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TRAFFIC & PARKING DEMAND ASSESSMENT

441 William Street, Perth WA 6000

Proposed Commercial Unit, Café & 30 Suite Hotel Development

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Introduction

AusWide Consulting was commissioned by Architectural Online to prepare a Traffic and Parking Demand Assessment for the proposed Hotel development at 441 William St in Perth, WA 6000.

The subject site is located along the western side of William Street. The proposal includes construction of a five level building for a Hotel with a total gross floor area of 1507.38 m².

There will be 30 Suites in the proposed Hotel.

The two Commercial areas on the ground floor will be occupied by a Café/Bar and a small office commercial space for a Bike Shop.

The estimated number of staff for the whole building is summarised in Table 1 below:

Table 1: Estimate of total staff for the whole development

Part of Building	Gross Floor Area	Estimated Staff Numbers
Hotel	1507.38m ²	10-15
Commercial Unit 1: Bike Shop	41.04m ²	2-3
Commercial Unit 2: Café/Bar	54m ²	10
Lane Way Outdoor Seating	148.7m ²	
TOTAL	1751.5m ²	22-28

This report will assess the traffic impacts of this proposed development on the surrounding environment and the compliance of the proposed car parking with the Australian Standards and relevant clauses presented within the City of Perth Planning Scheme. In the course of preparing this assessment, the subject site and its environment have been inspected, plans of the development examined, and all relevant traffic data collected and analysed.

Background and Existing Conditions

Location and Land Use

The subject site is currently vacant. The proposal involves the construction of a new building for a five level new Hotel with 30 Suites and two Commercial Units on the ground floor.

The subject site is located along the western side of William St in Perth. William St is a Main road about 10.5m wide with parking permitted on both sides of the street and a traffic lane in each direction. William Street carries over 10,000 vehicles per day near the subject site. The site is situated within an established Commercial Zone in the Vincent City Council Planning Scheme. The area in the vicinity of the subject site is primarily occupied by Commercial buildings.

There are frequent bus services leaving from a short 4-minute walk from the site to Perth CBD, providing residents and businesses with direct access to Perth CBD and other nearby suburbs near the site.

Figure 1 shows the site from the local road network from a street map perspective.

Figure 2 presents an aerial photograph of the subject site and the surrounding areas.

Figure 3 presents a photo of the site as seen from William St (Before construction of the proposed development).

