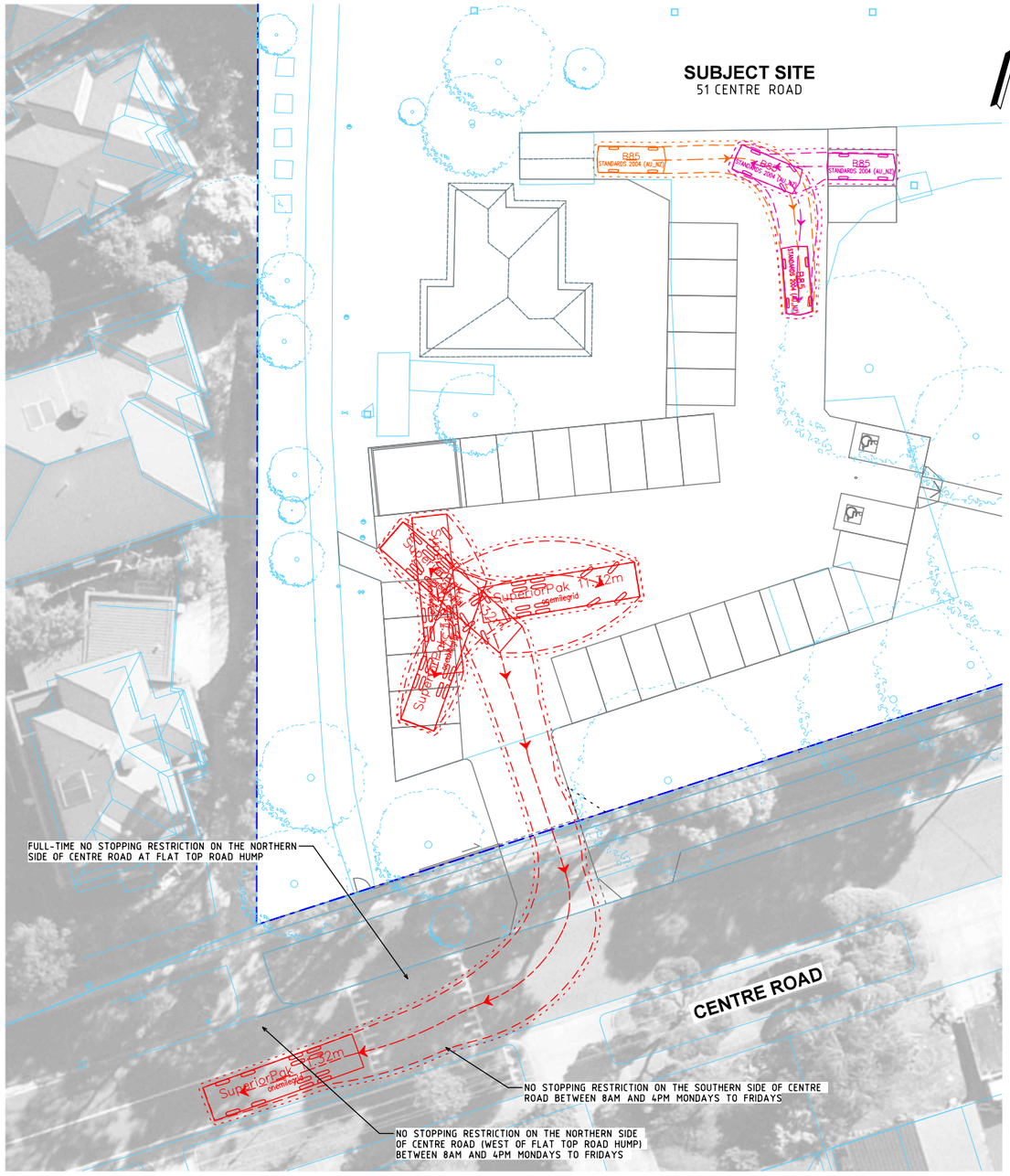
- - - - - - - - - 300mm CLEARANCE ENVELOPE SHOWN DOTTED



EXIT MANOEUVRES

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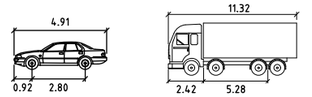

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Track	: 1.77	Track	: 2.50
Lock to Lock Time	: 6.0	Lock to Lock Time	: 6.0
Steering Angle	: 34.1	Steering Angle	: 31.0

onemilegrid

Wurundjeri Woiwurung Country
56 Down Street, Collingwood, VIC 3066
Email:info@onemilegrid.com.au Web:www.onemilegrid.com.au
Phone (03) 9939 8250

Scale 1:400 @ A3

0 2 4 8

Drawing Title
ST JAMES PRIMARY SCHOOL, VERMONT
VEHICLE SITE ACCESS
SWEPT PATH ANALYSIS

Designed	Approved	Melway Ref
CM	JD	63 C2

Project Number	Drawing Number	Revision
230488	SPA100	A

CAD File: N:\Projects\2023\230488\Drawings\230488SPA100.dgn

Date Plotted: 24-08-202311:33:43

onemilegrid operates from Wurundjeri Woiwurung Country of the Kulin nation.
We acknowledge and extend our appreciation to the Wurundjeri People, the Traditional Owners of the land.
We pay our respects to leaders and Elders past, present and emerging for they hold the memories, the traditions, the culture, and the hopes of all Wurundjeri Peoples.

Aerial Photography
Aerial photography provided by Nearmap