Response to Issues

Issues Raised by Council	Response
Stormwater	
The stormwater drainage design proposes to rely on rainwater tanks. You will need to provide a stormwater drainage design drawing that includes a rainwater tank, to meet the requirements of the BASIX Certificate.	The proposal does not include BASIX Affected Development.
A detailed Flood Impact Assessment is required incorporating maps showing flood behaviour, hazard and risk for both pre and proposed development conditions. The report should outline data and assumptions used in the flood model. The assessment should consider all events up to and including the probable maximum flood and Sea level rise. The flood impact assessment should be used to demonstrate compliance with all relevant flood-related development controls outlined in Chapter 39 of Draft Sutherland Shire Development Control Plan but particularly the flood effects clause.	Flood Study Assessment Report has been prepared, and is provided in **Attachment 2**.
A Stormwater Management Plan is required outlining the methodology to manage the stormwater generated from this development. The focus should be given on managing the stormwater within the site rather discharging directly to Council's stormwater network. Where the stormwater is discharged to Council's network, detail assessment shall be done regarding the capacity of the network to safely convey flow to the Quibray Bay. Stormwater management should be designed in accordance with John R Argue's Handbook (Water Sensitive Urban Design: Basic Procedures for "Source Control" of Stormwater). The management of stormwater runoff from the site must be considered simultaneously with flood impacts. Allowing for underground or on-ground OSD in flood affected areas is problematic and requires careful design to work.	Updated Stormwater Management Plan prepared – which relies on on-site infiltration. Provided as Appendix B of **Attachment 2**.
Any stormwater modelling must take account of sandy soils with high infiltration capacity. Modelling parameters such as initial and continuing losses and roughness coefficients should be consistent with those adopted for the Kurnell Flood Study.	Model parameters have been based on the Kurnell Flood Study. See Flood Study Assessment Report at **Attachment 2**.

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Flood Impact Assessment and Stormwater Management Plan should be submitted within a single report.	Stormwater Management Plan is provided as Appendix B of **Attachment 2**.
The choice of modelling approach(es), particularly the use of 1D and/or 2D modelling, needs to be fully justified.	Model parameters have been based on the Kurnell Flood Study. See Flood Study Assessment Report at **Attachment 2**.
Traffic	
The proposed light vehicle entry / exit off Sir Joseph Banks Drive within 30m from the Captain Cook Drive / Sir Joseph Banks Drive. The proposed driveway will create potential safety hazards due to inadequate sight distance for vehicle exiting the driveways and very short stopping distance for heavy vehicle turning from Captain Cook Drive into Sir Joseph Banks Drive. A vehicle crossing off Sir Joseph Banks Drive is therefore not supported.	Driveway off Sir Joseph Banks Drive has been removed. Updated site plans have been prepared and are provided at **Attachment 1**.
The proposed profile for this development will be a low level (two segments) crossing similar to Council's standard drawing No.612. The required grades are +3% and -7% (maximum), with the break over 2.1m off and parallel to the 'face of kerb' of the existing kerb and gutter.	The development will comply with Council's design standards.
At the ends of the vehicle access-way ramps aisles are to be created in compliance with Australian Standard.	The development will comply with Australian Standard AS2890.1.
In accordance with RMS guideline, the proposed development would generate 319 vehicle trips per hour during peak hours which will have significant impact on the adjacent Captain Cook Dr / Sir Joseph Banks Dr and Chisholm Road / Sir Joseph Banks Dr intersections. Whilst traffic report anticipated that the development would generate only 10 heavy vehicle trips and up to 36 light vehicles trips during peak hour which is considered significantly low compare to RMS guideline. The applicant has proposed on-site 20 loading docks plus 7 waiting bays for semitrailer. It is anticipated that these loading docks will generate significant heavy vehicle movements particularly semitrailer movements that was not highlighted in the traffic report. The applicant has estimated	Trip generation is based on actual usage of an existing comparable facility at Tempe, operated by the proponent. Notwithstanding this, a sensitivity analysis has been carried out to confirm that peak hour traffic generated at the RMS guideline rate of

