

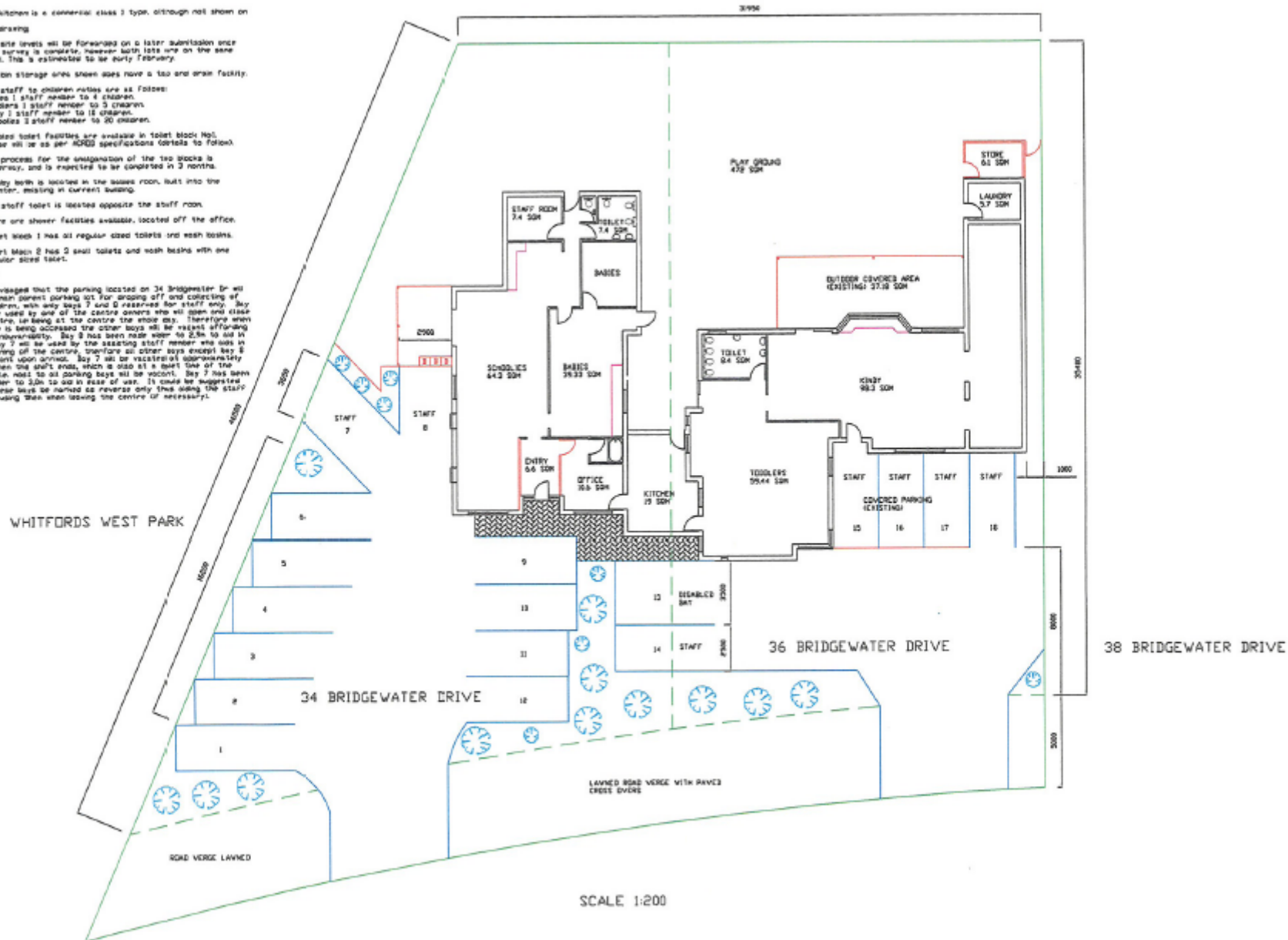


NOTES:

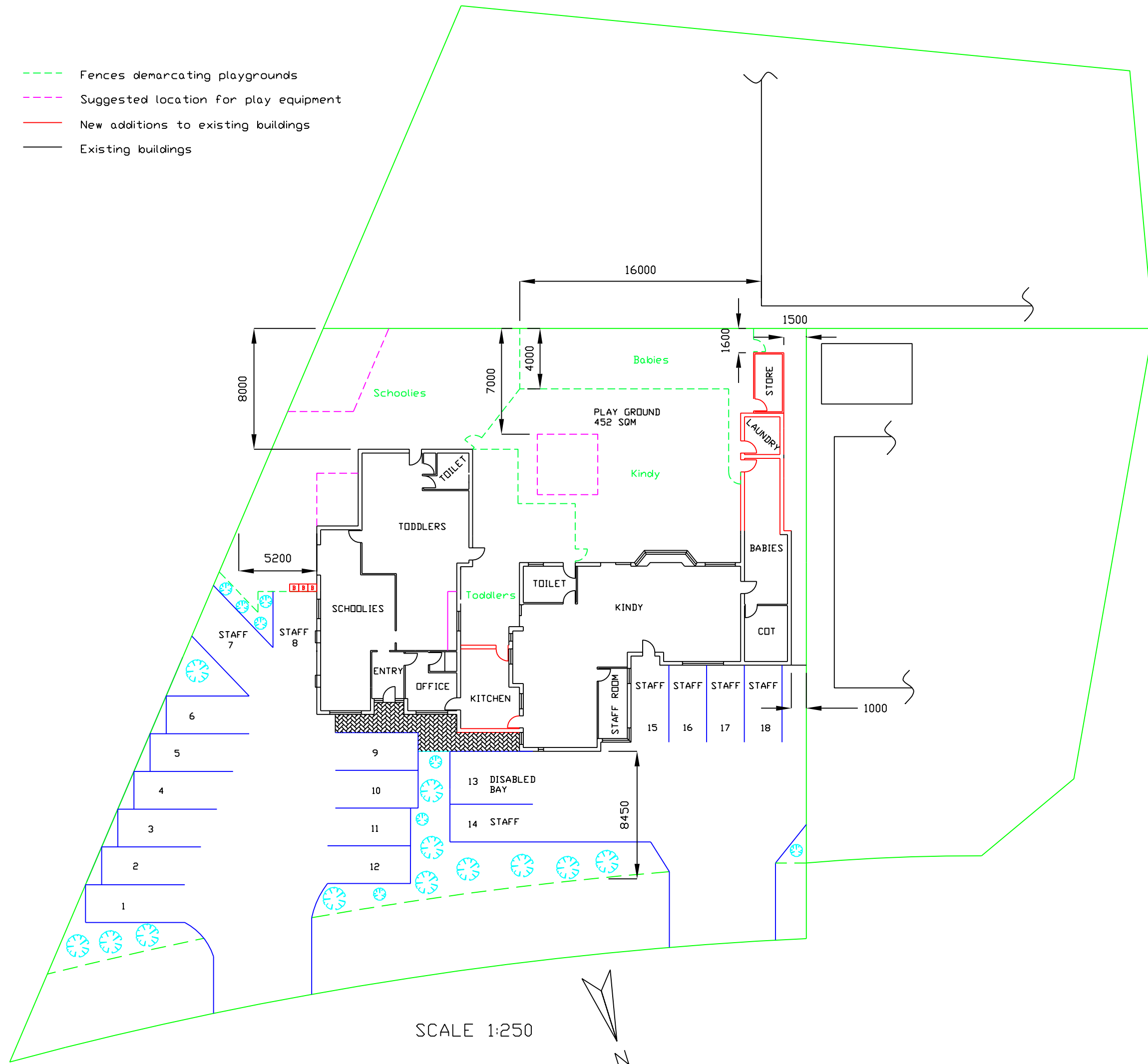
- 1) The kitchen is a commercial class 1 type, although not shown on this drawing.
- 2) The site levels will be forwarded on a later submission once the survey is complete, however both lots are on the same level. This is estimated to be early February.
- 3) The bin storage area shown does have a top and drain facility.
- 4) The staff to children ratios are as follows:
 Babies 1 staff member to 4 children.
 Toddlers 1 staff member to 3 children.
 Under 3 staff member to 15 children.
 Schoolies 1 staff member to 20 children.
- 5) Disabled toilet facilities are available in toilet block 101. These will be as per ACERS specifications details to follow.
- 6) The process for the inauguration of the two blocks is underway, and is expected to be completed in 3 months.
- 7) A baby bath is located in the nappy room, built into the counter, existing in current building.
- 8) The staff toilet is located opposite the staff room.
- 9) There are shower facilities available, located off the office.
- 10) Toilet block 1 has all regular sized toilets and wash basins.
- 11) Toilet block 2 has 2 small toilets and wash basins with one regular sized toilet.

