

9 August 2022

TfNSW Reference: SYD22/00508/03
DPE Reference: SSD-46561712

Mr Michael Cassel
Secretary
Department of Planning and Environment
Locked Bag 5022
Parramatta NSW 2124

Attention: Anthony Richardson

**REQUEST FOR SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS
BAPTIST CARE REDEVELOPMENT
157 BALACLAVA ROAD, MACQUARIE PARK**

Dear Mr Cassel,

Thank you for referring the request for Secretary's Environmental Assessment Requirements (SEARs), which was referred to Transport for NSW (TfNSW) for comment.

TfNSW has reviewed the submitted information and request the following issues in **TAB A** be addressed as part of the traffic and transport impact assessment for the proposed development.

Should you have any further inquiries in relation to this matter, please do not hesitate to contact Divna Cvetojevic, Development Assessment Officer, on 0455 515 259 or by email at development.sydney@transport.nsw.gov.au.

Yours sincerely,

A handwritten signature in black ink, appearing to read "J Hall".

James Hall
Senior Land Use Planner
Land Use Assessment Eastern
Planning and Programs, Greater Sydney Division

OFFICIAL

TAB A

- Details of estimated total daily and peak hour trips generated by the proposal, including vehicle, public transport, pedestrian and bicycle trips.
- The adequacy of existing public transport or any future public transport infrastructure within the vicinity of the site, pedestrian and bicycle networks and associated infrastructure to meet the likely future demand of the proposed development.
- Measures to integrate the development with the existing/future public transport network.
- The impact of trips generated by the development on nearby intersections, with consideration of the cumulative impacts from other approved developments in the vicinity, and the need/associated funding for, and details of, upgrades or road improvement works, if required (Traffic modelling is to be undertaken using SIDRA network modelling for current and future years). The key intersections to be modelled/examined include:
 - Epping Road / Balaclava Road
 - Epping Road / Herring Road
 - Herring Road / Ivanhoe Place
- The identification of infrastructure required to ameliorate any impacts on traffic efficiency and road safety impacts associated with the proposed development.
- Details of travel demand management measures to minimise the impact on general traffic and bus operations, including details of a location-specific sustainable travel plan (Green Travel Plan and specific Workplace travel plan) and the provision of facilities to increase the non-car mode share for travel to and from the site.
- The proposed walking and cycling access arrangements and connections to public transport services.
- Details of the proposed site vehicle access options and parking provisions associated with the proposed development including compliance with the requirements of the relevant Australian Standards (i.e. turn paths, sight distance requirements, aisle widths, etc).
- Detailing vehicle circulation, proposed number of car parking spaces and compliance with the appropriate parking codes.
- Details of the light and heavy vehicle movements (including vehicle type and likely arrival and departure times), including service vehicle movements.
- The proposed access arrangements, including car and bus pick-up/drop-off facilities, and measures to mitigate any associated traffic impacts and impacts on public transport, pedestrian and bicycle networks, including pedestrian crossings and refuges and speed control devices and zones.
- Proposed bicycle parking provision, including end of trip facilities, in secure, convenient, accessible areas close to main entries incorporating lighting and passive surveillance.
- Proposed number of on-site car parking spaces for staff and visitors and corresponding compliance with existing parking codes and justification for the level of car parking provided on-site.
- An assessment of the cumulative on-street parking impacts of cars and bus pick-up/drop-off, staff parking and any other parking demands associated with the development.
- An assessment of road and pedestrian safety adjacent to the proposed development and the details of required road safety measures, possible new infrastructure to insure safe pedestrian movements and personal safety in line with CPTED.

- Emergency vehicle access, service vehicle access, delivery and loading arrangements and estimated service vehicle movements (including vehicle type and the likely arrival and departure times).
- The preparation of a preliminary Construction Traffic and Pedestrian Management Plan to demonstrate the proposed management of the impact in relation to construction traffic addressing the following:
 - Assessment of cumulative impacts associated with other construction activities (if any).
 - An assessment of road safety at key intersection and locations subject to heavy vehicle construction traffic movements and high pedestrian activity.
 - Details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process.
 - Details of anticipated peak hour and daily construction vehicle movements to and from the site.
 - Details of on-site car parking and access arrangements of construction vehicles, construction workers to and from the site, emergency vehicles and service vehicle.
 - Details of temporary cycling and pedestrian access during construction.

Relevant Policies and Guidelines (but not limited to):

- Guide to Traffic Generating Developments
- EIS Guidelines - Road and Related Facilities
- Cycling Aspects of Austroads Guides
- NSW Planning Guidelines for Walking and Cycling
- Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development
- Standards Australia AS2890

Department of Planning and Environment

Our ref: DOC22/654663
Your ref: SSD-46561712

Anthony Richardson
Infrastructure Assessment
Planning Group
Department of Planning and Environment
4 Parramatta Square, 12 Darcy Street
Parramatta NSW 2150

Subject: Request for Secretary's Environmental Assessment Requirements (SEARs) for BaptistCare Macquarie Park Masterplan SSD-46561712

Dear Mr Richardson

Thank you for your e-mail received on 25 July 2022 requesting input from Environment and Heritage Group (EHG) for SEARs for the BaptistCare Macquarie Park Masterplan SSD-46561712.

EHG has reviewed the Scoping Report prepared by Ethos Urban dated 22 June 2022 and provides the comments below and in **Attachment A**.

Biodiversity

EHG recommends that the proponent address the attached standard EHG biodiversity requirements provided in Attachment A.

Please note that the BDAR required under point (1) must meet the requirements of BAM 2020, relevant BAM operational manuals, relevant legislation, and other sources of information such as survey guidelines and other BAM resources see:

<https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity-offsets-scheme/accredited-assessors/assessor-resources>. It must also contain the minimum information requirements specified in Appendix K (or Appendix L if a streamlined assessment was undertaken) of BAM 2020. This includes minimum information requirements for the spatial data associated with survey and assessment as required under point (4) of the Standard EHG biodiversity environmental assessment.

Should a waiver to the requirement for a biodiversity development assessment report (BDAR) be sought, it must be clearly demonstrated that the proposed development is not likely to have any significant impact on biodiversity values. Development that requires clearing of native vegetation or additional biodiversity impacts as prescribed by clause 6.1 of the Biodiversity Conservation Regulation 2017 is likely to require a BDAR.

