



Friday 9 December 2016

Roads and Maritime Reference: SYD16/01340/01

Council Ref: 14/5378

The General Manager

Inner West Council

PO Box 14

Petersham NSW 2049

Attention: Peter Wotton

**DRAFT AMENDMENTS TO MARRICKVILLE LOCAL ENVIRONMENTAL PLAN 2011 – VICTORIA ROAD
PRECINCT IN MARRICKVILLE**

Dear Mr Wotton

I refer to your letter of 27 September 2016 inviting Roads and Maritime Services to provide comment on the abovementioned planning proposal. Roads and Maritime appreciates the opportunity to provide comment and apologises for the delay in providing a submission.

Roads and Maritime has reviewed the Planning Proposal and it is noted that the intention of the proposal is to rezone land from 'IN1 General Industrial' to medium and high density residential, mixed use and business zones, increase maximum height of buildings and increase floor space ratios in the precinct.

Transport for NSW (TfNSW) will provide a separate submission to the Planning Proposal. Roads and Maritime's comments are outlined below.

Roads and Maritime does not support the Planning Proposal and is of the view that due to the nature and scale of the proposal, the Local Environmental Plan (LEP) amendment should not be gazetted until such time that the cumulative transport impacts are identified with associated mitigation measures and incorporated into an appropriate funding mechanism (i.e Section 94 and/or Planning Agreement).

In this regard, the Traffic and Transport Assessment submitted with the planning proposal is considered preliminary in nature and has not adequately analysed the cumulative traffic and transport impacts associated with the Planning Proposal. Development of a more detailed traffic and transport assessment should consider and address, amongst other issues, those outlined in Attachment A.

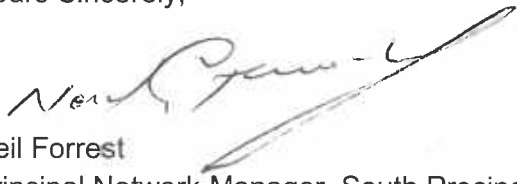
Roads and Maritime Services

An addendum Transport and Transport Impact Assessment should be undertaken to assess the cumulative impacts of the planning proposal on the local and regional road network (including public transport) and identify feasible infrastructure improvements required to support future developments within the Victoria Road precinct. This study should also make reference to funding responsibilities and associated funding mechanisms to be determined in consultation with the Inner West Council, Transport for NSW and the Department of Planning and Environment. Appropriate public exhibition of the Traffic and Transport Assessment should be undertaken prior to adoption of the plan.

Roads and Maritime would be happy to facilitate a meeting with Council as well as Transport for NSW to discuss the requirements of the Traffic and Transport Impact Assessment.

Thank you for the opportunity to provide advice on the subject proposal. If you require clarification on any issue raised, please contact Tricia Zapanta, Strategic Land Use Planner on 8849 2473 or by email on Tricia.Zapanta@rms.nsw.gov.au.

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'Neil Forrest', with a long, sweeping horizontal stroke extending to the right.

Neil Forrest
Principal Network Manager, South Precinct
Network Sydney

ATTACHMENT A

1. An addendum traffic and transport assessment should consider and address the following initial comments -
 - The intersection of Victoria Road and Sydenham Road will likely require upgrades to mitigate additional traffic generation from the proposed development. RMS supports, in principle, the proposal for widening to include right turn bays on the three approaches with the intersection operating with diamond phasing. This should be included in the detailed traffic modelling.
 - The proposed new link road connecting to Sydenham road, east of Victoria Road may result in rat runs in this part of the precinct. While RMS does not object to this proposed link, it should operate in a left-in left out configuration. The proposed modelling for the Sydenham/Victoria Rd intersection should not take into account any projected displaced vehicles making use of this link road.
 - The current level of service B for the Victoria Road and Sydenham Road traffic signals (TCS 41) is considered inaccurate with the intersection generally operating as a LOS of D. At present, the intersection has a number of filter turns with turning movements difficult and limited, effectively reducing the capacity to a single lane. Queuing is also experienced along Victoria Road northbound which can extend to Marrickville Road during the morning peak.
 - Provision of modelling information should include cycle lengths and phasing for the Victoria Road and Sydenham Road intersection as well as consider the current pedestrian protection on site, as well as the need for additional protection when pedestrian activity is increased.
 - The modelling should include the existing signalised pedestrian signals at Victoria Rd, south of Chapel St (TCS 1992).
2. It is noted that the draft DCP includes controls and mapping relating to the precinct's Movement Network. Roads and Maritime requests the following amendments and/or inclusion to the development controls -
 - Amend the existing control to include the bold highlight - 'The number of vehicle entry points per block **on Victoria Road and Sydenham Street** should be minimised and located **on secondary streets** where possible to maximise visual amenity within the public domain'.
 - Include a new control '**Future development along Sydenham Road should have no stopping restrictions fronting the property**'.
3. Council is advised that land at the south eastern side of the Victoria Road/Smith Street intersection is owned by Roads and Maritime and is currently in use as road. Any development in this vicinity will need to provide appropriate setback to the property boundary to allow for future road widening of Victoria Road (see attached PIMS plan).



Thursday 1 June 2017

Roads and Maritime reference: SYD16/01340/01
Council Ref: 14/5378

The General Manager
Inner West Council
PO Box 14
Petersham NSW 2049

Attention: Simon Manoski

VICTORIA ROAD, MARRICKVILLE PLANNING PROPOSAL

Dear Mr Manoski

I refer to your letter of 30 May 2017 following our meeting on Tuesday 23 May 2017 regarding the above mentioned Planning Proposal. Roads and Maritime appreciates the opportunity to confirm our issues and concerns in relation to the above matter.

Following a review of the documentation submitted by the proponent and respective meetings with the Department of Planning and Environment, Council and the proponent, Roads and Maritime advises Council that it concurs with the issues identified in Council's letter and agrees that the Planning Proposal has not addressed a number of traffic and transport related issues, which are outlined below, and therefore cannot support the proposal in its current form.

- The cumulative traffic and transport impacts on the surrounding local and regional road network (including an assessment of current and future public transport services) has not been adequately addressed with intersection analysis limited to intersections along the Victoria Road corridor, primarily the Victoria Road/Sydenham Road intersection. Given the scale and level of the proposed rezoning, a detailed traffic and transport assessment should have included the Sydenham Road/Farr Street, Addison Road/Enmore Road, Victoria Road/Edinburgh Road intersections.
- The proponent was advised that a likely future upgrade of the Victoria Road/Sydenham Road intersection which includes right turn bays on three approaches and a left turn slip lane from Sydenham Road east bound to Victoria Road was required to support the level of development. The proponent prepared a strategic concept plan for the intersection upgrade which identified the need for future land acquisition on Sydenham Road along the frontage to Wicks Park and on the south western side of Victoria Road, which is in private ownership and outside of the boundaries of this Planning Proposal. Council has confirmed that it does not support any land acquisition along Wicks Park or from properties outside of the Planning

Roads and Maritime Services

Proposal area. Therefore, it can be concluded that in the absence of Council's support for land acquisition, the proposal to upgrade the Victoria Road/Sydenham Road intersection to support the forecast increase in traffic movements to/from the intersection cannot be implemented.

