Response to Agency Submissions

	Key issue raised	Crown response
Trans	sport for NSW	
1	The proposed changes to George Street as a result of the proposed CBD Light Rail will increase traffic movements on the road network located within and adjacent to the Barangaroo Precinct. These changes have not been taken into account within the traffic analysis for the proposed development.	As noted in the TMAP, Transport for NSW is currently preparing a meso-scopic traffic model which considers the impacts on CBD streets following the completion of the Sydney light rail project. The EIS for the light rail project (specifically Technical Paper 1 – Transport Operations Report) provides no specific details with respect to changes in traffic volumes on Hickson Road adjacent to Barangaroo following the closure of George Street to general traffic. It should be noted that the Sydney City Centre Capacity Improvement Plan (RMS, November 2014) provides some detail with respect to the redistribution of traffic following the closure of George Street to general traffic. This plan illustrates the existing traffic displaced from George Street will be redirected onto adjacent north-south corridors, those being: Kent Street Clarence Street Macquarie Street Macquarie Street Macquarie Street Capacity improvements along both Clarence Street and Kent Street are proposed which are forecast to mitigate the impacts of this redistributed traffic. Importantly Hickson Road and Sussex Street (at the northern end of the CBD) are not identified as corridors expected to take displaced traffic from George Street. Therefore the traffic flows used for the modelling in the TMAP are considered appropriate to understand the impacts associated with the Crown Sydney Hotel DA. Refer to Appendix E.
	 Transport for NSW would like to see a detailed Construction Pedestrian and Traffic Management Plan be developed prior to the commencement of construction which will take into account other construction projects in the Barangaroo and Wynyard precincts. The plan should be prepared in consultation with TfNSW, Roads and Maritime Services and City of Sydney. The Wynyard Walk project is expected to be completed and opened in 	A detailed Construction Pedestrian and Traffic Management Plan can be prepared and submitted to Transport for NSW prior to the commencement of construction. This can be conditioned as part of any future development consent, as has been the approach taken to date with Das at Barangaroo. A cumulative traffic assessment has been undertaken which considers the impacts of the Crown Sydney construction
	2016. It will overlap with stage 1C Basement Excavation works. Wynyard Walk should be included in the assessment of construction impacts.	project in the context of ongoing works within the Barangaroo and Wynyard precincts, including Wynyard Walk. This assessment concludes the Crown Sydney construction works will have a negligible impact on the operation of the road network compared to the current environment. The assessment also considers pedestrian and cyclist movements during the construction works. The assessment concluded the construction related impacts, particularly with respect to pedestrians and cyclists, could be appropriately managed.

No footpath closures or changes to existing bicycle routes are considered necessary to facilitate the construction works. The pedestrian environment in the Barangaroo/Wynyard precinct has recently been improved through the opening of the City Walk Bridge and installation of traffic signals at the Hickson Road / Napoleon Street intersection. The pedestrian network will be further enhanced following the opening of the Wynyard Walk Bridge – expected in late 2015. Refer to Appendix E.
The Construction Traffic Management Plan has been updated accordingly and is provided at Appendix G .
A daily profile of activity was generated based on the current levels of traffic movements (both valet and self park) generated by the Crown Melbourne site over the course of an entire year. The data was moderated based on the number of members anticipated for the hotel relative to the total number in Crown Melbourne. Refer to updated Transport Assessment Report at Appendix H .
A total of 83 secure bicycle parks will be provided for Crown Sydney staff members within the basement. These are to be located in a secure lockable compound (e.g. bike cage) within the Crown Sydney basement. Complementing this secure bike parking, end of trip facilities will also be provided for Crown Sydney staff. This will include 83 lockers (1 per bike space), 6 showers and male and female changing rooms. Some public bicycle parking (e.g. u-rails) will be provided in the public domain along Lime Street as part of this DA. Currently 37 spaces have been allocated for public use. These will mainly be utilised by short-term visitors to the precinct, and be located within close proximity to the building entries. The Traffic Assessment Report has been updated in response to this and provides further details and justification of the proposed end of trip facilities. Refer Appendix H .
The Traffic Assessment Report has been updated in response to these requirements. Refer Appendix H .

	 Section 5 – CBD and South East Light rail is expected to take four years to complete Section 5.3 – some of the statements are incorrect. The recently released New CBD Bus Network brochure should be reviewed and the text amended. Section 5.3 – figure 33 does not reflect the recent release of information on the new CBD bus network. 	
	Travel Demand Management Report TfNSW request that the following amendments be made to reflect the current policies and the status of the transport projects: Section 2.3.2 – Construction is scheduled to commence in late 2015 and will take four years to complete Section 2.4.3 and 2.4.4 – Latest information in relation to the Sydney Metro needs to be included in Section 5 as per public announcements. Section 2.4.2 – The South West Rail Link is complete and now open Section 2.5 – Latest information in relation to Barangaroo Ferry Hub needs to be included in Section 5 as per public announcements Section 2.6 – Some of the statements are incorrect. The recently released New CBD Bus Network brochure should be reviewed Section 2.6 – Figure 14 does not reflect the recent release of information on the new CBD bus network	The Travel Demand Management Report has been updated in response to these requirements. Refer Appendix F .
	Construction Traffic Management Plan TfNSW requests that the following amendments be made: Section 3.2 – Wynyard Walk project is not expected to be completed by September 2015 as reported in Table 3. Wynyard Walk is now expected to be completed and opened in 2016 Section 4.4.4 – Level of Service is reported instead of Average Vehicle Delays in Table 7.	The Construction Traffic Management Plan has been updated in response to these requirements. Refer Appendix G .
Roads	and Maritime Services	
2	Section 3.55 refers to a 2015 opening of Wynyard Walk. The public opening date for Wynyard Walk is 2016, although it is understood the bridge is likely to open in 2015. The tunnel will not be open until next year.	Noted.
	 Section 5.1 refers to NSW 2021 State Plan. The State Plan was updated in September 2015 after the EIS was written. 	Noted.
	 Section 5.10.1 states that traffic generation as a result of the 	Noted.