PARKING:

It is envisaged that the parking located on 34 Bridgewater Dr will be the main parent parking lot for dropping off and collecting of the children, with any bays 7 and 8 reserved for staff only. Bay 8 will be used by one of the centre owners who will open and close the centre, leaving at the centre the whole day. Therefore when this bay is being accessed the other bays will be vacant affording easy manoeuvrability. Bay 8 has been made wider to 2.5m to aid in use. Bay 7 will be used by the assisting staff member who aids in the opening of the centre, therefore all other bays except bay 8 are vacant upon arrival. Bay 7 will be vacated at approximately 14:30 when the shift ends, which is also at a quiet time of the centre in most of all parking bays will be vacant. Bay 7 has been made wider to 2.5m to aid in ease of use. It could be suggested that these bays be named as reverse only thus using the staff member using them when leaving the centre if necessary.



- Fences demarcating playgrounds
- Suggested location for play equipment
- New additions to existing buildings
- Existing buildings





POLICY 3-1 – CHILD CARE CENTRES

STATUS:	<p>Council Policy - <i>A strategic policy that sets governing principles and guides the direction of the organisation to align with community values and aspirations.</i></p> <p>Council policies are developed by the Policy Committee for approval by Council.</p>
RESPONSIBLE DIRECTORATE:	Planning and Community Development
OBJECTIVE:	The purpose of this policy is to provide guidance for the location and development of Child Care Centres to maximise user convenience and maintain a high level of amenity in residential areas.

STATEMENT:

Relevant Legislation

District Planning Scheme No.2 Clause 1.9:

CHILD CARE CENTRE means premises used for the daily or occasional care of children in accordance with the Community Services (Child Care) Regulations 1988.

Table No 1 Zoning Table

The use class **Child Care Centre** is a 'D' use in the Residential, Mixed Use, Business, Commercial, Civic and Cultural, Private Clubs/Recreation and Special Residential Zones. A 'D' use is a use that is not permitted, but the Council may grant its approval after following the procedures of the scheme that relate to matters to be considered by Council and advertising. The use is not permitted in the Service Industrial and Rural zones.

TABLE 6

USE	NUMBER OF CARS
Child Care Centre	Not less than 5 and 1 per staff member

Related Legislation And Policies

Community Services (Child Care) Regulations 1988 (Government Gazette 25/11/1988)



Location

1 Road Hierarchy

Child Care Centres are reasonably high traffic generators and therefore should not be located on Primary District Distributors where the primary function is to cater for through traffic or on Local Distributors in close proximity to District Distributors or in or adjacent to Access Roads in residential areas where amenity, safety and aesthetics must take priority. Accordingly, these Centres should be located on Local Distributor roads in such a fashion that they will not conflict with traffic control devices and will not encourage the use of nearby Access Roads for turning movements.

2 Neighbouring Uses

Wherever possible it is preferred to locate Child Care Centres adjacent to non-residential uses such as Shopping Centres, Medical Centres/Consulting Rooms, School Site, Parks and Community Purpose Buildings to minimise the impact such Centres will have on the amenity of residential areas.

3 Existing Child Care Centres

When submitting an Application for Approval to Commence Development for a new child care centre, the proponents should demonstrate their awareness of the number, size and location of existing or approved centres within the locality.

Parking

1 Location

All parking areas should be located in front of buildings or at least be easily visible from the entry to the site so that patrons are encouraged to use the on-site parking and not the road verges. Any difficult to use or access parking bays should be allocated to staff.

2 Design

Parking areas should preferably be designed to allow traffic to flow through using entry and exit crossovers so that traffic conflicts and congestion do not unnecessarily restrict the use of the parking area. For the purposes of determining parking requirements, designs incorporating through flow are referred to as **Type 1** and those accessed only by a two-way crossover as a **Type 2**. In certain circumstances, detailed below, Type 2 designs require more parking bays than Type 1 designs.

3 Number - Children And Staff

All Child Care Centres must provide a minimum of one parking bay for each staff member and at least five parking bays for up to 25 children. For Centres with more than 25 children the required parking bays are determined by reference to the attached figure. The actual parking requirement for Centres in this category varies with the configuration of the parking area and the number of children.

At least one parking bay must conform to ACROD standards and be set aside for that purpose.



Setbacks

1 Street

In residential areas all buildings should be set back from the street boundary at least as far as the lesser of the two adjoining residences and if the adjoining lots are vacant should be set back a minimum of six metres.

2 Other

Side and rear setbacks should generally be in accordance with the Residential Planning Codes for residential buildings. Care should be taken to ensure outdoor play areas are not located adjacent to private open space or living areas.

Landscaping

1 Onsite

All street frontages of the site to a depth of three metres are required to be suitably landscaped and reticulated to assist to preserve the character of residential areas.

2 Verge

The verge area in front of all Child Care Centres is required to be suitably landscaped and reticulated and maintained to discourage patrons from parking on the verge instead of using the parking areas provided. Under no circumstances is the verge to be paved or sealed as this would encourage its use for parking and detract from the amenity of the area.

Advertising

1 Application

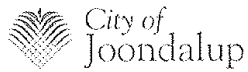
Because of the possible detrimental effect Child Care Centres can have on the amenity, safety and aesthetics of residential areas, all applications must be advertised for public comment prior to consideration for approval.

Approved Child Care Centres can display only one advertising sign approved by the Chief Executive Officer. The maximum lettering height is 20cm. Where letters or numerals are individually fixed to walls, the Chief Executive Officer shall approve the colours and materials. Where signboards are used the board shall not exceed 50cm in height and 100cm in length, and lettering shall be black on a gold/bronze background. Signs shall not be illuminated after 8.00pm each night.

Amendments: CJ213-06/99, CJ318-09/01, CJ206-10/05

Related Documentation: Delegated Authority Manual

Issued: October 2005



PARKING FOR CHILDCARE CENTRES

TYPE 1 PARKING

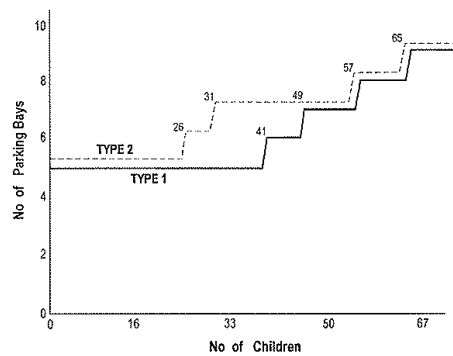
CHILDREN	BAYS
< 40	5
41 - 48	6
49 - 56	7
57 - 64	8
65 - 72	9

TYPE 2 PARKING

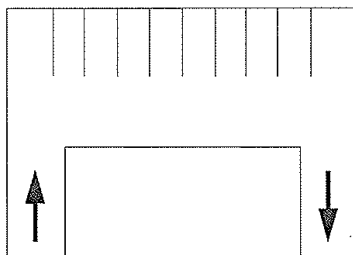
CHILDREN	BAYS
< 25	5
26 - 30	6
31 - 56	7
57 - 64	8
65 - 72	9

NOTE: ABOVE BAYS ARE FOR NUMBERS OF CHILDREN ONLY. ADDITIONAL BAYS ARE REQUIRED FOR EACH STAFF MEMBER.