- The proposal has not adequately addressed funding responsibilities and associated funding mechanisms (either through a Section 94 Contributions Plan, Voluntary Planning Agreement and/or Special Infrastructure Contribution) and an Infrastructure Staging Plan which identifies the timing, cost and trigger points for the delivery of transport infrastructure upgrades. Road and Maritime reiterates this should be undertaken prior to the gazettal of the plan and will not support the deferral of this matter to the Development Application stage.

Thank you for the opportunity to confirm our advice on the subject proposal. If you require clarification on any issue raised, please contact Tricia Zapanta, Strategic Land Use Planner on 8849 2473 or by email on Tricia.Zapanta@rms.nsw.gov.au.

Yours Sincerely,



per Greg Flynn
Program Manager, Land Use

21 November 2016

Mr Rik Hart
Interim General Manager
Inner West Council
PO Box 14
Petersham NSW 2049

Via email: council@marrickville.nsw.gov.au

Dear Mr Hart

Re: Victoria Road Precinct, Marrickville, Planning Proposal – 16/SF579

Thank you for the opportunity to comment on the draft planning proposal for the Victoria Road Precinct, Marrickville (the precinct).

Sydney Airport made a previous submission to the NSW Department of Planning and Environment (DPE) concerning an earlier version of this planning proposal.

The key issues raised in our previous submission were:

- The potential for new buildings or other structures in the precinct to intrude into Sydney Airport's prescribed airspace;
- The loss of industrially zoned employment lands in the vicinity of Sydney Airport; and
- New housing in parts of the precinct where the relevant Australian Standard considers it unacceptable.

In its Gateway Determination dated 14 March 2016, DPE had regard to these issues and required the proponent to revise its planning proposal to:

- Amend the maximum building height to ensure a safe separation to the obstacle limitation surface, as determined by Sydney Airport;
- Provide further justification for inconsistencies identified with *A Plan for Growing Sydney*, particularly regarding the protection of industrial land around the Sydney Airport Transport Gateway, to ensure the area is able to provide employment opportunities;
- Provide further justification for inconsistencies with local planning directions, in particular:
 - the loss of industrial land in the precinct, and
 - the loss of total potential floor space for industrial uses in industrial zones.

- Provide further justification for inconsistencies with local planning directions relating to development near licensed aerodromes; and
- Prepare a draft development control plan (DCP), in consultation with Sydney Airport and Inner West Council, giving consideration to matters that may affect pilot safety or the operation of the airport in building design (that is, no reflective surfaces or protruding items).

This submission deals with each of these issues in turn.

Protecting Sydney Airport's prescribed airspace

To ensure the safety of aircraft and airline passengers and to provide for future growth, the airspace surrounding Sydney Airport needs to be protected from inappropriate development. Australian Government regulations have therefore long recognised the need to restrict the height of buildings and other structures (such as cranes) near the airport or under flight paths.

The Victoria Road precinct is only two kilometres from the northern end of Sydney Airport's main runway and is immediately beneath the busy flight path used by aircraft landing on or taking off from that runway. At this point, aircraft on approach are only around 150 metres above ground level, with building heights in some parts of the precinct proposed to be only around 100 metres below that. For these reasons, the height of buildings in the precinct is an important issue.

Sydney Airport's protected airspace (also known as "prescribed airspace") includes seven surfaces, details of which can be found at:

<http://www.sydneyairport.com.au/corporate/community-environment-and-planning/planning/airspace-protection.aspx>.

As noted in our earlier submission, the Obstacle Limitation Surface (OLS), the Procedures for Air Navigation Services – Aircraft Operations (PANS-OPS) surfaces and the Precision Approach Path Indicator (PAPI) system surfaces are relevant to this planning proposal. We provided information about each of these surfaces to the proponent on 7 April 2016. Copies of charts showing these surfaces in relation to the precinct are shown at **Attachment A**.¹ Airlines may also have developed what are called "engine-out procedures" that may be relevant and also need to be taken into account.

The proponent states in section 6.4.1 of its July 2016 planning report (the planning report) that the proposed building heights in the precinct have been developed to be below the OLS and PANS-OPS. However, after reviewing the proposed building heights shown in Figure 21 of the planning report, it appears that in those parts of the precinct where buildings are proposed to be RL49 or RL50 metres in height, those buildings may intrude into one or more of these surfaces. This is based on information provided by the proponent in the survey shown in Appendix Q of its revised proposal. This information shows ground level heights (which are presumably above sea level) ranging from around 2.5 to 6 metres in these locations.

For example, in a location where the PANS-OPS surface is 52 metres AHD, the maximum allowable height of any building or structure attached to that building in that location would be

¹ We note that the OLS chart we provided to the proponent was not included in Appendix P of its revised proposal documentation, as published on DPE's website.

between RL46 and RL49.5 metres, not RL50 metres as proposed.² It is important to also note that construction cranes may be required to operate at a height significantly higher than that of any proposed building and, given the proximity of low flying aircraft and the frequency with which they fly over the precinct, it cannot be assumed these cranes would be approved under the *Airports (Protection of Airspace) Regulations*.

The planning report also indicates that buildings higher than those shown in Figure 21 are being contemplated. Given the location of the precinct relative to Sydney Airport's main runway, we would be concerned if such buildings were proposed to intrude further into Sydney Airport's prescribed airspace and would therefore be likely to oppose any such increased building heights.

Loss of employment lands

Maintaining an adequate stock of industrially zoned employment lands is essential to facilitate economic growth, productivity gains and increased competitiveness. This is particularly so in relation to nationally significant economic infrastructure such as Sydney Airport (Australia's busiest airport and international gateway) and Port Botany (NSW's largest container handling facility), both of which are forecast to grow into the future.

Our earlier submission expressed concern about the ongoing and permanent loss of industrially zoned employment lands in the vicinity of Sydney Airport, a concern we understand is shared by NSW Ports as the operator of Port Botany.

Our submission highlighted that a number of planning priorities and actions in the NSW Government's *A Plan for Growing Sydney* seek to ensure that existing industrially zoned employment lands in and near the Sydney Airport and Port Botany precincts are protected. Previous strategic plans for Sydney – including the *2005 Metropolitan Strategy*, the *2010 Metropolitan Plan for Sydney* and the draft *East and South subregional strategies* – also included similar policies designed to protect employment lands.

However, despite these policies being articulated by state governments for several years now, the overall area of industrially zoned land around the airport and port continues to decrease. Some of that which remains – such as the Cooks Cove trade and technology zone – is also at risk of being rezoned to permit residential and commercial development. Information provided by the proponent as part of this planning proposal confirms that the area of industrially zoned land in the former Marrickville local government area (LGA) has declined by 25 hectares (or 15 per cent) in just the last six years.