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development are estimates to be 75 vehicles an hour during the AM peak period and 213 vehicles an hour during the PM peak period, both of which are considerable in a CBD environment, particularly one that is already under pressure from high demands. The impact of these movements will need to be carefully considered particularly in relation to intersection coordination, control and performance along Hickson Road and Sussex Street and the roads adjoining them.	
Section 5.10.2 and Table 21 refers to the impacts of the proposed development in comparison to the modelling undertaken in the 2008 TMAP for Barangaroo South. The logic of this relative comparison is understood. Confirmation of how impacts of other projects and developments have been considered that may not have been recognised in the 2008 TMAP and have subsequently evolved, such as the Sydney Metro, the new bus services plan, Walsh Bay redevelopment, SICEEP, CBD and South East Light Rail, One Carrington Street, Overseas Passenger Terminal growth in operations amongst other changes. Additionally, site remediation of Hickson Road is proposed to commence shortly and will impact on available street capacity.	A cumulative traffic assessment has been undertaken which considers the operation of the road network following the development of Crown Sydney in conjunction with current and future developments in the Barangaroo precinct. This includes the full development of Barangaroo South, Barangaroo Central and Headland Park. The remediation works along Hickson Road are scheduled to be completed prior to the opening of the Crown Sydney development.
Section 5.10.4 proposes that peak demand for parking of the proposal will make use of expected available parking in the basement car park on a Friday or Saturday evening. What mitigation will be implemented if the parking is not available as expected or does not meet the anticipated demands?	It is proposed that during peak demand periods when on-site parking is at capacity, Crown Sydney management will be on-site to direct patrons to nearby available car parking areas in the precinct. This is similar to the approach currently taken by The Star at Pyrmont where parking demand exceeds supply on Friday and Saturday evenings. The additional demand for parking during these peak periods is managed through the external supply of parking in the Darling Harbour precinct such as the Harbourside car park. Outside of these evening peaks, demand is considerablylower, and thus casino parking is largely contained on site. This results in an efficient allocation of parking across the Barangaroo precinct. The level of parking demand will ultimately be constrained by the supply of parking in the precinct. Alternative transport modes such as bus, heavy rail and metro will be promoted to patrons.
Section 5.19 notes that a navigation impact assessment relating to "Modification 8 of the Barangaroo Concept Plan - MP06_0162 MODS', which includes a number of in water structures, was included in the supporting documentation for the proposal (SSD6957). However it appears these in water structures will be located outside of the "application site boundary" and will not form part of the current application. While RMS does not wish to raise any navigation safety issues in relation to the current application it requests that it be consulted prior to the determination of any future planning application seeking approval for in water structures forming part of Modification I	Noted.

of the Barangaroo Concept Plan.	
Section 5.30.4 stipulates that traffic control at personnel controlled access points will be done so in accordance with Condition of Approval D4(c) of MP10_0023. This condition refers to a maximum of no more than six vehicles being queued at an access point. The dynamics of the network and area have changed considerably since this condition was written and it is not considered to be an appropriate impactany longer, particularly with traffic lights and through connecting roads in place in an operational Barangaroo South development. Queuing should not generally be permitted in Hickson Road. Further, it will not be possible to queue vehicles in Hickson Road when site remediation of Hickson Road is being undertaken as per SSD14 6617.	Noted. Where practicable, no truck queuing is to occur on Hickson Road.
Travel Demand Management Plan Section 2.4.4 needs to be updated to reflect the changes announced on 23 June 2015 for a metro station to be built at Barangaroo as part of the Sydney Metro project.	This has been updated in the latest revision of the Travel Demand Management Plan that is included at Refer Appendices E and F .
Transport Assessment ■ Section 3.2 refers to the impacts of the proposed development in comparison to the modelling undertaken in the 2008 TMAP for Barangaroo South. The logic of this relative comparison is understood. Confirmation of how impacts of other projects and developments have been considered that may not have been recognised in the 2008 TMAP and have subsequently evolved, such as the Sydney Metro, the new bus services plan, Walsh Bay redevelopment, SICEEP, CBD and South East Light Rail, One Carrington Street, Overseas Passenger Terminal growth in operations amongst other changes. Additionally, site remediation of Hickson Road is proposed to commence shortly and will impact on available street capacity.	A cumulative traffic assessment has been undertaken which considers the operation of the road network following the development of Crown Sydney in conjunction with future developments in the Barangaroo precinct. This includes the development of Barangaroo South, Barangaroo Central and Headland Park. The remediation works along Hickson Road are scheduled to be completed prior to the opening of the Crown Sydney development. Refer to Appendix E.
Construction Traffic Management Plan Section 2.3 and Table 1 of the report has a November 2011 and July 2013 traffic volume comparison and notes a reduction in flows. The cruise passenger terminal stopped operating at Barangaroo on 1 April 2013 and obviously would likely have had an impact on traffic flows being reduced. Given how much change has happened at the site and the area around it recently, the 2011 and 2013 comparison is not	Noted – comparison to 2011 traffic counts removed from updated report. Refer to Appendix E and G .

