Ref 12 440

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Attention: Alan Crowe

Re: Proposed Modification to Approved MP 09_0051 – Centre for Obesity, Diabetes & Cardiovascular Disease (now known as the Charles Perkins Centre)

Dear Alan,

We refer to your recent request regarding the abovementioned Major Project application and in particular your request for TRAFFIX to undertake a review of the currently approved internal access link to the Charles Perkins Centre (CPC) building. We confirm that we have inspected the site and reviewed all relevant documentation made available to us and we and now advise as follows in relation to the issues that arise.

Relevant Background Information

On the 29th of June 2010 the Minister for Planning approved a proposal from the University of Sydney under Part 3A of the Environmental Planning and Assessment Act, for the establishment of the Centre of Obesity, Diabetes & Cardiovascular Disease, since renamed the Charles Perkins Centre (CPC). The approval generally included the construction of an 8 level building with an approximate gross floor area of 35,000m^2. The application included the provision of 200 parking spaces within a multi level basement car park accessed via Regimental Drive, John Hopkins Drive and Orphan School Creek Lane. The approved application incorporated an inherent traffic generation of 122 veh/hr in the AM peak period and 76 veh/hr in the PM peak period, based on the relevant documentation.

A subsequent Section 75W application was submitted to the Department and approved on the 13th October 2011. The approved modification resulted in the reduction of usable floor area by approximately 15% to 29,673m^2. The modification also resulted in the reduction in parking from 200 spaces to 97 spaces as well as the removal of the southern access to the basement car park. The modification incorporated a substantially reduced traffic generation, of 56 veh/hr in the AM peak period and 35 veh/hr in the PM peak period.

Further change to the building was made as part of a second Modification (Mod 2) approved in March 2012, however this modification application made no substational changes to either usable floor space or parking numbers This application also retained the approved access to Parramatta Road (via Orphans School Creek Lane). Accordingly all external access, traffic generation and parking matters have been previously assessed and subsequently approved by the Department.

Location and Site

The Centre for Obesity, Diabetes & Cardiovascular Disease (CODCD), now knwon as the Charles Perkins Centre (CPC), is located within the University of Sydney campus adjacent to the St Johns Oval and accessed via Regimental Drive and Orphan School Creek Lane.

A Location Plan is presented in **Figure 1**, with a Site Plan presented in **Figure 2** below.

Current Section 75W Application Proposal

A detailed description of the proposed modification is provided in the Environmental Assessment prepared by Urbis. In summary, the modification for which approval is now sought comprises the following components:

- Retention of the construction access for the purpose of providing future access to the development. The unconstructed section of the approved access alignment would not be constructed and accordingly this approved alignment via Orphans School Creek Lane would be extinguished.
- Civil works and landscaping to the existing construction access including the provision of necessary drainage and kerbs.
- Construction of a pedestrian footpath on the western side of the proposed access linking Parramatta Road with the CPC building and John Hopkins Drive; and
- One-way eastbound link to Regimental Drive and internal campus road network.

The justification for this proposal is provided below. Reference should be made to the plans submitted separately to the Department which are provided at a reduced scale in **Attachment A**.