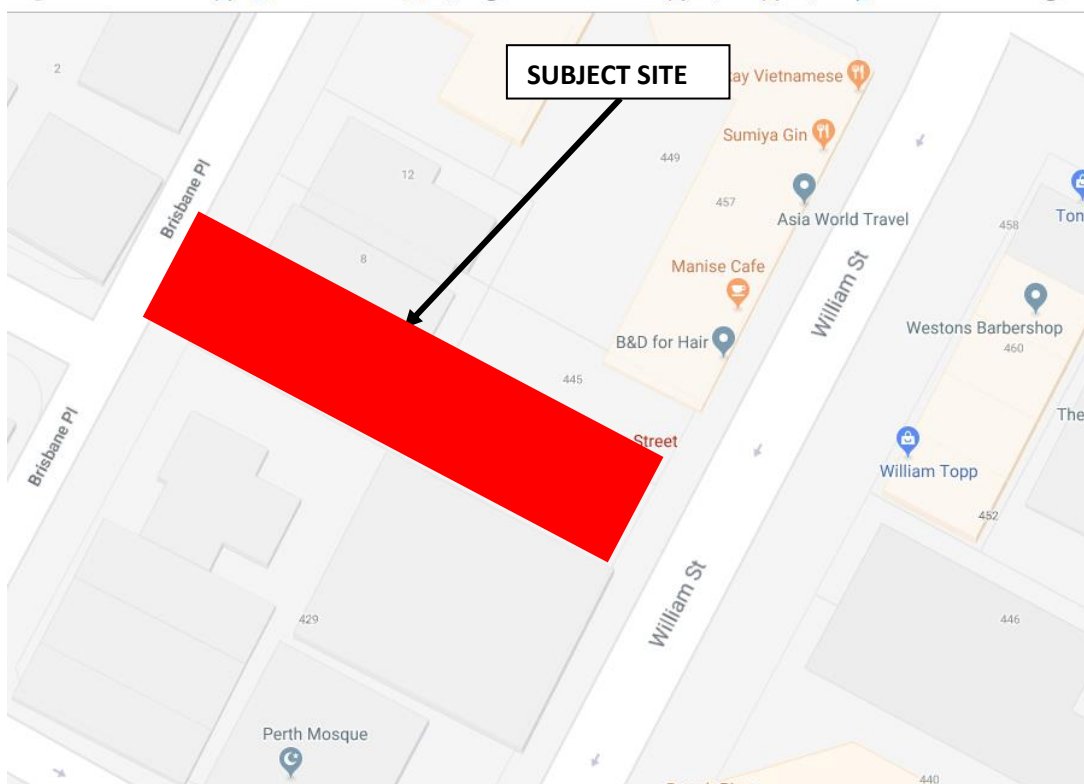


Figure 1: Location of the Subject Site on a Street map



Figure 2: Location of the Subject Site on Aerial View



Figure 3: View of the site frontage from William St (Before construction of the Hotel development)

Public Transport

Bus Services

The subject site has convenient accessibility to Bus services from Perth City Centre to Morley Bus Station. Figure 4 shows the Bus Route 60 map from Elizabeth Quay Bus Station to a stop at William St/ Edith St within a 331 m walk or 4 minutes to the site.

Table 2 below outlines the details of the Bus Route 80 Services available from the City to Morley Bus Station.