Issues Raised by Council	Response
that the proposed 267 on-site parking spaces will accommodate 238 staff and 27 visitors. Therefore, it is anticipated that development light vehicle generation would be much higher than 265 vehicle trips. The methodology of trip generation rate is considered unsatisfactory. You will need to undertake a traffic survey of similar size of development to determine the trip generation of this development.	319 vehicle trips per hour could be accommodated by the existing local road network. Revised Traffic Impact Assessment Report documenting he sensitivity analysis is provided at **Attachment 5**.
Landscaping	
The proposal has taken on board a number of the key recommendations made by AMBS pertaining to the retention of the EEC, provision of a 15m buffer, and retention of existing man made wetlands however further clarification is needed over what the 'threatened species' are within the south eastern corner of the site shown on the Site Analysis plans and whether these should to be protected. Future landscape and architectural plans must map the AMBS vegetation mapping onto their plans to allow for a better understanding of the context.	Landscape and Architectural Plans have been updated to incorporate AMBS vegetation mapping and 15m buffer zone. See **Attachment 3** and **Attachment 1** respectively.
In order to ensure the restoration and revegetation of the subject site and provide for the ongoing management of vegetation a Vegetation Management Plan (VMP) must be prepared by a suitably qualified and experienced Bush Regenerator or Ecologist and submitted to Council for review. Further requirements of this report are detailed in biodiversity section of this letter below.	A VMP is provided at **Attachment 6**.
Pedestrian connection between the ancillary offices/staff amenities and the warehouse could be improved. A stronger visual and physical connection should be explored through incorporation of entry/exit to the north east of the building, differentiation in paving (possibly a pedestrian crossing) and provision of vegetation.	A landscaped entry/exit to the north-east of the ancillary office building has been incorporated into the revised design – see **Attachment 1**.

Issues Raised by Council	Response
Additional Plans required: • Location of easements, rights of way, underground service lines, street trees, sewerage and stormwater drains • Details of proposed design, including hard and soft landscaped areas, contours, ground modelling, spot heights, finished levels and areas of cut and fill. • Proposed driveways, car parking, fences and retaining walls (indicate height and material) basic drainage details, i.e. location of all pits and lines, irrigation, hose cocks, etc. • Location of lighting, letterboxes, garbage receptacle and drying areas.	Updated Landscape Plan provided at **Attachment 3**. Not all details have been provided on amended Landscape Plan due to inclusion in other plans, and relevance to the site / project.
Biodiversity	
A Vegetation Management Plan (VMP) must be prepared by a suitably qualified and experienced Ecologist or Bush Regenerator. Specifically, the VMP must incorporate a modified form of the submitted Landscape Plan (for the external component of the site) and this may be represented by several detailed plans.	A VMP is provided at **Attachment 6**. The revised Landscape Plan is provided at **Attachment 3**.
The VMP must include, but not be limited to, the following: **Establishment Phase:** i) Inclusion of all recommendations and measures provided in the Ecological Assessment. ii) Inclusion of the Project Design recommendations provided in the Ecological Assessment, section 6.1. iii) Increase the proposed areas of vegetation management/ replanting to offset the proposed vegetation removal i.e: (a) provide a 4 to 5m vegetation strip along the eastern boundary with the Caltex owned land. (b) Provide details of increased planting within the 18m Sydney Water water supply easement in accordance with Sydney Water requirements. Council would recommend planting of grasses and shrubs above the pipeline and larger trees on the periphery of the easement in accordance with Sydney Water requirements. iv) Plan showing the different vegetation management/ replanting zones of the site. ii) The exact location of vegetation to be removed and retained on the site.	A VMP is provided at **Attachment 6**.

Issues Raised by Council	Response
This list must also be expanded to include appropriate wetland species for planting at the proposed onsite wetlands including (see list) : iv) Planting densities and species mix for replanting to create a natural landscape: i.e. areas that require revegetation should be done at a rate of 1 tree per 7m², 1 shrub per m² and 4 grass/groundcovers per m² and for wetland areas 6 plants per m². v) Specific fuel management, mulch, soil and stormwater management measures. vi) Plan identifying required vegetation protection areas. vi) Vegetation and tree protection measures to be employed in vegetation protection areas. viii) A plan showing the location of all weeds onsite, and statement outlining the proposed management techniques to control them. This is to include weeding within the Sydney Water water supply easement in accordance with Sydney Water requirements. **Maintenance Phase:** i) Specific timeframes, performance monitoring and maintenance, performance measures, expected outcomes and responses i.e. for a 5 year period. ii) Specific management responsibilities. iii) Other necessary habitat management or improvement measures.	
Green and Golden Bell Frog	
The Green and Golden Bell Frog is listed as vulnerable under the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act). You are required to refer the proposal to Commonwealth Department of Environment and Energy.	Referral to the Commonwealth prepared and submitted on 9/10/2017.

