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Childcare Centres, Coolinga Road & Marri
Crescent, Lesmurdie

Prepared For:
Pachamama Pty Ltd



Parking and Traffic
Management Plan Report



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1. INTRODUCTION

1.1 BACKGROUND

Pachamama Pty Ltd has commissioned Donald Veal Consultants (DVC) to prepare this Parking and Traffic Management Plan report to support its application to the City of Kalamunda to bring its approvals in line with its statutory government licensing approvals and practices with respect to operating hours and maximum capacity of children, for its existing Childcare Centres on Coolinga Road and Marri Crescent, Lesmurdie.

1.2 SCOPE OF THIS REPORT

This report covers the analysis of parking operations data collected during AM and PM peak period surveys carried out by DVC at the two sites. It provides the current Parking and Traffic Management Plans as practiced at the two locations. In addition, it provides updated Parking and Traffic Management Plans, including recommendations based on our professional appraisal, site observations and data analysis.

This revised version of the report includes additional information as agreed with the City following discussions with Mr Berlin Ciputra, Acting Principal Development Engineer and Mr Craig Edmeades, Traffic Design Officer of the City of Kalamunda on Tuesday 17th October, 2017.

2. SITE LOCATIONS

The two existing Child Care Centres are located at 36 Marri Crescent and 61 Coolinga Road, Lesmurdie. The general locality is shown in **Figure 2.1**, with more detail in **Figure 2.2**.

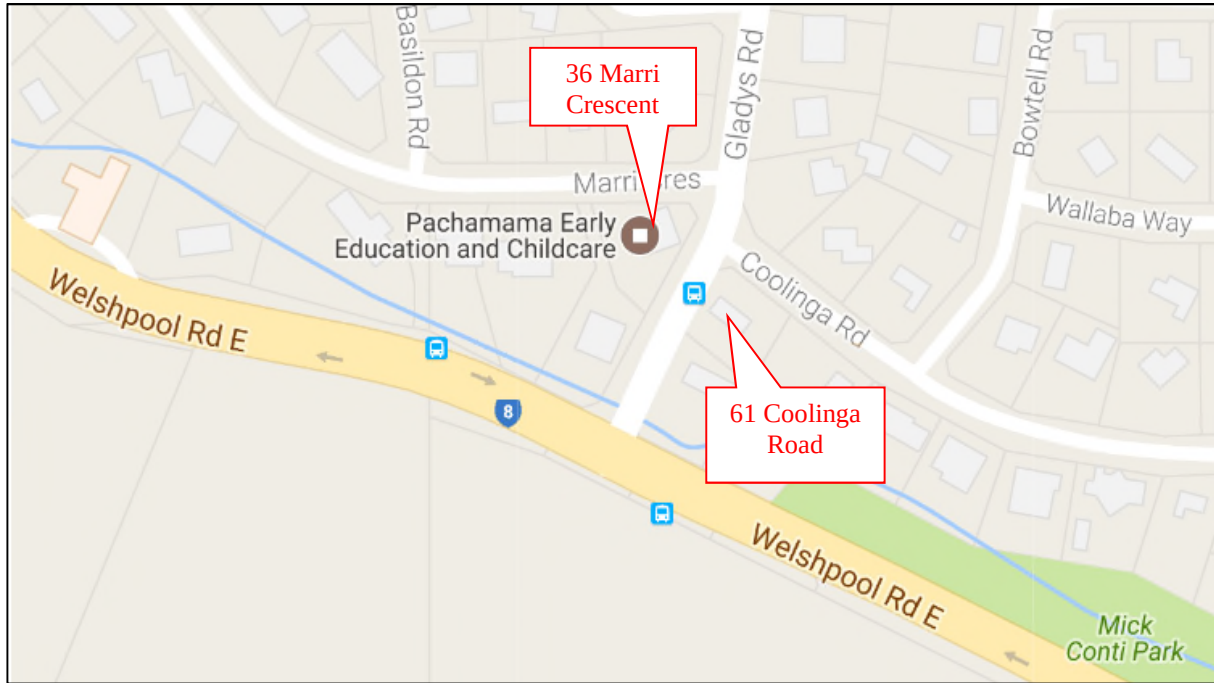


Figure 2.1: General Locality Plan. Source: Google Maps



Figure 2.2: Site Location. Source: Nearmap

2.1 ADJACENT ROAD NETWORK

The typical characteristics of roads in the immediate vicinity of the site are described in **Table 2.1**.

Table 2.1: Local Road Typical Characteristics

Road	Speed Limit	Carriageway		Road Authority
		Pavement Width	Lanes	
Coolinga Road	50 km/h	6.5 m	2 lanes undivided	City of Kalamunda
Gladys Road	50 km/h	7.0 m	2 lanes undivided	City of Kalamunda
Marri Crescent	50 km/h	6.0 m	2 lanes undivided	City of Kalamunda
Welshpool Road East	70 km/h	16.0 m	4 lanes divided	MRWA

2.2 ROAD HIERARCHY

MRWA's Road Hierarchy Classification is shown in **Figure 2.3**, highlighting Welshpool Road East as a Distributor A road, with Marri Crescent and Gladys Road as Local Distributor Roads. All other roads in the vicinity of the site are classified as Access Roads.