Any request for a BDAR Waiver is to include the information requirements set out in Tables 1 and 2 of the DPIE guidelines on *How to apply for a biodiversity development assessment report waiver for a Major Project Application*. The proponent can find further information on the BDAR waiver process on the Department's [Biodiversity development assessment report waiver](#) webpage.

Department of Planning and Environment

Flooding

EHG recommends the proponent address the standard EHG flooding requirements provided in Attachment A.

Water and Soils

EHG recommends the proponent address the standard EHG water and soil requirements provided in Attachment A.

Should you have any queries regarding this matter, please contact Angela Taylor, Senior Conservation Planning Officer on 9585 6146 or angela.taylor@environment.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink that reads "S. Harrison".

04/08/22

Susan Harrison
Senior Team Leader Planning
Greater Sydney Branch
Biodiversity and Conservation

Attachment A – EHG Environmental Assessment Requirements

Biodiversity
<ol style="list-style-type: none"> 1. Biodiversity impacts related to the proposed development are to be assessed in accordance with Section 7.9 of the Biodiversity Conservation Act 2017 the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the Biodiversity Conservation Act 2016 (s6.12), Biodiversity Conservation Regulation 2017 (s6.8) and Biodiversity Assessment Method 2020, including an assessment of the impacts of the proposal (including an assessment of impacts prescribed by the regulations). 2. The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the Biodiversity Assessment Method 2020. 3. The BDAR must include details of the measures proposed to address the offset obligation as follows: <ul style="list-style-type: none"> • The total number and classes of biodiversity credits required to be retired for the development/project; • The number and classes of like-for-like biodiversity credits proposed to be retired; • The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules; • Any proposal to fund a biodiversity conservation action; • Any proposal to conduct ecological rehabilitation (if a mining project); • Any proposal to make a payment to the Biodiversity Conservation Fund. <p>If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits.</p> 4. The BDAR must be submitted with all spatial data associated with the survey and assessment as per the BAM. 5. The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the Biodiversity Conservation Act 2016.

Flooding

6. The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:
 - a. Flood prone land.
 - b. Flood planning area, the area below the flood planning level.
 - c. Hydraulic categorisation (floodways and flood storage areas)
 - d. Flood Hazard.
7. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 5% Annual Exceedance Probability (AEP), 1% AEP, flood levels and the probable maximum flood, or an equivalent extreme event.
8. The EIS must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios:
 - a. Current flood behaviour for a range of design events as identified above. This includes the 0.5% and 0.2% AEP year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.
9. Modelling in the EIS must consider and document:
 - a. Existing council flood studies in the area and examine consistency to the flood behaviour documented in these studies.
 - b. The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood, or an equivalent extreme flood.
 - c. Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazard categories and hydraulic categories.
 - d. Relevant provisions of the NSW Floodplain Development Manual 2005.
10. The EIS must assess impacts on the proposed development on flood behaviour, including:
 - a. Whether there will be detrimental increases in the potential flood affection of other properties, assets and infrastructure.
 - b. Consistency with Council floodplain risk management plans.

- c. Consistency with any Rural Floodplain Management Plans.
- d. Compatibility with the flood hazard of the land.
- e. Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.
- f. Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site.
- g. Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of riverbanks or watercourses.
- h. Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the NSW SES and Council.
- i. Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the NSW SES and Council.
- j. Emergency management, evacuation and access, and contingency measures for the development considering the full range of flood risk (based upon the probable maximum flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the NSW SES.
- k. Any impacts the development may have on the social and economic costs to the community as consequence of flooding.

Water and Soils

11. The EIS must map the following features relevant to water and soils including:
 - a. Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map).
 - b. Rivers, streams, wetlands, estuaries (as described in s4.2 of the Biodiversity Assessment Method).
 - c. Wetlands as described in s4.2 of the Biodiversity Assessment Method.
 - d. Groundwater
 - e. Groundwater dependent ecosystems
 - f. Proposed intake and discharge locations

12. The EIS must describe background conditions for any water resource likely to be affected by the development, including:
 - a. Existing surface and groundwater.

- b. Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations.
- c. Water Quality Objectives (as endorsed by the NSW Government <http://www.environment.nsw.gov.au/ieo/index.htm>) including groundwater as appropriate that represent the community's uses and values for the receiving waters.
- d. Indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the [ANZECC \(2000\) Guidelines for Fresh and Marine Water Quality](#) and/or local objectives, criteria or targets endorsed by the NSW Government.
- e. Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions <http://www.environment.nsw.gov.au/research-and-publications/publications-search/risk-based-framork-for-considering-waterway-health-outcomes-in-strategic-land-use-planning>

13. The EIS must assess the impact of the development on hydrology, including:

- a. Water balance including quantity, quality and source.
- b. Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas.
- c. Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems.
- d. Impacts to natural processes and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches).
- e. Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water.
- f. Mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options.
- g. Identification of proposed monitoring of hydrological attributes.

End of Submission

Anthony Richardson
Senior Environmental Assessment Officer
Department of Planning, Industry and Environment
Email: anthony.richardson@dpie.nsw.gov.au

8 August 2022

Our Ref: COR2022/103

Dear Anthony

157 Balaclava Road Macquarie Park - Request for SEARs - BaptistCare Macquarie Park Masterplan –

Thank you for providing the opportunity to comment on the Secretary's Environmental Assessment Requirements for the proposed development at 157 Balaclava Road Macquarie Park (the site).

A list of requirements from Council are included in the attached submission. A key issue to be addressed through the preparation of the concept masterplan is to ensure an appropriate urban design outcome is provided in the Precinct. As such Council seeks that the Applicant submit the scheme to the State Design Review Panel for initial feedback before the submission of the EIS.

A subsequent review of the application by the State Design Review Panel should occur. The Applicant is encouraged to address how they have responded to the panels feedback in their EIS.

In addition, a detailed clause 4.6 variation request should be provided with the EIS demonstrating there is sufficient environmental planning ground to justify the breach of the control.