As part of the district planning process now underway, Sydney Airport has recommended to the Greater Sydney Commission that the district plans it is preparing for the central and south metropolitan districts include provisions to ensure a sufficient supply of industrially zoned employment land remains in the vicinity of the airport and port to support their long term growth. These provisions would then need to be given effect to through relevant local environmental plans and, importantly, supported by local governments in the future.

Sydney Airport notes that section 6.1.3 of the report states that:

² Note that, for the purposes of the *Airports (Protection of Airspace) Regulations*, intrusions into prescribed airspace by building elements such as plant and lift overruns, communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like are also defined as "controlled activities".

The precinct is located outside the area identified in the Sydney Airport master plan as being strategically significant to the airport's operations.

To support this statement, the report also states that Sydney Airport has said in its master plan that:

Due to access limitations, few airport-related industries are located within Marrickville.

It should be noted that the master plan referred to in the report is no longer in force and was superseded in 2014. There is no such statement in our existing master plan.

Draft development control plan

We thank the proponent for preparing a draft development control plan (DCP) for the precinct and acknowledge that, should the planning proposal be approved, it provides a way of minimising the likelihood of negative impacts on operations at Sydney Airport and aviation more generally.

However, we believe clauses 9.47.11 and 9.47.12 of the draft DCP and the accompanying *Victoria Road Precinct Aircraft Noise Policy* need to be strengthened to better disclose and manage likely aircraft noise and related impacts on future residents and ensure the planning guidelines in the National Airports Safeguarding Framework (NASF) are properly considered when individual development applications are lodged.

Our suggested amendments to clauses 9.47.11 and 9.47.12 of the draft DCP (as explained below) are shown at **Attachment B**.

Disclosure of aircraft noise and related impacts to future residents

Accurately communicating information to future residents about aircraft noise, the frequency of flights, the height at which aircraft will overfly residential buildings in the precinct and the likelihood of building vibration when aircraft are flying overhead is important so prospective purchasers in the precinct know what to expect *before* they decide to buy a property. This is especially relevant because of the significant number of residential units planned to be built in an area the relevant Australian Standard says is unacceptable for housing due to aircraft noise impacts.

As noted above, the precinct is less than two kilometres from Sydney Airport's main and busiest runway and is directly beneath the flight paths used by aircraft landing on or taking off from that runway. As this is the airport's longest runway, it tends to be used predominantly by larger aircraft types. Also as noted above, aircraft landing on this runway are flying at relatively low altitudes, being less than 150 metres above ground level.

For the period 1 August 2015 to 31 July 2016, there was an average of 193 (and up to 376) jet aircraft movements every day over the precinct. Sydney Airport's master plan forecasts that, by 2033, the average number of flights will increase to 302 (and up to 489) per day. These numbers would be higher with non-jet aircraft movements included. Total respite from noise between the 6am and 11pm over the same period was, and is forecast to remain into the future, only three per cent, with aircraft flying overhead regularly for the rest of the time.³

³ Respite periods are the number of whole clock hours when there are no aircraft movements using a particular flight path.

Section 1.6 of the proponent's July 2015 *Aircraft Noise Strategy* goes some way towards ensuring prospective purchasers are provided with appropriate information about aircraft noise and the frequency of overhead flights. Such information would be provided to prospective purchasers in "Aircraft Noise Information Packs" as part of the Contract of Sale of Land. As well as the information proposed to be included in these packs⁴, we would ask that the following also be included:

- Details concerning Sydney Airport's current master plan and where it can be accessed on its website. The master plan includes forecasts for future increases in aviation activity at Sydney Airport and charts showing aircraft noise impacts in the future.

However, in our opinion, there needs to be an additional and formalised mechanism to ensure these Aircraft Noise Information Packs are attached to all future Contracts of Sale for any property within the precinct. This is important for both initial purchasers of residential units within the precinct and those purchasing units in the future.

To ensure this occurs, we believe an appropriately worded notification should be included in all future planning certificate issued by the Inner West Council to prospective purchasers of property within the precinct.⁵

As planning certificates are annexed to a Contract of Sale of Land, this provides another transparent and guaranteed mechanism to ensure prospective purchasers are aware of relevant aviation-related information before they decide to buy a property in the precinct.

There is a useful precedent for this. The Western Australian Government has issued *State Planning Policy 5.1 – Land use planning in the vicinity of Perth Airport* which addresses precisely this issue.⁶ The standard wording for such a notification is shown in Appendix 3 of that policy. We believe this precedent should be followed here.

We have adapted the wording used by the Western Australian Government to be relevant to future development in this precinct. An appropriate notification is shown in **Attachment B**.

National Airports Safeguarding Framework

As our earlier submission noted, the National Airports Safeguarding Framework (NASF) is a national land use planning framework that aims to:

- improve community amenity by minimising aircraft noise-sensitive developments near airports; and
- improve safety outcomes by ensuring aviation safety requirements are recognised in land use planning decisions through guidelines being adopted by jurisdictions on various safety-related issues.

The National Airports Safeguarding Advisory Group, comprising of Commonwealth, State and Territory Government planning and transport officials, the Australian Government Department of Defence, the Civil Aviation Safety Authority, Airservices Australia and the Australian Local Government Association developed the NASF.

⁴ The information is listed in table 8 (Design Solution DS5) in section 1.6 of the *Aircraft Noise Strategy*.

⁵ This is permitted under section 149(5) of the *Environmental Planning and Assessment Act 1979*, which states that: "A council may, in a planning certificate, include advice on such other relevant matters affecting the land of which it may be aware."

⁶ The policy can be downloaded at: <https://www.planning.wa.gov.au/publications/6429.asp>

Commonwealth, State and Territory Ministers considered the Framework at the Standing Council on Transport and Infrastructure meeting on 18 May 2012.⁷

The NASF consists of:

- Principles for National Airports Safeguarding Framework
- Guideline A: Managing Aircraft Noise
- Guideline B: Managing Building-Generated Windshear
- Guideline C: Managing Wildlife Strike Risk
- Guideline D: Managing Wind Turbine Risk to Aircraft
- Guideline E: Managing Pilot Lighting Distraction
- Guideline F: Managing Protected Airspace Intrusion

While the draft DCP as currently drafted refers in clause 9.47.11 to the need to take into account the NASF, there should, in our view, be a more detailed reference to its purpose and relevant guidelines. **Attachment B** recommends an appropriate amendment to the draft DCP.

If you would like to discuss this submission further, please contact Sydney Airport's Head of Government and Community Relations, Mr Ted Plummer, on 9667 6182 or ted.plummer@syd.com.au.

Yours sincerely



Kerrie Mather



Managing Director & Chief Executive Officer

Enc: **Attachment A:** Sydney Airport prescribed airspace charts

Attachment B: Proposed amendments to the draft DCP – Victoria Road Precinct, Marrickville.

⁷ The NSW Government agreed to all but one of the six NASF guidelines, the exception being *Guideline A: Measures for Managing the Impacts of Aircraft Noise* where the government expressed reservations on the format of the guideline.