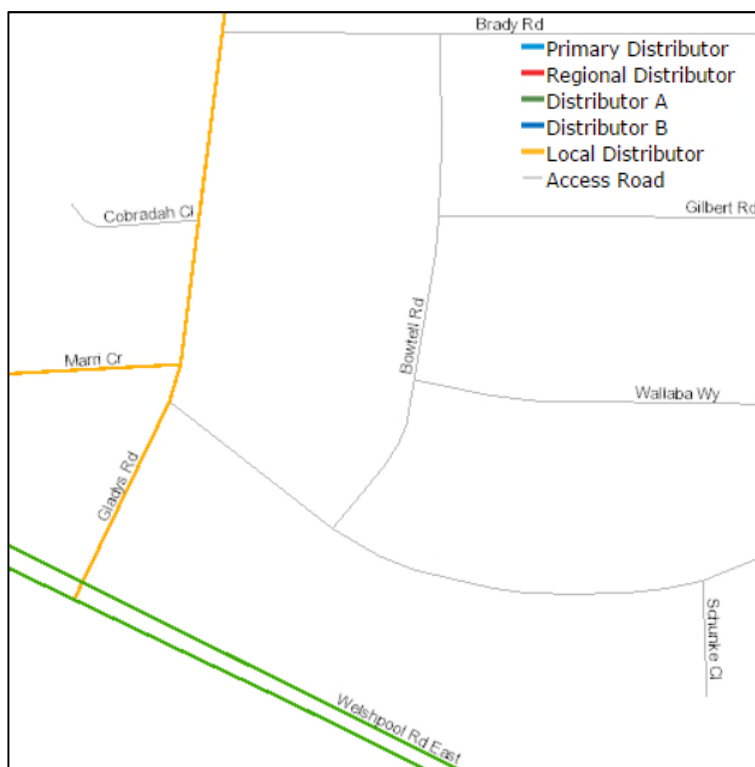


Figure 2.3: Road Hierarchy
 Source: MRWA

2.3 EXISTING TRAFFIC VOLUMES

Traffic count information as shown in **Table 2.2** was sourced from the MRWA Metropolitan Traffic Digest and the City of Kalamunda.

Table 2.2: Traffic Count Data

Road	Date	Vpd	AM Peak Hour	PM Peak Hour	Heavy vehicle %age
Coolinga Road	2015	149	18 vph (0900-1000)	25 vph (1700-1800)	2.0 %
	March 2017	305	25 vph (0700-0800)		
Gladys Road	2015	2,855	286 vph (0700-0800)	311vph (1700-1800)	4.8 %
	March 2017	4,180	400 vph (0700-0800)		
Marri Crescent	No data supplied				
Welshpool Road East	2015	14,470	1,096 vph (0800-0900)	1,161 vph (1445-1545)	8.4 %

2.4 CRASH HISTORY

A search of the MRWA CARS database showed no recorded crashes along Coolinga Road and seven crashes along Gladys Road in the last 5-year recorded period, from 2012 to 2016. No crashes were recorded on Marri Crescent in this period. Details of the crash history are included in **Appendix D**. Crash locations are shown in **Figure 2.4**, which shows the crashes concentrated at the intersections at either end of Gladys Road with one crash near Mazenod College. There were no crashes in the vicinity of the child care centres.

2.5 PLANNED CHANGES TO THE ROAD NETWORK

DVC has discussed the planning of the future road network in the vicinity of the subject site previously with the City of Kalamunda. Council did not specify any other works in the vicinity of the site which will impact upon or be impacted by the proposed development.



Figure 2.4: Crash Locations

3. DEVELOPMENT PROFILES

3.1 36 MARRI CRESCENT

The existing child care centre at 36 Marri Crescent is licensed by the Care and Education Regulatory Unit for 69 children in a long day care capacity, which requires 11 educators at full capacity.

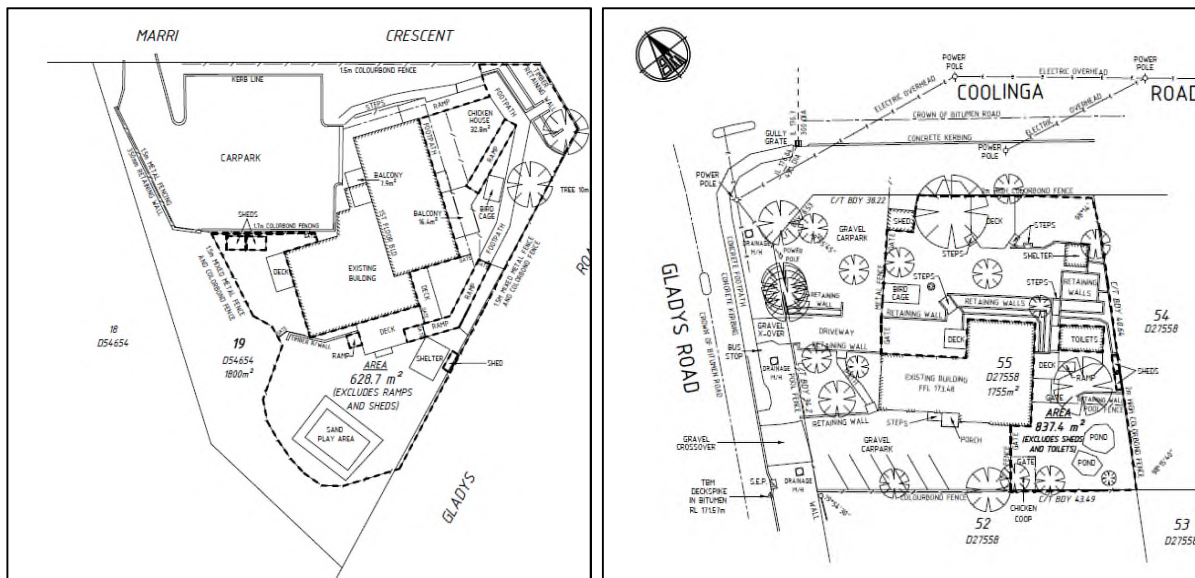


Figure 3.1: Layout of the Marri Crescent and Coolinga Road centres.

The centre currently is licensed to operate from 6.30am to 6.30pm.

3.2 61 COOLINGA ROAD

The existing child care centre at 61 Coolinga Road is licensed to provide Outside School Hours care to a maximum of 43 children which requires 5 educators at full capacity. With mandated changes to the National Quality Framework, this number will reduce to 3 educators from October 2018.

When initially approved, the opening hours of this facility were from 3:30pm to 6:00pm. However, the centre is licensed to and has been operating before school care from 6:30am to 9:00am and vacation care from 7:00am to 6:30pm.