Also note that this submission is made in absence of any draft SEARs provided to Council. Council is not made aware as to what other standard requirements will apply. Only the critical matters have been included. Council hopes that the requirements as outlined in the attached response is included in the SEARs.

If you require any additional information regarding this matter, please contact Nic Najar- Town Planner – Development Advisory Services on 0403 215 603 or email to NicholasNa@ryde.nsw.gov.au

Yours sincerely

Nicholas Najar
Town Planner - Development Advisory Services.

RESPONSE TO SEARs REQUEST - CITY of RYDE

Project: Concept State Significant Development Application (Masterplan) SSD 46561712

Location: 157 Balaclava Road Macquarie Park

Applicant: BaptistCare

Council Reference: COR2022/103

City of Ryde requests that the following matters be addressed/ included, in addition to the standards SEARs requirements:

1. Voluntary Planning Agreement (VPA) and Contributions:

- The Applicant should address any requirements for contributions (residential and non-residential) applicable under the following contribution policies:
 - *Section 7.11 Development Contributions Plan 2020*
- The Applicant is required to provide a new road through the site as required under the RDCP 2014. An appropriate mechanism to achieve this would be a Voluntary Planning Agreement (VPA) to be negotiated with Council. Applicant needs to begin discussions with Council's Development Contributions Coordinator to work out the details and requirements for the road construction, staging and delivery/ dedication to Council.
- A VPA offer and acceptance details to be in place prior to issue of any development consent for the site.

2. General Requirements

- A Biodiversity Development Assessment Report (BDAR)
- Details of staging of development and subsequent approval pathways for future applications
- Detailed landscape plans and public domain plans demonstrating that the proposal complies with Part 4.5 of the Ryde DCP 2014 with respect to its public domain interface.
- A landscape plan and landscape design statement prepared by a landscape architect
- Design verification statement/ design report
- Arboricultural Impact Assessment (AIA)
- Visual impact assessment and photomontages
- Acoustic report (noise and vibration), noting the construction noise and vibration impacts on nearby residences)
- Traffic and parking assessment including modelling
- A green travel plan and framework travel plan
- Wind impact assessment report.

- Air Quality Impact Assessment, including cumulative impact during construction and any proposed mitigation measures
- Preliminary Site Investigation (PSI) and any subsequent contamination reports stemming from the results of the PSI
- Stormwater strategy and flood precinct study (including water sensitive urban design)
- Detailed massing studies and concept architectural plans
- Economic impact report which details retail floor space and impacts on local centres within 5 kms, the quantum of employment floor space and likely employment generation
- Sustainability management plan or environmentally sustainable development (ESD) report
- Utilities and Infrastructure Assessment

3. Urban Design

Given the scale of the development, Council requests that the application is reviewed by the State Design Review Panel (SDRP) to ensure appropriate place making outcomes are achieved throughout the delivery of the masterplan. The Applicant should address how the proposal has responded to the feedback provided by the SDRP within their EIS.

A design verification statement/ design report should be provided with the future application.

4. Environmental Impact Statement (EIS)

The future EIS should address the following:

- Details of the proposal
- Compliance details with respect to applicable planning controls including Ryde LEP2014 & RDCP2014
- Proposed operational details of the future use (e.g proposed school, including anticipated number of students)
- A Crime Prevention Through Environmental Design Assessment
- Potential impact and proposed mitigation measures
- Details of staging and future approval pathways for each stage
- Details of a road connection to the site to the south east (Morling College). The Applicant is encouraged to engage with the owner of 122-126 Herring Road and discuss within the consultation section of the EIS
- Applicant to provide details of intention to dedicate roads to Council, as well as civil drawings of proposed roads

5. Clause 4.6 Variation Request

The Applicants scoping report indicated that the future application will be seeking to vary the height limit for developments within the Precinct. As such a clause 4.6 variation request should be provided with the application demonstrating there is sufficient environmental planning grounds to justify the breach. The 4.6 should outline and discuss the proposed buildings seeking to breach the height limit and nominate by how much they seek to vary the control by.

6. Arborist Report and Landscaping Plan

6.1. Arborist Report

An Arboricultural Impact Assessment (AIA) is required of all trees on site, trees on adjoining sites where any part of the development will encroach into the Tree Protection Zone (TPZ) of those trees and any street trees. This Assessment is to be carried out as per the requirements of Australian Standard AS4970-2009 Protection of trees on development sites. In the AIA must consider the impacts of the development including:

- Fences
- Stormwater proposals
- Cut and fill
- Retaining Walls that will be required
- Car parking and driveway
- Any encroachment on the TPZ and Structural Root Zone of trees on site or on adjoining sites

The AIA must also include a tree protection plan (drawing) showing the TPZs for the trees as required by Australian Standard AS4970-2009 and protection of trees on development sites. This plan should show the Structural Root Zones and is superimposed on the site plan showing the development and the assessed trees.

The assessment in these reports is to consider all associated infrastructure, including public domain improvement required in accordance with Ryde DCP 2014 and Ryde Public Domain Technical manual.

Council encourages the retention of as many trees as possible. If trees are required for removal replacement trees should be provided where relevant. A detailed landscape plan should be provided showing future trees proposed, indicative heights and canopy cover.

6.2. Landscaping

Details of landscaping proposed on the site must be provided on a landscape concept plan and landscape design statement drawn by landscape architect.

Public domain landscaping must consider the following:

- Conceptual public art plan outlining public art proposed throughout the precinct
- Street trees will be required to be planted within the public domain at 8.0 metre intervals except where other installations (eg. Power poles, driveway, bus shelters etc.) prevent this frequency
- The tree species is generally to be a large native smooth-barked tree as per one of the species within the Tree Selection Palette – table 3.4.2/ Macquarie Park Technical Manual
- The tree pit size is generally to 3.0m in length along the back of kerb and 1.50m in width with ground cover infill planting as per species to be confirmed by Council's landscape architect
- The final tree species and tree pit sizes will be determined by Council's Landscape Architect as part of the review of public domain construction certificate plans approved under the Roads Act