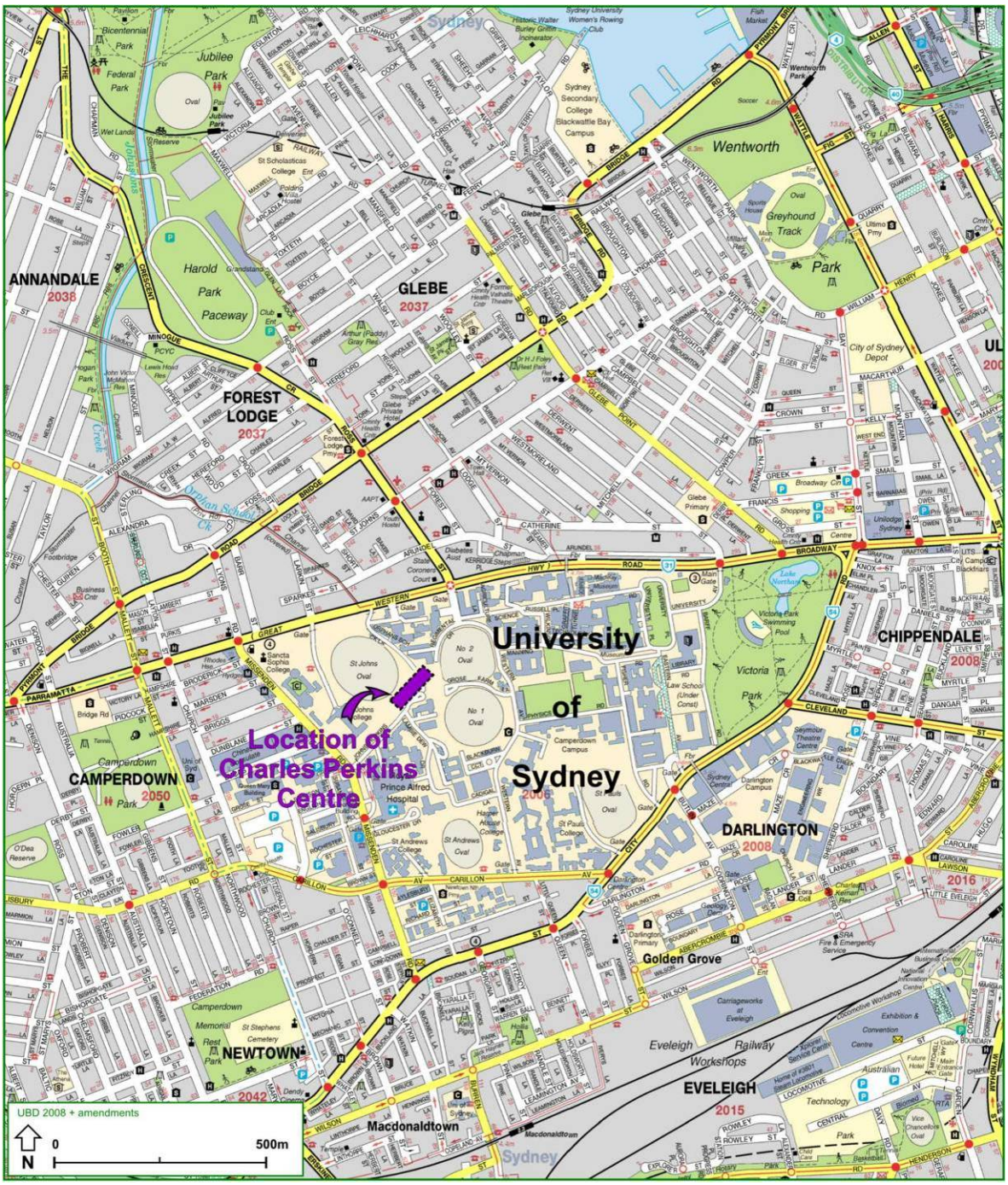


Figure 1: Location Plan

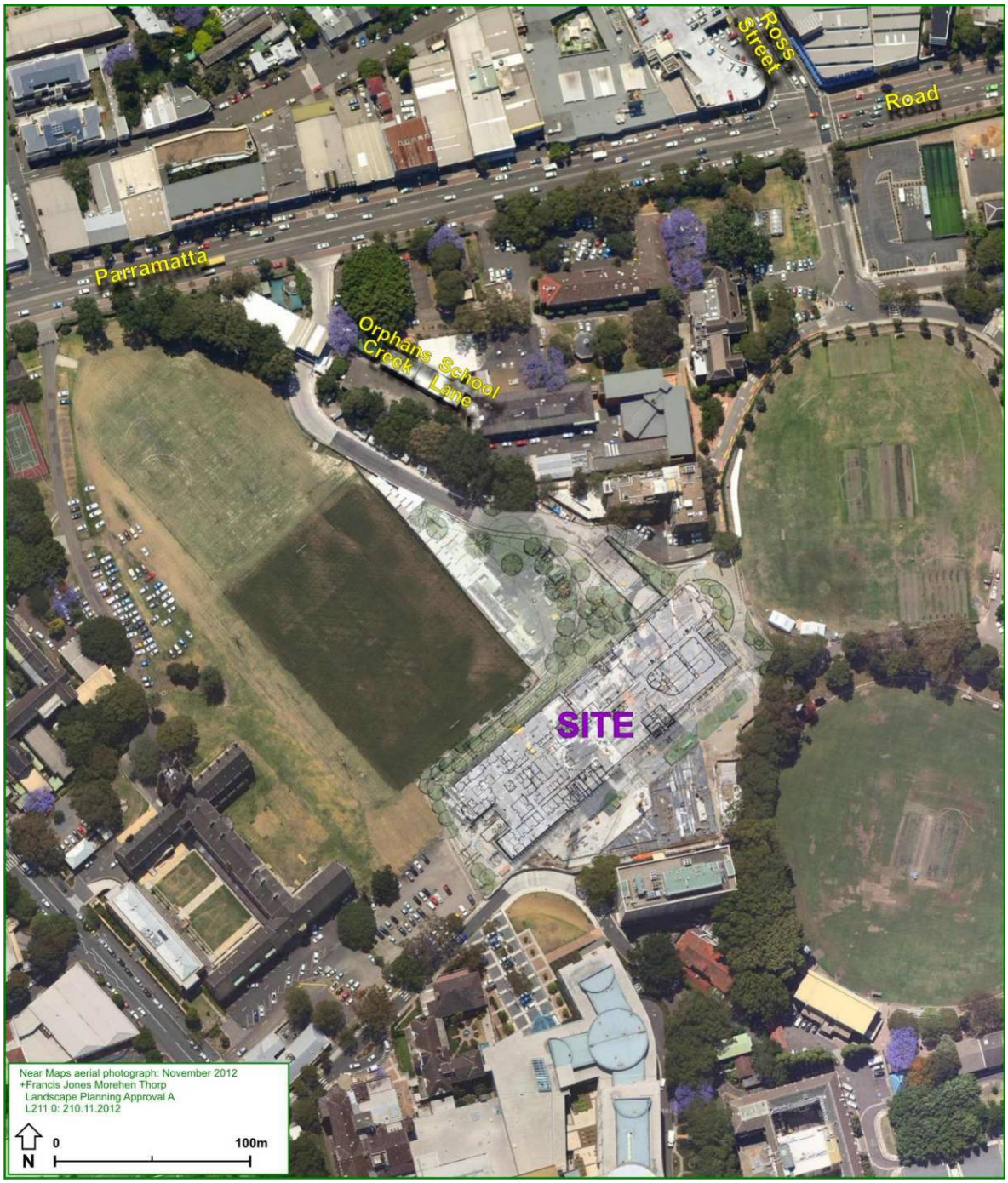


Figure 2: Site Plan

Proposed Retention of Construction Access

Under the current modification approval, all vehicular access to the site is to occur via the existing Orphans School Creek Lane. Based on the Traffic Impact Assessment undertaken by Halcrow for the approved Section 75W (Mod 1), the development will generate a peak hour demand during the AM peak period of approximately 60 veh/hr.

At the request of Brookfield Multiplex (through the University of Sydney), TRAFFIX has been commissioned to undertake a review of the approved access route via Orphans School Creek Lane in terms of the adequacy of the route to accommodate the future traffic generation of the development having regard for the increased traffic volumes (staff, visitors and service vehicles) that will occur due to the reliance on this access as the main site access under Mod 1 (notwithstanding the reduced overall traffic generation). We understand this review has formed part of a broader analysis of access and links to this important campus building to determine an optimum alignment for vehicles, bicycles and pedestrians using the CPC and other nearby facilities within the Campus.

The key findings of this review are summarised below.

Suitability of Carriageway

Orphans School Creek Lane (refer **Figure 3**) is constructed with carriageway generally of width 5.0 metres. Under the Australian Standards for Off-Street Parking (AS2890.1 – 2002) the minimum carriageway width for two way flow is nominated as 5.5m. Accordingly the current (and historic) operation of the laneway is considered satisfactory only by virtue of the very low daily traffic volumes that is accommodates, estimated at approximately 100 vehicles per day (vpd).

