

RESPONSE TO AGENCY SUBMISSIONS

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1. BLACKTOWN CITY COUNCIL TRAFFIC ISSUES	In response to submissions, a Supplementary Transport and Accessibility Impacts Report prepared by Arup is included in Attachment C to this PPR and should be read in conjunction with the responses below.
Council requests further details to be provided outlining RTA's scope of work.	The RTA is investigating the detailed scope of road improvements to accommodate increased traffic volumes from developments in the subregion including the proposed water theme park. Consultation with Council on these road improvements is a matter to be determined by the RTA.
1.1 Capacity: Cap on the capacity of the site to no more than 9,000 visitors.	A new commitment has been added to the Statement of Commitments to produce an Operational Transport and Traffic Management Plan in consultation with Transport NSW and Council. The plan will include details on crowd capacity and measures to cater for crowds including shuttle buses and overflow parking if needed. <u>Overflow parking is not likely to be required until the water theme park is expanded in future stages.</u>
1.2 Special Events: Restrictions on the approval of major Special Events to comply with Council regulations including restrictions on running parallel events with the nearby Eastern Creek Motor Precinct.	A new commitment has been added to the Statement of Commitments to produce an Operational Transport and Traffic Management Plan that will address the management of traffic on the site including special events. Special events will comply with relevant State and local government regulations.
1.3 Intersection Modelling: Traffic modelling be reviewed to reflect the traffic generation and assignments identified in this report and a revised Traffic Report be prepared.	Arup has prepared a Supplementary Transport and Accessibility Impacts Report included in Attachment C to this PPR to address issues raised in submissions and supplement the Transport and Accessibility Study included in the Part 3A Application EAR. The modelling issues raised in Council's submission are addressed in the Supplementary Report and below.
Forecast trip and traffic generation: The proponent has developed detailed daily attendance forecasts by drawing on surveys of existing similar developments including Wet 'n' Wild Gold Coast. Experience from Queensland has been adapted according to local Sydney conditions in order to determine probable traffic generation.	User surveys and traffic generation at similar developments including Wet'n'Wild on the Gold Coast are relevant to the proposed development of a Wet'n'Wild in Sydney and have been used accordingly in the traffic reports.
Person trip generation: Traffic modelling is not based on the "worse-case" scenario which may well be the peak holiday period which will generate a greater attendance than the shoulder period. Analysis of future scenarios, traffic modelling forecasting should be undertaken based on existing holiday counts, plus the peak holiday period traffic generation.	The RTA's Guide to Traffic Generating Developments gives guidance on the relevant period to model. For developments or transport systems with considerable day to day and week to week variation it is not appropriate to design for the worst case. For example, the required traffic capacity on major rural highways is based on the 100th highest hourly volume throughout the year, and shopping centre traffic generation is based on typical conditions not the peak few days before Christmas. The RTA accept the modelling of the shoulder period in the traffic impact assessment on the road network. The site access intersection off Reservoir Road is designed to accommodate the peak traffic generation.
Hourly arrival/departure profiles: The transport assessment is based on a 6pm closing time, however, closing time may be as late as 11pm. Further, it is possible that "events" attached to the music zone with live performance may create conditions which are more concentrated than allowed for in the analysis.	The modelling contained within the traffic report in the Part 3A Application EAR and the additional modelling contained within the Supplementary Transport prepared by ARUP included as Attachment C in this PPR have been carried out in accordance with the RTA and its Guide to Traffic Generating Developments, and is accordingly based on the peak shoulder periods. The road network has capacity to accommodate traffic outside these peak shoulder periods.

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	A new commitment has been added to the Statement of Commitments to produce an Operational Transport and Traffic Management Plan that will address the management of traffic on the site including special events.
Traffic attraction / distribution: Table 11 of the Report describes the traffic attraction / distribution based on where the development will attract visitors from within the Sydney metropolitan region. Blacktown Council suggest that the figure of 11.6% for Sydney West is an underestimation.	Sydney West (11.6%) refers to an area generally west of the M7. Sydney Central (37.8%) includes Blacktown town centre. Accordingly, the Sydney West figure of 11.6% is not considered to be an underestimation.
Given that the traffic generation would appear to be an underestimation from Sydney West, it is likely traffic generation distribution model of Table 14 may have underestimated traffic generation rates.	Given the above, the traffic modelling is appropriate.
It is preferable that details of the traffic model used to forecast traffic volumes be included as an attachment to the report. In particular, no information has been made on the raw traffic volumes predicted under the traffic model, or details of many of the assumptions used to develop the model.	<p>Trip generation data was presented in Section 4.2 of the Traffic Report appended to the EAR. This data remains unchanged and is included in a supplementary report prepared by ARUP provided as Attachment C. Additional modelling has been undertaken including model plots of the RTA's strategic EMME model, for the years 2011 and 2021 and including the Reconciliation Road extension (supplied by the RTA).</p> <p>On the basis of the RTA's model the following background growth rates were assumed:</p> <ul style="list-style-type: none"> ■ On opening of the Reconciliation Road extension, a fourfold increase in traffic on Reconciliation Road in the peak direction (Southbound in AM peak and Northbound in PM peak) and twofold increase in the non-peak direction. South of the M4, approximately 85% of this traffic is forecast to use the Prospect Highway and the remaining 15% Reservoir Road. ■ For the period 2011 to 2021, a uniform 2% per annum growth rate on all roads within the traffic model area. <p>These background growth rate values are independent of traffic generated by the proposed development. The modelling assumes full development of the site in 2011 and therefore site-generated traffic volumes for 2021 are the same as for 2011.</p> <p>The forecast 'peak' turning movement flows at the proposed site access and key intersections are provided within the supplementary report.</p>
Events and generation: The Daily Attendance Forecasts (Table 7) in the peak period may range on average up to 9,000. However, a crowd capacity for the proposed site is not specified in the report.	In response to submissions, a new commitment has been added to the Statement of Commitments to produce an Operational Transport and Traffic Management Plan in consultation with Transport NSW. The plan will include details on crowd capacity.
Larger special events are regularly held at the nearby Eastern Creek International Raceway and Sydney Drag Way venues.	It is highly unlikely that major events at Eastern Creek would coincide with peak Wet 'n' Wild days. The former have historically been held outside the Christmas holiday period which will be the peak period for Wet 'n' Wild. If, however, major events are scheduled to occur simultaneously in the area these will be addressed in the Operational Transport and Traffic Management Plan.

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<p>Intersection modelling: A number of intersections were not modelled as part of the Traffic Report, but may be impacted upon: Great Western Hwy/Reservoir Road, Reservoir Road/ Reen Road, new site access road / Reservoir Road, Ponds Road / Prospect Hwy and Prospect Hwy / Great Western Hwy.</p>	<p>94% of site-generated traffic is forecast to use the M4 Motorway to access the site, from either the east or west. The forecast traffic increase through intersections north of the M4 would be less than 20 vehicles per hour or less than 1 % of total traffic flow through each intersection. Therefore, the aforementioned intersections were excluded from the Sidra modelling due to the negligible impact.</p>
<p>The Traffic Report indicates modelling of the 'existing' scenario for M4 Westbound / Reservoir Road intersection is based on the M4 westbound off-ramp having priority. This is currently not the case as the Reservoir Road approach has priority.</p>	<p>The intersection has been modelled correctly. This discrepancy has arisen due to an incorrect diagram being included in the appendices of the Transport Report in the Part 3A Application EAR.</p>
<p>The report does not mention if modelling provides for the linking of Reconciliation Drive with the Fairfield area.</p>	<p>As detailed in the response to Point 1.6, additional modelling has been undertaken to incorporate the Greystanes Estate to Wetherill Park link. The results of the analysis are included in the Supplementary Transport Report prepared by ARUP and included as Attachment C in the PPR.</p>
<p>The assumption of 15% of visitors arriving by bus would appear to be an overestimation.</p>	<p>The mode split assumptions are based on experience from Wet 'n' Wild Gold Coast and are appropriate.</p>
<p>1.4 Intersection Upgrades:</p> <ul style="list-style-type: none"> i. Reconciliation Drive / Reservoir Road – a developer contribution be made to the upgrading of this intersection to traffic signals. ii. M4 westbound ramp / Reservoir Road – an upgrade to traffic signalisation. iii. M4 eastbound ramp / Reservoir Road – an upgrade to traffic signalisation. iv. Reen Road / Reservoir Road – an upgrade to roundabout. v. M4 westbound ramp / Prospect Highway – an upgrade to traffic signalisation. vi. M4 eastbound ramp / Prospect Highway – an upgrade to traffic signalisation. vii. Widening of the Prospect Highway bridge over M4. viii. Duplication of the Prospect Highway bridge over Great Western Highway. ix. Ponds Road / Prospect Highway – an upgrade to traffic signalisation. x. Great Western Highway / Prospect Highway – an upgrade to traffic signalisation. <p>1.5 Road Upgrades: Significant upgrades be made to develop rural roads into higher order roads including Reservoir Road (between the M4 off ramp at Reservoir Road and Reconciliation Drive), Watch House Road and Manning Street.</p>	<p>The Arup Transport Study included in the Part 3A Application EAR and Supplementary Report in this PPR find existing roads have capacity to accommodate traffic generated by the proposed water theme park other than certain directions on the M4 interchange with Prospect Highway and M4 interchange with Reservoir Road, which are already experiencing increasing capacity constraints even without the proposed water theme park.</p> <p>The proponent has made a significant monetary contribution to the NSW Government towards road improvements as part of the terms of the lease for the land, and this fulfils the proponent's contributions towards road improvements. The RTA are investigating the detailed scope of road improvements to accommodate increased traffic volumes from developments in the subregion including the proposed water theme park.</p>