7. Architectural and Built Form

7.1. Architectural Concept set:

- An indicative concept set should be provided outlining the following:
 - Proposed land uses and locations
 - Masterplan layout, including built form and building typologies
 - Proposed heights of each tower/building consistent with the current LEP control
 - Proposed FSR's of each tower/building consistent with the current LEP control
 - Massing study demonstrating indicative built form, including solar analysis
 - Proposed gross floor areas of each tower/building
 - Indicative dwelling yield
- Site layout plans to indicate:
 - Location of all pedestrian and vehicular access points
 - Arrangement of pedestrian access and circulation, especially from surrounding public roads to any proposed offices located at the rear of the site.
 - Location of active frontages (if any) on the ground-floor level
 - Where passive surveillance may be provided on levels above
 - Location, dimension and percentage of deep soil zones within the site.
 - Location, dimension and percentage of any soft landscaped areas within the site
- Site plan, floor, roof and elevations plans
- Sections to show the relationship and landscape treatments between all pedestrian entries and the adjacent street
- Sections including 1:50 sections and a material and finishes plan (given the nature of the building)
- All sectional drawings should show the existing ground level and the RLEP2014 allowable height limit

- 3D views of the proposal showing its compliance with the LEP height plane (with and without height incentive)

7.2. Built Form

The application is for a concept SSD approval, as such Council's development control plans don't apply. Notwithstanding the above, as the application is located within the Macquarie Park Corridor, Council has prepared a detailed development control plan (DCP) for the Macquarie Park Corridor which provides key development controls guiding development within the locality.

The Applicant is encouraged to prepare their masterplan informed by Council's controls within *Section 4.5 Macquarie Park Corridor* of the *Ryde Development Control Plan 2014*.

The Applicant should provide a detailed assessment against the provisions of this DCP as an Appendix of their EIS detailing how they are consistent/ deviate with the requirements of the DCP. Key controls include:

- 4.0 access network
- 5.0 public domain
- 6.0 implementation – infrastructure, facilities and public domain improvements
- 7.0 built form
- 8.0 site planning and staging
- 9.0 environmental performance

7.3. Visual Impact Assessment and Photomontages

A detailed Visual Impact Assessment (VIA) that includes photomontages from various aspects of the surrounding locality should be provided with the application. To provide photorealistic visualisation in both 'before' and 'after' scenarios at eye height from at least but not limited to the following locations:

- The low-density residential dwellings fronting Epping Road (Waring Street)
- Key public open space and public domain within the locality (fronting Balaclava Road)

8. Sustainability and Biodiversity

8.1. Sustainability

- The Applicant will need to demonstrate the application of Environmentally Sustainable Development Principles within the development of the Masterplan. It's recommended that a sustainability Management Plan or similar report is provided with the concept

application outlining the sustainable initiatives proposed to be implemented within the masterplan.

- Information should be provided on any green building/ sustainability plans or at a minimum (BASIX/ Nabers/ Nathers) assessment. (It is encouraged that a development of this size would be aiming for Greenstar compliance and certification at a minimum)

8.2. Biodiversity

It's understood that parts of the lot are contain remnant community of the threatened ecological community, Sydney Turpentine Ironbark Forest (STIF) as well as some native species across the site. The application should provide the following assessments:

- A Biodiversity Development Assessment Report (including the purchasing of credit's if required)– should the impact on the STIF vegetation trigger. If it does not the applicant will need to confirm this through ecological study

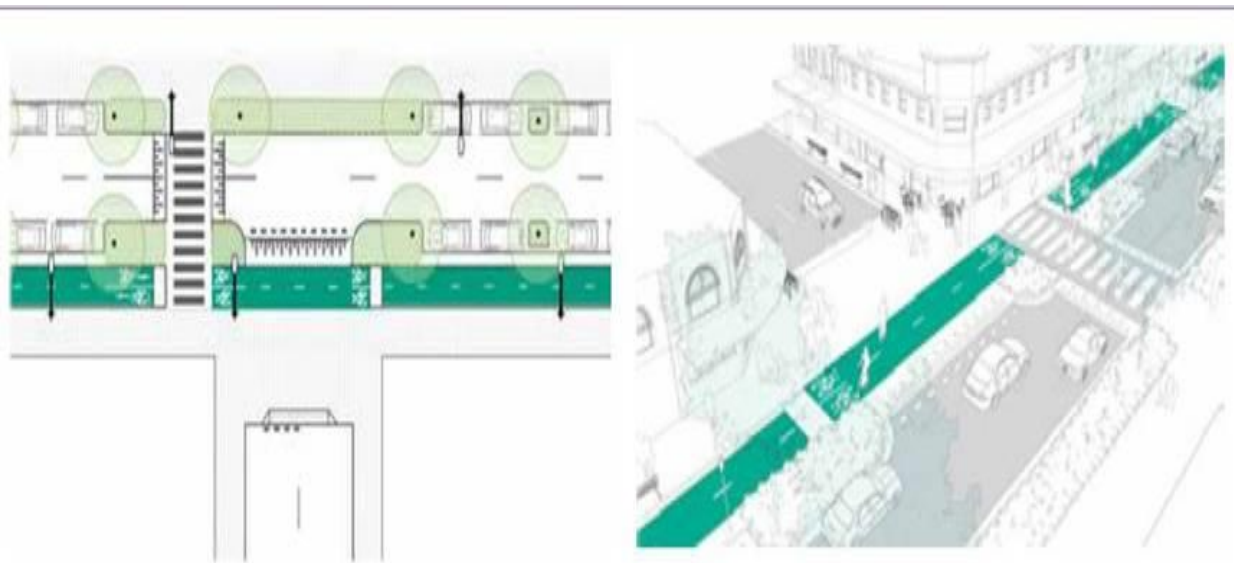
9. Traffic and Parking

A traffic and Parking Assessment report should be provided with the application. The applicant is required to submit:

- 1) A Traffic and Transport Impact Assessment which address (at minimum) the following:
 - An analysis of the existing traffic conditions within the surrounding road network, including but not limited to a description of the surrounding road hierarchy, current daily and peak hour vehicle movements and an assessment of the existing performance levels of nearby intersections.
 - A forecast of additional daily and peak hour vehicle movements for each stage of the proposed development.
 - An assessment of the future 10-year projected traffic conditions (with and without the development traffic), which incorporates background traffic growth for Macquarie Park established within Transport for NSW's Strategic Traffic Forecasting Model (STFM). This analysis may need to be substantiated by a SIDRA model assessment which needs to be developed in accordance with TfNSW's *Traffic Modelling Guidelines*. The following intersections are to be assessed (at a minimum):
 - Intersection of Epping Road and Balaclava Road
 - Intersection of Waterloo Road and Herring Road
 - Intersection of Herring Road and Ivanhoe Place/Morling College
 - Intersection of Epping Road and Herring Road.
 - Identification of potential traffic impacts on road capacity, intersection performance (e.g. level of service) and road safety (including pedestrian and cycle conflict) for both existing and future scenarios.
 - Proposals to mitigate any traffic impacts, including intersection/driveway upgrades and active/public transport infrastructure improvements to

minimise private vehicle trips to ensure nearby roads and intersections operate with an acceptable level of service as well as address potential road safety concerns.