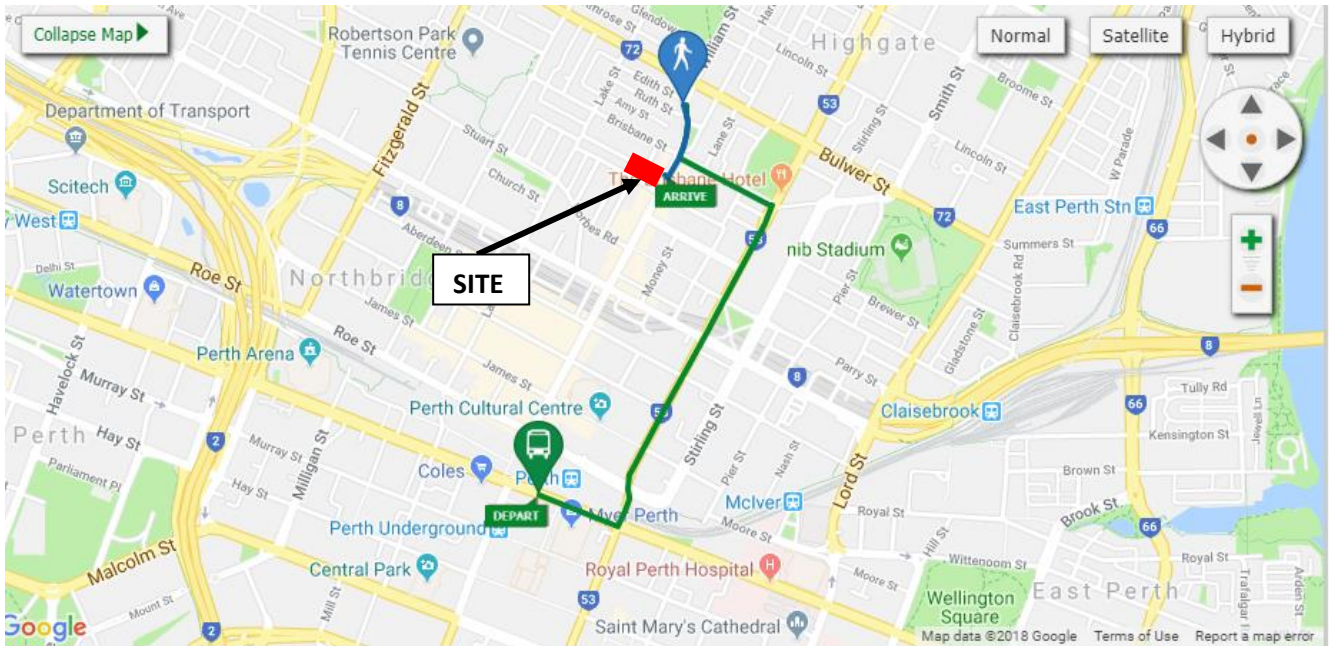


Figure 4: Map of Bus Route 60 from Elizabeth Quay Bus Station to the site.

Table 2: Bus Route 60 Service details

Bus Route	Stop Location	Distance m	Walking Time [mins]	Origin	Destination	Bus Frequency
60 Mon-Fri	William St /Edith St	230	4	Elizabeth Quay	Morley Station	16 mins
60 Sat/Sun	William St /Edith St	230	4	Elizabeth Quay	Morley Station	27-31 mins

Bus Services

Bus Route 60 provides a connecting service from Elizabeth Quay in the City and stops at William St/ Edith St, within a 230 m walk or 4 min. to the site. Table 2 above shows the service details for Bus Route 60.

From the above bus services information, buses run between 1 every 16 minutes during weekdays and during the weekend, buses run between 1 every 27-31 minutes.

Traffic Impacts of the Proposed Development

The proposed development at the subject site includes the construction of a new building for a Hotel with 30 Suites. In addition, the ground floor will have a Cafe/Bar and a Commercial Office Unit.

The NSW RTA Guide to Traffic Generating Development (2002) document does not provide any trip rate for Hotels. The trip rates for Motels under section 3.4.1 have been used instead. The following trip rates have been outlined in this document;

Motel development:

- Daily vehicle trips = 3/Unit.
- Weekday PM peak hour vehicle trips = 0.4 per Unit.

The calculation of peak hour trips and Daily trips for the Hotel development based on the NSW RTA rates for Motels is summarised in Table 3 below.

Table 3: Calculation of Trip Generation from the proposed development

PROPOSED USE	RTA NSW TRIP RATES		No. of Peak Hour Trips	No. of Daily Trips
	Peak Hour Trip Rate	Daily Trip Rate		
Hotel 30 Suites	0.4/Suite	3.0/Suite	12	90
Café/Bar + Laneway 202.7m ²	5/100m ² GFA	60/100m ² GFA	10	122
Commercial/ Office 41m ²	2/100m ² GFA	10/100m ² GFA	1	4
TOTAL			23	216
	Equivalent total trips		1 trip /3 mins	1 trip/ 3 mins

Total peak hour vehicle trips generated by the proposed development= 23 trips.

Total daily vehicle trips generated by the proposed development= 216 trips.

This number of trips during each peak hour is rather insignificant as it represents 1 vehicle every 3 minutes during each peak hour (assuming 100% in during the AM peak hour and 100% out during the PM peak hour).

The daily total traffic generated by this development at 216 trips, which equates to 1 trip every 3 minutes for a 12hour day. As no on-site parking is proposed, the traffic generated by this development is spread around the neighbouring streets rather than on William St only. This would have a less than minor effect on the daily traffic of around 10,000 vehicles per day already present on William St and other nearby roads.

As such, it is clear that the additional development traffic represents a very small fraction of the existing traffic volumes and therefore the additional traffic generated from the proposal is unlikely to generate any material impact on the existing traffic operations in the vicinity.

Department of Planning, Lands and Heritage (DPLH) Comments

The comments from the DPLH regarding the impact of transport noise on the proposed development have been considered. Due to the proximity of the proposed Hotel to significant traffic volumes on William St, the applicant shall provide measures for attenuation of traffic noise for Hotel residents under SPP5.4, in the application of a Building Permit for this development.