- Assessment or consideration of bus movements in the area that were recently announced by Government to service Barangaroo and Walsh Bay from 4 October 2015 do not appear to have been considered.
- Traffic flow capacityalong Hickson Road will need to be maintained to meet the prevailing demands, particularly with the activation of Barangaroo South and traffic light operations at the intersection of Sussex Street /Hickson Road/Napoleon Street. It is highly likely that new traffic lights will be operating in Hickson Road at other intersections in future and the Hickson Road remediation works will potentially impact capacity The impacts of these will need to be considered to ensure that impacts on access and Hickson Road operations can be suitably managed.
- 5.30.4 stipulates that traffic control at personnel controlled access points will be done so in accordance with Condition of Approval D4(c) of MP10_0023. This condition refers to a maximum of no more than six vehicles being queued at an access point. The dynamics of the network and area have changed considerably since this condition was written and it is not considered to be an appropriate impact any longer, particularly with traffic lights and through connecting roads in place in an operational Barangaroo South development. Queuing should not generally be permitted in Hickson Road. Further, it will not be possible to queue vehicles in Hickson Road when site remediation of Hickson Road is being undertaken as per SSD14 6617.

Section 5.3 of the document has been updated to consider bus movements in the Barangaroo precinct.

Noted. A cumulative traffic assessment has been undertaken which considers the impacts of the Crown Sydney construction project in the context of ongoing works within the Barangaroo and Wynyard precincts. This assessment concludes the Crown Sydney construction works will have a negligible impact on the operation of the road network compared to the current environment. Refer to the updated Traffic Assessment Report at **Appendix E**.

Noted. Where practicable, no truck queuing is to occur on Hickson Road.

Department of Primary Industries

Clarification the details of the calculations of the ongoing seepage through the basement wall and describe the fresh and saline groundwater fluxes at the site in relation to 3.3 Groundwater and 3.3.1 Operational Phase

A response to this has been prepared by AECOM and is located at **Appendix J**. The calculations of the on-going seepage through the basement, whether it be groundwater / freshwater coming in from up gradient or saline water coming in from the harbour, is based on the strict performance based specification prepared by Crown for the Stage 1C basement. This specification requires that ground water ingress does not exceed 0.75 l/min across the entire basement wall upon completion of the structure. This is equivalent to the requirement that ingress shall not exceed 1KL per day (24 hours x 60 minutes x 0.75 l/min = 1080 L / day). This criterion was set based on the practical and achievable outcomes of the contractors experience during the construction of the basement in Stage 1A.

Fresh and saline groundwater fluxes on the site were considered in 2010 by AECOM in a Groundwater Discharge Study. The objective of the Groundwater Discharge Study was to support development of the Remedial Action Plan (RAP) for the Declaration Site (which is east of the Stage 1C site) and to estimate likely attenuation factors for contaminant mass flux due to the mixing of seawater prior to discharge. The report concluded: the total inundation of sea water occurs within a 10 m wide tidal prism located immediately behind the caisson wall (located directly adjacent to Darling Harbour) during incoming and outgoing tides; and, that of the total flux towards the harbour in any given ebb tide, only 10% represented fresh groundwater.

		The performance based specification prepared by Crown for the Stage 1C basement includes a requirement that the design of the basement wall be resistant to the potentially deleterious effects of saline water.
NSW I	Police	
4	NSW Police will continue to work with Crown Sydney Hotel Resort to ensure an Alcohol and Security Management Plan is developed to a high standard.	Noted
Fire a	nd Rescue NSW	
5	There will be an increased risk of a fire starting within the building because smoking will be permitted within the development.	A custom Fire Safety Strategy has been prepared for the proposed building by Core Engineering Group and is provided at Appendix C .
	The fire safety strategy should not be limited by the Deemed to Satisfy of the Building Code of Australia. FRNSW would hope that any future conditions placed on the development enable FRNSW to advocate for the adoption of the world's	A custom Fire Safety Strategy has been prepared for the proposed building by Core Engineering Group and is provided at Appendix C .
	best safety practices	The scope of the Fire Safety Strategy is to detail the nominated non-complying BCA DtS provisions with the performance requirements of the BCA and provide methodologies for establishing a workable and safe Fire Safety Strategy through a trial design.
	FRNSW should be listed as a stakeholder and be consulted with during the design and construction of the building, and also post construction.	Noted.
Herita	ige Council of NSW	
6	The proposal would substantially alter the character and skyline profile of Millers Point and its surrounding area, including long views of Sydney Harbour foreshore from various vantage points	A detailed Visual Impact Photomontage Study of the proposed development has been carried out by Virtual Ideas and was provided as Appendix E to the Architectural Design Statement. In conducting this analysis Virtual Ideas prepared photo-realistic montages of the proposal from 20 different view angles and distances including within Barangaroo, Darling Harbour and wider Sydney Harbour.
		As shown by these photomontages the proposed development will be clearly visible and alter the skyline as viewed from Millers Point. In addition to this the proposed building will also be visible in the view plane when viewed from longer views within and around the Harbour and other vantage points within Sydney. While the building will be visible it is not considered that the proposal will 'substantially' alter the skyline profile of Millers Point as viewed form other locations. The location of Millers Point near the Harbour Bridge and CBD ensure that it is always viewed in the context of a CBD backdrop. The addition of the Crown Sydney Hotel Resort Building will extend the extent of the CBD backdrop to Millers Point but will not 'substantially alter' the nature and characteristic of these views. Further to this it is considered that the high quality nature of the building design will in fact add further visual interest to views of Millers Point and its surrounds when seen from other parts of Sydney, and for this reason it is considered that the building will have a positive effect on the view from surrounding areas.
		We also note that the Crown Sydney Hotel Resort Building has been designed to fit entirely within the building envelope set out within Concept Plan Modification 8, which is also accompanied by a detailed visual impact assessment.
		For full details refer to the Visual Impact Photomontages provided at Appendix E of the Architectural Design Statement, and the View Impact Analysis Report prepared by JBA and provided at Appendix D of the Environmental Impact Statement.