- Proposals to improve walking and cycling, such as connections into existing walking and cycling networks, high quality end-of-trip facilities and adequate bicycle parking for visitors, employees and residents (provided in accordance with the relevant rates, specifications and standards). At a minimum, the following active transport infrastructure is to be provided in accordance with City of Ryde's 2022 – 2030 Bicycle Strategy & Action Plan:
 - Dedicated cycle paths separate to pedestrian footpaths within the internal road network servicing the development.
 - Dedicated on-road cycle path separate to the live traffic along the eastern/southern side of Balaclava Road between Epping Road and the northern property boundary. The following diagram illustrates the preferred on-road cycle treatment in accordance with the Bicycle Strategy & Action Plan:
 - Cycling crossing facilities across Epping Road at its intersection with Balaclava Rd.
- Measures to promote sustainable travel choices for employees, residents or visitors, such as minimising car parking provision, encouraging car share and public transport, cycling and walking, implementing a green travel plan and providing adequate end of trip facilities.



- 2) The architectural design is required to address (at minimum) the following vehicular access, parking and servicing considerations:
- The proposed vehicular access, off-street car/bicycle parking and heavy vehicle servicing arrangements shall be designed to comply with AS2890.1, AS2890.2, AS2890.3, AS2890.6 and Council's DCP.

- The on-site car and bicycle parking provisions shall be provided in accordance with Parts 4.5 (Macquarie Park Corridor) and 9.3 (Parking Controls) of Council's DCP.
- Loading facilities for service vehicles are to be provided off-street. Swept paths of the largest/longest vehicle to be accommodated on site are to be provided to assess the safety and efficiency of such vehicles entering and exiting the site via the adjoining public road network.
- Internal 'Kiss and ride' facilities are to be provided for the school. These facilities need to have adequate capacity to accommodate the maximum student pick-up or drop-off parking demand generated by the proposed educational land use without extending onto either Epping Road or Balaclava Road.
- The terminating ends of internal roads need to have an appropriate turnaround facility (e.g. cul-de-sac bulb, hammerhead turnaround area) that is capable of supporting the largest vehicle that is expected to frequent the site.

10. PUBLIC DOMAIN

10.1. General Comments

The site is located at 157 Balaclava Road, Macquarie Park which is legally described as Lot 60 in DP 1107965. The site is a substantial 6.4-hectare parcel of land in Macquarie Park which adjoins Macquarie University to the north and west, private residential development and Morling College to the east, and Epping Road to the south. A segment of this block is occupied by a strata title allotment that is under separate ownership (Lot 1 DP 1274041 – 159-161 Epping Road).

Council is responsible for maintaining the Balaclava Road reserve as well as the pedestrian verge on Epping Road extending from the back of the kerb to the property boundary line. The proposed development will impact TfNSW assets which it adjoins and it therefore anticipated that TfNSW will impose a number of requirements and conditions in regards to the external works, which Council will need to review further in order to finalise their comments at a more advanced design stage.

These initial comments are generally limited to informing on Council's requirements under the DCP and Macquarie Park Technical Manual of which the development lies. The following comments relate primarily to the Macquarie Park Public Domain Technical Manual and Part 4.5 of the Development Control Plan (DCP).

- *Public Domain Technical Manual – Chapter 6: Macquarie Park - <https://www.ryde.nsw.gov.au/files/assets/public/publications/pdtm/public-domain-technical-manual-mac-park.pdf>*

- *Part 4.5: Macquarie Park Corridor – Public Domain Technical Manual - https://www.ryde.nsw.gov.au/files/assets/public/development/dcp/dcp-2014_4.5-macquarie-park-corridor.pdf*

10.2. Staging of Public Domain Works

Council will require a staging plan showing the extent of public domain works proposed with each stage of the development. The staging plan should carefully consider the following:

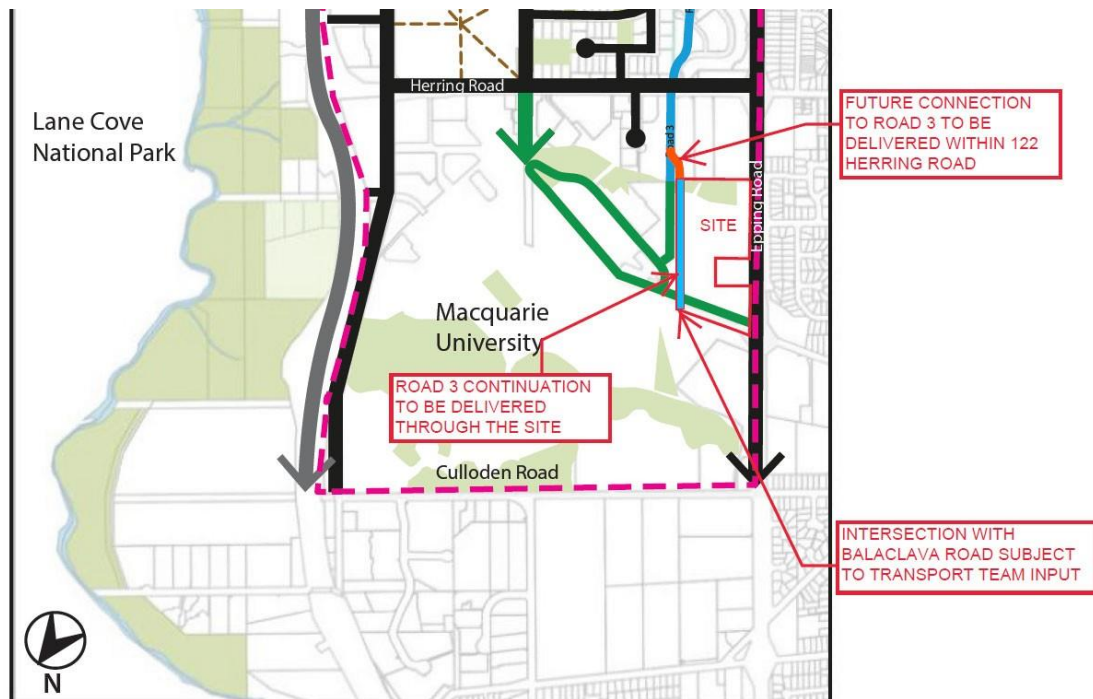
- How to maintain ongoing pedestrian and traffic flow along the frontage during each phase and interim periods.
- How to maintain pedestrian and vehicular access from the public road reserve into each active part of the site (construction or occupation) during each phase and interim periods.
- How to maintain necessary access for emergency services and utility authorities during each phase and interim periods.
- How will transition from new to existing infrastructure within the public domain be treated, particularly in cases where there are significant level differences – eg. Boundary footway levels. The above plan and accompanying information would be required as part of the submission documents for the concept stage application.

