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traffic & transport planners

Reference: 08 199

17 November 2009

Waterbrook at Wahroonga Partnership
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Re: Proposed Private Hospital, Water Street Wahroonga

Dear Ben,

We refer to the various responses to the Part 3A Application relating to the subject proposal and advise that we have reviewed the matters raised and now confirm as follows in respect of the issues arising that pertain to traffic planning matters. These are considered separately below in response to the matters raised by the RTA, the matters raised by Council, and the matters raised in public submissions.

RTA Response

The RTA's response is contained in its letter dated 21 July 2009 from the Land Use Planning and Assessment Manager. The Authority raises no objection the application and notes that the additional traffic will have a minimal impact on the surrounding road network. The various matters raised are therefore minor matters that are for consideration by the Department of Planning, with the expectation that these can be dealt with satisfactorily. The following minor matters are raised:

- The need for internal traffic signal control within the site via the Young Street access driveway, which is an option that was identified in the traffic report and can be conditioned;
- The need for Council to consider parking restrictions in Water Street. This is supported and can be conditioned subject to detailed assessment by Council's Traffic Committee;
- The internal design of accesses and car park and service areas should comply with the requirements of AS 2890.1 and AS 2890.2. This is considered to already be the case, although a condition requiring compliance with these standards is appropriate and is invited;
- The need to produce swept paths for the longest vehicle requiring access to and movement through the site is accepted and can also be included as a condition of consent. In our view, the requirement to undertake these in accordance with AUSTROADS should be included in the same condition that refers to AS 2890.1 as discussed above.



- The need for a detailed demolition and construction plan is acknowledged and has always been proposed in response to a condition of consent, to be prepared and approved prior to the issue of a Construction Certificate. Nevertheless, further consideration has been given to the formulation of access principles for construction and this involves a one-way clockwise flow pattern through the site, with entry via Billyard Avenue and exit via right turns into Young Street to return to Billyard Avenue. This minimises any impacts on Young Street (north of the access) or on Water Street which is a very good outcome. The ability of a 12.5m HRV (rigid) truck to manoeuvre through these accesses is shown in Attachment 1. It is emphasised that this truck represents the worst case and there is no intention to use 19m articulated trucks (semis) during construction. Use will also be made of “truck and dog” combinations which are longer than a 12.5m (rigid) HRV but are more manoeuvrable as they are articulated. The exit via Young Street towards Billyard Avenue will also be facilitated by the proposed widening of Young Street (between the site access and Billyard Avenue) as discussed further below. It is noted that some trucks will still use the Water Street access, which is unavoidable.
- The need for bicycle storage facilities including showers and change rooms is acknowledged and can be conditioned; and
- All vehicles are proposed to enter and exit the site in a forward direction.

Council Response

Council's response is contained within the report to the General Committee meeting held on 15th July 2009. The following matters have been raised and our response is as follows:

Parking Provision

- It is noted that the proposal exceeds both Council's DCP as well as the RTA's Guideline in terms of parking supply. The stated RTA requirement for 111 spaces is not accepted without qualification as the hospitals surveyed by the RTA generally include surgical and other procedures that will not take place at the proposed site and are therefore not comparable to the proposed hospital. The RTA's surveys are also outdated, being conducted in 1993. The RTA's preferred methodology is to conduct a survey of a comparable development and this was undertaken, with the resultant demand being satisfied, based on the assumptions made. Notwithstanding the above, compliance with Council's DCP, which is achieved, should of itself be sufficient as Council's requirements reflect local conditions and would take precedence.
- In these circumstances, no reliance on on-street parking is required or proposed.