4. CURRENT CAR PARKING PROVISION

4.1 36 MARRI CRESCENT

The Long Day Care facility at 36 Marri Crescent has an off street parking area accessed off Marri Crescent.

The car park provides 13 parking bays, split between staff bays and customer bays, with the designated use of each clearly marked. See **Photos 1 & 1a**.



Photos 1 & 1a: Staff and customer bays are clearly marked in the car parking area.

4.2 61 COOLINGA ROAD

The Outside School Hours Care facility at 61 Coolinga Road currently has two off street parking areas available. Both are accessed off Gladys Road.

The northern parking area is designated as providing parking for staff vehicles only. The area is unsealed and the bays are therefore unmarked, but it currently accommodates eight staff vehicles. Six vehicles were observed on the day of the surveys whilst we are advised that a further two vehicles are also often present. See **Photos 2 & 2a**.



Photos 2 & 2a: Space is provided for 7 staff vehicles.

The southern parking area is designated for 'Customer Parking', but is also able to accommodate some of the Centre's vans. As with the northern area, this parking area is unsealed and the bays are therefore not formally line-marked, however they are marked with signs on the end fence.

Photos 3 & 3a show six parking bays marked, including one designated 'disabled'. However, during the surveys only a maximum of three of the bays were observed as being occupied at any one time.



Photos 3 & 3a: Six 90° bays are marked, with 3 shuttle buses also accommodated.

Two drawings showing more formalised layouts of the parking bays in this area are included in **Appendix E**. Both options show seven staff bays in the northern car park comprising four standard sized bays plus three small vehicle (5.0m x 2.4m) bays. One option shows five full sized bays, including one designated for people with disabilities plus two small car bays (5.2m x 2.4m) for customer use in the southern car park. The other option shows three standard bays, two small car bays (5.2m x 2.4m) including one designated for people with disabilities for customer use plus six tandem bays for staff use in the southern car park. Hence one option provides for seven staff and seven customers whilst the other accommodates parking for 13 staff and five customers.

Other staff members were seen to park their vehicles at 59 Coolinga Road, which is currently unoccupied. The premises of 59 and 61 Coolinga Road are linked by a gate enabling staff to walk directly between the two properties. See **Photo 4**.



Photo 4: Staff parking at 59 Coolinga Road

5. PARKING OPERATION SURVEYS

5.1 SURVEY PERIODS & DATA COLLECTED

Parking surveys were carried out for the PM peak hour on Tuesday 20th June 2017, from 3.30pm to 5.30pm, and for the AM peak period on Wednesday 21st June 2017 from 7am until 9am.

The surveys consisted of a count of the number of vehicles arriving and departing at both of the centres during the survey periods, and number plate checks to determine the duration of stay of each vehicle. The locations used for parking were also recorded for both centres, both for staff and parents' vehicles.

The results of the surveys are analysed below and detailed in **Appendix A**.

5.2 SURVEY RESULTS AND ANALYSIS

5.2.1 36 Marri Crescent

During the AM survey period from 7.00 am to 9.00am, a total of 52 vehicles parked at the Marri Crescent site. Two of these were already parked prior to the survey commencing, and eleven remained parked at the end. It is expected that some of these latter vehicles belonged to staff, whilst others had only just arrived. One of the Centre's vans occupied one parking bay for a short period during the AM survey.

The vast majority of vehicles attending the site turned left into the parking area having come from Gladys Road, and returned the same way.

Only two vehicles were observed to park on the verge, remaining there for 6 and 8 minutes, respectively.

During the PM survey period from 3.30 pm to 5.30pm, a total of 49 vehicles parked at the Marri Crescent site. Nine of these were already parked prior to the survey commencing. No vehicles remained parked at the end. It is expected that some of these former vehicles belonged to staff, whilst others appeared to have only just arrived, as they left shortly after the start of the survey.

The vast majority of vehicles attending the site turned left into the parking area having come from Gladys Road, and returned the same way.

No vehicles were observed to park on the verge in the PM peak period.

The number of vehicles parked during the AM period peaked at 13, with the corresponding maximum for the PM period peaking at 10. The average customer dwell times at this site were less than 7 minutes in the AM peak period and 9 minutes in the PM.

5.2.2 61 Coolinga Road

During the AM survey period from 7.00 am to 9.00am, a total of 14 vehicles parked at the Coolinga Road site in the southern (customer) parking area, with a further 6 cars in the northern (staff) parking area.

All six of the vehicles parked in the staff area belonged to staff members, and remained parked at the end of the AM survey period. One staff member parked in the customer area, arriving after the end of the drop off period, remained parked beyond the end of the AM survey period.

The majority of vehicles attending the customer parking area turned left in from Gladys Road, and then turned left out.

No vehicles were observed to park on the verge in the AM period, with four doing so in the afternoon. On average, these vehicles remained parked on the verge for around 4 minutes.

Four of the Centre's vans were present at the far end of the customer parking area prior to the AM survey commencing. Three of them departed during the AM survey period, with two returning before the end.

During the PM survey period from 3.30pm to 5.30pm, a total of 23 vehicles parked at the Coolinga Road site in the southern (customer) parking area, with a further 9 cars using the northern (staff) parking area.

All nine of the vehicles parking in the staff parking area belonged to staff members. Six of these were present at the commencement of the PM surveys, four left during the period, whilst two remained throughout. A further three staff vehicles arrived during the survey, with one leaving again and the other two remaining beyond the end of the PM survey period.

The majority of vehicles leaving the customer parking area turned right onto Gladys Road.

The maximum number of cars parked in the customer area during both the AM and the PM periods was three, with the corresponding maximum for the Staff car park being six. The average dwell times at this site were 5 minutes in the AM peak period and just over 7 minutes in the PM.

No vehicles were observed to park on the verge in the AM period, with four doing so in the afternoon. On average, these vehicles remained parked on the verge for around 4 minutes.

Four of the vans were also present in the customer parking area prior to the AM survey commencing. Three departed during the AM survey period, with two returning before the end. In the PM period, three vans remained in the customer area throughout, with one more joining them just after 3.30pm.