Sydney Airport's prescribed airspace charts

ACTIVITY DETAILS			APPLICANT DETAILS		
MGA54 COORD E: 330222 N: 6246364 BEARING FROM ARP: 328° 56' 0" DISTANCE: 4259.33m / 2.30NM OLS (mAHD): 47 TYPE: RWY 34L TAKEOFF DEV / EQUIP HEIGHT (mAHD): 50m (164ft) AHD / 47m (154ft) AGL PENETRATION (mAHD): 3 START DATE: FINISH DATE: START TIME: FINISH TIME: MARKING: No LIGHTING: No LIGHTING TYPE:			APPLICANT NAME: INNER WEST COUNCIL CONTACT NAME: Mr Peter Wotton CONTACT PHONE: 9336 2266 CONTACT EMAIL: council@varfckville.nsw.gov.au		
LEGEND					
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16/0907	PB				03/11/16
REG No	OFFICER	NOTES	DATE OUT No.		
		CONTROLLED ACTIVITY ASSESSEMENT LOCATION DIAGRAM VICTORIA ROAD, PRECINCT 47 OLS ENQUIRY		SCALE	
				REGISTRATION No.	
				16/0907	
				SHEET	A4

Obstacle Limitation Surface

ACTIVITY DETAILS			APPLICANT DETAILS		
MGA84 COORD E: 330222 N: 6746364 BEARING FROM ARP: 328° 50' 0" DISTANCE: 4259.33m / 2.30NM OLS (mAHD): 47 TYPE: RWY 34L TAKEOFF DEV / EQUIP HEIGHT (mAHD): 50m (164ft) AHD / 47m (154ft) AGL PENETRATION (mAHD): 3 START DATE: FINISH DATE: START TIME: FINISH TIME: MARKING: No LIGHTING: No LIGHTING TYPE:			APPLICANT NAME: INNER WEST COUNCIL CONTACT NAME: Mr Peter Wotton CONTACT PHONE: 9336 2260 CONTACT EMAIL: council@varjocville.nsw.gov.au		
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REG No	OFFICER	NOTES		DATE OUT	No.
 <div style="text-align: center;"> CONTROLLED ACTIVITY ASSESSEMENT LOCATION DIAGRAM VICTORIA ROAD, PRECINCT 47 PANS-OPS ENQUIRY </div>			SCALE		
			REGISTRATION No.		
			16/0907		
			SHEET		
			A4		

PAN-OPS

ACTIVITY DETAILS			APPLICANT DETAILS		
MGA84 COORD E: 330272 N: 6246384 BEARING FROM ARP: 328° 56' 0" DISTANCE: 4259.33m / 2.30NM QLS (mAHD): 47 TYPE: RWY 34L TAKE-OFF DEV / EQUIP HEIGHT (mAHD): 50m (164ft) AHD / 47m (154ft) AGL PENETRATION (mAHD): 3 START DATE: FINISH DATE: START TIME: FINISH TIME: MARKING: No LIGHTING: No LIGHTING TYPE:			APPLICANT NAME: INNER WEST COUNCIL CONTACT NAME: Mr Peter Wolton CONTACT PHONE: 9335 2260 CONTACT EMAIL: council@marickville.nsw.gov.au		
LEGEND					
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PAPI protection surfaces

Attachment B

Proposed amendments to draft DCP – Victoria Road, Marrickville Precinct

The amendments proposed to the proponent's original wording in the draft DCP are shown in track changes format below:

9.47.11 Operation of Sydney Airport

Objectives

- (1) To ensure new development and alterations and additions to existing buildings does not adversely affect the ongoing operation of Sydney Airport or its ability to grow in accordance with the airport's approved master plan.

Controls

- (1) New development, alterations and additions must not incorporate reflective materials as part of the walls, windows or roofing structure.
- (2) Development must avoid any protruding building elements that extend beyond the maximum height limit outlined within the Building Heights Map of the MLEP 2011 or otherwise intrude into Sydney Airport's prescribed airspace.
- (3) Development should be consistent with take into account the relevant guidelines in the National Airports Safeguarding Framework, including:-
 - a) Managing the risk of building-generated windshear and turbulence at airports
 - b) Managing the risk of wildlife strike in the vicinity of airports
 - c) Managing the risk of distraction to pilots from lighting in the vicinity of airports
 - d) Managing the risk of intrusions into the protected airspace of airports

9.47.12 Noise and vibration

Objectives

- (1) To ensure new development does not unreasonably impact on the amenity of residential and other sensitive land uses by way of noise or vibration.
- (2) To design and orientate new residential development and alterations and additions to existing residential buildings in such a way to ensure adequate internal acoustic and visual privacy for occupants.
- (3) To ensure future residents have access to up-to-date and accurate information about aircraft noise, the frequency of flights, the height at which aircraft overfly residential buildings and the likelihood of building vibration when aircraft are flying overhead before they decide to purchase property.

Controls

- (1) New development is to be in accordance with **Schedule 1: Victoria Road Precinct Aircraft Noise Policy**.
- (2) To ensure that up-to-date and accurate information about the frequency and heights of flights over, and aircraft noise and vibration impacts within, the precinct are always made available to future prospective purchasers of property, the Inner West Council will, pursuant to section 149(5) of the *Environmental Planning and Assessment Act 1979*, include the following notification within any planning certificate issued for land within the precinct:

NOTIFICATION This property is situated in the vicinity of busy approach and take-off flight paths for the main runway at Sydney Airport. As such, it is currently affected, and will continue to be affected in the future, by aircraft noise and the possibility of building vibration from overflying aircraft. The number of aircraft flying in the vicinity of this property is likely to increase in the future as a result of an increase in the number of aircraft using the airport. Further information about existing aircraft noise impacts is available on the Airservices Australia website (<http://www.airservicesaustralia.com/>). Further information about forecast changes in aircraft noise impacts can be found in Sydney Airport's master plan, which is available on the Sydney Airport website: <http://www.sydneyairport.com.au/>.

17 January 2017

Mr Rik Hart
Interim General Manager
Inner West Council
PO Box 14
Petersham NSW 2049

Via email: council@marrickville.nsw.gov.au

Dear Mr Hart

Re: Supplementary submission – Victoria Road Precinct, Marrickville, Planning Proposal – 16/SF579

You may recall that, on 21 November 2016, Sydney Airport made a submission raising three key issues concerning the abovementioned planning proposal (the original submission).

We have since met with representatives of the proponent to discuss each of these issues. Following that productive meeting, Mr Gordon Kirkby, Director at JBA Urban Planning Consultants Pty Ltd wrote to me on 5 January 2016 providing a formal response to each issue. A copy of that letter is attached.

As this supplementary submission indicates, we believe the responses provided on behalf of the proponent are appropriate and our concerns have now been satisfactorily addressed.

The potential for new buildings or other structures in the precinct to intrude into Sydney Airport's prescribed airspace

We note and support the proponent's assurance that new buildings or other structures within the Victoria Road Precinct (the precinct) will not permanently intrude into Sydney Airport's obstacle limitation surface (OLS) or other prescribed airspace surfaces.