As a result of the approved development, daily traffic volumes are anticipated to increase on Orphans School Creek Lane by up to 500 vpd to a total of 600 vpd. This increase along Orphans School Creek Lane is unsupportable and does not comply with AS2890.1 having regard to its narrow width and the inability for the roadway to accommodate uninterrupted two way flow.

It is also noted that Orphans School Creek Lane requires pedestrians or cyclists to share the carriageway and that these will increase significantly as a consequence of the development, associated with the increase in arrivals and departures of both staff and visitors. The projected (increased) traffic volumes are incompatible with these activities, do not conform to relevant standards and best practice and raise serious concerns in relation to the safety of both cyclists and pedestrians.

Functionality of Orphans School Creek Lane

Orphans School Creek Lane generally operates as a service road providing access to the existing buildings generally associated with the Veterinary Science faculty including Evelyn Williams Building, the Cattery Building and the Veterinary Science Conference Centre. Loading dock facilities are currently located directly adjacent to the existing carriageway to both the Evelyn Williams Building and the Cattery Building as shown in Figure 3.

As a result of the CPC and the associated increases in vehicular and pedestrian movements along Orphans School Creek Lane that will occur under current consent, the use of the lane for servicing activities cannot continue in a safe and efficient manner and requires substantial improvement. This would include increasing the carriageway width to facilitate uninterrupted two way traffic flow, provision of a dedicated pedestrian footpath to facilitate safe movement of pedestrians (and cyclists) and local widening at existing docks to ensure that trucks can manoeuvre without traversing footpath areas. These improvements would only be acheivale with the redevelopment of the Veterinary Sicence precinct.