As the development is proposed to be staged and therefore delivery public domain works associated with later stages will be delayed, Council may require a Public Domain Works Security Bond to be lodged, to ensure the delivery of future phases of the proposed public domain works.

10.3. Roadways

A new road with a 20m road reserve width is to be delivered on the north-east boundary of the site and is to connect Balaclava Road to the future Road 3 through the neighbouring property of 122 Herring Road, Macquarie Park, refer below sketch.

The Road 3 continuation is to be dedicated to Council within the final stage of works. The proposed Road 3 continuation will need to tie into the portion of Road 3 that will be built under LDA2019/264 for 122-126 Herring Road. A typical street layout for 20m wide streets is presented in Section 6.0 of the Public Domain Technical Manual and is to be implemented in the design.



The left in left out entry / exit arrangement on Epping Road will require the provision of slip lanes to facilitate this access. Road Widening Easements may be required over private property as part of these works. TfNSW will impose several requirements and conditions regarding the external works fronting their assets.

10.4. Footway Paving

As specified by Figure 3.2.1 of the Macquarie Park Technical Manual, the Epping Road frontage of the development is to be designated to be upgraded to 2.4m wide granite paving with nature strip. Granite paving works must be carried out in accordance with Council requirements as detailed with standard details available at:

<https://www.ryde.nsw.gov.au/Business-and-Development/Planning-Controls/Development-Control-Plan/City-of-Ryde-Standard-Drawings>

A reinforced blinding slab of 125mm thickness, overlaid by a sand and cement mix and paver thickness of 60mm must be provided. The cross fall grades of the granite footway must be 2.5% from the back of kerb to boundary line – internal entrances and vehicular access must accommodate this requirement.

It is noted that there a large number of native street trees inside the boundary line, which are likely to have TPZ that extend into the public domain.

In the case that Council's Tree Management Officer or Landscape Architect request arborist reports which find that these trees are of significance and the

prescribed granite paving treatment may threaten their health, an alternate methodology or arrangement to that specified within Council's standard drawings may be required. The footpath on the Balaclava Road development frontage will be required to be upgraded to a minimum 1.2m wide in accordance with Council's standard drawings.

10.5. Access Network - Cycleways

Epping Road is identified as a Regional Bicycle Route in Figure 3.3.1 of the Macquarie Park Technical Manual. The Bicycle Network is to be implemented as an off-street shared cycleway along Epping Road. Cycleways are to be located adjacent to the property boundary, to minimise conflict with street trees, lighting, signage and other public domain elements. Concept plans are to be submitted Council for review with the concept SSD Application.

10.6. Street Trees

Street trees will be required to be planted within the 1.5m private property setback at 8.0 metre intervals except where other installations (e.g. Power poles, driveway, bus shelters etc..) prevent this frequency, in accordance with Section 6.6.1 of the Macquarie Park Technical Manual. The tree species is generally to be a large native smooth-barked tree as per one of the species within the Tree Selection Palette – table 3.4.1 of the Macquarie Park Technical Manual.

The final tree species and tree pit sizes will be determined by Council's Landscape Architect as part of the review of public domain construction certificate plans approved under the *Roads Act 1993*.

10.7. Bus Stops

Any bus stops located along the frontages of the site must be replaced and upgraded to meet Council's current bus shelter standards – currently Evo Premium bus shelter. The bus stop must comply with all requirements of the Disability Discrimination Act (DDA), including but not limited to aspects such as tactile for the vision impaired, minimum grades to facilitate disabled access including wheelchair maneuvering. Currently there are three existing bus stops with shelters located on the Balaclava Road and Epping Road frontages of the development site. Arrangement will need to be made with Sydney buses and any other relevant authorities to arrange for temporary relocation of the bus stop during public domain works.

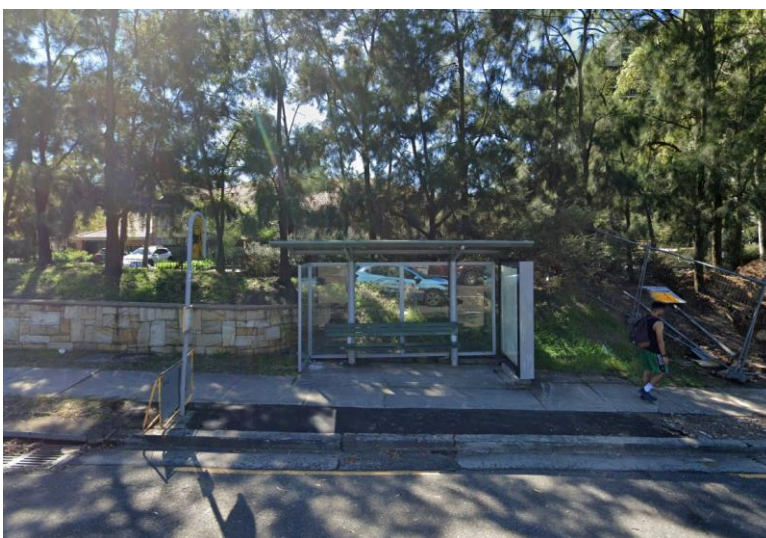
Balaclava Road Bus-stop



Epping Road Bus-stop – Eastern End of the Development Frontage



Epping Road Bus-stop – Western End of the Development Frontage



10.8. Sub-surface Utility Assets

The developer will be responsible for relocating any utilities necessary to complete the public domain upgrade works in accordance with Council standards. This may include relocation or adjustment of sub-surface utility assets to accommodate the required finished surface levels of the new granite footway or other infrastructure.