As Mr Kirkby's letter correctly indicates, temporary intrusions – such as by a crane during construction – would need to be assessed under the *Airports (Protection of Airspace) Regulations 1996*. We of course cannot pre-empt the outcome of any such future assessment, though it should be noted that, on receiving such applications, Sydney Airport routinely refers them to the Civil Aviation Safety Authority, Airservices Australia and airlines for advice.

The loss of industrially zoned employment lands in the vicinity of Sydney Airport

We thank the proponent for the additional information concerning industrially zoned employment lands within the precinct. The key point we made in our original submission was that, notwithstanding the fact the precinct presently does not contain any airport or aviation-related land uses, it may do so in the future, particularly as Sydney Airport continues to grow in accordance with our approved *Master Plan 2033*. In this context, we note that, assuming the planning proposal is ultimately approved, around 90% of the precinct will be retained within either an industrial or business zone.

While not likely to be concluded for some time, we also look forward to the Greater Sydney Commission examining the airport employment lands issue within a strategic and regional framework to ensure better protections of employment lands are afforded moving forward. We do not see that this planning proposal should be further delayed to await the outcome of such a process however.

Strengthening the draft development control plan (DCP) and noise disclosure notification under section 149(5) of the *Environmental Planning and Assessment Act 1979*

We thank the proponent for either wholly or substantially agreeing with our suggested changes to the draft DCP and our proposed noise disclosure notification clause under section 149(5) of the *Environmental Planning and Assessment Act 1979*.

Again, assuming the planning proposal is ultimately approved, these strengthened requirements are considered extremely important, given the proximity of future residential dwellings to Sydney Airport's busiest flight path and the growing numbers of aircraft that will be using that flight path in the future.

We note that, unlike other proposals to construct dwellings in noise affected areas, the flight path in question is not used during Sydney Airport's 11pm to 6am curfew. We would not support the construction of residential dwellings in such an area that would, in effect, be subject to aircraft noise impacts 24 hours a day.

We understand that adopting the final DCP and deciding whether to include the proposed noise disclosure notification clause in section 149 planning certificates are ultimately matters for the Inner West Council. We strongly urge council to support both the proposed changes to the draft DCP and the section 149(5) noise disclosure notification clause. When this issue comes before council for consideration, we would appreciate the opportunity to address either the Administrator or the elected councillors to support our case.

If you would like further information, please feel free to contact Sydney Airport's Head of Government and Community Relations, Mr Ted Plummer, on (02) 9667 6182 or at ted.plummer@syd.com.au.

Yours sincerely



Sally Fielke

General Manager Corporate Affairs

cc: Mr Gordon Kirkby, Director JBA Urban Planning Consultants Pty Ltd
Enc: Letter from Mr Gordon Kirkby to Ms Sally Fielke dated 5 January 2016



13530
5 January 2017

Sally Fielke
General Manager – Corporate Affairs
Sydney Airport Corporation Limited
10 Arrivals Court
Sydney International Airport
NSW 2020

Dear Sally

VICTORIA ROAD PRECINCT – PLANNING PROPOSAL

We write on behalf of Danias Holdings Pty Ltd, proponents for the preliminary planning proposal that was submitted for Council's consideration on 21 May 2014. This letter has been drafted in response to the submission made by the Sydney Airport Corporation Limited's (SACL) in response to Inner West Council's public exhibition of the Planning Proposal for the Victoria Road Precinct. This letter has also been drafted following a meeting held between SACL and the proponent on 22 December 2016 to discuss the concerns raised in SACL's submission.

Following our review of SACL's submission and subsequent further discussions with yourself and Mr Ted Plummer, we understand that SACL's key concerns and issues with the proposal are:

- a) Loss of Industrially zoned employment lands and the potential for there being an insufficient supply of employment lands near Sydney Airport in the future that could affect its ability to grow in line with master plan forecasts.
- b) The protection of Sydney Airport's prescribed airspace and the need to ensure that future buildings do not breach the Obstacle Limitation Surface; and
- c) Strengthening of the Draft DCP provisions and the inclusion of a notice on future Section 149 Certificates for properties in the precinct.

We provide a response to each of these matters below.

a) Loss of industrial zoned employment lands

We understand SACL's concerns regarding the loss of industrial zoned employment lands and the potential impact that this could have on the airport's ability to grow in line with master plan forecasts. Recognising this we note the following:

- We have undertaken a comprehensive and detailed review of employment lands within the Victoria Road Precinct to identify the businesses that currently operate within the area, and to understand how they might be affected by the proposed rezoning. This survey is included at **Appendix M** of the Planning Proposal. The survey shows that there are no airport related businesses operating within the parts of the precinct proposed to be rezoned from Industrial to Residential or Mixed Use.
- Approximately 90% of the precinct is being retained within an Industrial zone or is being changed to a Business zone. The proposed B5 Business Development zone still permits light industrial activities and will therefore in fact broaden the possible range of non-residential uses.

that can occur in the area. The change from Industrial to Business is therefore likely to enhance the potential of the Victoria Road Precinct to support future airport related businesses.

- Maps within a Plan for Growing Sydney illustrate that land to the west of the Princes Highway, including the Precinct that is the subject of the Planning Proposal, is not located within either of the identified Strategic Transport Precincts. In contrast, proposed Victoria Road Precinct is located within Sydney's Global Economic Corridor and adjacent to an identified urban renewal corridor, indicating a need for renewal and a greater contribution to Sydney's knowledge economy.
- The Planning Proposal area and Precinct 47 are not identified as being strategic employment land in the Sydney Airport Master Plan 2033. The Master Plan adopts the areas identified in the former draft Sydney South Sub-Regional Strategy as being of strategic importance. Again, these areas did not extend west of the Princes Highway.

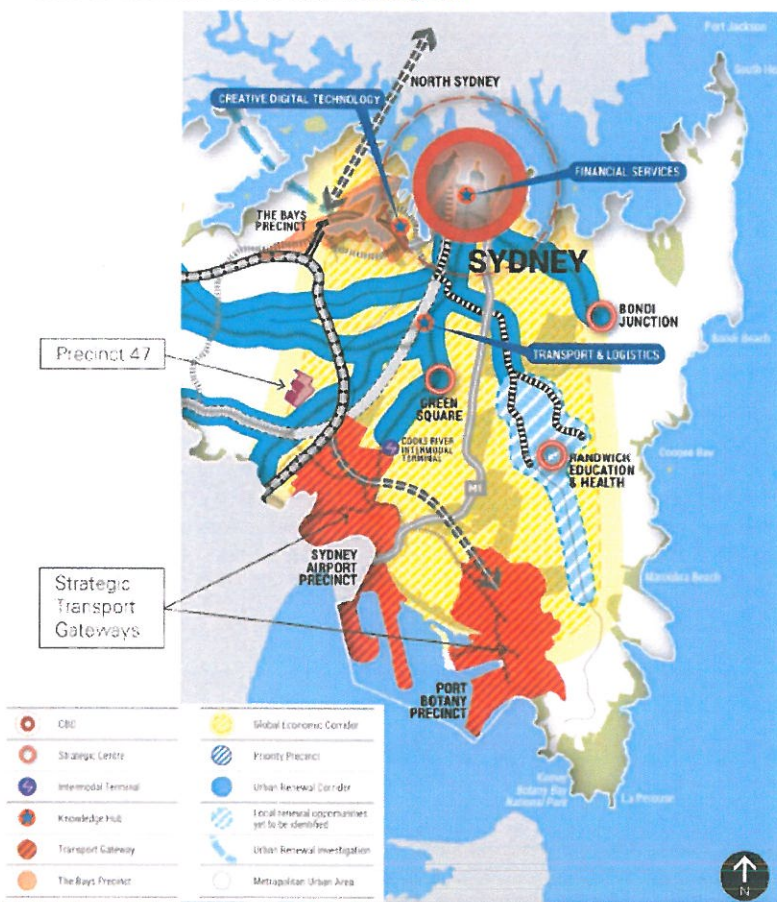


Figure 1 – Central Subregion physical structure plan, showing Precinct 47 and transport gateway land