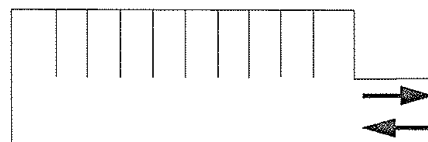
CHILDCARE PARKING



PARKING LAYOUTS



TYPE 1



TYPE 2

D:\PH\DATA\PRO\EXT\CYCLES\TR\PARKS\CHILDCARE

City of Joondalup



POLICY 7-1 - STATE ADMINISTRATIVE TRIBUNAL – MEDIATION AND REVISED DEVELOPMENT PROPOSALS

STATUS:	<i>City Policy - A policy that is developed for administrative and operational imperatives and has an internal focus.</i> <i>City policies are referred to Council for review and endorsement.</i>
RESPONSIBLE DIRECTORATE:	Planning and Community Development
OBJECTIVE:	To ensure that development matters that are brought before the State Administrative Tribunal (SAT) and involve the City of Joondalup, are dealt with in an open and accountable manner.

STATEMENT:

1. In the case of any mediation session before the SAT, where all parties consent, the City will request that the matter be heard in public.
2. In the case of any revised plans or other development matters that are presented by the applicant during the course of the SAT review, the City will request leave to advertise those revised plans or other matters for public comment, prior to establishing a position on the proposed revisions.
3. If leave is granted by the SAT to advertise amended plans or other development matters, the advertising is to be in the same format as the original advertising process. If the matter had not previously been advertised, the proposal is to be advertised in the normal manner appropriate to the application or development matter.
4. Where mediation is to take place, the CEO is to appoint an independent external advocate to represent the City.

Amendments:	CJ206-10/05
Related Documentation:	
Issued:	October 2005

Residual Holdings Pty Ltd A.B.N. 85 009 049 067 trading as:

HERRING STORER ACOUSTICS

Suite 34, 11 Preston Street, Como, W.A. 6152
P.O. Box 219, Como, W.A. 6952

Telephone: (08) 9367 6200
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Email: hsa@hsacoustics.com.au

ANNEXURE D

ALLAN HERRING M.E. AUST. M.A.S.
LYNTON STORER M.A.I.E.A. M.A.S.
TIM REYNOLDS M.E. AUST. M.A.S.

Our ref: 7332-3-06001-091

02 April 2007

Braig (Pty) Ltd
PO Box 134
HILLARYS WA 6923

Attention: Craig Scafidis

Dear Craig

**PROPOSED CHILD CARE CENTRE – 34-36 BRIDGEWATER DRIVE, KALLAROO
ACOUSTICAL ASSESSMENT – ADDITIONAL INFORMATION**

Following the meeting of the 21 March 2007 with the City of Joondalup, we have carried out additional noise modelling to reflect the amendment to the proposed childcare centre to be located at 34-36 Bridgewater Drive, Kallaroo.

SUMMARY

In accordance with the *Environmental Protection (Noise) Regulations 1997* it has been agreed that the assigned daytime noise levels at within 15 metres of a noise sensitive premises located adjacent to the proposed child care centre are an L_{A10} value of 48 dB(A) and an L_{Amax} value of 68 dB(A). At a distance of more than 15 metres from a noise sensitive premises, as outlined under the Regulations, the assigned daytime noise levels would be an L_{A10} value of 60 dB(A) and an L_{Amax} value of 80 dB(A).

We understand that the proposal has been amended, as outlined below to satisfy councils concerns regarding noise emissions.

- 1 Staff parking to occur on the western car park, with 2 park bays in the eastern car park to allow (if required) the arrival of staff before 0700 hours. Given these parking arrangements, we understand that it has been agreed that noise emissions from vehicle movements will be acceptable and no longer a point of contention.
- 2 The building extension to the south west of the proposal has been amended to allow a 1.5metre set back from the western boundary and to provide the acoustic barrier from the outdoor play areas. As shown on the attached noise contours noise received at the neighbouring premises to the west would comply with the Regulations.
- 3 As outlined by the councils acoustic consultant, the outdoor play area for the 0-2 year olds has been located along the western portion of the southern boundary, to provide a buffer zone between the outdoor play area for older children and the neighbouring noise sensitive premises to the south.
- 4 The outdoor play equipment, as shown on the attached plan, has been located at 7 metres from the southern boundary, thus providing a larger buffer distance than originally assumed by the council's acoustic consultant.

D₁

- 5 The western proportion of the southern boundary fence will be 2.2 metres high. The extent of the southern boundary fence that needs to be 2.2 metres high is shown on the attached Figure A1.

Note :

- A Only a proportion of the southern boundary fence needs to be 2.2 metre high, as at a distance of greater than 15metre from the noise sensitive premises the assigned L_{A10} value increases from 48 dB(A) to 60 dB(A).
- B With play equipment set at 7 metres from the boundary, and not 4 metres as assumed by the councils acoustic consultant, thus allowing the boundary height to be decreased from 2.4 metres, as recommended by the councils acoustic consultant, to 2.2 metres.
- C The remainder of the southern fence to be 2 metres high.

We believe that with the inclusion of the above amendments to the proposal noise emissions would be deemed-to-comply with the requirements of the Environmental Protection (Noise) Regulations 1997 and should satisfy the councils' requirements.

CRITERIA

The criteria used are in accordance with the *Environmental Protection (Noise) Regulations 1997*. These regulations stipulate maximum allowable external noise levels determined by the calculation of an influencing factor, which is then added to the base levels shown in Table 1. The influencing factor is calculated for the usage of land within the two circles, having a radii of 100m and 450m from the premises of concern.

TABLE 1 - BASELINE ASSIGNED OUTDOOR NOISE LEVEL

Premises Received Noise	Time of Day	Assigned Level (dB)		
		L_{A10}	L_{A1}	L_{Amax}
Noise sensitive premises at locations within 15m of a building directly associated with a noise sensitive use	0700 – 1900 hours Monday to Saturday	45 +IF	55 +IF	65 +IF
	0900 - 1900 hours Sunday and Public Holidays	40 +IF	50 +IF	65 +IF
	1900 – 2200 hours all days	40 +IF	50 +IF	65 +IF
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and Public Holidays	35 +IF	45 +IF	55 +IF
Noise sensitive premises at locations greater than 15m from a building directly associated with a noise sensitive use	All hours	60	75	80

Notes: L_{A10} is the noise level exceeded for 10% of the time.
 L_{A1} is the noise level exceeded for 1% of the time.
 L_{Amax} is the maximum noise level.
 IF is the influencing factor.

It is a requirement that noise from the mechanical plant, at another premises, be free of annoying characteristics (tonality, modulation and impulsiveness), defined below as per Regulation 9.

"impulsiveness" means a variation in the emission of a noise where the difference between L_{Apeak} and $L_{Amax\ Slow}$ is more than 15 dB when determined for a single representative event;

D₃

"modulation"	means a variation in the emission of noise that –
	(a) is more than 3dB $L_{A\text{ Fast}}$ or is more than 3 dB $L_{A\text{ Fast}}$ in any one-third octave band;
	(b) is present for more at least 10% of the representative assessment period; and
	(c) is regular, cyclic and audible;
"tonality"	means the presence in the noise emission of tonal characteristics where the difference between –
	(a) the A-weighted sound pressure level in any one-third octave band; and
	(b) the arithmetic average of the A-weighted sound pressure levels in the 2 adjacent one-third octave bands, is greater than 3dB when the sound pressure levels are determined as $L_{Aeq,T}$ levels where the time period T is greater than 10% of the representative assessment period, or greater than 8dB at any time when the sound pressure levels are determined as $L_{A\text{ Slow}}$ levels.

If the above characteristics exist and cannot be practicably removed, then any measured level is adjusted according to Table 2 below.

TABLE 2 - ADJUSTMENTS TO MEASURED LEVELS

Where tonality is present	Where modulation is present	Where impulsiveness is present
+5 dB(A)	+5 dB(A)	+10 dB(A)

Note: These adjustments are cumulative to a maximum of 15 dB.

Although, we have calculated the influencing factor as 4, we have agreed to use the influencing factor of 3, thus the assigned noise levels for the proposed hours of operation are as listed in Table 3.