No vehicle access is proposed from William Street. Any servicing will take place on Brisbane Place.

Car Parking Assessment

No on-site car parking has been proposed, at the subject site because the building will occupy the whole narrow site.

Full scale drawings of the proposed development are provided as part of the Development Application package and hence reference should be made to these drawings.

Vincent Council Planning Scheme - Car Parking Requirements

The car parking requirements for Special Residential developments are contained in Table 1 of the Vincent Council Planning Scheme.

Car parking provisions for Hotel and associated development must be made as follows in Table 4;

Table 4: Vincent Planning Scheme Car Parking Requirements (Table 1)

Type of Development	Number of units	Parking Requirement	Required Number of Spaces
Hotel (30 Suites)	30	0.5/Bedroom	15
Café/ Bar incl. Lane Way (202.7m ²)	Estimated Ave. seating=96	0.2/person	19 reduced to 10 ¹
Commercial Office Unit (41.04m ²)	1	2/100m ² NLA	1
Total Spaces Required			26

Note 1: It is considered that the clients of the Café/Bar will be mainly from the Hotel and the nearby Commercial sites, who would walk rather than drive. A 50% reduction has been applied to the Café/Bar parking requirement.

From the requirements presented in table 4 above, it is evident that a total of 26 car spaces is required for the overall development. The proposed residential development will have a shortfall of only 26 spaces.

Considering the frequent bus services to and from Perth City Centre, stopping within a short walk of the site, some of the visitors would choose public transport instead of driving or park in the available on-street parking on William St and other nearby streets and in the Public Wilson's car Park at 386-388 William St, within a 250m walk from the site.

Parking Demand Surveys

On-Street & Off-Street Parking Surveys

As a part of this study, parking utilization surveys were undertaken on street on both sides of William St, Brisbane St, Robinson Ave and Forbes St plus the William St Car Park on Saturday and Tuesday. The peak days and times surveyed are Saturday 15th September and Thursday 20th September (8am to 9pm). Figure 5 shows the extent of the on-street and off-street parking surveys, which covers an area within 250 metres of the site.

The results for the on-street and off-street parking surveys are summarized in Tables 5, 6 and 7. The available parking spaces are shown together with the parking restrictions, which apply to each section of road that was surveyed. The following sections summarize and discuss these results.



Figure 5: Map showing the extent of the On-Street and Off-Street parking surveys

Table 5: On-Street & Off-Street Parking Survey for Saturday 15 September 2018 (8am to 9pm)

Road	Direction	Parking Controls	Available Parking Spaces	Parking Occupancy at times below													
				8 am	9 am	10 am	11 am	12 pm	1 pm	2 pm	3 pm	4 pm	5 pm	6 pm	7 pm	8 pm	9 pm
William St	Nthbnd & Sthbnd	2P Ticket (8-6pm, M-F/8-12pm Sat)	53	21	23	24	26	28	25	28	29	31	33	23	21	16	13
Forbes St	Eastbnd	2P Ticket (8-7pm, M-F/P 7am-MidNt 8-12pm Sat)	18	7	8	8	9	10	9	9	10	10	11	8	7	5	4
Robinson Ave	Eastbnd & Westbnd	1P (8-5.30pm, M-F)	16	6	7	7	8	8	8	8	9	9	10	7	6	5	4
Brisbane St	Eastbnd & Westbnd	2P Ticket (8-8pm, M-Sun)	68	28	29	31	33	36	32	36	37	40	44	30	28	21	18
Brisbane St	Westbnd	CW 7-9am, M-F/2P 9am-7pm	8	3	3	4	4	4	4	4	4	5	5	3	3	2	2
William St Car Park	(Wilson's Parking)		45	18	19	22	22	24	22	23	25	26	28	20	18	13	11
	TOTAL OCCUPANCY		208	83	89	96	102	110	100	108	114	121	131	91	83	62	52
	%Occupancy			40%	43%	46%	49%	53%	48%	52%	55%	58%	63%	44%	40%	30%	25%
	Vacant Spaces			125	119	112	106	98	108	100	94	87	77	117	125	146	156