5.2.3 59 Coolinga Road

Three staff vehicles arrived to park on site at 59 Coolinga Road during the AM peak survey period, and remained beyond the end of the survey period.

At the commencement of the PM survey period, five vehicles were parked on site. One remained throughout the period, whilst the other four left before the end.

An additional vehicle was noted parked on the verge along Coolinga Road throughout the survey period, but assumed to be unconnected with the Child Care Centre.

5.3 OPERATING HOURS

Both the AM and PM peak period surveys confirmed that there were no issues regarding access to the sites at the relevant times, and that the traffic being generated by the sites had no visible impact upon the operation of the adjacent road network.

It was observed that a small queue of vehicles unrelated to the centre began to form on Gladys Road, from the Welshpool Road East intersection around 7.30am. The back of this queue remained well clear of both of the car park accesses (some 65m from the intersection), until just after 8.00am, then increased significantly, before clearing around 30 minutes later. However, all of the children had been dropped off at the 61 Coolinga Road site by the required drop off time of 8.00am, and therefore did not affect the centre.

6. PARKING AND TRAFFIC MANAGEMENT PLAN

6.1 EXISTING PLAN

The existing Parking and Traffic Management Plan was prepared by Pachamama based on the current trading hours being 6:30am to 6:30pm and the current license numbers of both centres, being 69 and 43 children.

A copy of the existing Plan is attached in **Appendix B**.

6.2 REVISED PLAN

DVC has updated the existing Parking and Traffic Management Plan to reflect the observations and outcomes of the above parking surveys.

A copy of the Revised Plan is attached in **Appendix C**.

6.3 PEDESTRIAN SAFETY

The two child care centres, being located on opposite sides of Gladys Road, generate some pedestrian crossing movements during the course of the day. Some Marri Crescent staff parking is provided at 61 Coolinga Road, which generates up to six staff crossings from the car park to the Marri Crescent site in the morning and a similar number of crossing movements in the afternoon.

There is adequate parking provision in each child care centre to independently cater for the parking demand generated by each site. However, some parents and guardians with children enrolled in both centres choose to park in one, typically the Marri Crescent car park and escort their child across Gladys Road to drop them off and then return to their vehicle, repeating the exercise in reverse in the afternoon. No child crosses the road unaccompanied.

These pedestrian crossing movements do not warrant any upgraded pedestrian crossing facilities and are assisted by the small island in Gladys Road, south of Coolinga Road. No safety issues were identified with the current arrangement which caters for bus passengers boarding and alighting at the bus stops either side of Gladys Road and local residents as well as pedestrian crossing movements between the child care centre sites. Also, there is no recorded history of crashes involving pedestrians in the area over the past five years.

The City of Kalamunda's Acting Principal Development Engineer and its Traffic Design Officer agreed with DVC that no upgrade work was needed with respect to pedestrian facilities on the surrounding road network.

6.4 MINIBUS PARKING ARRANGEMENTS

The child care centre uses a number of minibuses to transport children between the child care centre and various local schools. The minibuses pull off of Gladys Road in a forward gear onto the wide verge area and then reverse into the visitor parking area whilst the car park is not in use, hence they do

not turn within the car park itself. The minibuses are parked up inside the car park before visitors arrive to drop children off and leave the site in a forward gear with children on board and take them to their various schools in the morning. The minibuses then return and park up, reversing into the car park which is otherwise empty and not in use. In the afternoon they collect children from the various schools and bring them back to the site for after school care. The minibuses again pull off Gladys Road in a forward gear and reverse into the car park. Children disembark the minibuses when they are parked up within the car park area.

The City of Kalamunda officers, at a meeting held on 17th October 2017, accepted that this practice could continue provided the minibuses were fitted with reversing cameras and a spotter was used to ensure safety during the reversing manoeuvres.

7. SUMMARY & CONCLUSION

7.1 SUMMARY

DVC has carried out this study in order to provide a Parking and Traffic Management Plan report to support Pachamama's application to the City of Kalamunda to bring its approvals in line with its statutory government licensing approvals and practices with respect to operating hours and maximum capacity of children, of its existing Childcare Centres on Coolinga Road and Marri Crescent, Lesmurdie.

Parking surveys were carried out at both sites on typical weekdays for AM and PM peak periods (7am to 9am and 3.30pm to 5.30pm). These surveys recorded each vehicle arriving and departing the sites during these periods, together with details of where they parked and how long they remained.

The results of the surveys show that the existing parking allocations are working well with the current staff and child numbers, with adequate customer parking at both sites. This is primarily due to the short dwell times and fast turnover of the bays, which averaged between 5 and 9 minutes through the two peak periods.

Very few incidence of verge parking were observed at either site. When this did occur, it appeared to be more a behavioural trait than a necessity, as parking spaces were available within the car park.

Some staff members have been allocated parking in the driveway of 59 Coolinga Road, which reduces competition for bays in the staff parking area at 61 Coolinga Road.

The operation of the current operating times were not seen to have a detrimental effect on either the access to the car parks or on the operation of the adjacent road network.

Following a review of a previous version of this report by the City of Kalamunda, minor edits to the parking layout for 61 Coolinga Road have been made and included in the plan shown in **Appendix E**. These comprise widening of the staff bay in the northeast corner to 2.7m, physically blocking the unused northern access to the staff car park and sealing the driveway connection between Gladys Road and the property boundary.

7.2 CONCLUSION

The parking surveys have confirmed that staff members at both centres are aware of the existing Parking Management Plan and that it is very well adhered to. The current availability of parking is being well managed and is adequate for the staffing levels and the number of children under care.

Very little evidence was observed of verge parking by customers, although the few that did park on the verge could have been accommodated within the parking areas.

Given the widespread acceptance of and adherence to the current Parking and Traffic Management Plan, DVC advised that only a minimal update appeared necessary. The nature of this update was simply to refine small details and includes a hand out to be given to customers.