TABLE 3 - ASSIGNED OUTDOOR NOISE LEVEL FOR OPERATING HOURS

Premises Received Noise	Time of Day	Assigned Level (dB)		
		L_{A10}	L_{A1}	L_{Amax}
Within 15m of Residence	0700 – 1900 hours Monday to Saturday	48	58	68
At distance of greater than 15m from a Residence	All hours	60	75	80

Notes: L_{A10} is the noise level exceeded for 10% of the time.
 L_{A1} is the noise level exceeded for 1% of the time.
 L_{Amax} is the maximum noise level.
 IF is the influencing factor.

Note that once the vehicles are on the public roads, their noise levels are exempt from the Regulations, as specified in Regulation 3(a).

PROPOSAL

The childcare facility consists of a main building, outside play areas and car park facilities.

The building construction proposed is capable of containing any noise, from normal activities within, such that it will not be noticeable at adjoining residential locations.

D4

From information supplied, the childcare centre normal hours of operations are between 0700 and 1800 hours, Monday to Friday. Although the centre will cater for up to 76 children, due to the mix of age groups, only about 30 children will be playing outside at any one time.

From our discussion with council, we understand that noise emissions from vehicle movements are no longer a point of contention and the noise modelling carried out relates to noise emissions from the outdoors play area.

To reduce noise emissions from the outdoor play area the following amendments to proposal have been made:

- The extension to the south west of the proposal has been amended to allow a 1.5metre set back from the western boundary and to provide the acoustic barrier from the outdoor play areas.
- As outlined by the councils acoustic consultant, the outdoor play area for the 0-2 year olds has been located along the western portion of the southern boundary, to provide a buffer zone between the outdoor play area for older children and the neighbouring noise sensitive premises to the south.
- The outdoor play equipment, as shown on the attached plan, has been located at 7 metres from the southern boundary.
- As outlined by the councils acoustic consultant, the height of the western proportion of the southern boundary fence has been increased to reduce noise emissions to within 15 metres of the noise sensitive premises located to the south.

The closest neighbouring residences are:

- | | | |
|----|---|---|
| L1 | - | Residence to the west, opposite outdoors play area |
| L2 | - | Residence to the south, within 15 metres of residence |
| L3 | - | Residence to the south, at more than 15 metres from residence |

MODELLING AND RESULTS

In order to assess the noise received at the neighbouring residential premises from children using the outdoor play area, the sound power or sound pressure level at a fixed distance is required. This has been obtained from file data of measured levels of a similar operating childcare centre from which the sound power level has been determined. Similarly, file data has been utilised for the noise from a vehicle starting up and car doors being closed.

By acoustic modelling, the propagation of the play ground noise to nearby residences has been determined taking into account attenuation due to distance, ground absorption and any barrier affects due to fences or the like. Also, as previously modelling was undertaken generally in accordance with the *EPA Draft Guidance for Assessment of Environmental Factors No. 8 – Environmental Noise*.

Calculations were based on a sound power level of 83 dB(A) per group of 10 children, as previously used in the acoustic modelling.

Acoustic modelling of child play noise was made on the basis that 30 children would be at play outside, utilising 3 of the '10 children sound power level', distributed as plane sources over the outdoor play areas. Calculations of resultant L_{A10} noise levels were made to points at 1.5 – 1.8 metres above ground level (depending on age group).

Ds

Herring Storer Acoustics
Our ref: 7332-1-06001-091

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Both single point and noise contour calculations were carried out for the revised layout and with the proportion of the southern boundary fence being 2.2 metres high.

Note :

- A Only a proportion of the southern boundary fence needs to be 2.2 metre high, as at a distance of greater than 15metre from the noise sensitive premises the assigned L_{A10} value increases from 48 dB(A) to 60 dB(A).
- B The play equipment has been set at 7 metres from the boundary and not 4 metres as assumed by the councils acoustic consultant thus allowing the boundary height to be decreased from 2.4 metres as recommended by the councils acoustic consultant to 2.2 metres.
- C The remainder of the southern fence to be 2 metres high.

The resultant noise levels are tabulated in Table 4.

TABLE 4 - ACOUSTIC MODELLING RESULTS L_{A10} CRITERIA dB(A)

Activity	Location / Calculated Noise Level		
	L1	L2*	L3*
Children Playing	31	44	47

*Worst-case location

For information, noise contours are attached as Figure C1.

From the councils acoustic consultants report, we understand that the L_{A10} criteria is the critical criteria for compliance, and if compliance with the L_{A10} is achieved, then compliance with the L_{A1} and L_{Amax} assigned noise levels would be achieved.

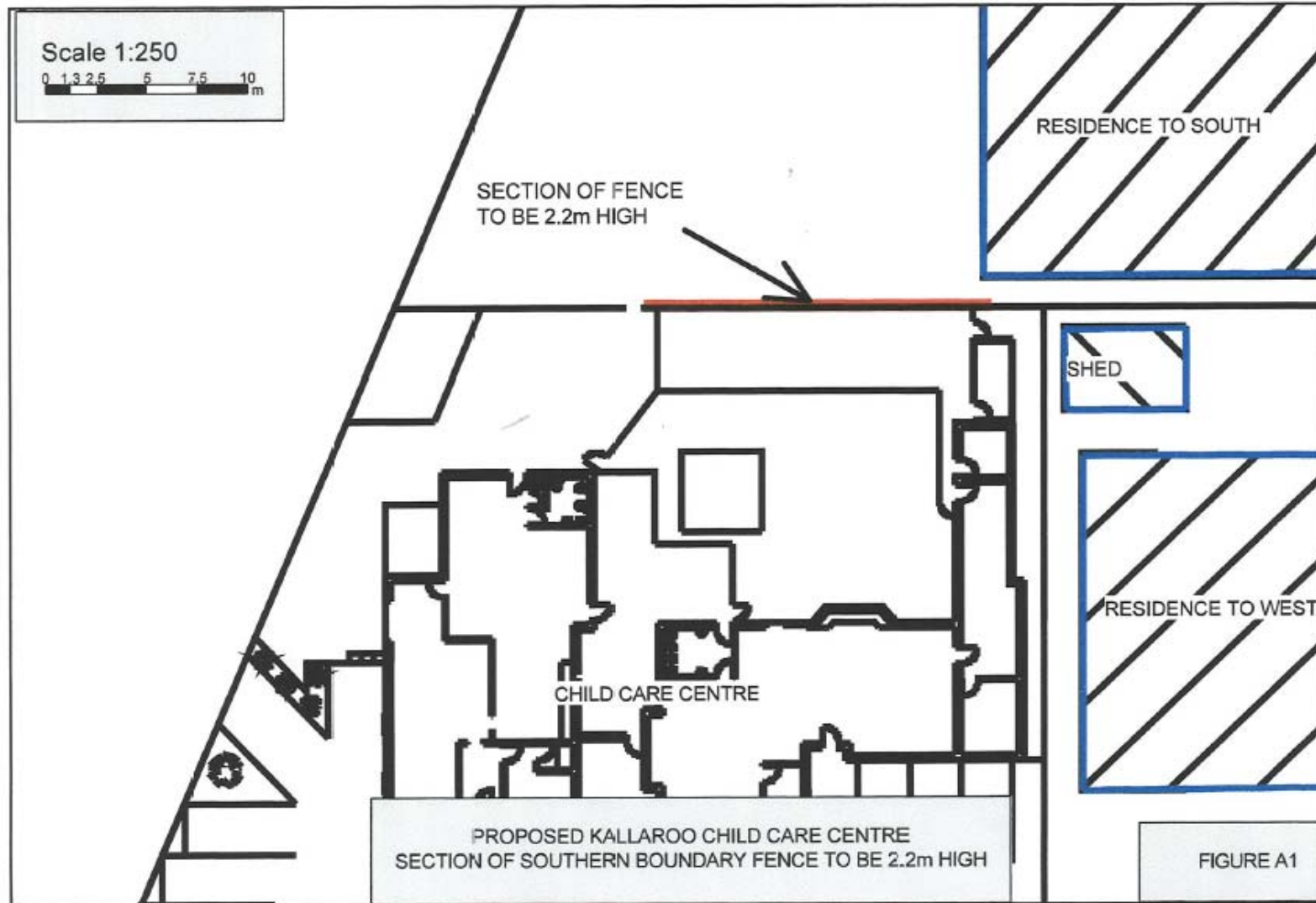
With the outdoor play equipment located at 7 metres from the boundary fence and based on our discussions, we believe that the southern boundary fence only needs to be 2.2 metres high for the proportion closest to the neighbouring residence, as shown on the attached Figure A1.