Table 6: On-Street & Off-Street Parking Survey for Thursday 20 September 2018 (8am to 9pm)

Road	Direction	Parking Controls	Available Parking Spaces	Parking Occupancy at times below													
				8 am	9 am	10 am	11 am	12 pm	1 pm	2 pm	3 pm	4 pm	5 pm	6 pm	7 pm	8 pm	9 pm
William St	Nthbnd & Sthbnd	2PTicket (8-6pm, M-F/8-12pm Sat)	53	20	22	23	25	27	24	26	28	30	32	22	20	17	15
Forbes St	Eastbnd	2P Ticket (8-7pm, M-F/P 7am-MidNit 8-12pm Sat)	18	7	7	8	9	9	8	9	10	10	11	8	7	6	5
Robinson Ave	Eastbnd & Westbnd	1P (8-5.30pm, M-F)	16	6	7	7	7	8	7	8	8	9	10	7	6	5	4
Brisbane St	Eastbnd & Westbnd	2P Ticket (8-8pm, M-Sun)	68	26	28	30	32	35	31	35	36	37	41	29	26	22	19
Brisbane St	Westbnd	CW 7-9am, M-F/2P 9am-7pm	8	3	3	3	4	4	4	4	4	5	5	3	3	3	2
William St Car Park			45	17	18	20	21	23	20	22	24	25	26	19	17	15	13
	TOTAL OCCUPANCY		208	79	85	91	98	106	94	104	110	116	125	87	79	69	58
	%Occupancy			38%	41%	44%	47%	51%	45%	50%	53%	56%	60%	42%	38%	33%	28%
	Vacant Spaces			129	123	117	110	102	114	104	98	92	83	121	129	139	150

Table 7: Overall summary of on-street & off-street Parking Surveys

Survey	Thursday 20 September (8am-9pm)		Saturday 15 September (9am-9pm)	
	Peak Occupancy %	Min. No. Vacant spaces	Peak Occupancy %	Min. No. Vacant spaces
On-Street + Off-Street Capacity=208 Spaces	60 % (125)	83	63 % (131)	77

Survey Results

From Table 7 above, the peak occupancy on-street was 60% to 63% and the corresponding minimum number of vacant spaces was 77 to 83 spaces. This will be more than sufficient to accommodate the parking shortfall of 26 spaces for the proposed Hotel development.

Conclusion

Based on the assessment presented in this report, it is considered that:

- The proposed site is very well located to public transport services with frequent bus services from Perth City Centre, which stops within a short distance from the site. This would encourage patrons to use public transport instead of driving to the site and therefore reducing the parking demand for this development.
- The proposed site will generate additional, but very low levels of trips (1 trip per 3 minutes) in the weekday AM and PM peak hours. The daily trips equate to 1 trip per 3 minutes.
- This would have a less than minor effect on the daily traffic of around 10,000 vehicles per day already present on William St and other nearby roads. These trips can be accommodated at the nearby intersections, without affecting intersection performance or increasing delays and queues.
- The comments from the Department of Planning, Lands and Heritage (DPLH) have been considered and they will be addressed in the Building Permit application.
- The car parking assessment indicates that the proposed Hotel development, including ancillary Commercial spaces has a shortfall of 26 spaces, compared to the parking requirement in the Vincent Council Planning Scheme.
- The on-street and off-street parking surveys show that the minimum vacant spaces at peak times are 77 to 83 spaces, which are more than sufficient to cater for shortfall of 26 spaces for the proposed development.

Based on this study, there are many traffic engineering reasons why a planning permit for the proposed Hotel development at 441 William St, Perth should be granted.