APPENDIX A: DETAILED SURVEY RESULTS



Figure A1: Car Park Survey Locations

Site 1: Marri Cres AM Survey Results 0700 hours – 0900 hours

Car No.	Location Parked	IN				OUT				Duration of Stay	No Vehicles in Car Park	Notes
		HH	MM	SS	Dir	HH	MM	SS	Dir			
1	Site 1	Before Start			-	Still there			-		1	
2	Site 1	Before Start			-	7	0	47	Right		2	
3	Site 1	7	4	9	Left	Still there			-		2	
4	Site 1	7	7	29	Left	Still there			-		3	
5	Site 1	7	12	28	Left	7	16	42	Right	0:04:14	4	
6	Site 1	7	13	21	Left	7	18	9	Right	0:04:48	5	
7	Site 1	7	14	56	Left	Still there			-		6	
8	Site 1	7	15	2	Left	7	21	40	Right	0:06:38	7	
9	Site 1	7	15	20	Left	7	18	34	Right	0:03:14	8	
10	Site 1	7	15	46	Left	7	27	48	Right	0:12:02	9	
11	Site 1	7	16	37	Left	7	25	23	Right	0:08:46	10	
12	Site 1	7	16	55	Left	7	23	31	Right	0:06:36	10	
13	Site 1	7	19	59	Right	7	24	20	Right	0:04:21	10	
14	Site 1	7	25	52	Left	7	32	2	Right	0:06:10	6	
15	Site 1	7	26	58	Left	7	30	40	Right	0:03:42	7	
16	Site 1	7	28	48	Left	7	32	50	Right	0:04:02	7	
17	Site 1	7	29	41	Left	7	35	46	Right	0:06:05	8	
18	Site 1	7	35	23	Left	7	38	44	Right	0:03:21	6	
19	Site 1	7	43	56	Right	Still there			-		5	Staff
20	Site 1	7	46	34	Right	7	52	28	Right	0:05:54	6	
21	Site 1	7	49	55	Left	7	54	1	Right	0:04:06	7	
22	Site 1	7	54	35	Left	8	0	24	Right	0:05:49	6	
23	Site 1	8	3	18	Left	8	18	37	Right	0:15:19	6	
24	Site 1	8	5	6	Left	8	11	4	Right	0:05:58	7	
25	Site 1	8	5	53	Left	8	10	31	Right	0:04:38	8	
26	Site 1	8	6	4	Left	8	12	34	Right	0:06:30	9	
27	Site 1	8	6	28	Left	8	10	49	Right	0:04:21	10	
28	Site 1	8	7	37	Left	8	26	12	Right	0:18:35	11	
29	Site 1	8	9	7	Left	8	16	33	Right	0:07:26	12	
30	Site 1	8	11	18	Left	8	15	15	Right	0:03:57	10	
31	Site 1	8	11	21	Left	8	19	47	Right	0:08:26	11	
32	Site 1	8	10	50	Right	8	26	49	Right	0:15:59	12	
33	Site 1	8	15	22	Left	Still there			-		11	
34	Site 1	8	15	33	Left	8	22	25	Right	0:06:52	12	
35	Site 1	8	15	35	Left	8	21	30	-	0:05:55	12 + Verge	VERGE PARKED
36	Site 1	8	15	54	Left	8	21	36	Right	0:05:42	13	
37	Site 1	8	17	3	Left	8	29	17	Right	0:12:14	13	
38	Site 1	8	17	8	Left	8	25	15	Right	0:08:07	13 + Verge	VERGE PARKED
39	Site 1	8	18	39	Left	8	23	33	Right	0:04:54	13	Waited for space/car to exit
40	Site 1	8	22	12	Left	8	26	30		0:04:18	12	
41	Site 1	8	24	41	Left	8	31	37		0:06:56	11	
42	Site 1	8	28	41	Left	8	33	18		0:04:37	9	
43	Site 1	8	30	46	Left	8	35	53		0:05:07	9	
44	Site 1	8	33	3	Left	8	41	44		0:08:41	9	
45	Site 1	8	33	3	Left	8	39	52		0:06:49	9	
46	Site 1	8	36	48	Left	Still there			-		9	
47	Site 1	8	38	38	Left	8	43	46		0:05:08	10	
48	Site 1	8	40	47	Left	Still there			-		10	
49	Site 1	8	40	52	Left	8	46	3		0:05:11	11	
50	Site 1	8	44	4	Left	Still there			-		10	
51	Site 1	8	45	5	Left	Still there			-		11	
52	Site 1	8	46	15	Left	Still there			-		11	