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<p>1.6 Ingress/Egress:</p> <p>Main access road to car park to be signalised and sufficient capacity be provided to cater for peak loads. All approaches to have pedestrian and bicycle lanterns.</p>	<p>The main access road to the car park is designed to cater for peak loads as explained in the Arup traffic reports in the Part 3A Application EAR and this PPR. The main access road will have appropriate lighting as shown in the lighting strategy component of the landscape masterplan in the Part 3A Application EAR.</p>
<p>1.7 Cycleways/Pedestrians: Construction of "shared path" cycleway (refer to RTA's NSW Bicycle Guidelines) on Reservoir Road between the western property boundary and Reconciliation Drive. Pedestrian footway to be installed on the opposite side of Reservoir Road adjacent to the property boundary. A cycleway "shared path" be included from Reservoir Road to the main gate. Bicycle facilities including bicycle racks to be provided adjacent to the main entrance.</p>	<p>The proposed development includes pedestrian and cycle facilities on site as shown in the plans, and the Statement of Commitments have been revised to include a commitment to provide this bicycle parking.</p> <p>The proponent has made a significant monetary contribution to the NSW Government towards road improvements as part of the terms of the lease for the land, and this fulfils the proponent's contributions towards road improvements external to the site.</p>
<p>1.8 Car Park:</p>	
<p>No less than 2,200 permanent and formalised car parking spaces be provided on-site or alternatively adequate justification be provided based on a similar theme park such as the Gold Coast Wet 'N' Wild.</p>	<p>The proposed development includes 1,857 car parking spaces based on the parking demand analysis in the Arup Transport Study in the Part 3A Application EAR.</p> <p>Parking demand can only be correlated to peak demand by taking into consideration arrival/departure profiles which are shown in Figure 12 of the Arup Transport Study in the Part 3A Application EAR. Council appears not to have taken these profiles into consideration.</p> <p>Detailed daily attendance forecasts have been developed by drawing on surveys of existing developments including Wet 'n' Wild Gold Coast. Experience from Queensland has been adapted according to local Sydney conditions on the basis of factors such as daylight saving, climatic conditions and school holiday periods. Therefore, parking provision requirements for Wet 'n' Wild Gold Coast are likely to differ from the parking provision requirements of Wet 'n' Wild Sydney.</p> <p>It is possible that the demand for parking may exceed on-site supply on a small number of peak days each year. A new commitment has been added to the Statement of Commitments to produce an Operational Transport and Traffic Management Plan which will include measures to address overflow parking. Overflow parking is not likely to be required until the water theme park is expanded in future stages.</p>
<p>Provision of sufficient bus, coach, mini-bus parking bays and pick-up / set-down zones be provided on-site.</p>	<p>Bus parking bays and a pick-up-set down zone are provided on site in the plans.</p>
<p>Provision of sufficient 'Kiss & Ride' drop area be provided on-site.</p>	<p>A 'kiss and ride' drop area is provided on the site as shown in the plans.</p>
<p>Provision of sufficient 'Taxi Zone' area be provided on-site.</p>	<p>The pick-up and set-down area shown on the plans will be used by taxis.</p>

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Aisle width, carparking dimensions, sight distance at driveways, swept path movements and other parking facilities to meet Australian Standards AS2890.1-2004, AS2890.2-2002 and Council's DCP.	The car park design will meet relevant Australian Standards as confirmed in the Arup Transport Study in the Part 3A Application EAR. A new commitment has been added to the Statement of Commitments for the design of the car park to meet relevant Australian Standards.
Park Assist technology, car park guidance systems, VMS technology or service time and circulation time technology be considered for installation.	A new commitment has been added to the Statement of Commitments to produce an Operational Transport and Traffic Management Plan which will incorporate car park technologies where feasible.
Lighting within the car park area to meet Australian Standards AS/NZS 1158 and associated standards for street lighting of car parks.	The lighting strategy for the water theme park is shown in the landscape masterplan in the Part 3A application EAR. A new commitment has been added to the Statement of Commitments for the design of the car park to meet relevant Australian Standards.
CCTV camera technology be provided to assist with security within and adjacent to the car park.	A new commitment has been added to the Statement of Commitments to produce an Operational Transport and Traffic Management Plan which will address security in the car park.
1.9 Buses: An indented bus bay, with kerb, gutter, and bus shelter meeting the 'Guide to Accessible Bus Stops', be provided on both sides of Reservoir Road adjacent to the property. A permanent and frequent shuttle bus be provided by the developer between Blacktown Station and the site. This should be available for both staff and visitors.	A new commitment has been added to the Statement of Commitments to produce an Operational Transport and Traffic Management Plan which will report on the feasibility of bus services and associated facilities serving the development.
1.10 Construction traffic management plan: Be provided to Council for approval prior to commencement of construction of the site. All intersection and road network upgrades to be in place prior to opening of the proposed Theme Park.	The Statement of Commitments includes a commitment for a construction management plan to be prepared prior to commencement of works that addresses, amongst other things, management of construction traffic. This commitment has been revised to ensure that the construction management plan is prepared in consultation with Council.
1.BLACKTOWN CITY COUNCIL (CONT.) HERITAGE ISSUES	In response to submissions, the following additional heritage studies have been prepared and should be read in conjunction with the responses below: <ul style="list-style-type: none"> - Heritage View Analysis Report prepared by Richard Lamb & Associates included at Attachment D to this PPR; - Baseline Historical Archaeological Impact Assessment prepared by Archaeological & Heritage Management Solutions (AHMS) included in Attachment E to this PPR; and - revised final Heritage Impact Statement prepared by Graham Brookes & Associates included as Attachment F to this PPR.

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<p>1.11 A landscape visual assessment of the development should be provided including a full view corridor analysis based on the parameters established for the Precinct in numerous past reports and as outlined in the Prospect Heritage Study for Precinct 1 – Prospect Northern Slopes.</p>	<p>A Heritage View Analysis Report has been prepared by Richard Lamb & Associates and is included at Attachment D to this PPR.</p>
<p>1.12 The visual assessment should establish the extent, species and location of tree planting and screening on the site, appropriate colours and forms for use within the landscape, and the optimum location of the tall ride elements.</p>	<p>The Heritage View Analysis includes a number of recommended view impact mitigation strategies relating to vegetation and ride structures on the site which have been incorporated into the final plans attached to this PPR.</p>
<p>1.13 Additional photomontages should be provided as part of the visual assessment to outline the impact of the development on the identified view corridor across the site from the Police House to St Bartholomew's, and the viewshed toward the site from St Bartholomew's to the south-west.</p>	<p>The additional photomontages are included in the Heritage View Analysis Report in Attachment D to this PPR.</p>
<p>1.14 The Proponent should provide detail on linked conservation works to be carried out to the Police Cottage.</p>	<p>Conservation works to the former Police Cottage do not form part of the Part 3A Application and will need to be subject to future development applications supported by heritage conservation documentation. A new commitment has been added to the Final Statement of Commitments in accordance with the recommendations of the final Heritage Impact Statement attached to this PPR for a comprehensive fabric analysis and schedule of conservation works be carried out with an experienced conservation architect overseeing any conservation work affecting the Cottage.</p>
<p>1.15 An Archaeological Management Plan should be established for the potential remains of outbuildings and 1860 - 1890 development of the western parts of the site, including the pre 20th century cottage sites identified in the Heritage Impact Statement.</p>	<p>A Baseline Historical Archaeological Impact Assessment prepared by Archaeological & Heritage Management Solutions (AHMS) is included in Attachment E to this PPR. The assessment concludes that it is unlikely potential historical archaeological 'relics' of significance survive on the site other than below the interior of the former policeman's cottage which is not affected by the proposed development at this stage, and no further historical archaeological assessment of proposed development in the study area appears to be warranted except for around the policeman's cottage. In accordance with the recommendations in the AHMS assessment, a new commitment is included in the Final Statement of Commitments for further archaeological assessment of the former Policeman's Cottage and its curtilage to be carried out as part of any future adaptive reuse or refurbishment of the Cottage.</p>
<p>1.16 Consideration should be given to softening the extent of hard surfaces required for the car park, including looking at methods of car parking that may enable the retention of the site topography particularly in the Stage 2 parking area.</p>	<p>The proposed area of hardstand car park will be completed in stages in line with the staging of the development of the water theme park. The car park includes landscape planting and natural drainage swales throughout and around it to the extent possible as shown in the final Landscape Plan attached to this PPR. The landscaping and swales minimise the impact of the hard surface on the visual landscape and also manage stormwater runoff from the car park as part of the overall stormwater management plan for the site. The proposed earthworks across the car park area are necessary to meet relevant Australian Standards for car park grades.</p>