A Utilities and Infrastructure Assessment will be required to be prepared and submitted as part of the EIS to enable the applicant to obtain a clear view of the full scope of works associated with service relocations. All works associated with relocation or adjustment of sub-surface utility assets must be carried out in consultation with the relevant utility authorities. Council will require documentation prior to asset handover, confirming that all works were carried out in accordance with the requirements of relevant utility authorities.

10.9. Road pavement works

Section 8.5, Part 1.1.4 of Council's Development Control Plan requires that the half road width of the road pavement along the development frontage is reconstructed in accordance with Council standards. The following requirements are applied for each development frontage:

1.1 Balaclava Road Frontage:

The current Council road pavement profile is CIV 14.2, available at: https://www.ryde.nsw.gov.au/files/assets/public/development/drawings/civil/civ_14.2-typical-pavement-structure-commercial-industrial-high-density-residential-mixed-developments.pdf

- This requirement will apply to the Balaclava Road frontage of the site.
- New kerb and gutter will be required to be constructed along the Balaclava Road frontage of the site in accordance with Council standards.

1.2 Epping Road Frontage:

- Pavement upgrades of traffic lanes in Epping Road is subject to TfNSW determination and specifications.
- New kerb and gutter may be required along the Epping Road frontage of the site, subject to TfNSW determination and specification.

10.10. Multi-function poles / Street Lighting

As per figure 3.5.1 of the Macquarie Park Technical Manual, Multi-Function Poles are required along the Epping Road frontage of the development site. New street lighting serviced by metered underground power and on multifunction poles (MFPs) shall be designed and installed to Australian Standard AS1158 Lighting for Roads and Public Spaces.

The number of MFPs and the design parameters must comply with Council's Macquarie Park Street Lighting Schema and the MFP Design Guide. Design plans for the proposed streetlighting are to be submitted to Council and approved prior to issue of the relevant construction certificate.

Existing street lighting in Balaclava Road are to be replaced with LED luminaires, designed and installed to Australian Standard AS1158:2010 Lighting for Roads and Public Spaces. The street lighting will remain on the Ausgrid street lighting network.

10.11. Undergrounding

Any existing overhead utilities along the Epping Road frontage of the development must be undergrounded. Design plans for the proposed services undergrounding are to be submitted to Council and approved prior to issue of the relevant construction certificate.

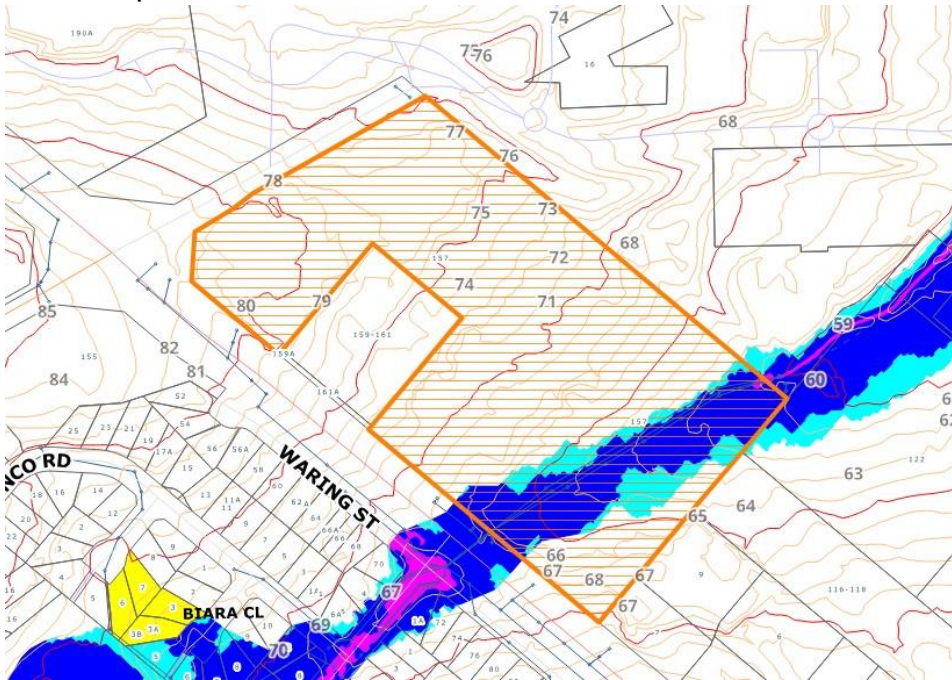
10.12. Encroachments

Any encroachments onto Council land must be removed and if necessary relocated inside the property boundary. For example, retaining walls / internal utilities.

10.13. Additional Notes

- The layout, width and arrangement of road access into to the site is subject to further investigation and review.
- TfNSW will need to be consulted for the requirements for slip lanes for entry / exit into the site from Epping Road.
- Existing stormwater drainage pits within Epping Road, will be required to be upgraded as part of the re-development of the site.
- It is noted that an existing overland flow path traverses the site close to the eastern boundary, refer figure below. Existing Council stormwater assets are located within this overland flow path. These or any other Council stormwater assets extending through or servicing the site must be maintained or upgraded and any necessary easements provided. Council's

Stormwater Engineers will provide additional information on the required stormwater upgrade works or installations required as part of the development works.



11. FLOODING AND STORMWATER MANAGEMENT

11.1. Flooding

The eastern corner of the site is affected by 1-100 year ARI flood.