Site 1: Marri Cres PM Survey Results 1530 hours – 1730 hours

Car No.	Location Parked	IN				OUT				Duration of Stay	No Vehicles in Car Park	Notes
		HH	MM	SS	Dir	HH	MM	SS	Dir			
1	Site 1	Before Start			-	Still there			-		1	
2	Site 1	Before Start			-	7	0	47	Right		2	
3	Site 1	7	4	9	Left	Still there			-		2	
4	Site 1	7	7	29	Left	Still there			-		3	
5	Site 1	7	12	28	Left	7	16	42	Right	0:04:14	4	
6	Site 1	7	13	21	Left	7	18	9	Right	0:04:48	5	
7	Site 1	7	14	56	Left	Still there			-		6	
8	Site 1	7	15	2	Left	7	21	40	Right	0:06:38	7	
9	Site 1	7	15	20	Left	7	18	34	Right	0:03:14	8	
10	Site 1	7	15	46	Left	7	27	48	Right	0:12:02	9	
11	Site 1	7	16	37	Left	7	25	23	Right	0:08:46	10	
12	Site 1	7	16	55	Left	7	23	31	Right	0:06:36	10	
13	Site 1	7	19	59	Right	7	24	20	Right	0:04:21	10	
14	Site 1	7	25	52	Left	7	32	2	Right	0:06:10	6	
15	Site 1	7	26	58	Left	7	30	40	Right	0:03:42	7	
16	Site 1	7	28	48	Left	7	32	50	Right	0:04:02	7	
17	Site 1	7	29	41	Left	7	35	46	Right	0:06:05	8	
18	Site 1	7	35	23	Left	7	38	44	Right	0:03:21	6	
19	Site 1	7	43	56	Right	Still there			-		5	Staff
20	Site 1	7	46	34	Right	7	52	28	Right	0:05:54	6	
21	Site 1	7	49	55	Left	7	54	1	Right	0:04:06	7	
22	Site 1	7	54	35	Left	8	0	24	Right	0:05:49	6	
23	Site 1	8	3	18	Left	8	18	37	Right	0:15:19	6	
24	Site 1	8	5	6	Left	8	11	4	Right	0:05:58	7	
25	Site 1	8	5	53	Left	8	10	31	Right	0:04:38	8	
26	Site 1	8	6	4	Left	8	12	34	Right	0:06:30	9	
27	Site 1	8	6	28	Left	8	10	49	Right	0:04:21	10	
28	Site 1	8	7	37	Left	8	26	12	Right	0:18:35	11	
29	Site 1	8	9	7	Left	8	16	33	Right	0:07:26	12	
30	Site 1	8	11	18	Left	8	15	15	Right	0:03:57	10	
31	Site 1	8	11	21	Left	8	19	47	Right	0:08:26	11	
32	Site 1	8	10	50	Right	8	26	49	Right	0:15:59	12	
33	Site 1	8	15	22	Left	Still there			-		11	
34	Site 1	8	15	33	Left	8	22	25	Right	0:06:52	12	
35	Site 1	8	15	35	Left	8	21	30	-	0:05:55	12 + Verge	VERGE PARKED
36	Site 1	8	15	54	Left	8	21	36	Right	0:05:42	13	
37	Site 1	8	17	3	Left	8	29	17	Right	0:12:14	13	
38	Site 1	8	17	8	Left	8	25	15	Right	0:08:07	13 + Verge	VERGE PARKED
39	Site 1	8	18	39	Left	8	23	33	Right	0:04:54	13	Waited for space/car to exit
40	Site 1	8	22	12	Left	8	26	30		0:04:18	12	
41	Site 1	8	24	41	Left	8	31	37		0:06:56	11	
42	Site 1	8	28	41	Left	8	33	18		0:04:37	9	
43	Site 1	8	30	46	Left	8	35	53		0:05:07	9	
44	Site 1	8	33	3	Left	8	41	44		0:08:41	9	
45	Site 1	8	33	3	Left	8	39	52		0:06:49	9	
46	Site 1	8	36	48	Left	Still there			-		9	
47	Site 1	8	38	38	Left	8	43	46		0:05:08	10	
48	Site 1	8	40	47	Left	Still there			-		10	
49	Site 1	8	40	52	Left	8	46	3		0:05:11	11	
50	Site 1	8	44	4	Left	Still there			-		10	
51	Site 1	8	45	5	Left	Still there			-		11	
52	Site 1	8	46	15	Left	Still there			-		11	

Site 2: Gladys Rd Customer Car Park AM Survey Results 0700 hours – 0900 hours

Car No.	Location Parked	IN				OUT				Duration of Stay	No Vehicles in Car Park	Notes
		HH	MM	SS	Dir	HH	MM	SS	Dir			
1	1/ACROD	7	4	42	Left	7	7	27	Left	0:02:45	1	
2	3	7	0	52	Right	7	11	10	Left	0:10:18	2	
3	1/ACROD	7	7	22	Right	7	9	53	Left	0:02:31	3	
4	3	7	17	59	Left	7	22	37	Left	0:04:38	1	
5	1	7	19	10	Left	7	22	42	Left	0:03:32	2	Blocks driveway for 30 sec
6	4	7	19	20	Left	7	27	15	Left	0:07:55	3	Waited on verge to enter driveway
7	4	7	25	30	Left	7	28	37	Left	0:03:07	2	
8	3	7	37	52	Right	7	42	4	Left	0:04:12	1	
9	1	7	39	40	Left	7	46	12	Left	0:06:32	2	
10	3	7	49	55	Left	7	52	19	Left	0:02:24	1	
11	ACROD	7	54	58	Left	8	1	20	Right	0:06:22	1	Reversed out onto Road, due to bad parking angle
12	3	8	0	24	Left	8	3	45	Right	0:03:21	2	
13	4	8	0	52	Right	8	9	4	Right	0:08:12	3	
14	1	8	20	50	Left	Still there			-		1	Staff Member

Site 2: Gladys Rd Customer Car Park PM Survey Results 1530 hours – 1730 hours

Car No.	Location Parked	IN				OUT				Duration of Stay	No Vehicles in Car Park	Notes
		HH	MM	SS	Dir	HH	MM	SS	Dir			
1	3	15	38	56	Left	15	48	50	Right	0:09:54	1	
2	3	15	49	37	Left	15	59	40	Right	0:10:03	1	
3	1	15	54	31	Left	16	1	15	Right	0:06:44	2	
4	Verge	15	57	38	Right	16	0	57	Right	0:03:19	3	VERGE PARKED
5	ACROD	16	2	25	Right	16	6	58	Right	0:04:33	1	
6	4	16	2	28	Right	16	7	34	Right	0:05:06	2	
7	2	16	21	43	Right	16	25	8	Left	0:03:25	1	
8	ACROD	16	22	45	Right	16	31	35	Right	0:08:50	2	
9	4	16	28	53	Right	16	40	34	Left	0:11:41	2	
10	3	16	31	45	Right	16	38	0	Right	0:06:15	2	
11	1	16	34	28	Left	16	44	8	Right	0:09:40	3	
12	4	16	43	10	Right	16	52	23	Right	0:09:13	2	
13	2	16	44	10	Left	16	48	30	Right	0:04:20	2	
14	1/ACROD	16	45	4	Right	16	51	35	Right	0:06:31	3	
15	Verge	16	48	25	Right	16	52	43	Left	0:04:18	3 + Verge	VERGE PARKED
16	4	16	53	30	Left	17	11	48	Right	0:18:18	1	
17	2	16	54	48	Right	17	3	26	Right	0:08:38	2	
18	ACROD	17	0	38	Right	17	8	7	Right	0:07:29	3	
19	Verge	17	1	5	Left	17	4	34	Left	0:03:29	3 + Verge	VERGE PARKED
20	1	17	4	16	Left	17	10	36	Left	0:06:20	3 + Verge	VERGE PARKED
21	2	17	10	40	Left	17	21	27	Right	0:10:47	2	
22	1/ACROD	17	18	13	Right	17	24	32	Right	0:06:19	2	
23	4	17	21	47	Right	17	25	29	Left	0:03:42	3	