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1.17 Additional screen planting of Cumberland forest species mature eucalypt plantings should be provided to the boundaries as established in conjunction with a detailed visual analysis.	In accordance with the Heritage View Analysis Report at Attachment D, additional screen planting is proposed along the site boundaries and is included in the final landscape masterplan attached to this PPR.
1.18 The Western Sydney Parklands should be encouraged to formally list as heritage items the Police Cottage and the Reservoir Road alignment from Prospect Highway to Honeman and Boiler Close as they intersect with the Great Western Highway.	The final Heritage Impact Statement recommends that the Police Cottage and a section of Reservoir Road forming the southern boundary of the site and demonstrating the alignment of the former Great Western Road be protected as heritage items. This is a matter for Western Sydney Parklands to consider implementing.
2. HERITAGE BRANCH – DEPARTMENT OF PLANNING	In response to submissions, the following additional heritage studies have been prepared and should be read in conjunction with the responses below: <ul style="list-style-type: none"> - Heritage View Analysis Report prepared by Richard Lamb & Associates included at Attachment D; - Baseline Historical Archaeological Impact Assessment prepared by Archaeological & Heritage Management Solutions (AHMS) included in Attachment E; and - revised final Heritage Impact Statement prepared by Graham Brookes & Associates included as Attachment F.
2.1. The Environmental Assessment does not address the assessment of archaeological impacts. It is important that an archaeological assessment be undertaken and appropriate mitigation strategies put in place should archaeology be encountered, including the nomination of an appropriately qualified archaeologist prior to works commencing. This archaeologist must meet NSW Heritage Council Excavation Director criteria.	The Baseline Historical Archaeological Impact Assessment concludes that it is unlikely potential historical archaeological 'relics' of significance survive on the site other than below the interior of the former policeman's cottage, and no further historical archaeological assessment of proposed development in the study area appears to be warranted except for around the policeman's cottage. In accordance with the recommendations in the AHMS assessment, a new commitment is included in the Final Statement of Commitments for further archaeological assessment of the former Policeman's Cottage and its curtilage to be carried out as part of any future adaptive reuse or refurbishment of the Cottage. The final Heritage Impact Statement prepared by Graham Brookes & Associates has been reviewed and amended accordingly and is included as Attachment F.
2.2. The impacts of the proposal on the State Heritage Register listed Royal Cricketers Arms Hotel have not been adequately assessed.	A Heritage View Analysis has been prepared by Richard Lamb & Associates (Attachment D) to assess the impact of the proposal upon all of the heritage listed items in the vicinity of the site. The analysis concludes that there are no views of the Royal Cricketers Arms, and no heritage views of or from the curtilages of the Royal Cricketers Arms that can be affected by the proposal.
2.3. Statements in the Heritage Report regarding visual impacts to the Royal Cricketers Arms Hotel are inconsistent.	The final Heritage Impact Statement included in Attachment F has been revised to incorporate the findings of the Heritage View Analysis prepared by Richard Lamb & Associates at Attachment D.

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<p>2.4. In Sections 1.2 and 8.2 of the Heritage Impact Statement, the DGR for heritage is wrongly stated and does not conform to DGR 7. Furthermore, the report does not address DGR 9– Archaeological Impacts.</p>	<p>The DGR for heritage has been amended in the final Heritage Impact Statement at Attachment F. Upon receipt of the archaeological assessment prepared by AHMS, the final Heritage Impact Statement was revised to include reference to the Baseline Historical Archaeological Study.</p>
<p>2.5. A significant issue with the Statement of Heritage Impact by Graham Brooks is the inability to reference correct levels of assessment for heritage.</p>	<p>The section of the final Heritage Impact Statement addressing assessment of cultural significance has been reviewed and corrected where warranted.</p>
<p>2.6. The Heritage Branch considers that increased visual screening along the Reservoir Road frontage through the appropriate use of trees is highly necessary, and increased visual screening around the Policeman's cottage heritage precinct is required to allow it to maintain its visual character as a heritage building and to separate it from the adjoining entry way and car park.</p>	<p>The final Heritage Impact Statement has been amended in response to these Heritage Branch comments and updated to include the recommendations for mitigation proposed by Richard Lamb in the Heritage View Analysis. The need for increased screening has been incorporated within the Heritage Impact Statement and is included in the final landscape masterplan attached to this PPR.</p>
<p>2.7. The Signage on Reservoir Road, requires careful location and design to fit in with the rural character and nature of the Road, particularly on the western side of the entry way which retains a rural character and feel as patrons pass the Royal Cricketers Arms Hotel and the Policeman's Cottage.</p>	<p>The signage proposed on Reservoir Road frontage has been located and screened in the final landscape plan attached to this PPR so that it will not be seen from the Cricketers Arms Hotel.</p>
<p>2.8. There is no map outlining the location of the subject site and highlighting the SHR listed heritage items in proximity to it.</p>	<p>The final Heritage Impact Statement has been revised and an image responding to this Heritage Branch comment has been added on page 9. The added image identifies the subject site and those State heritage listed items in close proximity.</p>
<p>2.9. The Heritage Branch concurs with the Applicants Statement of Commitments unrelated to archaeology, which includes:</p> <ul style="list-style-type: none"> • retaining the former Policeman's cottage on site, • retaining the tall pines in the immediate vicinity of the Policeman's cottage, • retaining a visual link between the former Policeman's Cottage and St Bartholomew's Church and • retaining the alignments of Reservoir Road and Watch House Road. 	<p>Heritage Branch concurrence to the proposed heritage conservation measures in the Part 3A Application is noted.</p>

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3. ROADS AND TRAFFIC AUTHORITY	In response to submissions, a Supplementary Transport and Accessibility Impacts Report prepared by Arup is included in Attachment C to this PPR and should be read in conjunction with the responses below.
3.1. Access is denied across the northern boundary of the site to the M4 motorway.	Agreed. Access is not proposed directly off the M4 motorway on the northern boundary of the site.
3.2 Clarification of traffic distribution is needed as distribution in the traffic report does not align with the directional signage plans in the EAR.	The forecast traffic distribution is provided in Table 1 in the Supplementary Transport Report prepared by ARUP attached to this PPR. The directional signage strategy plans in the EAR are indicative only, and will need to be finalised with the approval of the RTA in the future.
3.3 Traffic modelling needs to: - include the planned extension of Reconciliation Road; - be carried out for periods of peak traffic activity at each intersection; and - be submitted in electronic form to RTA for further review.	Traffic modelling inclusive of the planned extension of Reconciliation Road has been carried out for peak periods of activity at each intersection included in the original report. The details of the modelling and the results of the analysis are included in the Supplementary Transport Report prepared by ARUP included at Attachment C. The results of the analysis show that: <ul style="list-style-type: none"> ▪ The site access intersection is forecast to perform at an acceptable LOS for all modelled "Peak" time periods. ▪ All intersections are forecast to perform at an acceptable LOS for the Weekday AM Peak and Weekend AM Peak. ▪ All intersections are forecast to perform at an acceptable LOS for the Weekday PM Peak with the exception of both roundabouts of the M4 / Prospect Highway Interchange and the southern intersection of the M4 / Reservoir Road interchange. An electronic copy of the SIDRA files are being provided to the RTA and Blacktown Council.
3.5. Turn paths shall be submitted for a 14.5m coach turning from right turn bay into the site.	Turn paths for a 14.5m coach at the proposed site access intersection on Reservoir Road were included in the plans at Appendix V off the Part 3AA application EAR and are also provided in the Supplementary Transport Report prepared by ARUP included as Attachment C in the PPR.
3.6. Bus bays equipped with fencing, shelters and safe storage for queuing patrons shall be provided on both departure sides of the proposed intersection at Reservoir Road unless bus operators confirm that bus access into the site is satisfactory.	Bus bays are provided on site as shown in the plans. A new commitment has been added to the final Statement of Commitments in this PPR to produce an Operational Transport and Traffic Management Plan which will report on the feasibility of bus services and associated facilities serving the development.
3.7. Consideration shall be given to an additional left turn exit only access on Reservoir Road east of the proposed traffic control signals. This additional access may reduce the pressure on the traffic control signals and would allow for vehicles to wait for appropriate gaps to exit onto Reservoir Road.	The proposed Reservoir Road / Site Access signalised intersection, with pedestrian crossings on all approaches, is forecast to perform at a good level of service at all times including peak periods as described in the Arup transport report submitted with the Part 3A Application EAR. Therefore, an additional left turn exit only access onto Reservoir Road east of the proposed traffic control signals is not warranted.

