References:

1. North Sydney Traffic and Pedestrian Management Study, North Sydney Council, Arup, 2014.
2. Traffic Impact Assessment, Document ID 8956622, dated 6 July 2022 (part of the Development Application).
3. 'Owners of Reddam House to turn Harry Seidler building into new school', Lucy Carroll, Sydney Morning Herald, 23 July 2022.
4. North Sydney Precinct Planning Study, November 2020.
5. DA 197/2022 – PAN-237832 Traffic report additional information and amended plans

Update to Objection based on Reference 5

Having reviewed reference 5 above, the key facts of the objection detailed below remain valid. Some new specific comments (which should not in any way be taken to supersede the points in the original objection) are:

1. At paragraph 3.1 the amended plan infers erroneously that the site is serviced by a number of streets. This is false. The only access to the site is from Walker Street heading north, having entered Walker either from the Pacific Highway or from Berry Street.

2. At paragraph 3.2.3 the amended plan states that the site is well serviced by off-road cycleways. This is false. There is no way to access any of the existing or planned off-road cycleways from the site other than by attempting to use heavily trafficked roads at significant risk. The unviability of using cycles from the site is demonstrated by 138 Walker (opposite) having such low cycle usage as now converted half of its cycle storage into other uses.

3. The claim – unsubstantiated by any data – at paragraph 5.1 and 5.3 table 14 that net traffic generation will be three vehicle movements at peak times remains as laughable and unprofessional as it was at the time of the previous submission.

4. Figure 14 seems to show access to the site when southbound along Walker Street. This is impossible.

5. All of the analysis in section six is based on a false estimate of net traffic generation.

6. Section eight plays down and trivialises the strength and validity of the previous objections. Analytical data was provided in the community feedback (see below). None of this is addressed in section eight. Computations based on theory will help no-one when impossible and dangerous traffic conditions are created. The traffic consultant has not addressed any of the actual data provided earlier, save for statistics on intersections, all of which continues to rely on a fictional net traffic generation.

In summary, putting a development of this scale down slope, at the bottom of a cul-de-sac, with no access save one way into a street congested at peak time, only exitable through a

critical intersection, with pavements crowded with school girls in afternoons, remains illogical and unconscionable

Previous Objection including Real-World Traffic Data.

Introduction

The additional traffic generated by the proposed development will:

- Make Walker Street, both north and southbound, impassable during peak times.
- Seriously impede access to the Warringah Expressway, the Harbour Bridge and the new Western Harbour Tunnel from the Pacific Highway.
- Make even more dangerous vehicular and pedestrian traffic at the Walker Street / Berry Street intersection, already recognised as accident-prone. Accidents, perhaps fatalities, will be the result.

The Traffic Impact Statement (TIA) (Document ID 8956622 dated 6 July 2022), submitted in support of the development application, is beautifully prepared but inherently flawed. Not only are its conclusions erroneous, but its analysis is based on demonstrably wrong data. This objection will demonstrate those errors.

This development cannot be allowed to proceed as it would create an impossible traffic situation, for residents, for the local government area, and for traffic accessing the Sydney CBD.

Background

Walker and Berry Streets are already heavily congested at peak times. The latter is a major feeder from the Pacific Highway to the Warringah Expressway, the Harbour Bridge and, shortly, the Western Harbour Tunnel. At peak times it is backed up at least to Miller Street.

Walker Street, north of Berry Street, carries traffic from several extant high rise developments, the Wenona School morning student drop-off, Wilson's car park and additional traffic flowing down from McLaren and Ridge Streets. It will shortly carry additional traffic from the Aura development with around 300 parking spaces on the corner of Walker and McLaren, and the planned closure of Miller Street between Berry and the Highway. Further, 41 McLaren Street will shortly be converted to a K to Y12 school (Reddam School) adding further morning peak traffic.

Even before the Aura and Reddam developments, this section of Walker Street carries more traffic than does the section south of Berry Street, doing so on fewer lanes and lower capacity (reference 2, pp 17 – 18).

Traffic in Walker Street south of Berry Street is dominated by northbound vehicles turning right at the Walker/Berry intersection. At peak times, much of the traffic is generated by office workers exiting the numerous office-building carparks. A further new development at 86 – 88 Walker Street is constructing a 49 level mixed office, commercial and hotel building, which will generate predominantly peak hour traffic. This section of Walker Street generates northbound traffic, travelling north to the Berry Street intersection to access the Warringah Expressway, avoiding the numerous lights on the Pacific Highway, or back street routes leading to Cammeray and beyond, and necessitating three lanes at the intersection. At peak times the street is frequently backed up almost to the Walker/Pacific Highway intersection.

The determinant of all traffic movement in Walker Street and its environs is the Berry/Walker intersection. This intersection is controlled by lights. Berry Street is a State Road, being

classed a major arterial road, significant in Sydney's traffic system (reference 1, p17). It controls all southerly egress from Walker Street, noting that, because of the geometry of the Lower Walker Street / Walker Street intersection, all traffic to and from the development will have to enter this intersection. No more than 50 metres separates the two. It will become impossible to exit 138 Walker Street or Wilson's carpark, located on the western side of the road. See figure 1 below, noting the Google image minimises the height differences between the two. 138 Walker Street (Belvedere) is on the left of the picture, roughly where the grey car is. Wilson's car park entrance is at the immediate bottom left of the picture.