Site 2: Gladys Rd Staff Car Park AM Survey Results 0700 hours – 0900 hours

Car No.	Location Parked	IN				OUT				Duration of Stay	No Vehicles in Car Park
		HH	MM	SS	Dir	HH	MM	SS	Dir		
1	Staff	Before Start			-	Still there			-		1
PAC 011	Verge West	Before Start			-	Still there			-		1
PAC 022	Bus Parking	Before Start			-	8	18	39	Right	1:20:39	1
PAC 033	Bus Parking	Before Start			-	8	9	40	Left	1:11:40	2
PAC 044	Bus Parking	Before Start			-	Still there			-		3
PAC 055	Bus Parking	Before Start			-	8	19	45	Left	1:21:45	4
2	Staff	7	47	10	Right	Still there			-		2
3	Staff	7	54	0	Left	Still there			-		3
4	Staff	8	7	8	Right	Still there			-		4
5	Staff	8	15	0	Right	Still there			-		5
6	Staff	8	48	50	Right	Still there			-		6
PAC 033	Bus Parking	8	51	49	Left	Still there			-		2
PAC 055	Bus Parking	8	52	27	Left	Still there			-		3

Site 2: Gladys Rd Staff Car Park PM Survey Results 1530 hours – 1730 hours

Car No.	Location Parked	IN				OUT				Duration of Stay	No Vehicles in Car Park
		HH	MM	SS	Dir	HH	MM	SS	Dir		
1	Staff	Before Start			-	16	16	49	Left		5
2		Before Start			-	Still there			-		
3		Before Start			-	17	5	33	Left		4
4		Before Start			-	Still there			-		
5		Before Start			-	17	22	14	Left		4
6		Before Start			-	16	51	50	Left		
PAC 011	Verge West	Before Start			-	Still there			-		
PAC 022	Bus Parking	15	33	10	Left	Still there			-		
PAC 033	Bus Parking	Before Start			-	Still there			-		
PAC 044	Bus Parking	Before Start			-	Still there			-		
PAC 055	Bus Parking	Before Start			-	Still there			-		
7	Staff	16	22	0	Left	16	54	42	Right	0:32:42	6
8	Staff	16	55	39	Left	Still there			-		5
9	Staff	17	7	15	Left	Still there			-		5

Site 3: Coolinga Rd AM Survey Results 0700 hours – 0900 hours

Car No.	Location Parked	IN				OUT				Duration of Stay	No Vehicles in Car Park
		HH	MM	SS	Dir	HH	MM	SS	Dir		
1	Site 3	7	2	10		Still there					1
2	Site 3	7	47	30		Still there					2
3	Site 3	8	22	45		Still there					3

Site 3: Coolinga Rd PM Survey Results 1530 hours – 1730 hours

Car No.	Location Parked	IN				OUT				Duration of Stay	No Vehicles in Car Park
		HH	MM	SS	Dir	HH	MM	SS	Dir		
4	Site 3	Before Start				Still there					1
5	Site 3	Before Start				Gone					2
6	Site 3	Before Start				16	55	39			3
7	Site 3	Before Start				Gone					4
8	Site 3	Before Start				Gone					5
9	Site 3 - Verge	Before Start				Still there					6

APPENDIX B: ORIGINAL PARKING MANAGEMENT PLAN

PACHAMAMA EARLY EDUCATION AND CHILDCARE

36 Marri Crescent (our Long Day Care): TOTAL BAYS 13

1. Opening Educator - park in the Open/Closing Bay (1 Educator - start 6:15am);
2. Closing Educator - park in the Guest Bay adjacent to Opening Bay) (1 Educator - start 10am);
3. All Educators that start BEFORE 8am, park onsite in Educator Bays (along the playground fence), with small car at end (4 Educators):
4. All Educators that start AT or AFTER 8am, park in staff carpark at 61 Coolinga Road (6 Educators);
5. Cook parks in the 2nd bay (adjacent to handicap bay) in the parent car park at 61 Coolinga Road;
6. Lunchtime cover parks in the parent car park at 61 Coolinga Road.

Guests: 5 bays, Staff: 8 bays

PACHAMAMA ACTIVITY CENTRE

61 Coolinga Road (OSH Care): 16 bays at 61 Coolinga + 5 bays at 59 Coolinga Road = 21 TOTAL BAYS:

1. Opening/Closing Educators - park in Open/Closing Bay in staff carpark at 61 Coolinga Road;
2. ALL other Educators park at 59 Coolinga Road and use pond gate between properties (morning - 2 Educators & afternoon - 4 Educators)

Guests: 5 bays, Staff:

Other Rules:

1. High School/University Trainees must use public transport - can catch bus from home or Sanderson Road and disembark on Gladys Road in front of 59 Coolinga Road;
2. All onsite appointments (such as orientations with parents) are scheduled during off-peak times (9:30am-2:30pm).

APPENDIX C: REVISED PARKING AND TRAFFIC MANAGEMENT PLAN – STAFF AND CUSTOMER HANDOUTS

PACHAMAMA EARLY EDUCATION AND CHILDCARE

Staff Parking Handout (issued June 2017)

36 Marri Crescent (Long Day Care) and 61 (& 59) Coolinga Road (Outside School Hours Care) sites

All staff members are to park on site either at 36 Marri Crescent or at 61 (or 59) Coolinga Road as instructed. No staff members are to park on the verges surrounding the sites at any time.