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3.8 Clarification on the location and number of staff car parking spaces is required.	A staff parking and service vehicle area will be provided adjacent to the administration building. The parking area will be accessed off Watch House Road (refer to item 49 on Overall Site Plan). It will have approximately 47 parking spaces to be shared between service vehicles and staff vehicles.
3.9 Further information is required regarding the number and frequency of service vehicles entering Watch House Road. The Gold Coast Wet 'n' Wild service operations should be used as a guide. This information is required to determine an appropriate intersection type for the intersection of Watch House Road and Reservoir Road.	Service vehicle traffic generated by the development will be due to a range of uses including deliveries, catering, waste and maintenance. Service vehicle access to the development will be from Watch House Road. On the basis of the operation of Wet 'n' Wild Gold Coast, it is estimated that the number of service vehicle movements will typically be no more than 10 vehicles per hour. Most service traffic will be scheduled to occur outside peak arrival/departure times for visitors, and outside peak periods on the surrounding road network. The existing intersection of Watch House Road and Reservoir Road has capacity to accommodate this relatively low number of service vehicles.
3.11 The RTA does not concur with the treatment of pedestrians and cyclists in the assessment. A shared pedestrian and cycle path along Reservoir Road shall be provided between the attraction's entrance and pathway alongside Reconciliation Road and shall be designed to the satisfaction of Blacktown Council.	The proponent has made a significant monetary contribution to the NSW Government towards road improvements as part of the terms of the lease for the land, and this fulfils the proponent's contributions towards road improvements.
3.12 Appropriate crossings for cyclists and pedestrians across Reservoir Road onto the existing bicycle routes through Prospect Picnic grounds and into Picrite Close opposite the site shall be provided to the satisfaction of Blacktown and Holroyd Councils (as appropriate) to link with existing bicycle paths to the south and west.	The proposed Reservoir Road and Site Access signalised intersection will have pedestrian crossings on all approaches. This will enable pedestrians and cyclists to safely cross Reservoir Road in the vicinity of the site.
3.13 The RTA requires a re-assessment of the number, type and location of bicycle parking spaces.	Blacktown Development Control Plan 2006 does not give guidance on bike parking and therefore the most appropriate reference document is the <i>Planning Guidelines for Walking and Cycling</i> (NSW Government, 2004). It recommends that for a theme park, bike parking should be provided for 3-5% of total staff numbers and 3-5% of daily visitor capacity. This equates to 9-15 bike parking spaces for staff and 150-250 spaces for visitors on a typical busy day of 5,000 visitors. The Statement of Commitments has been revised to include a commitment for the following: A class 2 (high security) bike parking area for staff accommodating up to 20 bikes provided near the administration building with access from Watch House Road. A class 3 (high to medium security) bike parking area for visitors accommodating up to 200 bikes provided in a highly visible location near the main entry plaza with access from the signalised intersection on Reservoir Road.
3.14 The proposed signage layout shall be forwarded to the Tourist Attraction Signposting Assessment Committee (TASAC) for assessment, once an application is deemed eligible by TASAC the RTA will assess and determine the design and location of signs.	The signage described in the Access and Directional Signposting Strategy prepared by ARUP and included as Appendix D in the Part 3A Application EAR is indicative only. A formal signage scheme will be prepared at a subsequent stage of the design process.

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3.15 All works associated with the proposal shall be at no cost to the RTA.	The proponent has made a significant monetary contribution to the NSW Government towards road improvements as part of the terms of the lease for the land, and this fulfils the proponent's contributions towards road improvements.
4. TRANSPORT NSW	In response to submissions, a Supplementary Transport and Accessibility Impacts Report prepared by Arup is included in Attachment C to this PPR and should be read in conjunction with the responses below.
4.1 TNSW supports the proposed travel demand measures	Noted.
4.2 TNSW seek further clarification regarding the forecast number of visitors to the site.	The attendance scenario data presented in Section 4.1 of the Transport Report submitted with the Part 3A Application EAR refers to total daily figures including special events such as live performances and drive-in movies.
4.3 TNSW seek further clarification regarding traffic management for special events.	A new commitment has been added to the final Statement of Commitments in this PPR to produce an Operational Transport and Traffic Management Plan in consultation with Transport NSW and Council within 6 months of the park opening. The Management Plan will address special events.
4.4 TNSW recommend that conditions of consent should include a commitment to the continued operation of the proposed shuttle bus services to Blacktown Railway Station prior to commencement.	The Operational Transport and Traffic Management Plan will report on the feasibility of a shuttle bus service.
4.5 The preparation of a detailed Operational Environmental Management Plan (OEMP) in consultation with TNSW is advised.	The Operational Transport and Traffic Management Plan (OEMP equivalent) will be prepared in consultation with Transport NSW.
4.6 The preparation of both a Travel Access Guide(TAG) and a Workplace Travel Plan (WMP) should be included in the conditions of consent.	The Operational Transport and Traffic Management Plan will include a TAG and WMP.
4.7. TNSW advise that bus route 812 is unlikely to be altered unless warranted by demand.	The Operational Transport and Traffic Management Plan will address bus services.
4.8 TNSW note that the RTA has provided a detailed review of the proposal and that their comments regarding pedestrians and cyclists are supported.	Noted. Responses to the RTA submission are provided in Section 3.

Government Agency Submissions and Issues	Response
5. DEPARTMENT OF ENVIRONMENT AND CLIMATE CHANGE	<p>Ecological Australia prepared the Biodiversity Impact Assessment submitted with the Part 3A Application EAR and have prepared the following responses to the issues raised by DECC.</p>
5.1 SEPP (Western Sydney Parklands) 2009 DECCW requires consideration of the following provisions in clause 14 of State Environmental Planning Policy (Western Sydney Parklands) 2009:	
(2)(a) whether the development is compatible with and does not detract from the values of the nature reserve.	<p>There are a number of values discussed in the <i>'Prospect Nature Reserve – Draft Plan of Management (DPOM)'</i> (DECCW 2009), these are: cultural, natural, research, educational and water. The potential impacts of the proposal include lighting, noise and edge effects. Various mitigation measures have been employed to ensure these impacts do not detract from the values of the Nature Reserve, and are discussed further below. The revegetation/rehabilitation of Cumberland Plain Woodlands (CPW) and wetlands area on the subject site will compliment the natural and educational values of the reserve.</p>
(2)(b) any management plans applicable to the nature reserve.	<p>The following strategies of relevance to the proposal are identified for the reserve in the DECC (2009) DPOM, including:</p> <p>Section 3.1: Work with the managers and trustees of the Western Sydney Regional Parkland to integrate management of the reserve with the parkland's master plan.</p> <ul style="list-style-type: none"> ▪ The development of the Western Sydney Parklands Plan of Management 2020 was undertaken in consultation with stakeholders including the SCA and DECCW. The proposed development is located within Precinct 7 – Prospect Recreation, with Tourism facilities identified as a Land Use Opportunity for this area. <p>Section 3.5: Work with other relevant organisations and neighbours to establish vegetation linkages.</p> <ul style="list-style-type: none"> ▪ Natural woodlands on the site will be enhanced through rehabilitation and revegetation, providing vegetation linkages to isolated remnants on the subject site with indigenous vegetation corridors. <p>Section 4.1: Liaise with surrounding landholders, Blacktown Council and other relevant authorities to ensure that their activities do not impact negatively on the Nature Reserve.</p> <p>Section 4.2: Encourage collaborative programs with neighbouring landholders to control the invasion and spread of weeds and other introduced plants into and within the Nature Reserve.</p> <ul style="list-style-type: none"> ▪ Weeds at the site will be managed through the implementation of a Vegetation Management Plan in the areas of woodland along the southern (adjacent) boundary, including any Weeds of National Significance or Noxious Weeds (NSW Noxious Weed Act 1993). Other introduced plants within the park are not considered invasive and do not provide a threat to the Nature Reserve.