And similar PMF flood affectation as below:



Therefore, a flood study must be provided detailing below:

- A HEC-RAS / TUFLOW 2D computer model file analysing pre and post development situations to confirm that the proposal does not have adverse impact on the adjacent properties.

- The applicant shall prove that the proposed development is not adversely affecting the flood conditions of neighbouring properties or downstream catchment.
- Electronic copies of the Hydraulic model (HEC-RAS/TUFLOW) shall be submitted to Council.
- Existing scenario flood levels shall be calibrated with the Flood Certificate levels provided by Council.
- The obtained Flood levels (Flood Levels Certificate) used to calibrate the model to be attached to the report.
- The pre and post development flood levels are to clearly be shown, inside the property and inside the neighbouring properties.
- The freeboard requirements of Ryde DCP to be implemented in the design of the habitable/non-habitable building areas.

Drainage System/ Overland Flow	Residential			Industrial/ Commercial	
	Land Level ^(a)	Habitable Floor Level	Non-Habitable Level ^(b)	Land Level ^(a)	Floor Level
Surface Drainage/ adjoining ground level ^(a)	-	.15m	-	-	.15m
Public drainage infrastructure, creeks and open channels	0.5m	0.5m	0.1m	0.3m	0.3m
Flooding and Overland Flow (Overland Flow Precincts and Low Risk)	N/A	0.3m	0.15m	N/A	0.3m
Flooding and Overland Flow (Medium Risk and greater)	N/A	0.5m	0.3m	N/A	-
Onsite Detention ^(b)	N/A	0.2m	0.1m	N/A	0.2m
Road Drainage Minor Systems (Gutter and pipe flow)		0.15m below top of grate			
Road Drainage		Refer to Figure 2-1.			
Detention Basins ^(d)		The top water level shall be designed to be 0.5m below top of embankment (100yr ARI)			

Table 2.1 Freeboard requirements.

- VD product (Velocity x depth) of overland flows to be supplied and, if increased inside the development, restricted to below 0.4 m² /s. VxD map to be included in the Flood Study, including neighbouring properties (no increments in VD product is allowed inside the neighbouring property).

- Flood Impact maps shall be submitted showing the variation in Flood Levels between the pre and post development scenarios for 1 in 100 yr ARI storm event.

11.2. Stormwater Management

1. A stormwater management plan to be submitted and include the following information:
 - Details of proposed drainage for the site.
 - The horizontal clearance from the proposed development to the existing Council pipe to be shown on the plan.
 - Details of the connection to Council pipe/ pit shall be included in the Stormwater Management Plan.
 - Exact position of the Council drainage assets (including pits, pipe/headwall, etc.) shall be obtained by non-destructive methods.
2. Architectural plan to be submitted and include the following information:
 - Architectural plans to avoid any encroachment to the easement, including eaves, gutters, window aluminum decorations, etc.
 - Any basement proposed where there is PMF affectation must have crest levels up to PMF level or higher.

End of Report

Our Ref: ID 1682
Your Ref: SSD-46561712

15 August 2022

Anthony Richards
Department of Planning and Environment
Locked Bag 5022
Parramatta NSW 2124

via email: Anthony.richardson@dpie.nsw.gov.au

Dear Anthony,

Secretary's Environmental Assessment Requirements for Baptist Care Macquarie Park Masterplan

Thank you for the opportunity to provide comment on the Secretary's Environmental Assessment Requirements (SEAR's) for Baptist Care Macquarie Park Masterplan (the Masterplan) at 157 Balaclava Road, Macquarie Park. It is understood that the Masterplan has the potential to include up to 190,000m² of a range of land uses including:

- Student Housing
- Seniors Housing
- Build to Rent
- Retail
- Residential
- Mixed uses including commercial and allied health, and
- A school.

The NSW State Emergency Service (NSW SES) is the agency responsible for dealing with floods, storms and tsunami in NSW. This role includes, planning for, responding to and coordinating the initial recovery from floods. As such, the NSW SES has an interest in the public safety aspects of the development of flood prone land, particularly the potential for changes to land use to either exacerbate existing flood risk or create new flood risk for communities in NSW.

NSW SES has considered the proposed development against the available information, including flood studies and emergency plans. Attention is drawn to the following principals outlined in the NSW Floodplain Development Manual, 2005 which are of importance to the NSW SES role as described above:

- **Zoning should not enable development that will result in an intolerable increase in risk to life, health or property of people living on the floodplain.**
- **Risk assessment should consider the full range of flooding, including events up to the Probable Maximum Flood (PMF) and not focus only on the 1% AEP flood. The**

site appears to be at risk of isolation from local creek flooding. Risk assessment should identify the frequency at which this occurs. In addition, the Scoping Report identifies that part of the site is at risk of inundation from the 1 in 100 year storm event and PMF levels. Risk assessment should consider the depth, velocity and duration of this inundation. The existing study, Macquarie Park Floodplain Risk Management Study and Plan 2011 indicates that the eastern side of the site is subject to flooding in a PMF. However, additional flood assessment should be undertaken.

- **Risk assessment should have regard to flood warning and evacuation demand on existing and future access/egress routes, particularly in relation to the local creek flooding as this area is susceptible to flash flooding.**
- **In the context of future development, self-evacuation of the community should be achievable in a manner which is consistent with the NSW SES's principles for evacuation.**
- **Future development must not conflict with the NSW SES's flood response and evacuation strategy for the existing community.**
- **Evacuation must not require people to drive or walk through flood water.**
- **Development strategies relying on deliberate isolation or sheltering in buildings surrounded by flood water are not equivalent, in risk management terms, to evacuation.**
- **Development strategies relying on an assumption that mass rescue may be possible where evacuation either fails or is not implemented are not acceptable to the NSW SES.**
- **The NSW SES is opposed to the imposition of development consent conditions requiring private flood evacuation plans rather than the application of sound land use planning and flood risk management.**

Please feel free to contact me via email at rra@ses.nsw.gov.au should you wish to discuss any of the matters raised in this correspondence. We would be interested in receiving information regarding the outcome of this referral in the future.

Yours sincerely,



Elspeth O'Shannessy
Planning Coordinator, Emergency Risk Management
NSW State Emergency Service