Parking Space Dimensions

- It is proposed that the dimensions for staff and visitor parking be in accordance with AS 2890.1 for long stay and short stay parking respectively. This would be covered under a condition relating to compliance with AS 2890.1 as discussed above. It is expected that this will be conditioned and it is noted that it is proposed to provide about 50 spaces for staff and the balance for patients and visitors. The former will be Class 1A parking, with a minimum bay width of 2.4 metres and an aisle width of 5.8 metres, which is provided. The latter will be Class 3 parking, with a bay width of 2.6 metres and an aisle of 5.8 metres. These are also provided but in any event compliance with the standard is able to be conditioned and if any deficiencies exist (none have been able to be identified), these can be readily addressed.



Access Points

- The final design of the Young Street access can be dealt with on the basis of compliance with AS 2890.1. Nevertheless, concepts have been prepared which will result in a substantially improved outcome, with Young Street widened between the site access and Billyard Avenue. Two basic options have been prepared, comprising a 7.5m wide carriageway and a 9.0m carriageway (with a 3.7m wide road verge along the site frontage incorporating a footpath). Both are available for implementation and both are more generous than is required under AMCORD Guidelines, which we note is endorsed in the RTA's Guidelines. The 7.5m wide carriageway enables vehicles to pass without difficulty and also permits occasional/intermittent on-street parking to occur, associated with residents and their visitors. The ability of a car and an MRV (the standard service vehicle) to access the site via Young Street is shown in **Attachment 2**. It is noted that the driveway is slightly angled to encourage left turn entries to and right turn exits from the site. It is also proposed that a "No Left Turn" sign be placed opposite the driveway to effectively eliminate left turn exits movements onto Young Street.
- A second option has also been prepared which accommodates a 9.0m road carriageway in Young Street between the driveway and Billyard Avenue. This is overdesigned and also has the potential to alter the character of Young Street. Nevertheless, it is able to be provided if required and will effectively enable parallel parking on the western side of Young Street over this section, for use by residents and their visitors. Reliance is not made on this parking by the proposed Hospital. The ability of a car to access the site via Young Street under this option is shown in **Attachment 3**.
- The swept paths provided in Attachments 2 and 3 demonstrate compliance using a Category 2 Driveway and no further widening is considered necessary. This width is also sufficient to accommodate occasional service vehicles. These swept paths demonstrate that the concept plans prepared for the road widening are supportable and able to be delivered. The final road designs will however presumably be the subject of a suitable condition of consent requiring that the road be constructed to Council's requirements, while the driveway will be subject to compliance with AS 2890. For reference and to assist comparison, the existing road geometry is provided in **Attachment 4**.
- The need to provide adequate sight distances to pedestrians is acknowledged and is a requirement of AS 2890.1 in any event. The amended Young Street access driveway provides improved pedestrian sight lines, with an additional footpath within the site along the southern side of the internal roadway.

Future Traffic Conditions

- It is noted that Council has accepted that all intersections as assessed operate very well, with minimal delays and good levels of service, both currently and with the additional development traffic.
- It is noted that the traffic generation is higher than that generated by the previous proposal for a retirement village. However, this is not a relevant consideration to the current application.
- The additional trips generated in the AM and PM peaks is 56 veh/hr and 64 veh/hr in the PM peak. These are moderate and were previously assumed to split equally between both accesses and using both approach and departure directions, with the result that there were no unacceptable environmental amenity impact and this is acknowledged by Council. Nevertheless, the improved width of Young Street, based either on a 7.5m or 9.0m



carriageway, will result in a slight bias of traffic along this section of road, with a resultant reduction in traffic using Water Street. This will result in a further improvement in the amenity of residents in Water Street. This outcome can also be effectively guaranteed, with management being able to require that all staff use the Young Street access via Billyard Avenue. This could form part of a management plan and is supported in principle.

- A trip generation of 100 veh/hr based on the RTA's Guidelines occurs between 3.00pm and 4.00pm. This was similarly previously split between both accesses and all approach directions and an additional one vehicle per minute does not raise any concerns. With no delays at intersections or access driveways and with all parking provided on site, there is also no concern over impacts relating to the Bush School, which will continue to operate as at present. Again, these conclusions are reaffirmed by the current proposal to widen Young Street, which will reduce traffic using Water Street.