Figure 3: View looking west along Orphans School Creek Lane taken from Everly Williams building looking west

Sight Distances

Sight distances are generally acceptable along the length of Orphans School Creek Lane with the exception of the location adjacent to the corner of the Evelyn Williams Building. As can be seen in **Figure 4** sight distance at this location is unacceptable, even with current volumes.

While the approved access road alignment will improve this situation, the sight distance will remain unsatisfactory, particularly in view of the need to overcome conflicts between the higher traffic, pedestrian and cyclist volumes that will occur under the current consent.

Figure 4: Sight Distances along Orphan School Creek Lane, taken from corner of Evelyn Williams Building looking east

Summary of Issues

It is considered that the approved route via Orphans School Creek Lane is unsuitable to accommodate the future increases in traffic, pedestrian and cyclist volumes associated with the CPC, with major safety concerns including:

- Insufficient carriageway width to accommodate the future traffic volumes.
- Inadequate pedestrian infrastructure to accommodate the future pedestrian demand. This is particularly relevant having regard for the increased traffic volumes as a result of the CPC; and
- Continued use of the lane for servicing of the adjacent buildings will result in potential on-street conflicts.

Accordingly, it has been recommended that an alternative access to the CPC be identified and provided. Consultation with relevant stakeholders was subsequently undertaken and as a consequence, access to the site is now proposed via the existing construction site access. That is, the experience gained from operating the existing construction site access has demonstrated that this would be suitable as the main site access, with no adverse or unacceptable consequences.

The proposal in shown conceptually in Appendix A and will result in a carriageway width of 7.2 metres (compared to 5.0m) which is sufficient to provide uninterrupted two way traffic flow as well as allowances for cyclists. In addition a pedestrian footpath is also proposed along the access road's western edge, directly linking CPC with Parramatta Road.

The proposed access road will have no impact on the operation of critical intersections in the locality or the operation of the access to Parramatta Road which will continue to operate as previously documented and approved.

The proposed access arrangements are considered superior to that which are currently approved and will result in significant improvements in vehicular and pedestrian safety to that which would otherwise be provided should access via Orphans School Creek Lane be maintained. Accordingly the proposed access is considered supportable on traffic planning grounds and it is the firm recommendation of TRAFFIX that the revised access arrangements be adopted.

Access to Regimental Drive

The application also seeks approval for a one-way eastbound access to Regimental Drive. The proposal will allow for the recirculation of vehicles (including heavy vehicles) that have indivertibly travelled along the access road towards the site and would otherwise be required to undertake multiple turning movements to exit (noting that due to the lack of turning facilities heavy vehicles would be required to reverse from the site back to Parramatta Road).

In addition, the proposed access will also facilitate egress from the site via the University's internal road netowk should access to Orphans School Creek Lane or Parramatta Road be unachievable in an emergency.

Accordingly the through access to Regimental Drive is considered supportable and the provision of a secondary egress from the site is considered best practice.

Summary

This Section 75W application generally seeks approval for the retention of the current construction site access to facilitate all future access to the site. This represents a considerable improvement over the currently approved access route which is in our view inadequate for accommodating the future demands of the development without unacceptably compromising both pedestrian and vehicular safety.

