

## **APPENDIX C**

---

### **TRAFFIC REPORT**

Ref: 21/126

10<sup>th</sup> August 2021

McDonald Jones Homes  
C/- HDP Planning Design Development Pty Ltd  
PO Box 40  
MAITLAND NSW 2320

Attention: - Aprajita Gupta

Dear Aprajita,

**RE: Traffic Impact Statement – McDonald Jones Homes - Display Home – 881 New England Highway, Lochinvar.**

Reference is made to your request for Intersect Traffic Pty Ltd (Intersect Traffic) to provide a Traffic Impact Statement in regard to the traffic related impacts of a Display Home development constructed on Lot 1 in DP 195915, 881 New England Highway, Lochinvar.

## TRAFFIC IMPACT STATEMENT

### DEVELOPMENT

The proposed development is for the continued use of a display home constructed for McDonald Jones Homes for which DA 05-3986 was granted consent to operate for a period of 5 years from the date of occupation certificate, which was issued in 2007, according to Maitland Council. The approval was for a development that includes a display home with information centre accessed by a 7m wide combined entry / exit driveway for use by light vehicles at the New England Highway. Maitland City Council also required that the development not exceed 35 vehicles per week or 5 per day on average.

On-site there is provision for 10 car parking spaces (staff and visitors). Car parking has been provided such that forward entry and exit access of the site occurs and normal site servicing is provided with kerbside waste collection.

The approved plans are shown in **Attachment 1**.

The display home has been constructed in accordance with the approved plans however the continued use as a display home requires a new consent and Council has requested a Traffic Impact Assessment in accordance with Chapter 3 of the Maitland DCP with consideration of TfNSW requirements under SEPP (Infrastructure) 2007, Clause 101 to support this development.

## TRAFFIC GENERATION

There is no available data or criteria available in terms of the traffic generation of a home exhibition village / display home development. However, using the parking requirements of Maitland City Council and the usage data provided by McDonald Jones Homes the traffic generated for the development can be calculated.

The car parking requirement within Maitland City Council's DCP (Section C.3 – Exhibition Homes & Villages) is 2 spaces per display home. Visitors would stay for an average of 1 hour per visit for a single display home. Therefore, the maximum peak hour traffic generation would be:

Peak Hour (AM or PM) = (2) car spaces x 4 vehicle trips per car space turnover (1 trip into site and 1 trip out of site)  
= 2 x 2 vtpH  
= **4 vtpH**

To confirm this rate as relevant the usage rates provided by McDonald Jones Homes for the last 12 months (together with Intersect traffic's conversion to weekly and daily rates) are presented below:

- 12 months – 1,396 vehicles, (17 per week, 3.8 per day),
- 6 months – 839 vehicles, (33 per week, 4.6 per day),
- Recent four weeks – 118 vehicles (dated June 2021), (29.5 per week, 4.2 per day)

In addition, the approved operational details were as provided below.

### 2.0 OPERATIONAL DETAILS

2.1	Type of business	"Exhibition Home"
2.2	Number of staff	One
2.3	Number of visitors	Projections of initial peak of 70 per week leveling off to about 40 per week
2.4	No of Vehicles	Peak of 35 per week or 5 per day on average
2.5	Hours of operation	10am – 5pm 7 days per week

The usage rates provide by McDonald Jones Homes demonstrates the compliance within the operational requirements of 35 vehicles per week or 5 per day on average and would also demonstrate that the peak hourly traffic generation rate of a maximum of 4 vtpH calculated above is valid for the development when approved and currently.

## TRAFFIC IMPACTS

It has been determined that the peak traffic generation on the road network during the AM or PM peak hour periods is 4 vtpH. This would result in a maximum trip distribution of 2 vtpH entering and 2 vtpH exiting the site. Traffic Classifiers were placed on the New England Highway, approximately 100 metres east of the site, by Northern Transport Engineering and Planning (NTPE) for another project in December 2017 and the counts are shown in **Attachment 2**. The counts have been utilised to assess

current traffic by applying a growth factor of 1.5% per annum for 4 years to predict (current) 2021 traffic.

The highest Saturday and Sunday late morning to mid-afternoon weekend mid-block peak hour counts coinciding with peak hour visitation for display homes were:

- ◆ Saturday 11 am – 12 pm - 961 vtp (2017) and 1020 vtp (2021), and
- ◆ Sunday 10 am – 11 am – 872 vtp (2017) and 962 vtp (2021)

It is noted that the Hunter Expressway (M15), which opened in 2014, resulted in a reduction in traffic of approximately 30% on the New England Highway. Applying the relevant background traffic growth to the counts results in the estimated maximum Saturday New England Highway 2021 peak hour traffic volume of 1,020 vtp.