Yours faithfully,
For **HERRING STORER ACOUSTICS**

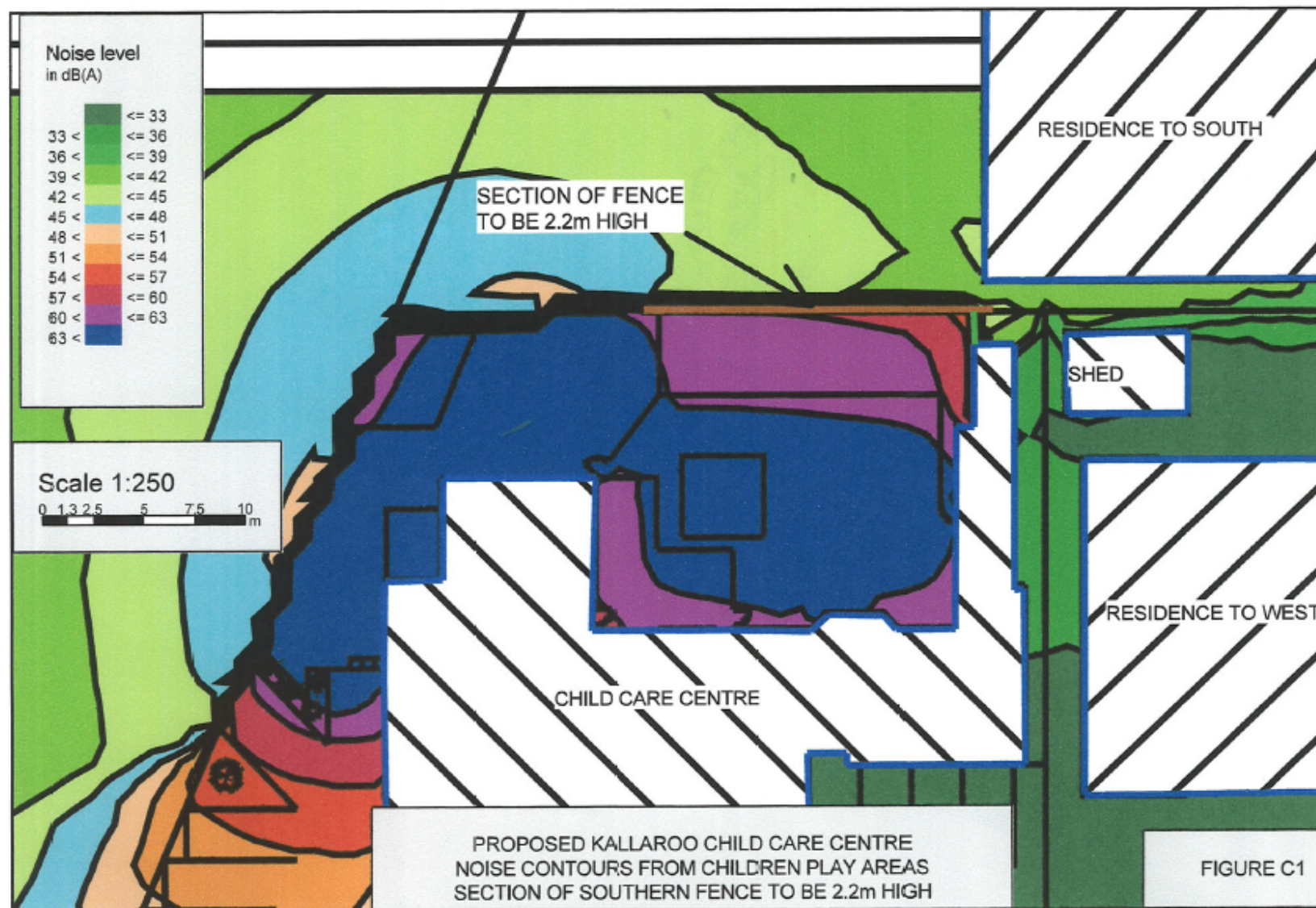
TC Reynolds

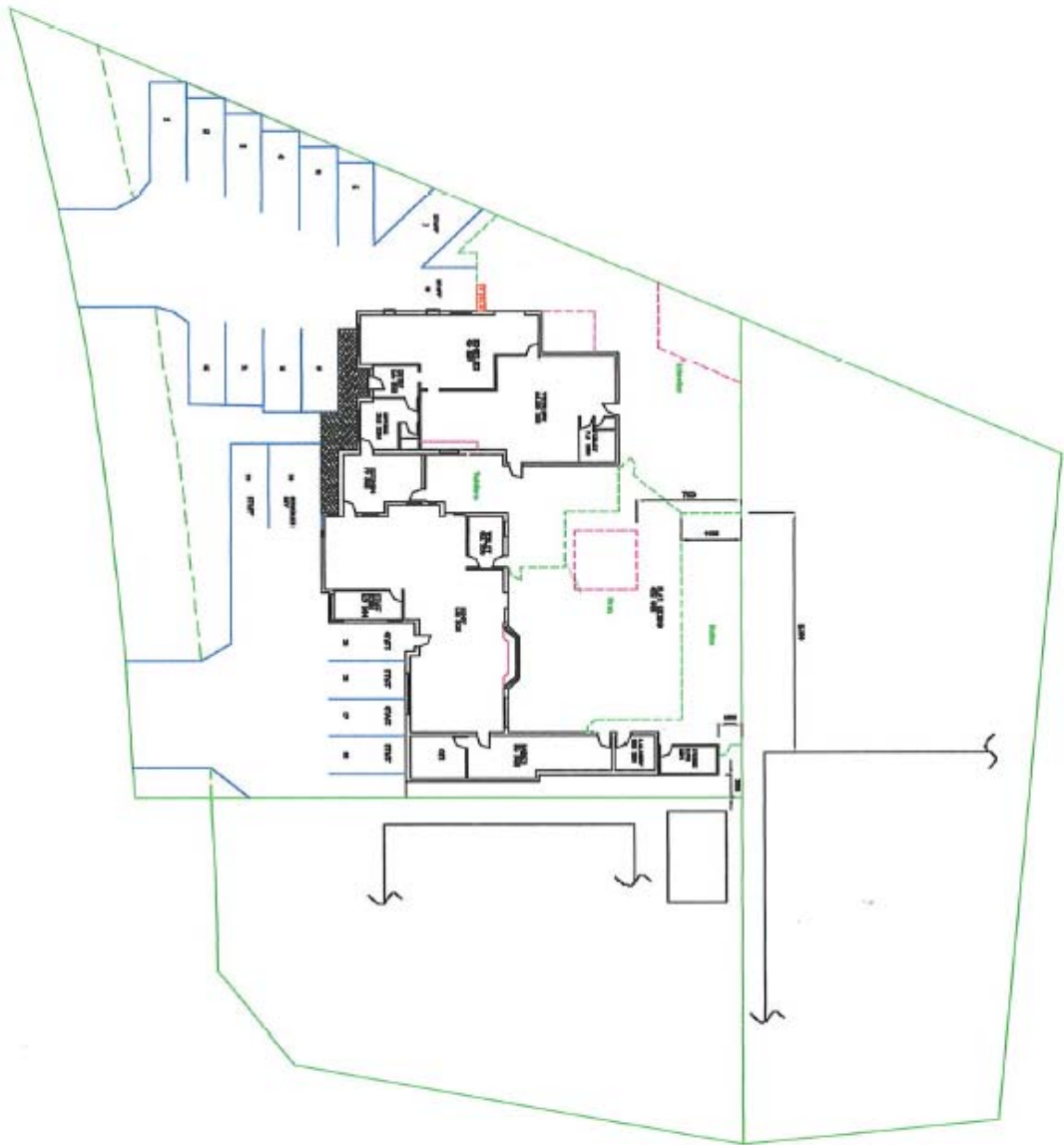
Tim Reynolds

Dc



D7





DB

TARSC Pty Ltd

**Kallaroo Day Care Centre
Bridgewater Drive**

TRAFFIC IMPACT ASSESSMENT

- Revised Final
- 13/07/06

TARSC Pty Ltd
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MAYLANDS WA 6051
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TARSC Pty Ltd