Source: *A Plan for Growing Sydney*, NSW Department of Planning & Environment

Based on the detailed assessment that has been carried out as part of the Planning Proposal and the nature of the proposal itself, it is considered that there will be no direct or indirect impacts as a result of loss of industrial zoned employment lands, nor will there be a reduction in the potential to accommodate new airport related businesses within and around the airport.

b) Protecting Sydney's prescribed airspace

It is understood that SACL have some concerns regarding the potential for future buildings to intrude on Sydney Airport's prescribed airspace. We note that the original Planning Proposal, when lodged in 2014, included maximum building height limits in metres. At the time of this original submission SACL raised a valid concern about buildings potentially exceeding the Obstacle Limitation Surface (OLS). In response to this concern the proposed LEP maps were amended to include specific maximum building height provisions that responded to OLS and PANS-OPS levels for Sydney Airport, which based on information provided by SACL measure between RL49 in the east and RL50 in the west of the precinct.

The OLS levels have therefore been adopted as the maximum building height limit for the tallest parts of the precinct, which will ensure that no matter what the underlying ground level is across the site, future buildings are unable to exceed the specific OLS based maximum height level.

It is noted that temporary structures, such as construction cranes may exceed the OLS height limit, however this will only occur subject to acquiring the necessary approvals under the Airports (Protection of Airspace) Regulations 1996 (the Regulations) for the intrusion a crane into airspace which, under the Regulations, is prescribed airspace for Sydney Airport.

We note that consultation with Sydney Airport Corporation Limited (SACL) and the Commonwealth Department of Infrastructure and Regional Development has been undertaken as part of the preparation of this Planning Proposal, which has confirmed that development of the heights envisaged under this Planning Proposal will not interfere with, or breach the OLS and PANS-OPS levels for Sydney Airport.

c) Strengthening of the DCP Provisions and Section 149 Certificate

We acknowledge SACL's desire to see a strengthening of policies within the DCP and Section 149 Certificate. We provide a response to each of SACL's suggested changes below:

REQUESTED AMENDMENT	RESPONSE
9.47.11 - Operation of Sydney Airport	
Objectives (1) To ensure new development and alterations and additions to existing buildings does not adversely affect the ongoing operation of Sydney Airport or its ability to grow in accordance with the airport's approved master plan.	Agree to change.
Controls (1) New development, alterations and additions must not incorporate reflective materials as part of the walls, windows or roofing structure.	Agree to change.
(2) Development must avoid any protruding building elements that extend beyond the maximum height limit outlined within the Building Heights Map of the MLEP 2011 or	Agree to change.

otherwise intrude into Sydney Airport's prescribed airspace.	
<p>(3) Development should be consistent with take into account the relevant guidelines in the National Airports Safeguarding Framework, including:</p> <ul style="list-style-type: none"> a. Managing the risk of building-generated windshear and turbulence at airports b. Managing the risk of wildlife strike in the vicinity of airports c. Managing the risk of distraction to pilots from lighting in the vicinity of airports d. Managing the risk of intrusions into the protected airspace of airports 	Agree to change subject to further review of National Airports Safeguarding Framework.
9.47.12 – Noise and Vibration	
(1) To ensure new development does not unreasonably impact on the amenity of residential and other sensitive land uses by way of noise or vibration .	Agree to change.
(2) To design and orientate new residential development and alterations and additions to existing residential buildings in such a way to ensure adequate internal acoustic and visual privacy for occupants.	No change required.
(3) To ensure future residents have access to up-to-date and accurate information about aircraft noise, the frequency of flights, the height at which aircraft overfly residential buildings and the likelihood of building vibration when aircraft are flying overhead before they decide to purchase property.	Agree to change.
Controls	
(1) New development is to be in accordance with <i>Schedule 1: Victoria Road Precinct Aircraft Noise Policy</i> .	No change required.
(2) To ensure that Up-to-date and accurate information about the frequency and heights of flights over, and aircraft noise and vibration impacts within, the precinct are always to be made available to future prospective purchasers of property, the Inner West Council will, pursuant to Section 149(5) of the Environmental Planning and Assessment Act 1979. Section 149 Certificates are to include the following notification within any planning certificate issued for land within the precinct:	We agree to these changes subject to the amendments identified in blue. We note however that inclusion of a notice on Section 149 Planning Certificates is a matter for the Inner West Council to decide as this represents a policy decision that has broader implications for the LGA. Specifically, it is noted that such a notification, if applied, needs to be applied across the Local Government Area, and not just within the Victoria Road Precinct.

NOTIFICATION

This property is situated in the vicinity of ~~busy approach and take-off flight paths for the main runway at~~ Sydney Airport. As such, it is currently affected, and will continue to be affected in the future, by aircraft noise ~~and the possibility of building vibration from overflying aircraft. The number of aircraft flying in the vicinity of this property is likely to increase in the future as a result of an increase in the number of aircraft using the airport.~~ Further information about ~~existing~~ aircraft noise impacts is available on the Airservices Australia website (<http://www.airservicesaustralia.com/>). ~~Further~~ Information about forecast changes in aircraft noise impacts can be found in Sydney Airport's master plan, which is available on the Sydney Airport website: <http://www.sydneyairport.com.au/>.

We would encourage SACL to speak directly to Council regarding this proposed amendment.

We trust this letter adequately responds to the matters raised by SACL. If this is the case then we would greatly appreciate a further letter from SACL to the Inner West Council confirming that these matters have been addressed to your satisfaction, and that SACL no longer have any objections or concerns regarding the Planning Proposal. Finally we would like to thank SACL for the proactive and productive way that you have engaged with the project team during the course of the Planning Proposal. As always should you have any queries about this matter, please do not hesitate to contact me on 99566962 or gkirkby@jbaurban.com.au.

Yours faithfully



Gordon Kirkby
Director

22 November 2016

Our Ref: 158422

Jamie Erken
Acting Manager, Planning Services
Inner West Council
PO Box 14
Petersham NSW 2049

RE: Draft Amendments to Marrickville Local Environmental Plan – Victoria Road Precinct, Marrickville

Dear Jamie,

Thank you for notifying Sydney Water of the planning proposal listed above. We have reviewed the application and provide the following comments for your consideration.