1. Long Day Care Opening Educator - park in the Open/Closing Bay at 36 Marri Crescent;
2. Outside School Hours Care Opening Educator - park in the Open/Closing Bay in northern (staff) car park at 61 Coolinga Road;
3. Long Day Care Closing Educator - park in the Customer Bay adjacent to Opening Bay) at 36 Marri Crescent after 10am;
4. All other Long Day Care Educators that start BEFORE 8am (4 staff) - park in staff bays (along the playground fence);
5. All other Long Day Care Educators that start AT or AFTER 8am (6 staff) - park in staff car park at 61 Coolinga Road;
6. All other Outside School Hours Care Educators (2 AM & 4 PM staff) - park at 59 Coolinga Road and use pond gate to access 61 Coolinga Road premises;
7. Long Day Care Cook - park in the 2nd bay (adjacent to ACROD bay) in the customer car park at 61 Coolinga Road; and
8. Long Day Care Lunchtime cover - park in the customer car park at 61 Coolinga Road.

Other Rules:

1. High School/University Trainees must use public transport - can catch bus from home or Sanderson Road and disembark on Gladys Road in front of 59 Coolinga Road;
2. All onsite appointments (such as orientations with parents) are to be scheduled during off-peak times (9:30am-2:30pm).

PACHAMAMA EARLY EDUCATION AND CHILDCARE

Customer (Parent/Carer) Parking Handout (issued June 2017)

36 Marri Crescent (Long Day Care) and 61 Coolinga Road (Outside School Hours Care) sites

Welcome to Pachamama. To ensure the safety of all children, parents, visitors and staff at Pachamama we have provided off street parking for everyone and ask that you do not park on the verges outside of the centre at any time.

There is a customer car park provided for each site. Please ensure that you enter and leave the car park in a forward gear. For your own safety and the safety of others, at no time attempt to either reverse your vehicle into or out of the car park.

If you experience any difficulties parking at Pachamama at any time please raise these matters with a member of staff so that we can address the issue.

APPENDIX D: CRASH HISTORY – 2012 TO 2016

Client: Pachamama Pty Ltd

Project: Coolinga Road & Marri Crescent, PTMP

Detailed Crash History																							
Road	SLK	CWY	Intersection	Date	Day	Time	Severity	Crash No.	Light Cond	Road Cond	Traffic Control	Road Feature	Road Alignment	MR Nature	Location	RUM	Unit	Unit Type	From Dir	To Dir	Veh/Ped Move	First Object Hit	Target Impact Point
1020014	0.00	S	GROVE RD (045418)	11/09/2014	Thursday	0820	PDO Major	2014090283	Daylight	Dry	Stop Sign	3-way Intx (T-junction)	Straight	Right Angle	On Cway	12: Intx: Right - Thru	Target	Car			Straight Ahead: Not Out Of Control		Side
																	Colliding	Station Wagon			Turning: To Make Right Turn		
			GROVE RD (045418)	24/09/2016	Saturday	1150	PDO Major	2016273744	Daylight	Dry	Stop Sign	3-way Intx (T-junction)	Curve	Hit Object	On Left Verge After Leaving Cway	77: Loss Of Control: Right Turn - Intx	Colliding	Car	S - GLADYS RD	E - GROVE RD	Out Of Control: Other	SEC Pole	
	0.76	S	Midblock	18/10/2016	Tuesday	1520	PDO Major	2016314871	Daylight	Dry	No Sign Or Control	Driveway	Straight	Right Angle	On Cway	47: Manoeuv: Leaving Driveway	Target	Car	S	N	Stopped: Other		Side
																	Colliding	Bus	W	N	Out Of Control: Other		
	1.53	S	WELSHPOOL RD EAST (045289)	21/04/2013	Sunday	1745	Medical	2013649523	Daylight	Wet	Stop Sign	3-way Intx (T-junction)	Straight	Right Angle	On Cway	14: Intx: Thru - Right	Colliding	Motor Cycle	W - WELSHPOOL RD EAST	E - WELSHPOOL RD EAST	Straight Ahead: Not Out Of Control		
																	Target		N - GLADYS RD	W - WELSHPOOL RD EAST	Turning: To Make Right Turn		Side
			WELSHPOOL RD EAST (045289)	23/06/2014	Monday	0910	PDO Minor	2014845830	Daylight	Dry	Stop Sign	3-way Intx (T-junction)	Straight		On Cway	30: Same Dir: Other	Target	Four Wheel Drive (Not Car Design)	N - GLADYS RD	W - WELSHPOOL RD EAST	Stopped: To Avoid Veh		Front
																	Colliding	Car		N - GLADYS RD	Reversing Or Rolling Back Straight		
			WELSHPOOL RD EAST (045289)	05/05/2015	Tuesday	0755	PDO Major	2015052440	Daylight	Dry	Give Way Sign	3-way Intx (T-junction)	Straight	Right Angle	On Cway	15: Intx: Right - Right	Target	Bus	E - WELSHPOOL RD EAST	N - GLADYS RD	Turning: To Make Right Turn		Side
																	Colliding		N - GLADYS RD	W - WELSHPOOL RD EAST	Turning: To Make Right Turn		
			WELSHPOOL RD EAST (045289)	13/07/2016	Wednesday	0650	PDO Major	2016195274	Dark - Street Lights On	Dry	Stop Sign	3-way Intx (T-junction)	Straight	Right Angle	On Cway	14: Intx: Thru - Right	Colliding	Motor Cycle	W - WELSHPOOL RD EAST	E - WELSHPOOL RD EAST	Straight Ahead: Not Out Of Control		
																	Target	Car	N - GLADYS RD	W - WELSHPOOL RD EAST	Turning: To Make Right Turn		Side

APPENDIX E: PARKING LAYOUT PLANS FOR 61 COOLINGA ROAD