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(2)(c) whether the development has been designed and sited to minimise visual intrusion when viewed from vantage points in the nature reserve.	<p>The site planning and design of the water theme park includes a number of measures that respect the natural topography of the site and surrounding properties, and reduce its impact on the landscape and amenity of the area as mentioned in Sections 4.4 and 4.5 of the Part 3A Application EAR.</p> <p>In response to submissions, the final landscape plan attached to this PPR has been revised to include additional landscape planting and revegetation along the Reservoir Road frontage which provides a further buffer screen to the nature reserve on the opposite side of the road.</p>
5.1.2 Section 4.1.2 of the Environmental Assessment states there are no nature reserves in proximity to the site.	Section 2.5 of the Biodiversity Impact Assessment in Appendix O of the Part 3A Application EAR correctly identifies the Prospect Nature Reserve immediately to the south of the subject site. The statement in Section 4.1.2 of the main body of the EAR is an error.
5.2 Impacts to Prospect Nature Reserve (PNR)	
5.2.1 The Proponent should address the <i>Guidelines for developments adjoining land and water managed by the DECCW 2010</i> , particularly impacts of noise and light on fauna and impacts of run-off, weeds and edge effects on the PNR.	<p>The impacts of noise resulting from the proposal are discussed in Section 4.13 of the Part 3A Application EAR. It is noted that there will be an increase in <i>'potential acoustic impacts that may arise as a result of the proposed development'</i>, and <i>'mitigation measures to ensure relevant noise control guidelines are followed'</i> are provided. The DECCW (2010) guidelines recommend that: <i>'Planning authorities should consider whether it is appropriate to apply control measures, such as landscaping with local native plant species, implementing buffer areas, limiting hours of operation, and use of appropriate colours, building materials, lighting and height controls.'</i></p> <p>The Landscape Master Plan identifies a large proportion of the southern boundary of the site (the area adjacent to PNR) is to be revegetated/rehabilitated, providing a buffer for light and noise from the park. Topographically the site naturally falls away from the PNR, creating further natural buffering of these impacts.</p> <p>In response to submissions, the final landscape plan attached to this PPR has been revised to include additional landscape planting and revegetation along the Reservoir Road frontage which provides a further buffer screen to the nature reserve on the opposite side of the road.</p>
5.3 Biodiversity	
5.3.1 An assessment of whether the Endangered Ecological Community (EEC), Freshwater Wetlands on Coastal Floodplains, is present at the site should be provided.	Mapping used for the Biodiversity Impact Assessment in the Part 3A Application EAR was NPWS (2002), which did not identify the area in question as a wetland. Subsequent review of the SMCMA (2009) mapping does include one of the farm dams in the centre of the site as Freshwater Wetlands on Coastal Floodplains (FWW). It is also noted in the mapping that this site was 'not assessed' in the field during that mapping project. The area of the site included as FWW is in fact an area of artificially dammed drainage line, mapped on the 1:25:000 topographic map as a Class 1 stream. Whilst this dam is surrounded by <i>Typha</i> sp. and the drainage line does maintain some <i>Persicaria</i> and <i>Juncus</i> spp., these flora are common to drainage lines and do not indicate that this site is an EEC. In the opinion of Eco Logical Australia (ELA), the SMCMA (2009) mapping is incorrect in this instance.

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5.3.2 Potential impacts on the water table and hydrological regime on the CPW remnant due to the 'cut and fill' required to create the wetland and water reuse area	<p>Section 4.11 of the Part 3A Application EAR deals with 'Geotechnical Issues' and provides discussion with regards to groundwater. Ground water is not expected to be impacted significantly due to the measures undertaken in the design and operation of the water theme park.</p> <p>Section 3.6 and Appendix B of the Part 3A Application EAR describe the water cycle management strategy for the site including the stormwater management plan. Section 4.12 and Appendix B of the Part 3A Application EAR address flood risk and demonstrate that that the site will be unaffected by flooding.</p>
5.3.3 The protection of native vegetation during construction should be considered further.	<p>Section 4.13 and Appendix O of the EAR include 'Management and Mitigation' measures to provide protection for native vegetation during construction, including soil erosion measures and disturbance minimisation in accordance with <i>'Guidelines Soils and Construction: Managing Urban Stormwater 4th Edition (Landcom 2004) Landcom (2004)</i>. In response to submissions, the final Statement of Commitments in this PPR has been revised to ensure the Construction Management Plan in Commitment No.11 includes the fauna inspection and protection measures and the tree protection measures in Section 6.6 of the Biodiversity Impact Assessment in the Part 3A Application EAR.</p> <p>A Vegetation Management Plan (VMP) is also recommended and included in the Statement of Commitments to enhance currently degraded remnants, scattered indigenous trees and other indigenous vegetation.</p>
5.3.4 Potential impacts to Green and Golden Bell Frog (GGBF) should be considered further.	<p>It is noted that whilst GGBF has been recorded within the Prospect Nature Reserve and surrounding Prospect Special Area, this species has not been recorded in these areas (or within 5kms of the site) since the 1960's. Further records of this species were not made within 10kms until the late 90's, at Merrylands (~3kms north-west through urban and industrial estate). Given this, it was not considered 'likely' or 'potentially likely' to occur at the site and as such was not targeted during the survey nor were any impact assessments deemed necessary. It should also be noted that where potential habitat does exist (i.e. the farm dams and the drainage line onsite), complimentary habitat will be provided for frog species surrounding the water retention basin (See Section 6.7 of the Biodiversity Impact Assessment in the Part 3A Application EAR).</p>
5.3.5 The Biodiversity Impacts Assessment (BIA) uses of the 'Guidelines for Threatened Species Impact Assessment under Part 3A of the EP&A Act' (DEC & DPI 2007) to determine significance of impacts to threatened species and ecological communities, however this does not provide an assessment of the significance of impact.	<p>The guidelines in question provide criterion to <i>'identify potential impacts of the proposal on threatened species, populations and ecological communities'</i> (DEC & DPI 2007, Appendix 3). Whilst they are not specifically an instrument used to determine significance of impact (contrary to the Assessment of Significance Guidelines, s94A TSC Act), the assessments in Appendix D of the Biodiversity Impact Assessment in the Part 3A Application EAR provide a rationale consistent with the 'Guiding principles for threatened species assessment (Section 1.2)' of the DEC & DPI (2007) guidelines.</p>
5.3.6 The Landscape Master Plan does not use species characteristic of CPW.	<p>It is noted that the Landscape Master Plan (LMP) only includes three tree species and one shrub species characteristic of CPW, whilst the suggested nine tree and 14 shrubs/groundcover species are not characteristic of this community. Given the critically endangered status of this ecological community, it is necessary that the revegetation of the woodland areas are outlined in a Vegetation Management Plan (VMP) prepared by an appropriately qualified ecologist, including a suggested planting palette consistent with those indigenous to the CPW.</p>

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	As per the recommendations of the Biodiversity Impact Assessment in the Part 3A Application EAR, the Statement of Commitments includes the preparation of a VMP which will specify selection of species for the areas of CPW and supersede the landscape masterplan.
5.3.7 The Vegetation Management Plan (VMP) is to be implemented for a period of 5 years, DECCW request that this VMP be in place in perpetuity.	The VMP to be prepared will be in accordance with Office of Water's (DECCW), ' <i>Guidelines for Vegetation Plans</i> '. It is noted that there is no time period specified in these guidelines, therefore a suggested timeframe of 5 years has been proposed. It is considered that this time frame is sufficient to adequately abate the threats of weed incursion and allow natural resilience to prevail in the areas.
5.3.8 Linear nature of the revegetation/ rehabilitation of the CPW will be subject to a high degree of edge effects.	The proposed revegetation / rehabilitation will provide a net increase in the extent of the CPW at the site, from 2.2ha, to 3.1ha, a 40% increase. Whilst the linear nature of some portions of this revegetation / rehabilitation will be subject to edge effects, these edge effects will be managed through a VMP and ongoing management by landscaping staff employed by the proponent.
5.3.9 Propagation and replanting of a vulnerable species, <i>Grevillea juniperina</i> subsp. <i>juniperina</i> , is not supported by DECCW.	It is noted that this species has been included in the Landscape Masterplan in the Part 3A Application EAR as a revegetation species in the CPW woodland area. The Statement of Commitments has been revised so that the VMP to be prepared for the CPW woodland will determine the species to be used and is prepared in consultation with the Office of Environment and Heritage.
5.4 Aboriginal Cultural Heritage	
5.4.1 DECCW is satisfied that the consultation process undertaken for this project has been done in accordance with the Part 3A <i>Draft Guidelines for Aboriginal Heritage Impact Assessment and Community Consultation 2005</i> .	Noted.
5.4.2 The Archaeological Assessment is broadly supported by DECCW.	Noted.
5.4.3 The following comments relate to the management recommendation proposed in the Aboriginal Archaeological Management Methodology:	
i) Test/Salvage of BC PAD1 (AHIMS#45-5-3972) ii) Management Plan for BC PAD1 (AHIMS#45-5-3972) DECCW recommends that the current DECCW 'Code of Practise for Archaeological Investigations of Aboriginal Objects in New South Wales' be a guide to undertake the test/salvage operations and subsequent reporting.	Use of the DECCW Code as a guide to excavation method and reporting is accepted. The final Statement of Commitments has been revised to include the Code as a guide.
iii) Aboriginal Cultural Assessment: Consider the request from the Darug Custodian Aboriginal Corporation (DCAC) to explore introducing Darug Interpretive signage and themes.	Requests relating to signage and themes will be considered by the proponent.