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Bridgewater Drive**

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Kallaroo Day Care Centre
Traffic Impact Assessment

TARSC Pty Ltd


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Kallaroo Day Care Centre
Traffic Impact Assessment

TARSC Pty Ltd

Document history and status

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2	13/07/06	R Ding		Section 6 modified Issued as Revised Final

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2	1	1 (e-mail)	Craig Scafidas

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Author: Rodney Ding
Project manager: Craig Scafidas
Name of organisation:
Name of project: Kallaroo Child Care
Name of document: Traffic Impact Assessment
Document version: Revised Final
Project number: J06.17

The information is provided for the benefit of Craig Scafidas for the purpose of quantifying the traffic impacts of the proposed Kallaroo day care centre of Bridgewater Drive. No liability is accepted by TARSC Pty Ltd for use of any information or comments outlined in this report by any other persons or organisations. Notwithstanding that this report may contain statements in relation to technical matters, both of a general nature and in relation to specific issues, in no way should readers of the report rely solely on its contents. Readers must seek appropriate expert advice on their own particular circumstances and rely on such advice.

Kallaroo Day Care Centre
Traffic Impact Assessment

TARSC Pty Ltd

1. Introduction

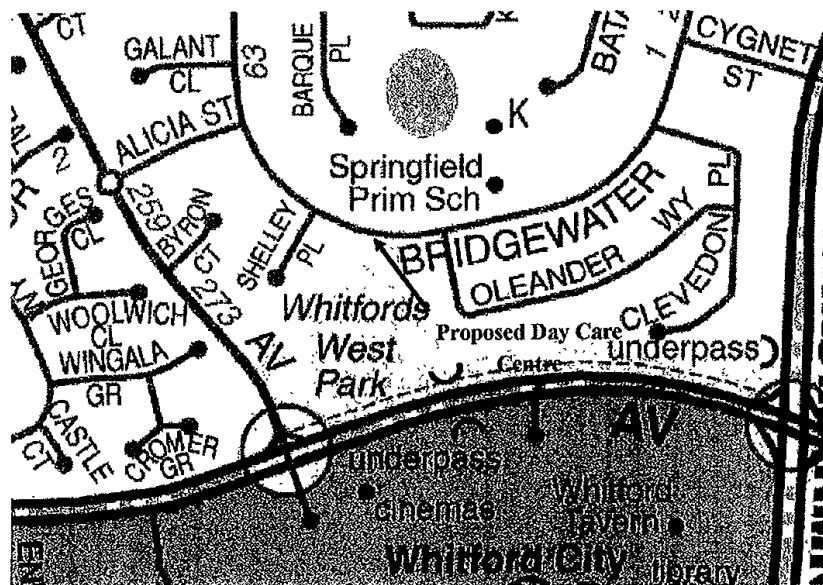
1.1 Purpose of This Report

TARSC Pty Ltd has been commissioned by Craig Scafidas to provide a traffic impact assessment for the proposed day care centre on Bridgewater Drive, Kallaroo.

1.2 Background

The existing sites of the 34 and 36 Bridgewater Drive are proposed to be redeveloped into a day care centre catering for babies, toddlers, kindergarten and school aged children.

The proposed development site is on the southern side of Bridgewater Drive, Kallaroo on the north west corner of Whitfords West Park. The site is currently of residential use with single dwellings located on each site. There is parking provided in front on 34 Bridgewater Drive. Refer to the locality plan below.



■ Figure 1 Locality Plan

The development is proposed to combine the two building and provide a total of 18 car parking bays. Refer to Appendix A for a plan showing the proposed development.

Kallaroo Day Care Centre
Traffic Impact Assessment

TARSC Pty Ltd

3. Proposed Development

The proposed development is to involve the combination of the two building on 34 and 36 Bridgewater Drive into a single building.

It is proposed to provide vehicle access from Bridgewater Drive via the two existing crossovers for 34 and 36 Bridge water Drive. The two crossovers will provide access to separate parking areas for each of the current two separate properties. On 34 Bridgewater Drive there is proposed to be 12 parking bays whilst on 36 Bridgewater Drive there is proposed to be 6 parking bays, for a total of 18 parking bays for the entire proposed development. **Appendix A** contains plans detailing this development.

Sight distances are generally good from the proposed locations of the crossovers with approximately 85m sight distance to the west and 300m sight distance to the east along Bridgewater Drive. These distances far exceed the minimum 40m required as per the publication **Guide to Traffic Engineering Practice** series by Austroads.

The development is proposed to provide day care for the following types and numbers of children:

- 10 Babies;
- 20 Toddlers;
- 30 Kindergarten children; and,
- 10 Before/After School Care.

Kallaroo Day Care Centre
Traffic Impact Assessment

TARSC Pty Ltd

5. Traffic Impact of Development

From Section 4 it is apparent that there will be traffic volume increases on Bridgewater Drive in the vicinity of the development. However the above increase in traffic volumes will not exceed the capacities of the Bridgewater Drive. Table 5 below gives an indication of the resultant traffic volumes compared to the road capacities, known as the Volume Capacity Ratio (VCR).