The proposal would alter significant views from a number of State Heritage Register items and conservation areas in close proximity including: Grafton Bond Stores MSB Stores Complex Millers Point and Dawes Point Village Precinct and Conservation Area	There will inevitably be an impact on views presently available from the Grafton Bond Stores and the MSB Stores Complex, by virtue of the fact that both of these buildings are located along Hickson Road and are situated to the east of the Barangaroo precinct. Whilst this is the case it is noted that the proposed residential towers will sit between the Crown Sydney Hotel Resort building and the heritage listed buildings. The proposed building will therefore be largely screened from view and will have little real impacton views from these buildings. The Crown Sydney Hotel Resort Building is designed to fit within the building envelope set by ConceptPlan Mod 8, which is also accompanied by a detailed visual impact assessment. As ConceptPlan Mod 8 establishes the height, width and location parameters for the hotel and residential buildings, it is considered that this is the appropriate application to address view impact concerns of this nature. As an aside we note that clear direct views from the Grafton Bond Stores will be available along Watermans Quay down to Watermans Cove, while a view will also be available from the MSB Stores Complex along Barton Street. With regard to the Millers Point and Dawes Point Village Precinct and Conservation Area, as illustrated by the photomontages the proposed development will undoubtedly be clearly visible from this area. Whilst this is the case the addition of the building to the skyline will not have an adverse impact on the integrity of the conservation area or a person's ability to appreciate its heritage qualities. This conservation area sits adjacent to the largest CBD in Australia and there must be a reasonable expectation that views from Millers Point to the surrounding area will change over time. Further to this it is also considered that the high quality nature of the building design will in fact add further visual interest to views from Millers Point, and for this reason it is considered to have a positive effect in this regard.
The proposal would interrupt western views from Sydney Observatory and its setting within Observatory Park which is significant for its elevated site and spectacular vistas towards the harbour.	A detailed Sky View Impact Assessment was carried out by Lend Lease in conjunction with UNSW Global and was submitted with the development application for the Crown Sydney Hotel Resort. Following a detailed assessment of the impacts on the Observatory UNSW Global concluded that "the presence of the building is not expected to have a major detrimental impact on the Observatory's night time activities." We also note that this matter has also been dealt with in extensive detail as part of Concept Plan Mod 8. With regard to the setting of Observatory Park and its views towards the harbour, the location of the proposed Crown Sydney Hotel Resort building to the south of the Observatory and the Park ensures that views to the harbour are largely unaffected by the proposal. Indeed the only view that is affected is the view south from the park towards Darling Harbour and the Barangaroo site, this view will be impacted as a result of the proposal but it will not result in any blockage of a view that would constitute a 'spectacular harbour view' as suggested by the Heritage Council of NSW.
Sydney Water 7	Natod
7 Ensure the appropriate applications to gain access to Sydney Water's systems and request formal requirements.	Noted

The approval will be dependent on the capability of Sydney Water's systems to service the revised development demands, and will be assessed at application	
phase.	
Sydney Water cannot guarantee that variations to the existing Environmental Protection Licence will be approved	Noted
The environmental approval for any work associated with Sydney Waters systems will need to be covered under the Environmental Impact Assessment approval.	Noted
Recommend to continue to work with Sydney Water to confirm servicing advice and development needs.	Noted

Museum of Applied Arts and Science

8 Sydney Observatory

- Sydney Observatory is recognised by UNESCO as a historically significant site and the development will affect viewing of Omega Centauri for part of the year.
- Light spill from the development and city activity has the potential to affect night viewing at all times of the year.
- The Museum of Applied Arts and Sciences and Sydney Observatory are keen to work with neighbours and those with a role in the planning to create a wider strategic plan to physically and economically connect and promote the attractions across the wider precinct.
- There will be a loss of 8% of the presently available viewing time across the year in session one and 11% of the presently available viewing time in session two.
- The EIS claims the viewing schedule within each session can be adjusted to enable the affected targets to be viewed first. This cannot be achieved across multiple group sessions in the August-October period. To maximise viewing in this period, the program is structured to provide 2 or 4 groups of 20 within a 90 minute period in each session, based on 2 sessions per night.
- The development will spill light to the sky reducing the contrast between the background sky and object viewed from Sydney Observatory making objects more difficult to view.
- The EIS does not reference the impact of light spill on Sydney
 Observatory from the eastern facades of the development which will
 feature extensive use of glass, to maximise views to the city and
 Sydney Harbour. More details in relation to lighting of this façade is
 requested.
- The opportunity to significantly reduce the impact of light spill on the operations of Sydney Observatory is something that should be

With regard to the potential impact on the operations of the Sydney Observatory, a detailed Sky View Impact Assessment was carried out by Lend Lease in conjunction with UNSW Global and was submitted with the application. Following detailed analysis UNSW Global notes that from the list of sky targets of concern highlighted by the Sydney Observatory, only the viewing of Omega-Centauri will be affected by the presence of the proposed Crown Sydney Hotel Resort building.

The Omega-Centauri (NGC5139) globular star cluster passes through the area of night sky that is obstructed by the proposed building during late August, September and early October each year. During these months (or part months) Omega-Centauri is obstructed or potentially affected by light spill from the proposed development for a maximum of 73 minutes on a particular night.

The Sydney Observatory runs two viewing sessions each night during this period (6:15pm and 8:15pm), with each session lasting for 90 minutes. Hence viewing of Omega-Centauri is affected by the proposed building for only parts of the observation session times during the time it is affected. The SVLA highlights that if the Observatory was able to coordinate their viewing sessions at particular times they could significantly reduce the number and length of impact on these sessions caused by the proposed building. In addition to this the report notes that:

- In general, viewing targets in the vicinity of the sky obstructed by the proposed building would be done under far from ideal observing conditions, and that the image quality would be relatively poor on most nights; and
- The Observatory is no longer a research facility, with the observation carried out at the facility being for public education purposes. Observing for public outreach activities does not have the same demanding requirements as observing for research purposes, and that observing from the centre of the City is still considered satisfactory for public education purposes.