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iv) Collection of BC1 (AHIMS #45-5-3970) and BC2 (AHIMS#45-5-3971): DECCW raises no objection to the collection of the artefacts.	Noted.
v) Care and control of retrieved artefacts: DECCW recommends initial lodgement of collected/excavated artefacts with the Australian Museum and further discussions about potential future Care and Control with Aboriginal stakeholder groups	Agreed. The final Statement of Commitments has been revised to include a commitment for any collected/excavated artefacts to be deposited at the Australian Museum. Further discussions with Aboriginal stakeholders about future care and control will be undertaken in conjunction with the recommended test/salvage excavations and collection.
5.5 Environmental Protection 5.5.1 DECCW note that the EAR mentions exceedances in noise levels at certain neighbourhoods during both the construction and operational phases and recommend that the proposed development comply with the requirements of the NSW industrial Noise Policy, NSW Environmental Criteria for Road Traffic Noise and Interim Construction noise Guidelines.	<p>A Noise and Vibration Assessment prepared by Renzo Tonin & Associates (NSW) Pty Ltd in accordance with the Environmental Criteria for Road Traffic Noise (ECTRAN) and the Industrial Noise Policy (INP), produced by DECCW was included in Appendix J of the Part 3A Application EAR. Noise from the operations, construction and traffic associated with the proposed water theme park, and associated noise mitigation measures have been addressed adequately.</p> <p>The nearest residential neighbourhood is situated approximately 500m to the north of the subject site, on the other side of the M4 Motorway and Great Western Highway. Given these separation distances, residential neighbourhoods will not be significantly affected by noise from the proposed development.</p> <p>The sensitive noise receivers nearby the site comprise a few rural residential dwellings and a church. The Noise and Vibration Assessment included in the Part 3A Application EAR finds that the operation of the water theme park will meet relevant noise criteria with the exception of potential for minor exceedances after 10pm. The Assessment also finds that construction activities will exceed relevant noise standards, but not reach the levels where sensitive receivers are being highly affected. The Assessment makes a number of recommendations for noise mitigation measures for both construction and operation of the water theme park. The implementation of these noise mitigation measures is included in the Statement of Commitments.</p>
6. LAND AND PROPERTY MANAGEMENT AUTHORITY 6.1 Condition of approval requested for consultation to occur with Office of Strategic Lands for co-ordinated approach to location of easements, and then a revised services and utilities report be submitted.	Sydney Water have agreed in principal to an alternative easement route as shown in the letter from Sydney Water included as Attachment G to this PPR. The precise details of the new easement route will be established during future detailed design stage, and the Statement of Commitments has been revised so that this will be carried out in consultation with the Office of Strategic Lands.

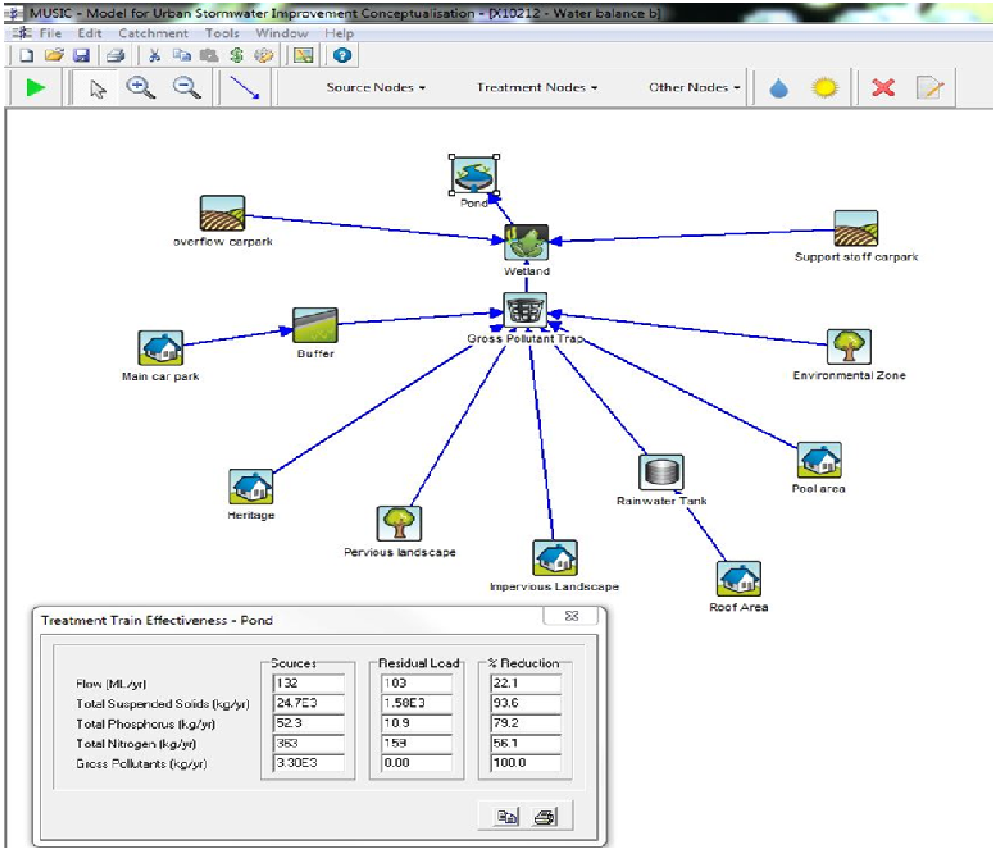
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<p>7. NSW RURAL FIRE SERVICE The Rural Fire Service (RFS) recommends the following conditions.</p> <p>7.1 At the commencement of building works and in perpetuity the property around the buildings adjacent to the areas of 'Remnant' Cumberland Plain Woodland to a minimum distance of 10 metres, shall be maintained as an inner protection area (IPA) as outlined within section 4.1.3 and Appendix 5 of 'Planning for Bush Fire Protection 2006' and the NSW Rural Fire Service's document 'Standards for asset protection zones'.</p>	<p>Ecological Australia prepared the Bushfire Protection Assessment submitted with the Part 3A Application EAR and have prepared the following responses to the issues raised by NSW Rural Fire Service.</p> <p>Table 1 of the Bushfire Protection Assessment in the Part 3A Application EAR shows that the minimum APZ proposed around all enclosed buildings was 20m which exceeds the RFS requirement.</p> <p>Subsequent changes to the proposed revegetation of the Cumberland Plain Woodland within the site now mean that the two machinery sheds will be at least 10 m from the nearby low hazard vegetation, while the remainder of the buildings will be located at least 25 m from nearby low hazard vegetation (as shown in the table below). Accordingly, the proposed development complies with RFS Condition 1.</p> <p>The Statement of Commitments includes a commitment to comply with the recommendations in the Bushfire Protection Assessment in the Part 3A Application EAR.</p>

Government Agency Submissions and Issues	Response						
<p>Footnotes in table:</p> <p>¹ Slope most significantly influencing the fire behaviour of the site having regard to vegetation found. Slope classes are according to PBP.</p> <p>² Predominant vegetation is identified, according to PBP and “Where a mix of vegetation types exist the type providing the greater hazard is said to be predominate”.</p> <p>³ Assessment according to PBP.</p> <p>⁴ Assessment according to AS 3959-2009.</p>	Table - Bushfire threat assessment for enclosed buildings within 100 m of bush fire prone vegetation						
	Direction from building	Slope ¹	Vegetation ²	PBP required APZ ³	Proposed APZ	AS 3959-2009 Construction Standard ⁴	Comments
	Administrative building – vegetation to the north-west	>0-5° downslope	Low hazard vegetation (rainforest)	10 m	25 m	BAL-19	APZ in place within su land
	Machinery storage (north) – vegetation to the north and east				≥10 m	BA -40	APZ in place within su land
	Machinery storage (south) – vegetation to the west				≥10 m	BAL-4	APZ in place within subject land
	Bar – vegetation to the north				30 m	BAL-12.5	APZ in place within su land
	Southern satellite F/B – vegetation to the south	>5°-10° downslope	Forest	35 m	78 m	BAL-12.5	APZ in place within subject land and adjacent to Reservoir f reserve
		>0-5° downslope	Low hazard vegetation (rainforest)	10 m	35 m	BAL-12.5	APZ in place within su land
	Western satellite F/B – vegetation to the south	>0-5° downslope	Low hazard vegetation (rainforest)	10 m	42.5 m	BAL-12.5	APZ in place within su land
	Northern satellite F/B – vegetation to the north-east	>0-5° downslope	Low hazard vegetation (rainforest)	10 m	80 m	BAL-12.5	APZ in place within su land