Figure 1 - Lower Walker / Walker Streets' Intersection

The traffic lights at the Berry / Walker intersection prioritises Berry Street traffic (four lanes), followed by Walker Street south of the intersection (three lanes northbound, two lanes southbound), with Walker Street north of the intersection coming last. It operates on a cycle varying from 100 to 120 seconds (the time taken to operate every light combination for every street). Southbound traffic exiting Walker Street north of the intersection has, at most, ten seconds to enter the intersection and sometimes around six seconds. Thus, only three to four cars southbound/turning left can enter the intersection each 100 to 120 second cycle.

What's Wrong with the Traffic Report and Why this Development Should Not Go Ahead

Traffic issues have been consistently misrepresented throughout the rezoning and development application processes. Both the original traffic submission made with the rezoning application, and the current submission made with the development application lack any full appreciation of the situation – egregious omissions given the centrality of the issue to the proposed development.

Specific omissions include:

- The impact of traffic using the new Western Harbour Tunnel access.
- The impact of the Aura development on local traffic.
- The impact of the new Reddam School development, particularly on morning peak time.
- The impact of the 86 -88 Walker Street development on morning and evening peak hour traffic.
- Actual measurement of existing traffic loads on Walker Street and the Berry / Walker intersection.
- The impact of new traffic loads on the Berry / Walker intersection reflecting the timing of the lights, particularly at peak times.

More fundamentally, the TIA contains errors of fact which fundamentally undermine its conclusions to the point where it cannot be used to justify the development application. Most

seriously, it completely underestimates the increased traffic which the development will generate at peak times.

In its traffic analysis (reference 2, pp 19, 20) the TIA states (using theoretical factors) the existing uses on the site generate 43 vehicle movements in the morning peak time and 35 in the afternoon peak time. Yet it goes on to show that there are only 27 parking places available to the residents (reference 2, p 21). Therefore, it would be impossible for these 27 vehicles to generate either 43 or 35 movements unless most of them conducted round-trips within both morning and evening peak times.

Further, at page 38 of attachment 3 of reference 2 (confusingly, on page 2 of several pages of incorporated landscape material), the TIA notes that the 22 on-street parking places are filled all day using the resident's parking permits. Accepting that the remaining five car-part places (27 noted above less 22) are empty during the day, the current car movements are 5 in the morning peak and 5 in evening peak.

The TIA also uses a theoretical model to estimate new traffic generation without reference to actual traffic generation by similar Walker Street apartment blocks. The TIA's theoretical model proposes 43 movements in morning peak time and 39 in evening peak time. However actual data gathered using 138 Walker Street's building management system (a building of similar size and demographic) shows an average of 65 vehicle movements during morning peak time and 84 during afternoon peak time. This completely contradicts the theoretical modelling, demonstrating an underestimate of over 50% for morning peak time and over 100% for afternoon peak time.

The table below highlights the defects of the TIA and the real-world impacts of the proposed development.

Table 1 – Comparison of Claimed and Actual Traffic Movements

Factor	TIA Figure	Corrected using TIA Data	Real World	Consequences	Substantiation
Current Vehicle Movements from Site AM	43	5	NA	65 minus 5 = 60 additional movements during peak time all attempting to exit or enter via the Berry / Walker intersection with a lights period of between six to ten seconds. 60 additional movements, all southbound because of the geometry, will take at least 17 lights cycles and more than 28 minutes. Traffic will be backed up into underground parking, back into Ridge and McLaren streets and probably back onto the Pacific Highway. Morning vehicle access to Wenona will become close to impossible.	Data contained in TIA which disproves its own analysis and conclusions.
Expected Vehicle Movements from Development AM	48	NA	65		Using actual data from comparative apartment block opposite with almost identical size and the expected demographic.
Current Vehicle Movements from Site PM	35	5	NA	84 minus 5 = 79 additional movements during peak time all attempting to exit or enter via the Berry / Walker intersection with a lights period of between six to ten	Data contained in TIA which disproves its own analysis and conclusions.

Expected Vehicle Movements from Development PM	39	5	84	seconds. 79 additional movements, northbound or via Berry Street, because of the geometry, will take an average of 19 lights cycles or approximately 31 minutes. Worse, the proposed plan expects traffic to stop in the northbound lane of Walker Street, turning across traffic to enter Lower Walker. This traffic will have bursts of around 90 seconds to cross. Inevitably, traffic will be backed up down the southern part of Walker and vehicles arriving via Berry will attempt to cross from the left side of the street to the right within 50 metres.	Using actual data from comparative apartment block opposite with almost identical size and the expected demographic.

None of the consequences identified above include the impacts of the other developments already underway or expected, such as Aura, 86 – 88 Walker, the Western Harbour Tunnel or the Reddam School.

Pedestrian foot traffic will likewise be beyond the capacity of the Berry / Walker intersection. For good reason, there is no crossing on the eastern side of the intersection across Berry Street. So, all foot traffic heading to North Sydney Station or other public transport will have to cross Walker Street and then either Berry Street or continue west along Berry Street. The lights cycle does not accommodate this, due to the correct priority given to Berry Street through traffic.

Reference 1 identified the Berry / Walker intersection as one of the most common locations of accidents.

Summary

This development will seriously impact the functioning of one of Sydney's critical intersections, funnelling traffic into and away from the city, and into the new Western Harbour Tunnel, and will endanger travellers and their vehicles. Pedestrians will also be at risk.

As this paper proves, the analytical basis of the TIA is fundamentally wrong in its estimation of new traffic generation, not in details but by multiples. It has attempted to divert attention from the reality by burying it in a long dissertation on alternative modes of transport, divorced from the proven realities of the locality.

It did not stand up to proper analytical scrutiny at the time of the rezoning and it does not do so now.