The proposal's peak traffic generation has remained the same since initially approved in 2007 and will not change as a result of the continued use of the display home. As a two-lane two-way sub-arterial road the New England Highway would have a mid-block two-way road capacity of at least 2,200 vtp (Level of Service (LoS) D). As existing traffic volumes on the road network are well less than the two-way mid-block capacity of the road network, including the development traffic, it is reasonable to conclude that there is sufficient spare capacity within the adjoining road network to cater for traffic generated by the continued use of the display home. Therefore the proposed development would not adversely impact on the adjoining road network and will not result in a deterioration of the LoS experienced by motorists.

## ON-SITE CAR PARKING

The Maitland DCP (2011) - *Part C.3 – Exhibition Homes & Villages* specifies display homes require the provision of 2 car spaces, including 1 access space.

The development currently provides ten on-site light vehicle car parking spaces comprising:

- 9 light vehicles car parking spaces, plus
- 1 access parking space.

Therefore, the current provision of car parking for the development allows for visitors and staff and more than complies with the on-site car parking requirement of the Maitland DCP 2011.

*AS2890.1-2004 Parking facilities - Part 1 Off-street car parking Figure 2.2 Layouts for Angled Parking Spaces* specifies 5.4 metre long by 2.6 metre wide spaces with aisle width of 6.6 metres for the worst case parking, User Class 3A (short term high turnover) parking. The parking provided has spaces 5.5 metres long by 2.6 metres wide and aisle widths at least 11.15 m. Blind aisles of 1 m have not been provided however the large aisle widths permit complying manoeuvring without this provision. Therefore, it is concluded the spaces are compliant with the intent and requirements of Australian Standard *AS2890.1-2004 Parking facilities* –for Class 1 (employee parking).

Overall, it is reasonable to conclude the development provides sufficient and suitable on-site parking ensuring there is no demand for on-street car parking resulting from the development. The on-site car parking is compliant with both Maitland City Council and Australian Standard requirements.

## ACCESS

Under Australian Standard *AS2890.1-2004 Parking facilities – Part 1 Off-street car parking* a car park containing less than 25 spaces with a worst case of User Class 3A with access via a sub-arterial road needs to be serviced by a Category 2 access. A category 2 access is a combined entry / exit between 6 metres and 9 metres wide. As the development provides a 7 m wide combined entry / exit at the boundary the development complies with the access requirements of Australian Standard *AS2890.1-2004 Parking facilities – Part 1 Off-street car parking*.

Due to the relatively flat topography around the site and the use of transparent fencing (chain wire) pedestrian and vehicle sight lines required by Australian Standard *AS2890.1-2004 Parking facilities – Part 1 Off-street car parking* have been easily achieved at the site access. Vehicle sight lines exceed the minimum required 65 metres for cars in a 60 km/h speed environment and a 2m by 2.5m sight triangle made available at the property boundary to sight pedestrians. The development complies with these requirements.

It was also observed on the site that the pavement width (travel lane and shoulder) for eastbound traffic on the New England Highway was 6 metres wide thereby allowing through traffic to easily pass a right turning vehicle into the site.

No swept turning paths for manoeuvring of vehicles is required as the plans comply to the standards and will allow forward entry and exit to and from the site to be achieved by the design vehicle (light vehicle) for the site.

Overall, it is concluded safe and convenient access is provided and is considered to be compliant with Maitland City Council and Australian Standard requirements.

## OPERATING HOURS

The operating hours of the development are not in dispute and the development is operating within its approved operation times of 10am to 6pm - 7 days per week.

## CONCLUSION

Having undertaken this traffic and parking assessment for the continued use of a McDonald Jones Homes display home on Lot 1 in DP 195915, 881 New England Highway, Lochinvar has concluded that:

- The development will generate up to 4 vtp/h in the AM or PM weekend peak hour, and up to 5 vehicles per day and up to 35 vehicles per week on average.
- As existing traffic volumes on the road network are well less than the two-way mid-block capacity of the road network, including the development traffic, it is

reasonable to conclude that there is sufficient spare capacity within the adjoining road network to cater for traffic generated by the continued use of the display home. Therefore the proposed development would not adversely impact on the adjoining road network and will not result in a deterioration of the LoS experienced by motorists.

- The development provides sufficient and suitable on-site parking ensuring there is no demand for on-street car parking resulting from the development. The on-site car parking is compliant with both Maitland City Council and TfNSW requirements.
- The development provides safe and convenient access that is both compliant with Maitland City Council and Australian Standard requirements.