In light of the above UNSW Global conclude that despite impacting on an iconic sky object for parts of the some observing sessions over two months of the year, the "presence of the proposed building is not expected to have a major detrimental impact on the observatories night time activities."

Crown Sydney Hotel Resort

Appendix A – Detailed Response to Submissions

- addressed through sensitive lighting design for both internal and external lighting schemes.
- Sydney Observatory would like an ongoing commitment that we will be consulted with as more detailed proposals for lighting are developed at the application stage.

We also note that the matter of sky view impact has also been dealt with in extensive detail as part of Concept Plan Mod 8, including the preparation and submission of a new and separate report that was submitted to the DP&E as part of the 'Response to Submissions' for Concept Plan Mod 8. This supplementary report prepared by UNSW Global maintains the previous conclusions and notes while there is an impact on the ability to view a limited set of target objects, it is considered that the impact is limited and may be appropriately mitigated through the manner in which viewing sessions are managed and the selection of objects targeted for viewing. The report maintains the view that impact is limited to only a small portion of the year and for only limited portions of the viewing times. The report additionally highlights that weather conditions, Bright of Moon, existing urban conditions and the nature of the Observatory's instruments provide mitigating considerations in this respect, and reiterates that viewing sessions may be organised to target alternative objects in order to maintain a high quality viewing experience and suggests a range of alternative targets in this respect.

With regard to the matter of potential light spill impacts, a detailed lighting strategy and design is yet to be prepared for the building and as such a detailed light spill assessment is unable to be carried out using quantitative data at this time. Such a requirement can be conditioned as part of any future development consent, which stipulates that a light spill assessment is to be prepared and light spill impacts taken into consideration as part of any future lighting design strategy.

Response to Local Government

Key issue raised **Crown response** City of Sydney Council Public domain Further clarification of the varying dimensions of the promenade around the proposal are provided in the plan and Maintain the continuity of the existing 30 metre wide waterfront diagrams prepared by WEA and included at Appendix D. As shown within this plan the primary western building façade is set back at least 25m from the promenade edge, and 30m from the edge of the proposed deck extension that runs Develop concepts or design principles for the waterfront promenade's along the majority of the building's waterfront frontage. A number of building elements sit within the setback, including: structures. The Barangaroo Central promenade should continue along the Crown frontage to unify the public domain. Greater clearance at ground level, building activation in the form of alfresco dining areas for restaurants, cafes and bars may should be provided between the sea wall and any related Crown extend to within 16m of the existing harbour edge (i.e. within a zone of up to 9m). structures. A third row of trees should be preserved. at podium levels above ground, terraces, open balconies and the like may extend to within 19m of the existing harbour edge (i.e. within a zone of up to 6 metres). The tower form at ground is predominantly 25m from the harbour edge, with a very small section extending to within 20m as shown at Appendix D. The primary southern building facade is to be setback an average of at least 17m from the proposed Globe Harbour edge. Within the minimum average 17m setback, building activation and articulation in the form of restaurants, cafes,

	terraces, open balconies and the like may extend to within 12m of the proposed Globe Harbour edge (i.e. within a zone of up to 5m). The variation to the width of the promenade is considered to add interest and articulation to the waterfront whilst still enabling uninhibited and uninterrupted pedestrian and cyclist access along the foreshore. The incorporation of a 5m widdeck/pontoon extension area will also add further interest and articulation to this space, ensuring that it provides ample opportunity for people to rest, relax and take in the surrounds.
Transport and Access 610 car spaces is excessive and not supported by public investment in existing and improved public transport initiatives in the vicinity. The government's announcement of a metro rail line with a station at Barangaroo supports a radical reduction in public and private car parking.	Crown has sought to achieve an appropriate balance between providing sufficient car parking to cater for the needs of the development and its users/occupants, whilst keeping sustainability a key priority by promoting the use of public transport in the future. The proposed 610 car spaces are considered necessary to service the needs of the proposal and consist of 500 spaces to service the hotel and 110 spaces to service the needs of the residential apartments. The government announcement of the metro rail like will improve the accessibility of the Barangaroo Precinct and as a result it is expected more people are likely to visit the area on a frequent basis. Despite the provision of this transport lir it is still anticipated that the demographic of a VIP gaming facility and associated facilities of the Crown Sydney Hotel Resort building will still also look to drive to the area by private vehicle. With this in mind it is important to ensure that adequate car parking is provided on site to serve the buildings functional needs. Further details are provided in the Supplementary Traffic Response and updated Traffic Assessment Report included at Appendices E and H .
The proposed parking spaces are double the allowance under the Sydney Local Environmental Plan 2012. The SSDA proposes 110 spaces for 66 apartments where 57 spaces would be the maximum under the City's controls. Restrict the 500 public car parking spaces being operated for commuter car parking Relocate Barton Street wholly within Barangaroo South or Barangaroo Central	Given the unique nature of the integrated resort, it was considered that the most appropriate method to forecast future traffic generation and parking demand is to refer to similar elements of the existing Crown resort in Melbourne. In this regard Arup (traffic experts for the project) were provided with parking and traffic data by Crown including both video surveillance footage and entrylexit data from Crown Towers Hotel porte cochere and valet operation. Through the use of this data Arup have been able to forecast with a reasonably high degree of accuracy, the likely traffic generation and parking demand created by the proposed development. Given the unique nature of the proposed development use of this methodologyto calculate parking numbers is considered to provide a higher degree of accuracythan application of standardised parking rates under the Sydney LEP 2012.
Establish whether the proposed loading dock has been adequately designed to accommodate waste vehicle collection.	With regard to residential spaces, it is noted that the type of residential product on offer in the Crown Sydney Hotel Resort building will be high end luxury apartments. Many of the occupants of these apartments are therefore likely to require more than one car space. The proposed 110 spaces represent approximately 1.6 cars per apartment which is considered to be an appropriate reflection of the likely demand generated by the proposal. Further to this it is noted that parking rates are being addressed and established within the Concept Plan, which sets rates of 1.2 spaces/ 2 bed apartment and 2 spaces/ 3+ bed apartment.
	Relocation of Barton Street is not a matter for this application, but is rather a matter that should be addressed as part o Concept Plan Mod 8.
	The Crown Sydney loading dock has been designed to accommodate vehicles no larger than standard garbage trucks (medium rigid vehicles). A vertical clearance of 3.6m has been provided so that it is not possible for larger vehicles (e.g.