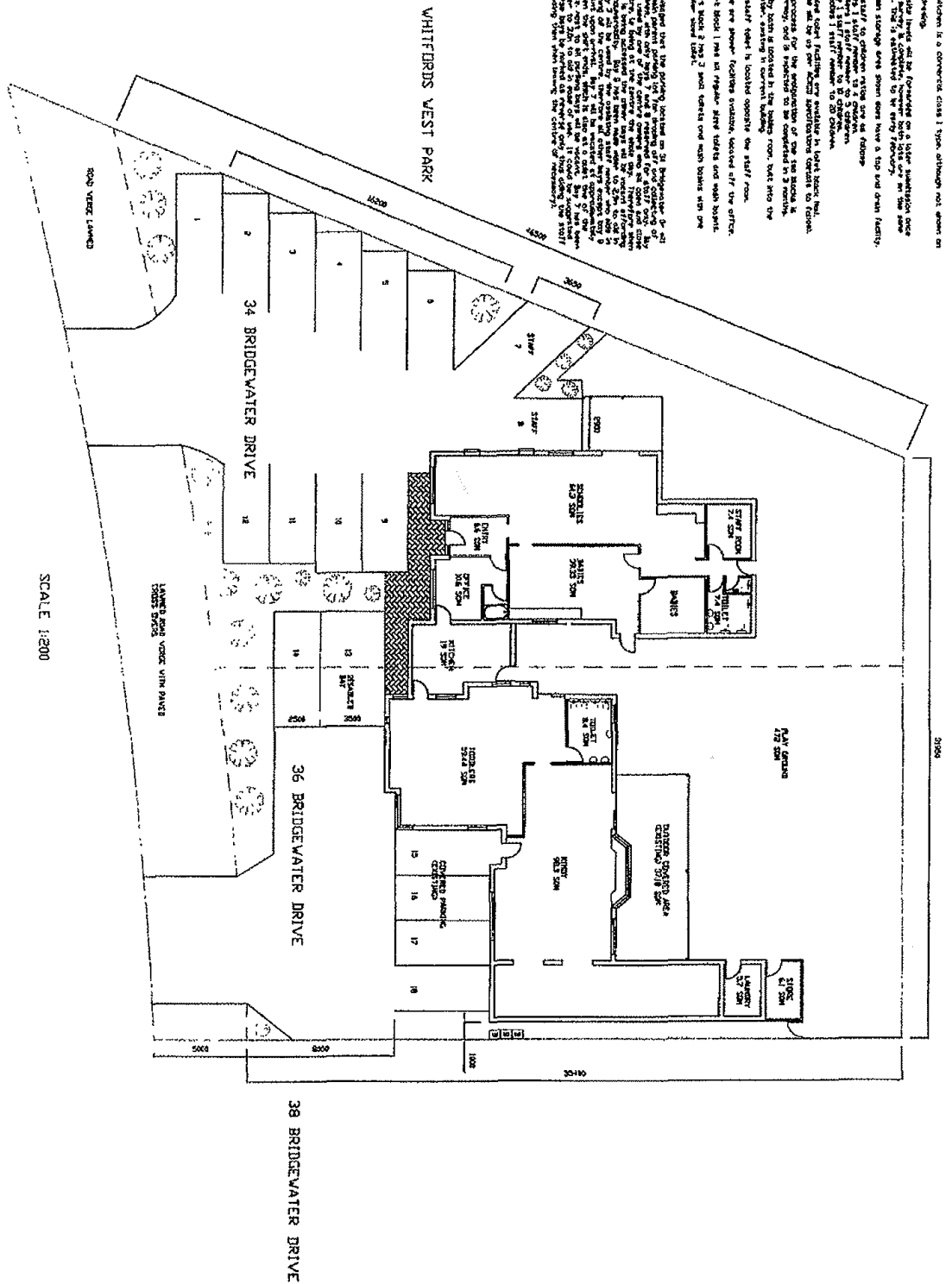
■ Table 5 Comparison to Road Capacities

Road	Traffic Volume		
	Daily	Capacity	Volume to Capacity Ratio (VCR)
Bridgewater Drive	1483	3,000	0.49

Based on the above calculated resultant VCR it is concluded that the additional vehicular trips due to the development will not have an adverse effect on Bridgewater Drive in the vicinity of the proposed day care centre.

To assess the impact of additional traffic at the crossovers for the day care centre aaSIDRA was used. The traffic volume for Bridgewater Drive and the day care centre between 8am and 9am was utilised as this period represented the highest traffic flows and percentage increase in traffic. The 33 vehicles entering/leaving the day care centre was split between 34 and 36 Bridgewater Drive based on the number of parking bays available on each lot. Thus 11 movements were associated with 36 Bridgewater Drive and 22 with 34 Bridgewater Drive.

- 1) The kitchen is a converted cross 1 type, although not shown on site drawings.
- 2) The staff lounge will be furnished on a later installation date.
- 3) The main storage area shown here have a tip and drain facility.
- 4) The staff 50 children will use as follows:
 Boys 1 staff member is a woman.
 Girls 1 staff member is a woman.
 Boys 1 staff member is a woman.
 Girls 1 staff member is a woman.
 Boys 1 staff member is a woman.
 Girls 1 staff member is a woman.
- 5) The staff 50 children will use as follows:
 Boys 1 staff member is a woman.
 Girls 1 staff member is a woman.
 Boys 1 staff member is a woman.
 Girls 1 staff member is a woman.
 Boys 1 staff member is a woman.
 Girls 1 staff member is a woman.
- 6) The process for the application of the new system is underway, and is expected to be completed in 2 months.
- 7) A 2000 ton is located in the building room, but also the counter, setting in current building.
- 8) The staff 50 children will use as follows:
 Boys 1 staff member is a woman.
 Girls 1 staff member is a woman.
 Boys 1 staff member is a woman.
 Girls 1 staff member is a woman.
 Boys 1 staff member is a woman.
 Girls 1 staff member is a woman.
- 9) There are shower facilities outside, located off the office.
- 10) Toilet block 1 and 2 are regular staff toilets and wash basins.
- 11) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 12) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 13) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 14) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 15) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 16) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 17) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 18) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 19) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 20) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 21) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 22) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 23) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 24) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 25) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 26) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 27) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 28) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 29) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 30) Toilet block 2 and 3 are regular staff toilets and wash basins.
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- 33) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 34) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 35) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 36) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 37) Toilet block 2 and 3 are regular staff toilets and wash basins.
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- 42) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 43) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 44) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 45) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 46) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 47) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 48) Toilet block 2 and 3 are regular staff toilets and wash basins.
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- 50) Toilet block 2 and 3 are regular staff toilets and wash basins.
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- 59) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 60) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 61) Toilet block 2 and 3 are regular staff toilets and wash basins.
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- 65) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 66) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 67) Toilet block 2 and 3 are regular staff toilets and wash basins.
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- 69) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 70) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 71) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 72) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 73) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 74) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 75) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 76) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 77) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 78) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 79) Toilet block 2 and 3 are regular staff toilets and wash basins.
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- 81) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 82) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 83) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 84) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 85) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 86) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 87) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 88) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 89) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 90) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 91) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 92) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 93) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 94) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 95) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 96) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 97) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 98) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 99) Toilet block 2 and 3 are regular staff toilets and wash basins.
- 100) Toilet block 2 and 3 are regular staff toilets and wash basins.



Kallaroo Day Care Centre
Traffic Impact Assessment

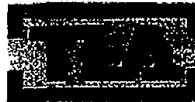
TARSC Pty Ltd

Appendix C Traffic Flow Data

15-JUN-2006 16:04

TECHNICAL SERVICES Co/J

618 9400 4501 P.01/12



TRAFFIC LOGISTICS AUSTRALIA
403 Summer Lakes Parade,
Ballajura WA 6066
Ph: + 61(8) 9209 1285
Email: trafficlogistics@bigpond.com

MetroCount Traffic Executive
Class Speed Matrix

ClassMatrix-717

DATASETS:

Site: [COJ03] Bridgewater Drive, East of Shelley Place
Direction: 8 - East bound A>B, West bound B>A, Lane: 0
Survey Duration: 12:15 Thu 18 May 2006 to 09:45 Wed 31 May 2006
File: \\Traffic-gekibwb\TRALOGAUS\MAIN ROADS WA DATA
COLLECTION\DATA\COLLECTION-Classifiers\MICROCOM - PRIVATE\0 - CITY OF
JOONDALUP\31 May 7\COJ0331MAY2006.EC0 (Plus)
Identifier: A867N6VC MC56-1 [MC55] (c)Microcom 07/06/99
Algorithm: Factory default

PROFILE:

Filter time: 12:15 Thu 18 May 2006 to 09:45 Wed 31 May 2006
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/hr.
Direction: North, East, South, West (bound)
Headway: All
Scheme: AustRoads94
Name: Factory default profile
Method: Vehicle classification
Units: Metric (m, km, m/s, km/hr, kg, tonne)
In profile: 17051 Vehicles

85% = 58.0 km/h

upol = 1483

15-JUN-2006 16:05

TECHNICAL SERVICES CofJ

618 9400 4501 P.04/12

Speed Statistics (Bin size = 0.1m/s)

Total vehicles in profile = 17051
 Posted speed limit = 50 km/hr
 Number speeding = 8302 (48.69%)
 Maximum speed = 92 km/hr
 Minimum speed = 10 km/hr
 Mean speed = 49.16 km/hr
 85% speed = 58.0 km/hr
 Median speed = 49.7 km/hr
 20 km/hr pace = 40 to 60
 Number in 20 km/hr pace = 12735 (74.69%)
 Variance = 68.85
 Standard deviation = 8.32 km/hr

Speed Bins

Speed	Bin	Below	Above	Effect	n*Effect
0 - 10	0 0.0%	0 0.0%	17051 100.0%	0.00	0.00
10 - 20	80 0.5%	80 0.5%	16971 99.5%	0.00	0.00
20 - 30	450 2.6%	530 3.1%	16521 96.9%	0.00	0.00
30 - 40	2084 12.2%	2614 15.3%	14437 84.7%	0.00	0.00
40 - 50	6135 36.0%	8749 51.3%	8302 48.7%	0.00	0.00
50 - 60	6518 38.2%	15267 89.5%	1784 10.5%	0.00	0.00
60 - 70	1577 9.2%	16844 98.8%	207 1.2%	0.00	0.00
70 - 80	176 1.0%	17020 99.8%	31 0.2%	0.00	0.00
80 - 90	27 0.2%	17047 100.0%	4 0.0%	0.00	0.00
90 - 100	4 0.0%	17051 100.0%	0 0.0%	0.00	0.00
100 - 110	0 0.0%	17051 100.0%	0 0.0%	0.00	0.00
110 - 120	0 0.0%	17051 100.0%	0 0.0%	0.00	0.00
120 - 130	0 0.0%	17051 100.0%	0 0.0%	0.00	0.00
130 - 140	0 0.0%	17051 100.0%	0 0.0%	0.00	0.00
140 - 150	0 0.0%	17051 100.0%	0 0.0%	0.00	0.00
150 - 160	0 0.0%	17051 100.0%	0 0.0%	0.00	0.00
160 - 170	0 0.0%	17051 100.0%	0 0.0%	0.00	0.00
170 - 180	0 0.0%	17051 100.0%	0 0.0%	0.00	0.00
180 - 190	0 0.0%	17051 100.0%	0 0.0%	0.00	0.00
190 - 200	0 0.0%	17051 100.0%	0 0.0%	0.00	0.00