Widths of Roads

- It is noted that Council accepts that the width of Water Street and Young Street is sufficient based on Amcord Guidelines having regard for future traffic volumes. This includes all traffic from all sources, including the school, together with the development traffic. Nevertheless, the opportunity has been taken to undertake localised road and footpath improvements along Young Street, which results in an improved outcome. Indeed, it is a potentially over-engineered solution that provides more road capacity than is required.
- Any extensions to existing parking restrictions along Young Street are a matter that should be considered by Council's Traffic Committee. No objection would be raised to the extension of the existing parking restrictions as outlined by Council.

Accident History

- It is noted that there were no recorded accidents at the intersection of Water Street and Young Street over the 5 year period between July 2003 and June 2008. This demonstrates the safe nature of this locality which is immediately adjacent to the Bush School set-down and pick-up area,
- It is agreed that motorists travel in this area with care, but also that the road system is inherently safe based on its existing geometry.

Land Use – Transport Interaction

- Public transport accessibility to a private hospital of the nature proposed is not considered to be a significant issue and the small size of the facility in particular does not warrant additional services or diverted services. Nevertheless, a Transport Access Guide would be a worthwhile initiative and the need to produce one could be included as a condition of consent. This will encourage bus patronage as well as ride-sharing by employees.
- It is noted that bus services operate to/from Turrumurra Station along Eastern Road. This route is 400 metres walking distance from the site and is therefore acceptable for commuter travel as well as for trips to the Turrumurra Town Centre. The opportunity to provide a more convenient bus stops could be further assessed although this is not expected to generate a significant benefit.



Construction Traffic Management

- The need to prepare a detailed construction traffic management plan as a condition of consent is accepted as also requested by the RTA. The ability of trucks to turn is a function of the available driveway width and the CTMP will include swept paths that comply with the requirements of AS 2890.2 as well as Austroads Guidelines, based on the principles shown in **Attachment 1**. It is noted that trucks are able to use the full width of the carriageways in all local streets when accessing a driveway as permitted under AS 2890.2 as well as the Australian Road Rules. No use of articulated trucks is anticipated.

Public Submissions (if not discussed above)

- The narrowness of the Water Street and Young Street is not a concern of itself and in general terms, limiting road geometry achieves a beneficial effect of slowing traffic. Nevertheless, widening Young Street to 7.5m is supported and with the proposed turn restrictions at the driveway, results in less traffic using Water Street than previously assessed;
- The safety of school children is presently not an issue as reflected in the 5 year accident history examined by Council. The additional traffic does not cause any breach of any threshold relating either to traffic generation or environmental amenity concerns. Safety will be maintained through compliance with all relevant standards;
- In general terms, resident concerns are overstated and are not reflected in any of the analysis undertaken. Indeed, Council officers have not identified any safety or amenity concerns that cannot be dealt with by suitable conditions of consent as discussed above;
- The issues raised by residents are not dissimilar to objections raised in relation to the previous development proposal for a retirement village, notwithstanding that this was the lowest traffic generating use that could be contemplated for the site, including low density residential development. In this context, the current concerns should not be given undue weight.
- There is no basis to the proposition that a private hospital of the nature proposed cannot coexist within a residential community including local schools. Any development on the subject site will generate impacts that must be managed and it is unreasonable to assume that the road environment in the immediate vicinity should not evolve over time as occurs in all parts of metropolitan Sydney. That is, it is unreasonable to expect traffic conditions to remain a constant.

We trust that this advice will be of assistance. Please contact us should you have any queries.