Wind

- Wind impacts from the tower are anticipated, based on the impact assessments in Concept Plan Mod 8
- The wind assessment for the SSDA adopts a different approach to the wind assessment for Concept Plan Mod 8. The Mod 8 assessment speaks to safety and comfort criteria for able-bodied pedestrians and less able body pedestrians. The SSDA is more general and does not make distinctions between the user experiences of an able-bodied person and a person with a disability.
- Wind shield/skirts should be incorporated into the built form of the tower and podium to address downdrafts on both the privatised and public areas of the base.

heavy rigid vehicles) to access the loading dock. Waste vehicles will however be able to access the dock and remove waste as required.

Further details are provided in the Supplementary Traffic Response and updated Traffic Assessment Report included at **Appendices E** and **H**.

An assessment of pedestrian wind impact has been undertaken for the proposed development by RWDI and was provided with the application. Wind conditions for the proposal were assessed through detailed wind tunnel testing that involved 93 specifically designed sensors that were connected to the model and which reported back to a wind data acquisition system to record wind conditions surrounding the proposal. Wind testing was then taken from 36 different angles to ensure a thorough analysis of potential wind conditions in all environments. Measurements were then taken to evaluate pedestrian comfort at building corners, near building entrances, on adjacent pavements with high pedestrian traffic, and in open plaza areas. It is noted that the report prepared for the Crown Sydney Hotel does not differentiate between able bodies and disabled persons, but rather assesses and discusses the impacts on 'pedestrians' in a broader sense.

The results of this analysis indicated that the wind environment around the building is expected to be met at all locations with the exception of around the building's northwest corner, where summer winds from the north-east and north northeast have the potential to result in elevated wind conditions that would affect the levels of pedestrian comfort. Mitigation measures we recommended in response to the elevated wind conditions including the addition of vertical wind control elements at the building's northwest corner, and the provision of landscaping along the promenade and to the north of the building. Both of these mitigation measures have been incorporated into the design of the proposal and as a result wind conditions in all locations will pass the relevant criterion.

Shopfront and Signage

- Shopfront and signage strategies should be prepared to guide the detailed design phase toward integrated approaches that contribute positively to the public domain.
- Signage visible from the public domain, both night and day should be integrated with the quality and form of the building and not detract from the vista of the public waterfront
- It would be excessive to have building identification signage over every pedestrian entry to the building

Signage will be required for a number of retail and restaurant uses located at ground level. Signage zones are therefore located along the building's ground level facade and are intended to provide an appropriate signage area for future occupiers. These zones are positioned to directly relate to the entrance and frontage of the relevant ground floor tenancy and range between 1.0m and 1.5m in height with varying lengths depending on the extent of the tenancy frontage. Specifically signage zones are proposed for the following:

- North café:
- North Restaurant:
- Lobby Bar:
- West Restaurant: and
- Retail Tenancies 1 and 3.

Inclusion of signage zones will ensure that the location and size of signs on the building is well regulated and does not become excessive in size and number.

It is noted that the proposed Crown Sydney Hotel Resort is intended to be a high quality tourist destination and in this regard it is important that all signage on the building is designed to be in keeping with the image of Crown as a luxury

	high end brand. In this regard signage is expected to be elegant and understated so as not to detract from the public domain or quality of the user experience. For full details in relation to signage refer to Appendix F of the Architectural Design Statement.
The provision of affordable and key worker housing is an important community benefit for housing diversity, inclusiveness and equity. The SSDA does not include any commitments to affordable of key worker housing although a number of key workers and shift workers will be needed to support the development in the future. A minimum of 10% of the GFA, but preferably 20% should be provided as affordable and key worker housing	Affordable housing, otherwise known as Key Worker Housing is not proposed within the Crown Sydney Hotel Resort building. Whilst this is the case, Key Worker Housing is to be provided within Barangaroo South site as per the approved ConceptPlan, which commits to a minimum 2.3% of the total residential GFA being provided for such uses. This commitment has not changed under the current proposal to modify the ConceptPlan (i.e. Mod 8), but has resulted in a proportionate increase in the provision of Key Worker Housing to reflect the uplift in residential GFA within the Barangaroo South precinct. Under ConceptPlan Mod 8 approximately 3,542m² will therefore be provided as Key Worker Housing, with the longstanding commitment being to focus this housing in a location near or adjacent to Hickson Road. Of the remaining buildings, only R5 or C1 therefore have the potential to accommodate the use. While both buildings have potential under the ConceptPlan, Lend Lease's current proposal involves locating Key Worker Housing in the Renzo Piano designed R5
Dwelling mix	building. It is noted that under Lend Lease's Statement of Commitments, Statement of Commitment No. 29 relates to the provision of Key Worker Housing, thus ensuring that there is a framework and requirement in place for the delivery of this housing. While this housing will not be provided for in the Crown Sydney Hotel Resort building, the commitment to provide Key Worker Housing within Barangaroo South will still be realised within the Lend Lease buildings as described above. Residential apartments within the proposed Crown Sydney Hotel Resort building are to be aimed at the luxury high end
 Of the apartments included in the SSDA, all are 2-5 bedroom dwellings. None are studio or 1 bedroom apartments. This dwelling mix is not supported by the City 	market and in this regard are integral to the intended vision for the proposal. Studio and one bed apartments are therefore not a target market for the proposed building as the target market is expected to be seeking larger accommodation.
	While studio and one bed apartments are not provided within the proposal, these smaller apartments will be provided as part of the adjacent residential buildings, ensuring that this type of product is available to the market within Barangaroo South.
Visual impact The Visual Impact Assessment should include an analysis of the vista from the waterfront promenade in Barangaroo South, with and without the SSDA.	An extensive Visual Impact Assessment was provided with the development application which showed the proposed development from 20 different viewing angles. A view angle is provided from Pyrmont Bridge which clearly depicts what the proposed development will look like from Darling Harbour. The location and size of the building in the view plane will inevitably increase as you move along the Barangaroo South promenade towards the site. Additional views from these angles are provided on page 53 of the Architectural Design Report.
chhardt Council	
Traffic and parking	500 car parking bays are proposed within the hotel to service the non-residential components of the development. This