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<p>7.2. At the commencement of building works and in perpetuity the property around the buildings adjacent to the areas of the 'Forest structure' Cumberland Plain Woodland to the south of the site, for a minimum distance of 35 metres, shall be maintained as an inner protection area (IPA) as outlined within section 4.1.3 and Appendix 5 of 'Planning for Bush Fire Protection 2006' and the NSW Rural Fire Service's document 'Standards for asset protection zones'.</p>	<p>Table 1 of the Bushfire Protection Assessment in the Part 3A Application EAR shows that the minimum APZ between all enclosed buildings and the forest across Reservoir Road to the south was 78 m. The proposed development complies with RFS condition 2.</p>
<p>7.3 A fire management plan is to be prepared that addresses the following requirements: a) Contact person / department and details; and b) Schedule and description of works for the construction of asset protection zones and their continued maintenance – particularly in relation to the retained 'remnant' vegetation within the subject site.</p>	<p>The final Statement of Commitments has been revised to include a new commitment for a Fire Management Plan to be prepared prior to occupation in compliance with RFS condition 3.</p>
<p>7.4 Water, electricity and gas are to comply with section 4.1.3 of 'Planning for Bush Fire Protection 2006'.</p>	<p>As outlined in Section 3.1.6 of the Bushfire Protection Assessment in the Part 3A Application EAR, proposed utilities comply with the requirements of Section 4.1.3 of Planning for Bushfire Protection 2006. Therefore, the proposed development complies with RFS condition 4.</p>
<p>7.5 Property access roads shall comply with section 4.1.3 (2) of 'Planning for Bush Fire Protection 2006'.</p>	<p>As outlined in Section 3.1.4 of the Bushfire Protection Assessment in the Part 3A Application EAR, the proposed property access roads within the development comply with the requirements of Section 4.1.3 of Planning for Bushfire Protection 2006. Therefore, the proposed development complies with RFS condition 5.</p>
<p>7.6 Arrangements for emergency and evacuation are to comply with section 4.2.7 of 'Planning for Bush Fire Protection 2006'. An Emergency/Evacuation Plan is to be prepared detailing the following:</p> <ol style="list-style-type: none"> 1) under what circumstances will the complex be evacuated; 2) where will occupants be evacuated to; 3) roles and responsibilities of persons coordinating the evacuation; 4) roles and responsibilities of persons remaining with the complex after evacuation; and 5) a procedure to contact the NSW Rural Fire Service District Office/NSW Fire Brigade and inform them of the evacuation and where they will be evacuated to. 	<p>The final Statement of Commitments has been revised to include a new commitment for a Bushfire Emergency and Evacuation Plan to be prepared prior to occupation of the proposed development in compliance with RFS Condition 6.</p>

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<p>7.8 New construction shall comply with the relevant section of Australian Standard AS 3959–2009 'Construction of buildings in bush fire-prone areas' and section A3.7 Addendum Appendix 3 of 'Planning for Bush Fire Protection'.</p>	<p>Table 1 of the Bushfire Protection Assessment in the Part 3A Application EAR explains the proposed Bushfire Attack Levels for enclosed buildings ranged from BAL-LOW to BAL-19.</p> <p>The table provided in response to Item 7.1 above provides a reassessment of the required Bushfire Attack Levels for buildings within the proposed development based on Cumberland Plain Woodland revegetation planned for within the site. The construction levels required for buildings within the proposed development now vary from BAL-LOW up to BAL-40.</p>
<p>7.9 The proposed buildings that are not subject to specific construction requirements under AS 3959–2009 may be voluntarily upgraded to improve ember protection. If this option is implemented, then it should be achieved by enclosing all openings (excluding roof tile spaces) or covering openings with non-corrosive metal screen mesh with a maximum aperture of 2 mm. Where applicable, this includes any sub floor areas, openable windows, vents, weepholes and eaves. External doors are to be fitted with draft excluders.</p>	<p>Noted. RFS Condition 9 is not a mandatory condition, but will be considered in the detailed design of buildings assessed as BAL-LOW.</p>
<p>7.10 Landscaping to the site is to comply with the principles of Appendix 5 of 'Planning for Bush Fire Protection 2006'.</p>	<p>Landscaping of the proposed Wet n' Wild site will comply with the requirements of Appendix 5 of 'Planning for Bush Fire Protection 2006' and the RFS document 'Standards for Asset Protection Zones'.</p> <p>The final Statement of Commitments has been revised to include a new commitment for a Fire Management Plan to be prepared prior to occupation that will address landscaping and vegetation on the site in accordance with the PBP guidelines.</p>
<p>8.0 SYDNEY WATER</p>	
<p>8.1 The existing drinking water network does not have capacity to service the proposed development. A new 250 mm water main will need to be laid along Reservoir Road to the site from the existing 300mm water main crossing Reservoir Road (approximately 350 metres to the east of the site).</p>	<p>The Utility Services Report in the Part 3A Application EAR proposes the extension to the potable water supply as stated by Sydney Water. No use of a pump is envisaged.</p>
<p>8.2 The site currently is not connected to Sydney Water's wastewater network. The developer is also required to build wet weather online storage of about 400 cubic metres to reduce the peak wet weather flows.</p>	<p>The Utility Services Report in the Part 3A Application EAR proposes the extension to the wastewater network as stated by Sydney Water. The current high level design of the parks wastewater system takes into account the restrictions as stated in the Sydney Water submission.</p> <p>The final Statement of Commitments has been revised with a new commitment for the waste water system on site to include wet weather online storage of about 400 cubic metres.</p>

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<p>8.3 Sydney Water has a proposed 1200 mm pressure main route and easement through the development site. In March 2010 Sydney Water wrote to the landowner outlining the conditions under which Sydney Water would agree to relocate the pressure main route and easement. An alternative route along the northern boundary of the site will be utilised, subject to them meeting prescribed conditions.</p>	<p>Sydney Water have agreed in principal to an alternative easement route as shown in the letter from Sydney Water included as Attachment G to this PPR.</p>
<p>8.4 The developer has requested to use Sydney Water's 1200 mm stub main under the M4 as a utility conduit. Sydney Water is not opposed to this use, however they request the developer to provide more detail about the intended use of the stub.</p>	<p>The use of Sydney Water's existing stub main under the M4 as a conduit for utilities such as waste water will be discussed further with Sydney Water at a future date in detailed design phase.</p>
<p>8.5 Request for further information on how weeds will be managed at the site to ensure that there is no impact or increased pressure on the Cumberland Plain Woodland at the Prospect Reservoir site.</p>	<p>Weeds on the site will be managed through the implementation of a Vegetation Management Plan (VMP) for the site. The Statement of Commitments includes a commitment to prepare a VMP.</p>
<p>8.6 Request for further information on what impact the construction and operational vibrations will have on the water and wastewater mains within and adjacent to Prospect Reservoir</p>	<p>Vibration is not expected to be an issue given the large separate distances between the proposed development and the water and wastewater mains associated with Prospect Reservoir.</p>
<p>8.7 Request for further information on what noise and visual impact the proposed development will have on the picnic areas within Prospect Reservoir.</p>	<p>The proposal will not have a visual impact upon picnic areas within Prospect Reservoir as these sites are generally situated within areas of Cumberland Plan Woodland. In response to a number of submissions, the final Landscape Plan attached to this PPR includes additional planting along Reservoir Road frontage which will provide additional buffer screening to the Prospect Reservoir reserve to the south.</p> <p>The Noise and Vibration Assessment included within the Part 3A Application EAR included an assessment of potential noise impacts upon nearby rural residential properties. The picnic areas within Prospect Reservoir are located a similar distance from the proposed water theme park, therefore noise impacts are expected to be the same. The Noise and Vibration Assessment finds that the operation of the water them park will comply with relevant noise criteria with the exception of potential for slight noise exceedances after 10pm at night.</p>
<p>8.8 Request for further information on what impact increased traffic will have on the maintenance requirements for the reservoir and/or emergency vehicle access to the site.</p>	<p>Vehicular access to Prospect Reservoir is available from a number of different directions surrounding the reservoir including Reservoir Road to the north. Reservoir Road will continue to operate at a good level of service with increased traffic from the proposed Wet 'n' Wild development. It is therefore unlikely that site generated traffic will have a significant impact on maintenance/emergency vehicle access to Prospect Reservoir.</p>
<p>8.9 Sydney Water does not support the inclusion of bushland from Prospect Reservoir in the proposed Asset Protection Zone.</p>	<p>The APZs for the proposed development are already in place on site within the subject land and surrounding roads/ allotments, and are not required in Prospect Reservoir reserve.</p>