Water

- There is sufficient trunk capacity to service the proposed development, however the existing mains along Victoria Road have nearly reached their service life (laid in 1925) and may need amplifications from 250mm to 300mm to avoid any reliability and capacity issues for this development.
- The developer needs to prepare a reticulation scheme plan for the rest of the development for Sydney Water's endorsement.
- Detailed requirements, including water main extensions or amplification will be provided at the Section 73 application phase.

Wastewater

- The preliminary investigation finds that the downstream carrier -Alexandria submain has sufficient capacity to service the proposed development. The two main carriers-Terry Ck carrier along Chapel St and Sydenham Rd submain along Sydenham Rd which will receive wastewater from this development have limited available capacity.
- The developer needs to prepare a catchment plan and reticulation scheme plan for this development.
- Detailed requirements will be provided at the Section 73 Phase.

Stormwater

Building over or adjacent to stormwater assets:

There are number of Sydney Water's major stormwater assets located within the proposed Victoria Precinct.

As per the current Sydney Water's policies and guidelines, Sydney Water would not permit any new buildings or new permanent structures within **1m** from the outside face of the stormwater assets or within the Sydney Water easement, whichever is larger. Permanent structures include (but are not limited to) basement car park, hanging balcony, roof eaves, hanging stairs,

stormwater pits, stormwater pipes etc. This clearance requirement would apply for unlimited depth and height.

Submitted building envelope indicates that there are number of buildings proposed over the Sydney Water's stormwater assets. Proposed buildings and permanent structures which are within 1m from the outside face of the stormwater assets are to be reconfigured such a way that these structures are 1m away from the Sydney Water's stormwater assets and Sydney Water's easements.

Direct stormwater connections to Sydney Water's stormwater systems:

All direct stormwater connections to Sydney Water's stormwater systems require compliance with Sydney Water's On Site Detention guidelines and Water Quality requirements.

Sydney Water E-Planning

Sydney Water has an email address for planning authorities to submit statutory or strategic planning documents for review. This email address is urbangrowth@sydneywater.com.au.

Further advice and requirements for this proposal are at attachments 1 and 2 (overleaf). If you require any further information, please contact Manwella Hawell of Urban Growth Strategy on 02 8849 4354 or e-mail manwella.hawell@sydneywater.com.au.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "Greg Joblin", written over a horizontal line.

Greg Joblin
Manager, Growth Strategy



Mr Jamie Erken
Acting Manager, Planning Services
Inner West Council
2-14 Fisher Street
PETERSHAM NSW 2049

Notice of Draft Amendments to Marrickville LEP 2011 – Victoria Road Precinct

Dear Mr Erken

Thank you for your letter in regard to the above planning proposal submitted by the former Marrickville Council.

Transport for NSW (TfNSW) supports the Roads and Maritime Services (Roads and Maritime) position outlined in their letter to Council dated 9 December 2012. The above LEP amendment should not be gazetted until the cumulative transport impacts and associated mitigation measures are identified and incorporated into an appropriate funding mechanism (i.e. Section 94 and/or Planning Agreement).

The Roads and Maritime suggestion to develop an addendum Traffic and Transport Impact Assessment (TTIA) is also supported. TfNSW has identified a number of additional issues that should be incorporated into the addendum TTIA that are detailed in the attachment.

Thank you again for consulting on this proposal. If you have any further questions please contact Mr Tim Dewey, Senior Transport Planner on (02) 8202 2188.

Yours sincerely

12/1/17

Mark Ozinga
Principal Manager
Land Use Planning and Development

CD16/14684

Attachment

Victoria Rd Precinct (Precinct 47) Rezoning Proposal: Traffic and Transport Assessment (TTA)

Section 2.3 Existing Public Transport Network, 2.3.1 'Bus Services' (pp.7-9)

- TTA states in table 2-3 that routes 423, 426, L23 and M30 utilise the Victoria Road corridor, however the corridor is also serviced by route N40 and numerous school buses
- Table 2-3 indicates that routes 418, 425, and M30 operate via the Sydenham Road corridor. TfNSW operates no bus services on Sydenham Road instead these services operate via Marrickville Road which is a considerable distance from 'Precinct 47'
- The TTA states in Table 2-3 that M30 operates via Edinburgh Road which is incorrect – the M30 only operates via Victoria Road/Enmore Road

Section 2.3.2 'Rail Services' (pp.10-11)

- Suggests that Sydenham Railway Station is located approximately 500m to the south of Precinct 47. However, it is over 650 metres from the entrance of Sydenham Railway Station to the south end of the site (Fitzroy Street).

Section 2.8.1 'Intersection Capacity' (pp.16-18)

- Indicates that in the AM and PM peak periods that the intersections of Victoria Road/Chapel Street and Victoria Road/Rich Street operate under Level of Service (LoS) of 'F' and acknowledges significant strain would be further on these intersections with any future development. This would be of further detriment and place greater pressure on Victoria Road, which affects routes 423, 426, L23, M30, N40 and numerous school buses which operate on the road network. It is noted that the report focuses on driver behaviour as the cause of the congestion, however whilst this may be a contributing factor – a greater analysis by the proponent into what can be done to improve the road network at these intersections is required, particularly since the proposal will generate additional traffic to the precinct (estimated to be at 1063 vehicle trips in one peak hour, page 24)
- The Victoria Road corridor is well serviced by public transport, particularly with the M30. Nevertheless, it is pivotal that the proposal mitigates any traffic impacts to ensure that existing services are not hindered through the provision of the appropriate road treatments especially since the proponent states that ingress/egress access is needed onto Victoria Road

Section 3.4 Proposed Site Access Arrangements (pp.24-25)

- Suggests potential new access sites along Victoria Road, however any ingress/egress movements must not disrupt or interfere with existing bus operations – as the map (in Figure 3-13) is unclear, it is difficult to determine the precise location of these proposed access options. Any access options should be discussed with TfNSW at the earliest opportunity.



Wednesday 18 October 2017

Roads and Maritime Reference: SYD16/01340/04

Department of Planning
Sydney Region East

Attention: Karen Armstrong

Planning Proposal for Victoria Road Precinct – Amended Concept Plan and Modelling for Sydenham Road/Victoria Road intersection

Dear Ms Armstrong

I refer to your email of 29 August 2017 requesting Roads and Maritime Services comments on the abovementioned amended concept plan for the Victoria Road/Sydenham Road intersection to support the Planning Proposal for the Victoria Road Precinct, Marrickville.

Roads and Maritime has reviewed the submitted documentation and it is noted that the documentation submitted for review is limited to the proposed upgrade of the Sydenham Road/Victoria Road intersection. Comments in relation to the amended intersection concept design and modelling are outlined in Attachment A and should be addressed prior to the making of the plan.