Other Issues	Response
Architectural Review Advisory Panel	
Review and refinement of the articulation of the structure of the office building. Currently the structural columns, which are a strong echo of the pure form of the building, are treated carelessly in their location and in their relationship to other built elements. More clarity and consistency in the expression of the structure should be aimed for. This should include a re-consideration of the distortion of the structure for the ground floor entry, which compromises flexibility as well as the consistency of the structural geometry on the floors above.	The structural columns have been revised and amended to ensure consistency of the structural geometry.
A satisfactory resolution and integration of various aspects relating to the atrium of the office building - its roof detailing, solar access and shading, landscape and air conditioning.	These details will be addressed in detailed design to ensure the atrium will provide a high quality internal space for staff and visitors.
A review of the office facility locations, including print server room and potential integration of the amenities within the circular form thus maximising the value of the atrium space.	The print / server room has been removed, and amenities relocated to the perimeter of the building.
A review of office and warehouse parking demands and the reinforcement of an independent one-way access system for trucks servicing the warehouse complex.	The parking along the western side of the warehouse has been removed to avoid conflict between office car park users and warehouse trucks.
Incorporation of an outdoor space with appropriate amenity for the staff.	Outdoor space is not considered necessary due to the very high levels of amenity achieved within the building and through the atrium. Outdoor space would be available on the western side of the car park if required by Council.

Other Issues	Response
Confirm: • The support of Greenweb 100% indigenous plant species. • Atrium planting design should replace non-native species with native species. • A 20m wide buffer along Captain Cook Drive, as an uninterrupted site boundary, to be mounded and planted with Banksia and Tea-tree coastal forest/scrub.	The proposal includes native plants in the external landscaping, and a mix of native and non-native species within the atrium space. Native species could be used exclusively within the atrium if conditioned by Council. The existing vegetated buffer along Captain Cook Drive will be retained, however further revegetation is restricted by the presence of the Sydney Desalination Plant pipeline easement (see below).
The carrying out of environmental recommendations to minimise impacts on flora and fauna as follows: • Protection and rehabilitation of Kurnell Dune Forest EEC including the removal of all weed species by accepted bush management techniques, and protection of EEC and threatened plant species with a 15m vegetated buffer zone of Banksia Forest along the northern edge of the EEC between the construction footprint and the EEC. • Protection and enhancement of the two man made wetlands along Chisolm Road. • Revegetation of existing disturbed and cleared areas within the site and along Captain Cook Drive with Banksia Forest and Kurnell Dune Forest. • Undertaking of erosion and sediment control measures to avoid indirect impacts on retained vegetation. • Treatment of all stormwater and runoff from the development on-site according to the Drainage Plan.	The development will be carried out in accordance with the recommendations of the Flora and Fauna Report, including protection and rehabilitation of wetlands and EECs, and the provision of a 15m buffer around the EECs.

Other Issues	Response
Aboriginal Heritage	
Further Aboriginal Heritage Consultation was carried out in 2016 and 2017 after the lodgement of the DA.	An updated Heritage Assessment is provided at **Attachment 7**. It recommends further test excavations be undertaken, which will be completed prior to construction commencing. If Aboriginal items are discovered then an Aboriginal Heritage Impact Permit will be required from the Office of Environment and Heritage.
Sydney Desalination Easement	
Consultation with Sydney Desalination to address the following key issues: • Protection of the infrastructure during construction. • Access to the infrastructure during construction and operation. In particular, they wish to maintain access via the Tempe Tyres side of the pipeline easement as this is how the arrangements are currently in place (and access via Captain Cook Drive is constrained by vegetation). • Sydney Desalination would not accept any additional landscape works within the easement that involves the planting of trees.	• Piling will be at least 20m away from the pipeline, and will not interfere with the pipeline. • Tempe Tyres will work with Sydney Desalination Plant to ensure suitable access arrangements to the pipeline easement are maintained. • Updated Landscape Plan has been prepared and is provided at **Attachment 3**. Planting of vegetation would be restricted within the pipeline easement to be compliant with Sydney Desalination Plant requirements.