Therefore, it is recommended that the development can be supported from a traffic and parking perspective as it will not adversely impact on the adjacent road network and complies with all Maitland City Council, Australian Standards and TfNSW's requirements for the development.

For further information or clarification please do not hesitate to contact me on 0423 324 188.

Yours sincerely



Jeff Garry  
**Director**  
**Intersect Traffic**



## ATTACHMENT 2

### Site 1 New England HWY 200m W of Wyndella RD [60/80]

### Eastbound

Day Time	Fri 01/12/17	Sat 2/12/2017	Sun 3/12/2017	Mon 4/12/2017	Tue 5/12/2017	Wed 6/12/2017	Thu 7/12/2017	W/Day Ave.	W/End Ave.	7 Day Ave
0:00	41	48	51	15	24	42	31	31	50	36
1:00	25	40	27	14	27	42	36	29	34	30
2:00	17	16	7	9	15	19	12	14	12	14
3:00	29	13	9	19	15	20	21	21	11	18
4:00	65	47	16	49	44	67	54	56	32	49
5:00	159	59	34	163	178	189	200	178	47	140
6:00	282	130	85	318	304	333	296	307	108	250
7:00	463	289	193	483	479	471	477	475	241	408
8:00	693	369	214	566	685	705	698	669	292	561
9:00	547	477	398	468	507	525	557	521	438	497
10:00	441	474	474	390	392	430	458	422	474	437
11:00	400	433	395	369	394	372	250	357	414	373
12:00	388	368	318	376	346	363	173	329	343	333
13:00	392	316	326	348	398	341	265	349	321	341
14:00	447	319	323	422	433	400	432	427	321	397
15:00	739	321	350	567	674	693	675	670	336	574
16:00	580	307	272	596	653	591	574	599	290	510
17:00	541	276	258	523	502	502	557	525	267	451
18:00	341	246	216	317	364	368	398	358	231	321
19:00	313	235	208	267	272	288	301	288	222	269
20:00	159	107	134	141	124	150	162	147	121	140
21:00	107	109	81	71	89	118	104	98	95	97
22:00	104	222	63	44	60	60	62	66	143	88
23:00	62	77	22	18	50	51	33	43	50	45
<b>Total</b>	<b>7335</b>	<b>5298</b>	<b>4474</b>	<b>6553</b>	<b>7029</b>	<b>7140</b>	<b>6826</b>	<b>6977</b>	<b>4886</b>	<b>6379</b>

### Site 1 New England HWY 200m W of Wyndella RD [60/80]

### Westbound

Day Time	Fri 01/12/17	Sat 2/12/2017	Sun 3/12/2017	Mon 4/12/2017	Tue 5/12/2017	Wed 6/12/2017	Thu 7/12/2017	W/Day Ave.	W/End Ave.	7 Day Ave
0:00	24	42	49	16	18	24	21	21	46	28
1:00	20	30	25	16	16	18	15	17	28	20
2:00	9	15	10	18	9	11	17	13	13	13
3:00	34	23	15	27	30	30	30	30	19	27
4:00	225	86	71	236	239	225	241	233	79	189
5:00	488	222	166	491	523	515	512	506	194	417
6:00	403	117	92	434	426	410	411	417	105	328
7:00	437	175	100	423	455	489	447	450	138	361
8:00	609	216	152	441	632	625	603	582	184	468
9:00	389	337	288	359	396	380	394	384	313	363
10:00	357	469	398	390	389	374	409	384	434	398
11:00	428	528	455	427	406	426	416	421	492	441
12:00	457	489	459	496	420	449	482	461	474	465
13:00	516	463	426	397	406	412	455	437	445	439
14:00	615	447	437	521	573	552	604	573	442	536
15:00	635	433	445	574	587	606	632	607	439	559
16:00	612	426	447	565	627	650	631	617	437	565
17:00	658	484	409	604	659	680	630	646	447	589
18:00	351	268	245	338	342	334	344	342	257	317
19:00	193	148	163	197	183	190	259	204	156	190
20:00	199	124	142	154	183	181	254	194	133	177
21:00	140	111	85	129	117	142	185	143	98	130
22:00	122	102	71	54	66	75	87	81	87	82
23:00	67	84	30	46	63	46	48	54	57	55
<b>Total</b>	<b>7988</b>	<b>5839</b>	<b>5180</b>	<b>7353</b>	<b>7765</b>	<b>7844</b>	<b>8127</b>	<b>7815</b>	<b>5510</b>	<b>7157</b>