Yours faithfully,

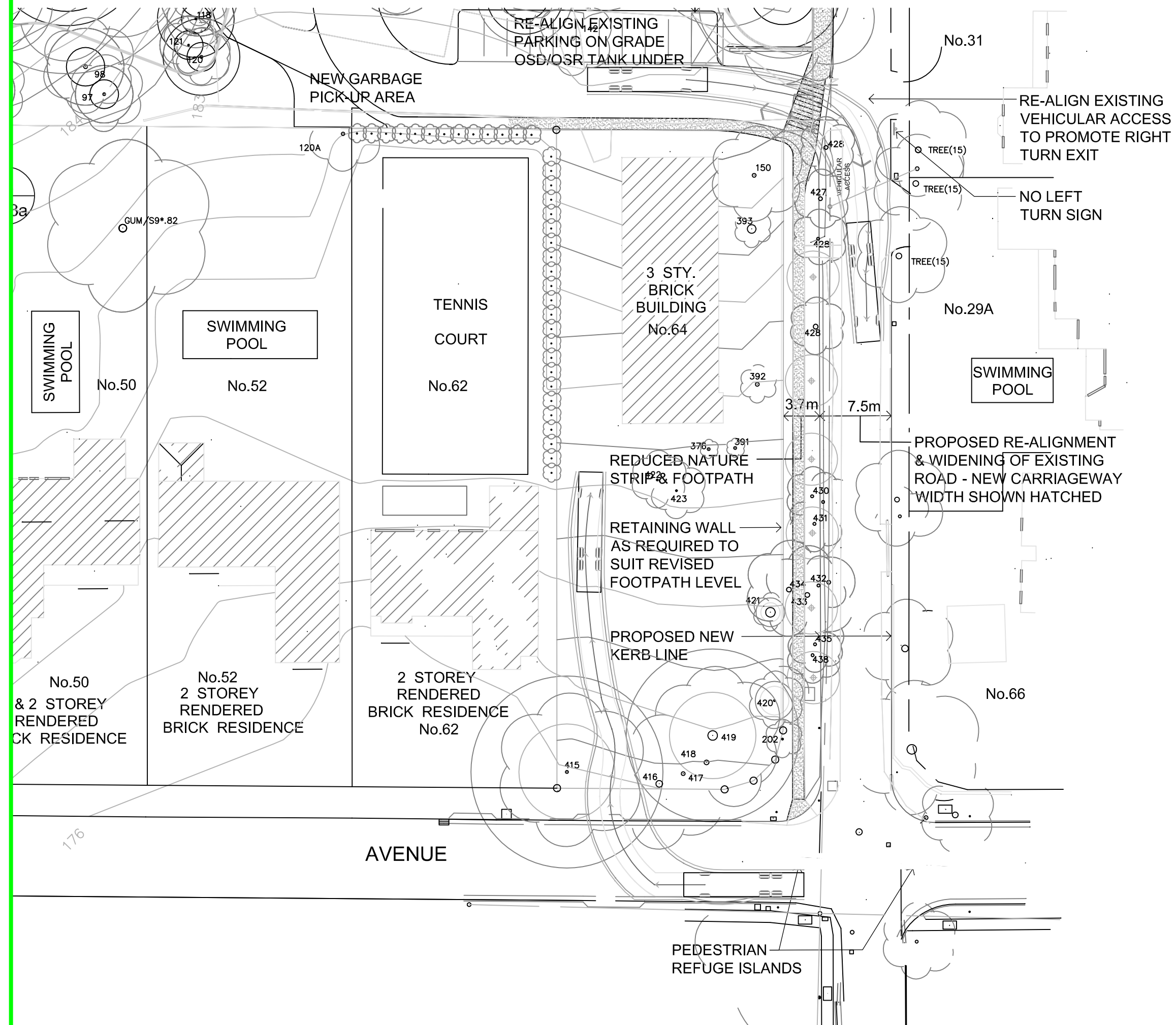
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Graham Pindar
Director