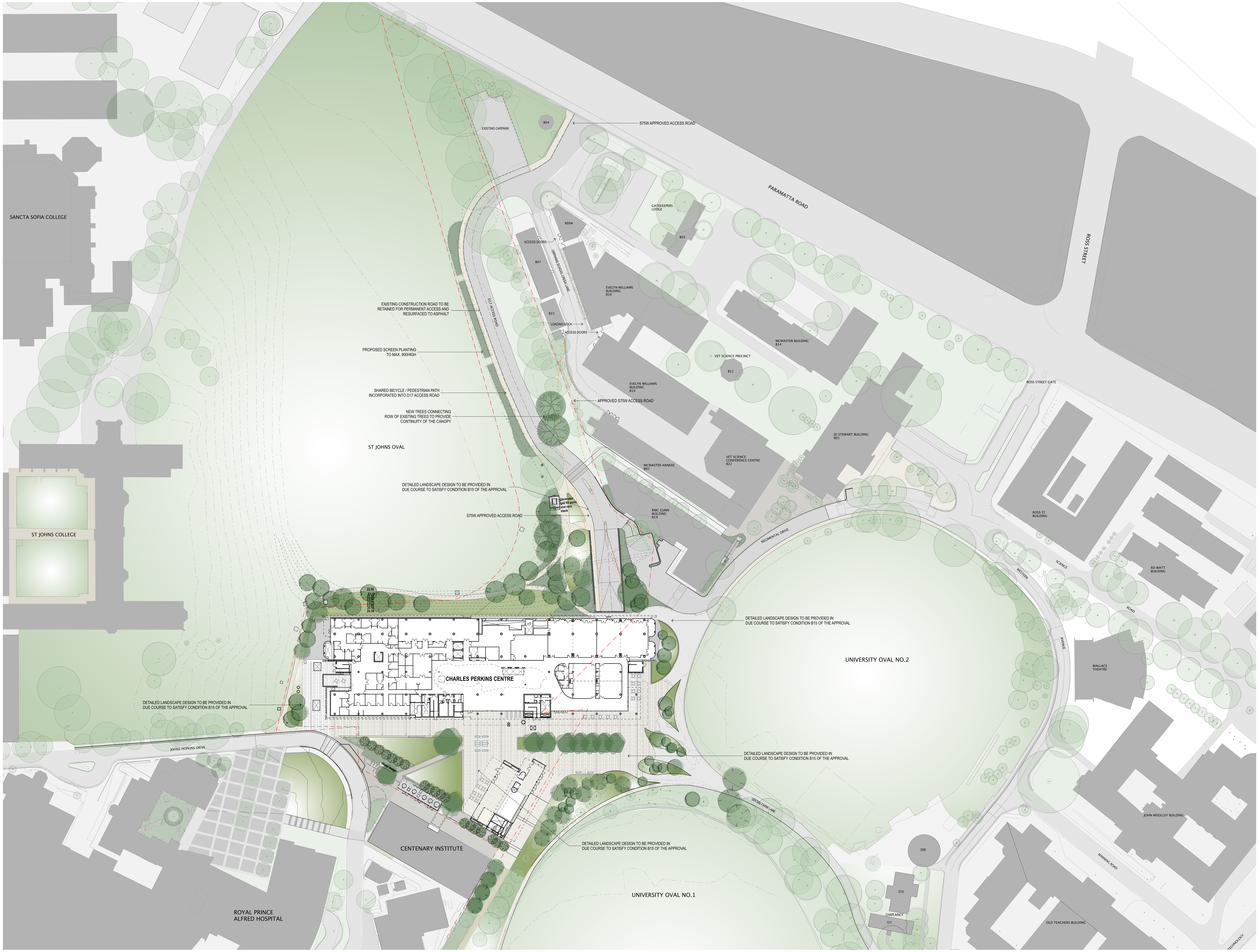
The application is therefore supportable on traffic planning grounds and will have a minimal impact on existing conditions whilst providing a benefit for future users of the CPC as well as pedestrians and cyclists traversing through the University Campus and users of the various Veterinary Science buildings accessed off Orphans Shcool Creek Lane. If you have any questions or would like to discuss the application further please do not hesitate to contact the undersigned.

Yours faithfully

traffix

Andrew Johnson
Associate Engineer

attachment 1



FOR INFORMATION

Notes

All dimensions, setouts and existing conditions to be checked and verified prior to commencement on site.
All omissions or discrepancies to be notified to the architect.

All level relative to 'Australian Height Datum'

Do not scale drawings. Use figured dimensions only

Copyright

Legend

S75W Approved Road (as per Drawing A-DA-012)

Boundary line

Planting

- Trees to Be Removed
- Existing Trees
- Existing Turfed Areas
- Existing Gardens
- Proposed Trees_Large Screening
- Proposed Trees_Medium
- Proposed Trees_Small
- Proposed Specimen Trees_Medium - Large
- Proposed Specimen Trees_Small - Medium
- Proposed Mass Planted Gardens
- Proposed Turfed Areas
- Proposed D17 Access Road Mass Planting Beds

REV	DATE	COMMENT	BY	CHK
05	13.12.12	FOR PLANNING APPROVAL	CRB	MT
04	13.12.12	FOR PLANNING APPROVAL	CRB	MT
03	10.12.12	FOR PLANNING APPROVAL	CRB	MT
02	07.12.12	FOR PLANNING APPROVAL	CRB	MT
01	04.12.12	FOR PLANNING APPROVAL	CRB	MT

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Design and Construct Contractor

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Project

Charles Perkins Centre
The University of Sydney

Drawing Title

LANDSCAPE PLAN ACCESS ROAD
S75W Planning Modification

DESIGN DEVELOPMENT

Scale 1:500 @ A0
0 5 10 20m

N

Date 04.12.12 Drawn CRB Checked MT

Project No.	Drawing No.	Rev.
D17	LA-9401-DA	05