•	The SSDA notes there will be a parking shortfall of 300 basement parking spaces. This is inconsistent with the information provided in Concept Plan Mod 8. Information about the nature arrangements for managing the parking provision shortfall should be made available.	quantum of parking was determined based on the expected daily profile of vehicular movements arriving and departing the site. A daily profile of activity was generated based on the current levels of traffic movements (both valet and self park) generated by the Crown Melbourne site over the course of an entire year. The data was moderated based on the number of members anticipated for the hotel relative to the total number in Crown Melbourne. The quantum of parking proposed (500 spaces) will meet the expected demand generated by the hotel on weekdays and for the majority of the time on weekends (Friday evening through Sunday). Parking within the basement will be continually monitored and actively managed by the valet parking staff, thus ensuring maximum efficiency of the car park at all times.
	SSD 6957 represents a significant departure from the 2007 Approved Concept Plan so the development is no longer "substantially the same development" as originally approved The 2007 original Approved Concept Plan included a maximum GFA of 388,300m2. The amendments to the Concept Plan over the past eight years means that the total development floor space represents an overall increase in GFA of 217,611m2. Concept Plan Mod 8 has not been approved so the Concept Plan as is has no standing	This is a matter that is more appropriately addressed as part of the Concept Plan Mod 8 (MP 06_0162) application that is presently with the DP&E.
Zoning	As the current zoning of the subject land is RE1 – public recreation, therefore the uses described in the SSDA are prohibited under Part 12, Division 3 (9) of State Environmental Planning Policy (Major Development) 2005. The document contains fundamental flaws including a failure to assess the proposal under the requirements of the statutory planning regime.	While it is acknowledged that the site is presently zoned RE1 – public recreation under the Major Development SEPP, Barangaroo South is presently the subject of an application to modify the Concept Plan (i.e. Mod 8). The assessment of the proposed Crown Sydney Hotel Resort building has been carried out under the proposed provisions of Concept Plan Mod 8, and will only be able to be approved in the event that Concept Plan MOD 8 is approved in the first instance.
Design	The EIS for the SSDA for the Hotel refers to the design being in accordance with Concept Plan Mod 8 and the Barangaroo South guidelines – these have not been approved yet. The proposed form of the Hotel, at a height of 275 metres and immediatelyadjacent to the water's edge ignores the CBD's morphology and is contrary to the long term planning for the CBD which sees tall buildings scaling down to the water's edge.	It is acknowledge that Concept Plan Mod 8 is yet to be approved. Whilst this is the case it is considered appropriate to carry out an assessment of the proposal against the provisions proposed under Concept Plan Mod 8 as the Crown building will only be able to be approved in the event that Concept Plan Mod 8 is approved in the first instance.
Key work	The proposal fails to achieve any meaningful key worker housing outcomes. A target of 2.3% of residential gross floor area for key	Affordable housing, otherwise known as Key Worker Housing is not proposed within the Crown Sydney Hotel Resort building. Whilst this is the case Key Worker Housing is to be provided within the Barangaroo South site as per the approved Concept Plan, which commits to a minimum 2.3% of the total residential GFA being provided for such uses. This commitment has not changed under the current proposal to modify the Concept Plan (i.e. MOD 8), but has resulted

worker housing falls well short of affordable housing targets. Crown is proposing to increase in GFA but with no commitment to increase the percentage of key worker housing.	in a proportionate increase in the provision of Key Worker Housing to reflect the uplift in residential GFA within the Barangaroo South precinct. Under Concept Plan MOD 8 approximately 3,542m² will therefore be provided as Key Worker Housing, with the longstanding commitment being to focus this housing in a location near or adjacent to Hickson Road. Of the remaining buildings, only R5 or C1 therefore have the potential to accommodate the use. While both buildings have potential under the Concept Plan, Lend Lease's current proposal involves locating Key Worker Housing in the Renzo Piano designed R5 building. It is noted that under Lend Lease's Statement of Commitments, Statement of Commitment No. 29 relates to the provision of Key Worker Housing, thus ensuring that there is a framework and requirement in place for the delivery of this housing. While this housing will not be provided for in the Crown Sydney Hotel resort building, the commitment to provide Key Worker Housing within Barangaroo South will still be realised within the Lend Lease buildings as described above.
The EIS does not provide sufficient detail regarding the size and characterisation of the gaming facility to allow for adequate consideration and comment in relation to this component of the development. There is no Social Impact Assessment for the proposed casino use and mixed development.	A further detailed Area Schedule has been provided and is included at Appendix B . As shown in this table the proposed gaming facility will be 6,085m² and will be separated into two locations within the building, with one part being situated within the podium and the other in the tower. Further details of the VIP Gaming Facility are set out on page 48 of the Environmental Impact Statement and the Response to Submissions Report.
Impact on the Sydney Opera House The original Concept Plan was approved in February 2007, four months before the Sydney Opera House was included on the UNESCO World Heritage List. The EIS does not provide an assessment on the impact of the proposal on the setting and context of the Opera House and therefore cannot be supported.	The proposed Crown Sydney Hotel Resort building and the wider Barangaroo site is well removed from the location of the Opera House and will not be apparent in its immediate setting, therefore no further analysis is considered necessary.
Inconsistencies with Concept Plan Mod 8 If Mod 8 is approved, inconsistencies will remain with this SSDA. The Concept Plan encourages wintergardens on the building but none are provided.	The Barangaroo South Draft Design Guidelines 'encourage' wintergardens in high rise buildings if they are considered necessary. It is noted that these are not a requirement. By electing not to provide wintergardens this does not mean that the proposal is 'inconsistent' with Concept Plan, rather it incorporates one of a number of possible design solutions allowed for under the Draft Design Guidelines.