Encl: Attachments 1 to 4



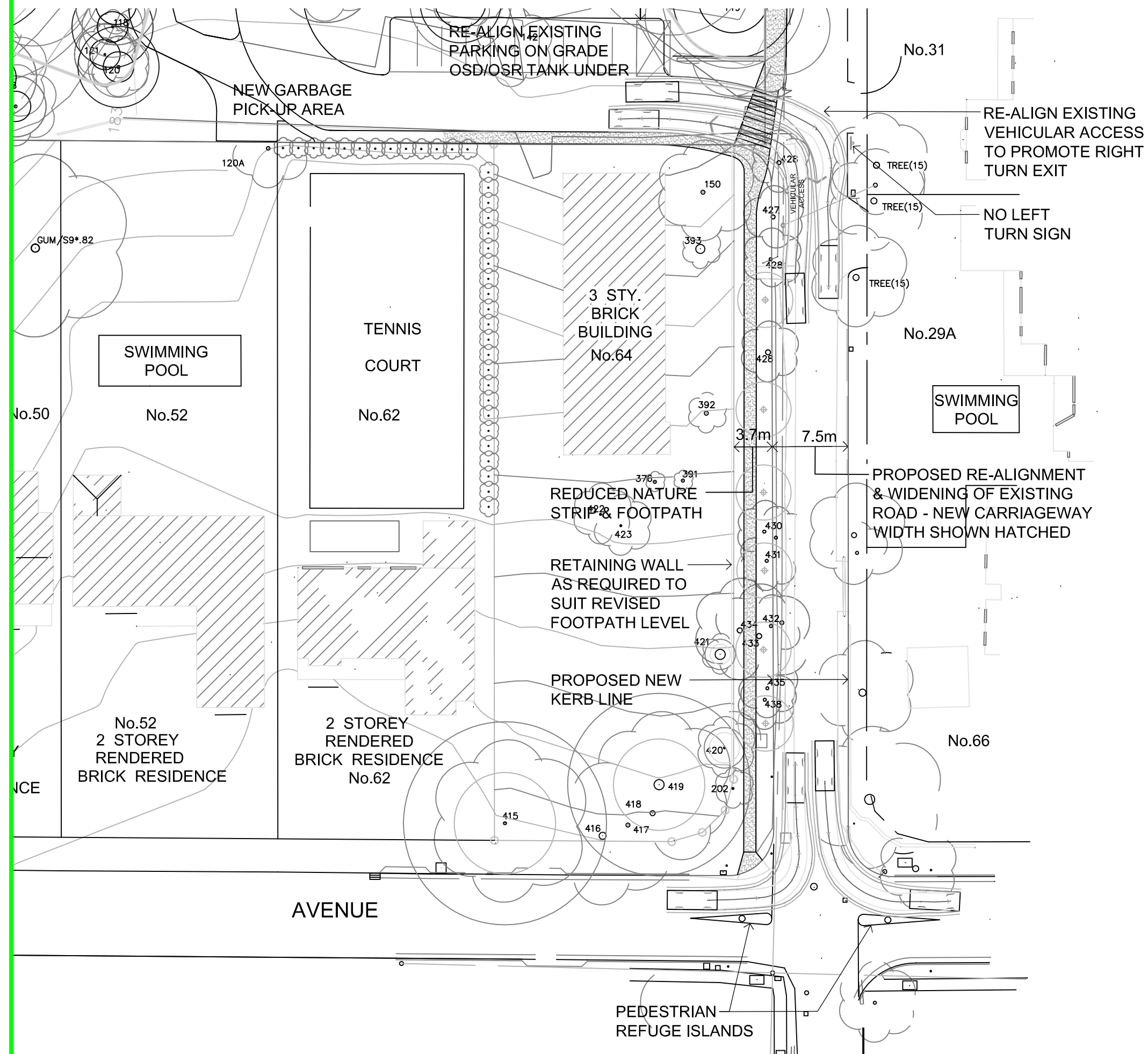
attachment 1