Furthermore, it is noted that the following issues raised by Roads and Maritime in our letters of 9 December 2016 and 1 June 2017 remain unresolved:

- The development is focussed on the proposed upgrade to the Sydenham Road/Victoria Road intersection and has not considered the cumulative traffic impacts of the proposed development on intersection requested by Roads and Maritime. It is noted that a subsequent intersection assessment has been undertaken for the Sydenham Road / Farr Street intersection and traffic impacts resulting from increased uplift will be relatively minor and less than the current traffic generation of existing uses. However, an assessment of the Victoria Road / Edinburgh Road and Enmore Road / Addison Road intersections has still not been addressed. It is unknown what the impacts of the proposed uplift will be on these intersections and the need, if any, for any upgrades. It would have been preferable for a network model to have been undertaken to assess the traffic impacts of the proposed uplift rather than a piecemeal approach of assessing select individual intersections. The traffic impact assessment for this proposal is generally considered insufficient in relation to traffic impact assessments undertaken for developments of a similar scale and nature in the Sydney metropolitan area.

Roads and Maritime Services

- Identification of an appropriate infrastructure delivery mechanism has still not been addressed, as requested in previous correspondence, and remains a critical issue requiring resolution in relation to the proposed upgrade of Sydenham Road / Victoria Road intersection. Timings, cost and trigger points of the intersection upgrade should be identified in an Infrastructure Staging Plan / funding mechanism prior to the making of the plan. Without an infrastructure delivery mechanism in place, it is unclear how the intersection upgrade will be implemented.
- It is noted that options to upgrade the Sydenham Road / Victoria Road intersection have been proposed that considers a reduction in road lane and footpath widths to accommodate the increase in uplift, potentially impacting road network efficiency and pedestrian safety. Conversely, the Department of Planning should also consider options to reduce the proposed development yield to a scale that has less impact to road network efficiency and safety for the community.

Thank you for the opportunity to provide advice on the subject proposal. If you require clarification on any issue raised, please contact Tricia Zapanta, Strategic Land Use Planner on 8849 2473 or by email on Tricia.Zapanta@rms.nsw.gov.au.

Yours Sincerely,



Greg Flynn

Program Manager, Land Use

ATTACHMENT A

Proposed concept design (Sydenham Road / Victoria Road)

- Roads and Maritime would support a minimum of between 3.3 - 3.4m kerb side lanes on Sydenham Road and Victoria Road as both are heavily used bus routes. The proposed intersection concept design and modelling under all development scenarios (including sensitivity analysis of threshold yields) should be amended / updated to test the feasibility of this lane requirement and to assist in identifying any potential traffic and land impacts. Roads and Maritime will also be seeking confirmation of Council's position on the proposal to reduce footpath widths along the northern side of Victoria Road adjacent to Wicks Park and the south western side of Victoria Road in order to determine the feasibility of the proposed intersection concept design.

SIDRA modelling

The SIDRA modelling requires further updating and analysis in relation to the following:

1. In volumes peak flow period of 60 min appears to have been adopted in the base model and for the options model for both traffic and pedestrian volumes. This needs further justification. Adopted 60 min appears to give better results for the intersection. It should be noted that the origin-destination patterns of vehicle movements are likely to be more balanced over longer analysis periods, which may hide problems associated with unbalanced flow patterns. Use of shorter peak flow periods is recommended in such situations. The US Highway Capacity Manual recommends the use of 15 min Peak Flow Period for analysis. The default values of the Peak Flow Period are 30 minutes for SIDRA INTERSECTION standard versions and 15 minutes for the HCM versions.
2. In the network model (full upgrade with clearway scenario AM peak and PM peak 100% development) the intersection of Sydenham Rd/Victoria Road and pedestrian crossing is shown as coordinated which should not be the case, in other scenario models for 50% , 75% development it is shown as not coordinated. This should be reviewed and corrected. This is likely to have impact on the model outcome.
3. Full upgrade option with clearway model and partial upgrade with clearway model does not show PM peak scenarios. This information is required.
4. It is noted that even with 100% development, the volume of pedestrians used at the intersection of Victoria Rd / Sydenham Rd is 20. Further analysis is required to test higher volumes of pedestrian and the impact to pedestrian phasing.
5. Phase cycle times applied in the model should be in accordance with SCATS (see Network Operations comments below).

Network Operation (Traffic Signal TCS 41):

1. Current cycle time for this area is a maximum of 100 seconds. This is to allow more chances for right turning vehicles to turn under a filter and increase the amount of times per hour for pedestrian crossing to introduce. A potential 5 phase intersection would need to increase the cycle time. Currently the intersection of Victoria Road and Sydenham Road (TCS 41) co-ordinates with Marrickville Road and the strip shopping precinct, as well as along Sydenham Road. If the proposal aims to increase the amount of phases at TCS 41, the maximum cycle may have to increase which will affect public transport and pedestrian amenity in the area. Modelling should be updated to reflect the actual cycle time.
2. Given the increase in pedestrians as part of the development, appropriate amounts of pedestrian protection must be considered in the modelling.
3. The phasing suggested in the modelling has leading and trailing right turn phases for Sydenham Road, in addition to the three existing phases. This arrangement is extremely inefficient and will result in

extensive delays. The eastbound right turn on Sydenham Road could only operate in the dedicated phase, as the trailing turn in the opposing direction introduces the yellow trap issues. This arrangement would need to operate all the time, rather than periodically as the modelling suggests. Furthermore, as there is no dedicated right turn bay for eastbound traffic on Sydenham Road, the leading right turn phase would operate, regardless of any right turning traffic. The proposed phasing arrangement is not supported by Network Operations. A mark-up is attached (Attachment A) showing a phasing arrangement that would be supported by Network Operations. A new right turn phase for westbound traffic on Sydenham Road is supported, as this is provided with a dedicated right turn bay.

4. Network Operations would support the full upgrade proposal (scenario 1), with a two new right turn bays for southbound traffic on Victoria Road and westbound traffic on Sydenham Road respectively, as well as the left turn slip lane for eastbound traffic on Sydenham Road into Victoria Road. This option would allow the most flexible operation of the traffic signals, as the leading right turn phases would only be introduced when demanded, as well improving eastbound traffic on Sydenham Road as currently there are times when lane 1 is held up by left turning traffic waiting for pedestrians to cross, and right turning traffic is unable to make the filter turn effectively stopping any traffic proceeding east on Sydenham Road. Given the increase in pedestrian activity due to the proposed development, this situation would happen significantly more compared to the current situation (without the proposed development).
5. The modelling should be updated with the operating cycle time of 100 seconds as well as incorporating the proposed phasing arrangement in the attached mark-up shown in Attachment A. Further comments will be provided after the modelling has been updated and submitted for subsequent Roads and Maritime review.

ATTACHMENT A

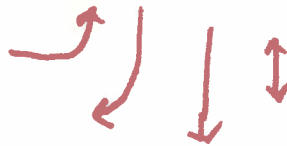
TCS 41 - Sydenham Rd & Victoria Rd.

Proposed Phasing 19/09/2017 YD.

A Phase



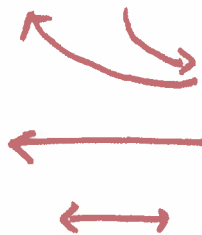
B Phase



C Phase



D Phase
(NEW)



Sequence A - B - C - D