Total Speed Factor = 0.00

Hour Bins

	Mon - Fri				Sat, Sun			
Hour	Num	Mean	p85	n> 50	Num	Mean	p85	n> 50
0000	28	54.4	63.0	19 67.9%	80	51.0	60.8	47
0100	10	56.7	61.6	9 90.0%	49	50.7	59.4	26
0200	8	51.2	57.2	5 62.5%	26	52.5	61.9	17
0300	22	52.1	58.0	17 77.3%	16	52.6	60.5	12
0400	21	61.5	73.1	13 61.9%	20	50.3	62.6	13
0500	91	56.0	63.4	74 81.3%	12	55.2	62.3	9
0600	272	53.1	63.0	181 66.5%	50	53.8	61.2	33
0700	495	49.4	58.0	219 44.2%	79	51.7	63.7	45
0800	1351	41.2	47.9	150 11.1%	173	51.3	60.8	106
0900								
1000								
1100								
1200								
1300								
1400								
1500								
1600								
1700								
1800								
1900								
2000								
2100								
2200								
2300								

15-JUN-2006 16:05

TECHNICAL SERVICES Conf

618 9400 4501 P.06/12



TRAFFIC LOGISTICS AUSTRALIA
 403 Summer Lakes Parade,
 Balajura WA 6066
 Ph: + 61(8) 9209 1285
 Email: trafficlogistics@bigpond.com

MetroCount Traffic Executive
Weekly Vehicle Counts

WeeklyVehicle-711

DATASETS:

Site: [COJ03] Bridgewater Drive, East of Shelley Place
 Direction: 8 - East bound A>B, West bound B>A, Lane: 0
 Survey Duration: 12:15 Thu 18 May 2006 to 09:45 Wed 31 May 2006
 File: \\Traffic-gakibwa\TRALOG\MAIN ROADS WA DATA
 COLLECTION\DATA\COLLECTION-Classifiers\MICROCOM - PRIVATE\0 - CITY OF
 JOONDALUP\31 May 7\COJ0331MAY2006.EC0 (Plus)
 Identifier: A867N6VC.MC56-1 [MC55] (c)Microcom 07/06/99
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 Direction: North, East, South, West (bound)
 Headway: All
 Scheme: AustRoads94
 Name: Factory default profile
 Method: Vehicle classification
 Units: Metric (m, km, m/s, km/hr, kg, tonne)
 In profile: 17051 Vehicles

15-JUN-2006 16:05

TECHNICAL SERVICES CoPJ

618 9400 4501 P.07/12

Weekly Vehicle Counts

Report Id: WeeklyVehicle-711
Site ID: COJ03.OWE
Location: Bridgewater Drive, East of Shelley Place
Filter time: 12:15 Thu 18 May 2006 to 09:45 Wed 31 May 2006
Scheme: AustRoads94
Filter: CL(1 2 3 4 5 6 7 8 9 10 11 12) DR(NESW) SP(10,160) HW(all)

	MON	TUE	WED	THU	FRI	SAT	SUN
AVERAGES							
Date 15 May 06	16 May	17 May	18 May	19 May	20 May	21 May	
5-DAY 7-DAY							
Hour period							
0000-0100	*	*	*	*	0	28	18
0.0 15.3							
0100-0200	*	*	*	*	0	9	11
0.0 6.7							
0200-0300	*	*	*	*	0	8	5
0.0 4.3							
0300-0400	*	*	*	*	0	4	2
0.0 2.0							
0400-0500	*	*	*	*	0	5	3
0.0 2.7							
0500-0600	*	*	*	*	0	3	3
0.0 2.0							
0600-0700	*	*	*	*	0	15	6
0.0 7.0							
0700-0800	*	*	*	*	0	22	17
0.0 13.0							
0800-0900	*	*	*	*	0	59	34
0.0 31.0							
0900-1000	*	*	*	*	0	77	66
0.0 47.7							
1000-1100	*	*	*	*	0	98	72
0.0 56.7							
1100-1200	*	*	*	*	0<	101<	97<
0.0< 66.0<							
1200-1300	*	*	*	39	0	110	84
19.5 58.3							
1300-1400	*	*	*	72	0	122<	86
36.0 70.0							
1400-1500	*	*	*	80	0	116	85
40.0 70.3							
1500-1600	*	*	*	149<	136	101	80
142.5 116.5							
1600-1700	*	*	*	122	134	117	81
128.0 113.5							
1700-1800	*	*	*	144	169<	113	111<
156.5< 134.3<							
1800-1900	*	*	*	147	193	112	88
150.0 125.0							
1900-2000	*	*	*	31	77	74	42
54.0 56.0							
2000-2100	*	*	*	0	52	43	33
26.0 32.0							
2100-2200	*	*	*	0	36	34	16
18.0 21.5							
2200-2300	*	*	*	0	36	22	18

15-JUN-2006 16:06

TECHNICAL SERVICES CofJ

618 9400 4501 P.09/12

Weekly Vehicle Counts

Report ID: WeeklyVehicle-711
 Site ID: CQJ03.0WE
 Location: Bridgewater Drive, East of Shelley Place
 Filter time: 12:15 Thu 18 May 2006 to 09:45 Wed 31 May 2006
 Scheme: AustRoads94
 Filter: CL(1 2 3 4 5 6 7 8 9 10 11 12) DR(NESW) SP(10,160) HW(all)

	MON	TUE	WED	THU	FRI	SAT	SUN
AVERAGES							
Date	22 May 06	23 May	24 May	25 May	26 May	27 May	28 May
5-DAY	7-DAY						
Hour period							
0000-0100	2	1	1	4	6	11	23
2.8 6.9							
0100-0200	2	0	1	3	2	7	22
1.6 5.3							
0200-0300	1	0	1	2	1	3	10
1.0 2.6							
0300-0400	1	0	2	3	3	4	6
3.4 3.9							
0400-0500	3	3	2	2	3	3	9
2.6 3.6							
0500-0600	8	12	13	13	11	3	3
11.4 9.0							
0600-0700	28	31	35	36	33	18	11
32.6 27.4							
0700-0800	67	69	54	63	56	25	15
61.8 49.9							
0800-0900	150<	194<	166<	157<	179<	50	30
158.0< 131.4<							
0900-1000	92	99	99	108	86	91	41
96.8 88.0							
1000-1100	59	65	55	62	72	100	78
62.6 70.1							
1100-1200	72	64	64	72	80	110<	82<
70.4 77.7							
1200-1300	63	76	80	87	84	126	101<
78.0 88.1							
1300-1400	62	60	57	76	109	129	86
72.8 82.7							
1400-1500	84	78	64	67	110	105	78
80.6 83.7							
1500-1600	152<	160<	185<	140	163	105	91
160.0< 142.3<							
1600-1700	118	147	149	122	137	120	50
134.6 120.4							
1700-1800	143	150	154	156<	164<	119	62
153.4 138.3							
1800-1900	106	111	118	133	128	135<	73
119.2 114.9							
1900-2000	43	71	72	90	90	96	48
73.2 72.9							
2000-2100	22	32	31	52	54	56	20
38.2 38.1							
2100-2200	11	22	33	41	30	22	12
27.4 24.4							
2200-2300	17	12	14	22	26	27	12