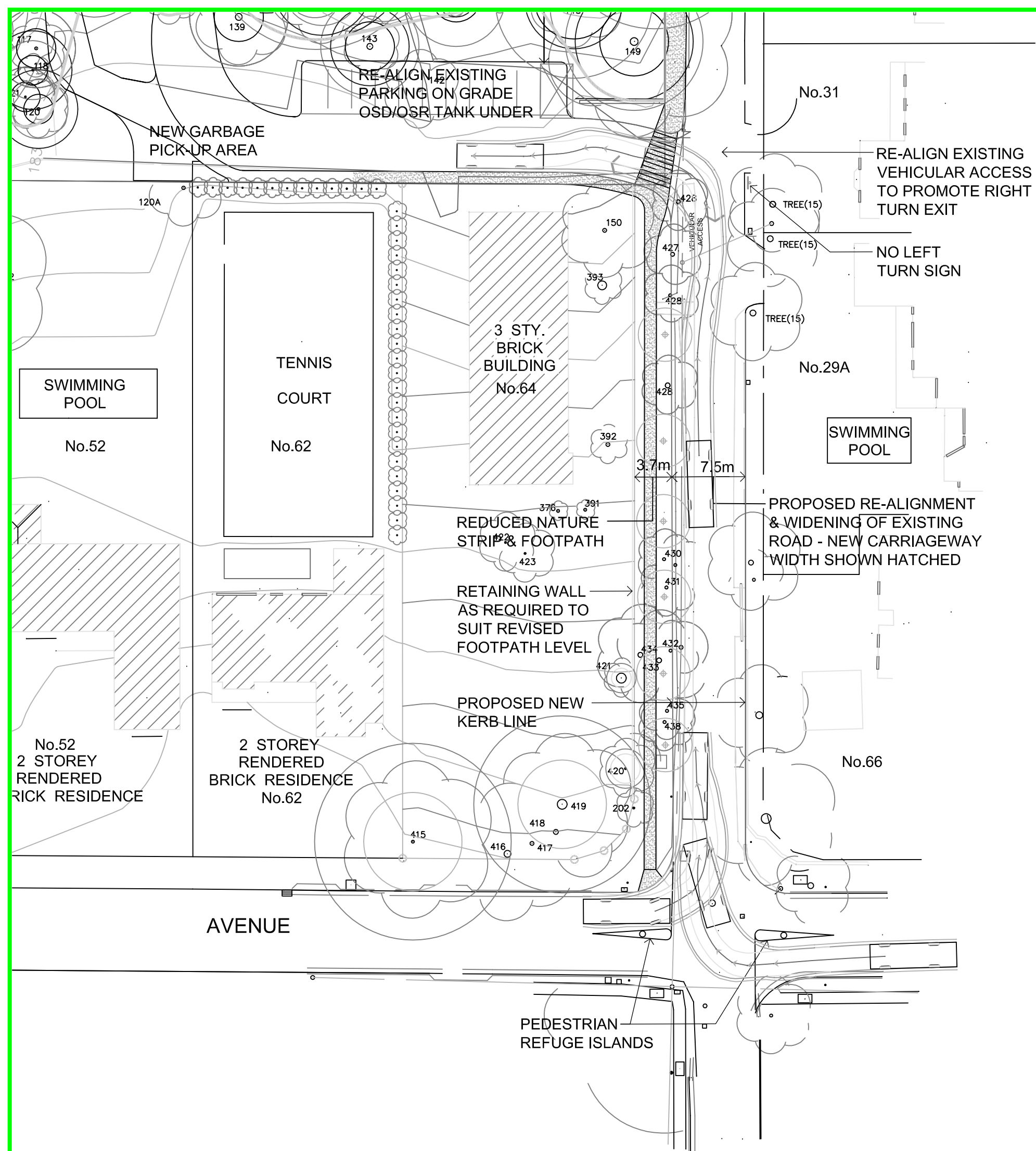
Construction Truck Access
1 in 400 at A3