Government Agency Submissions and Issues	Response																								
8.10 Sydney Water will further assess the impact of the development when the proponent applies for a Section 73 Certificate.	Noted.																								
9.0 NSW OFFICE OF WATER	Brown Consulting engineers prepared the Water Cycle Management Plan included in the Part 3A Application EAR and have provided the following responses to the issues raised in the submission from Office of Water.																								
9.1 The proposal needs to demonstrate it can achieve the proposed water supply before approval can be granted.	<p>The water balance calculations carried out using the MUSIC water quality modelling software package and are shown below to demonstrate that the stated reuse volume can be achieved.</p>  <p>The screenshot displays the MUSIC software interface. The main window shows a diagram of a water cycle with various nodes connected by arrows. The nodes include: Pond, Wetland, Gross Pollutant Trap, Main car park, Buffer, Heritage, Pervious landscape, Impervious Landscape, Rainwater Tank, Roof Area, Pool area, Environmental Zone, Support staff carpark, and overflow carpark. A 'Treatment Train Effectiveness - Pond' window is open, showing a table of pollutant loads and reduction percentages.</p> <table><tr><th></th><th>Source</th><th>Residual Load</th><th>% Reduction</th></tr><tr><td>Flow (ML/yr)</td><td>132</td><td>103</td><td>22.1</td></tr><tr><td>Total Suspended Solids (kg/yr)</td><td>24.7E3</td><td>1.58E3</td><td>93.6</td></tr><tr><td>Total Phosphorus (kg/yr)</td><td>52.3</td><td>10.9</td><td>79.2</td></tr><tr><td>Total Nitrogen (kg/yr)</td><td>383</td><td>159</td><td>58.1</td></tr><tr><td>Gross Pollutants (kg/yr)</td><td>3.30E3</td><td>0.00</td><td>100.0</td></tr></table>		Source	Residual Load	% Reduction	Flow (ML/yr)	132	103	22.1	Total Suspended Solids (kg/yr)	24.7E3	1.58E3	93.6	Total Phosphorus (kg/yr)	52.3	10.9	79.2	Total Nitrogen (kg/yr)	383	159	58.1	Gross Pollutants (kg/yr)	3.30E3	0.00	100.0
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	<p>The results of the water balance show a flow coming off the post development site of 132ML per year with reuse for irrigation and loss due to evapotranspiration in the wetland and pond leaving a residual flow of 103ML per year leaving the site. The reasons only 95% of irrigation water is stated as being available from the pond whilst a large residual flow exists is the periods of dry weather that are contained in the rainfall data set used and the storage volume in the pond.</p> <p>More information on the water balance calculations can be found in the Water Cycle Management Plan in the Part 3A Application EAR.</p>
9.2 Provide further detail on any existing structure/s (date of construction, location, purpose, size and capacity, the legal status/approval for existing structure/s)	<p>The date of construction of the existing water storage dam structures on the site is unknown. Their purpose has been to support previous agricultural use of the land and most recently for stock water. The existing water storage dam structures are proposed to be removed as part of the proposed development.</p>
9.3 Provide further detail on any proposal to change the purpose of existing structures.	<p>The existing water storage dam structures are proposed to be removed.</p>
9.4 Provide further detail if any remedial work is required to maintain the integrity of the existing structure/s.	<p>Not applicable as existing dam structures are to be removed.</p>
9.5 Provide further detail on the purpose, location and design specifications for any proposed structures.	<p>The purpose, location and design of the proposed water structures are described clearly in the relevant Part of the Part 3A Application EAR including the Water Cycle Management Plan outlined in Section 3.6 and detailed in Appendix B, and the stormwater management plan in Appendix U.</p> <p>The purpose of the proposed water pond structure is threefold:</p> <ul style="list-style-type: none"> ■ The treatment of site runoff; ■ Flood attenuation for site runoff to Upper Parramatta River Catchment Trust (UPRCT) requirements; ■ Retention of water for use as irrigation water. <p>The key design specifications for the pond and wetland structures at this stage of development have been the UPRCT <i>'On-Site Stormwater Detention Handbook'</i> and Blacktown City Councils, <i>'Engineering Guide for Development'</i> and <i>'WSUD handbook'</i>. Various other guidelines have also been consulted and these have been listed in the reference section of the Water Cycle Management Report.</p>
9.6 Provide further detail on the size and storage capacity of structures.	<p>The proposed storage capacity of the water reuse pond to the outlet level is 3.304 ML.</p> <p>The dam wall is approximately 100m long with a maximum height of 3m. The base width of the dam wall is 9m and the top width is 3m.</p> <p>Note: The embankment is very large for the storage capacity. This is due to the flood attenuation volume requirement of the UPRCT this results in a large volume above the outlet level from the pond which is short term storage for flood control only.</p>

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9.7 Provide a calculation of the Maximum Harvestable Right Dam Capacity (MHRDC).	<p>Given the land is not zoned rural and a very wide range of urban development is allowed on the land, Brown Consulting do not consider that the MHRDC applies to the development. However, the MHRDC is given below and a full explanation of how the storage meets the purpose of the MHRDC requirements is included further below under Item 9.11.</p> <p>Site area = 25.5ha : MHRDC Multiplier = 0.13MI/ha : $25.5 \times 0.13 = 3.315$ MI</p>
9.8 Provide further detail regarding how the structure/s are affected by flood flows.	<p>As discussed in section 5.3 of the Water Cycle Management Plan in the Part 3A Application EAR, flows up to and including the 100 year ARI are attenuated in the storage pond and hence do not pose any risk to the embankment. The PMF flood level of 77.2m is 200mm above the embankment wall top level of 77.0m. The proposed construction of the embankment is a sandstone retaining wall with a 1 to 1 face slope on either side with a compacted clay core between them. The rock retaining wall which forms the face of the embankment will be stable with a 200mm flow depth passing over it and will be sufficiently keyed into natural ground on the downstream slope so as not to become undercut.</p> <p>Note: The final stormwater management plan attached to this PPR has corrected the 100 year ARI flood level and embankment wall level information.</p>
9.9 Provide further detail on any proposal for shared use, rights and entitlements of the structure/s.	No shared use is proposed.
9.10 Provide information if the proposed development has the potential to bisect the structure/s.	There is no potential to bisect the water structures proposed in the development.
9.11 Does the dam exceed the Maximum Harvestable Right Dam Capacity?	<p>The storage capacity of the proposed water pond is 3.304MI and the calculated MHRDC for the site is 3.315MI, so by this simple test the dam does not exceed its MHRDC.</p> <p>However, the NOW correctly notes a large abstraction during the course of a typical year from the dam for irrigation purposes of approximately 20MI. The MHRDC is 10% of the runoff volume from the site in its current rural condition. Meaning the expected annual runoff from the site is 33.15MI in its current rural condition.</p> <p>Annual rainfall on the development site is approximately 218.1ML from the rainfall data used in the water balance calculations.</p> <p>The proposed development of the site will result in approximately 4ha of impervious area in the main car park, 0.6ha of impervious roof area, 5.7ha of impervious hard landscaping and 4.2ha of area in staff and overflow car parking that, though grassed, will have a compacted base capable of carrying vehicle traffic which will be effectively impervious, i.e. more than half the site will become impervious due to development. As can be seen in the MUSIC modelling results presented in point 9.1 the flow reaching the pond is 132MI post development and directed to the Blacktown Creek is 103MI.</p> <p>It can be seen from these runoff values that even with the large abstraction for irrigation, the flow directed to the Blacktown creek post development is increased from 33.15MI to 103MI meaning there is no danger of a loss of environmental flows or adverse impact on downstream water abstractions and far greater than 90% of the annual runoff of the rural site continues to be directed to the creek.</p>

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9.12 The NSW Office of Water recommends advice be obtained from the DECCW in relation to the proposal of the removal of Cumberland Plain Woodland.	DECCW have made a submission which is addressed above in Section 5.