attachment 2



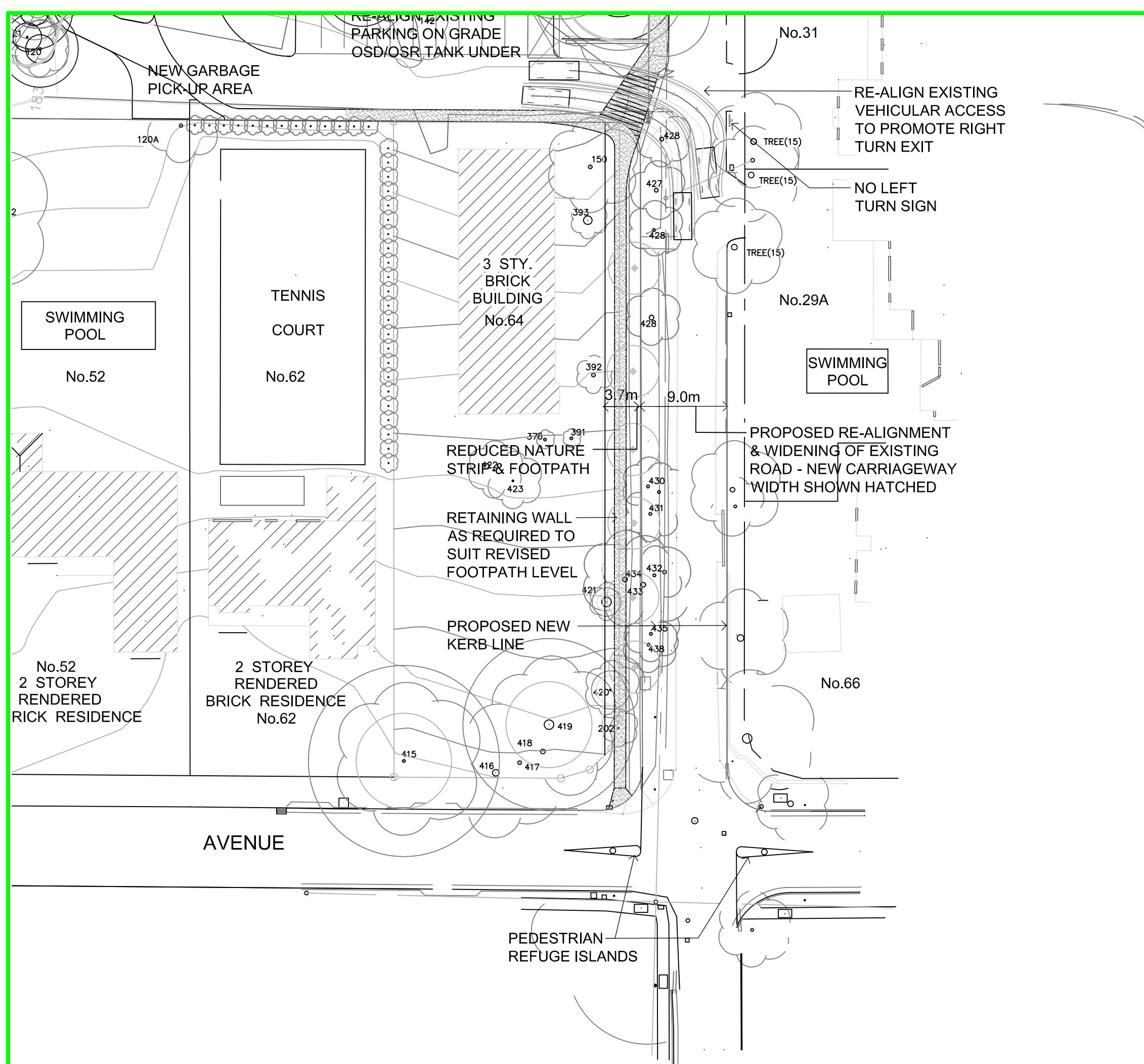
7.5m Road Option
Car Access
1 in 400 at A3



7.5m Road Option
Standard delivery (MRV) Access
1 in 400 at A3



attachment 3



9.0m Road Option
Car Access
1 in 400 at A4



attachment 4