Response to Industry bodies

	Key issue raised	Crown response
Unite	d Voice – NSW Branch	
1	Support for the proposal and belief that Crown Sydney brings employment, training and workforce development opportunities, particularly for Indigenous workers.	Noted
Penri	th Panthers	
2	Support for the proposal because of the benefit it will have on jobs, training and Indigenous Education.	Noted
	Strong support for the training facilities that will be established, particularly the one in Penrith as it will have a positive impact on the young people of Western Sydney	
Natio	nal Rugby League	
3	Support for the proposal because of the community benefits it will deliver including Indigenous education and training	Noted
Acco	Hotels	
4	Support for the following reasons Provide more hotel rooms in Sydney – currently there are not enough Increase in tourism will increase jobs in Sydney Indigenous employment and engagement	Noted
Touri	sm and Transport Forum	
5	Support for the development as an employment and entertainment precinct. The proposed development will be a landmark building and key tourist attraction. It will generate significant employment opportunities and make a strong contribution to the state's economy.	Noted
Urbar	Taskforce	
6	Support for the proposed development for a number of reasons. It provides an excellent balance between the built form of the hotel and the natural environment of the new headland park, Barangaroo Reserve It is a significant building and will be one of the tallest in Sydney. The height is appropriate as the building needs to stand out from the nearby towers as an iconic and landmark building. The architecture is exceptional and will complement other Sydney icons such as the Sydney Harbour Bridge and Opera House The setback from the water of 17 metres and 25 metres is consistent with other parts of the site.	Noted

	 It will act as an attractor for global tourism and will be an excellent 'marker' to the overall composition for Barangaroo. 	
Sydne	ey Business Chamber	
7	 Barangaroo represents a once in a generation opportunity for Sydney to re-engage with its harbour and grow its commercial, tourism and residential offerings. Strong support for the planning application and the fact that it will boost NSW tourism, provide strategic addition to the hotel stock in Sydney and improve competitiveness. This development will help NSW to compete for major domestic and international events and attract a greater share of Asia's outbound tourism market. 	Noted
Natio	nal Trust	
8	The development would have a negative impact on the heritage significance of Millers Point, the Observatory and Observatory Hill.	As shown by the photomontages the proposed development will be clearly visible from Millers Point, the Observatory and Observatory Hill. Whilst this is the case the addition of the building to the skyline will not have an adverse impact on the integrity of this area/building or a person's ability to appreciate their heritage qualities. This conservation area sits adjacent to the largest CBD in Australia and there must be a reasonable expectation that views from Millers Point to the surrounding area will change over time. Further to this it is also considered that the high quality nature of the building design will in fact add further visual interest to views from Millers Point, and for this reason it is considered to have a positive effect in this regard. As illustrated in the Visual Impact Assessment prepared by Virtual Ideas the proposed building will be clearly visible from Millers Point. Whilst this is the case the proposal will not result in the 'loss of heritage' of the Millers Point community as it will not result in any demolition or physical impact on any items or areas of heritage significance. Further to this the mere presence and visibility of the building will also not 'destroy' the character of the area. Even with the proposed development, the Millers Point community will still comprise the same streets, spaces and buildings and will still have the same character feel.
	The floor space (which was public land) has increased by almost 80% and the height has been increased with no discernible improved public benefit.	This is a matter that is more appropriately addressed as part of the Concept Plan Mod 8 (MP 06_0162) application that is presently with the DP&E. Whilst this is the case it is noted that the proposed Crown Sydney Hotel Resort development will deliver a significant number of social, economic and community benefits to Sydney and NSW. These are set out in detail in the Public Benefits Analysis located at AppendixL .
	There is no justification for the increase in floor space or height.	This is a matter that is more appropriately addressed as part of the Concept Plan Mod 8 (MP 06_0162) application that is presently with the DP&E.

It is 116 metres taller than the original hotel proposal and appears to be the tallest building at Barangaroo and the closest to Millers Point. Building heights were meant to gradually reduce towards Millers Point. Despite State Heritage and almost certainly National Heritage Significance, the key urban design and heritage conservation principle has been abandoned.	The proposal is for a new building that has been designed to fit within the building envelopes established under the Barangaroo Concept Plan (as modified). The location, configuration and height of the proposed buildings within Barangaroo South is therefore a matter that is more appropriately addressed to the Concept Plan Mod 8 (MP 06_0162) application that is presently with the DP&E.
The proposed development usurps the designated public open space on the harbour foreshore.	The proposal is for a new building located in accordance with the design of the Barangaroo Concept Plan (as modified). The configuration and location of the proposed building within the precinct is a matter that is more appropriately addressed under Concept Plan Mod 8 which is currently being considered and assessed by the DP&E
	The proposed building has been designed to be a landmark building within the context of Barangaroo and the CBD. The underlying design intent for Wilkinson Eyre Architects has been to create a building that is sculptural in form and which rises to the skyline like an inhabited artwork, thus providing a clear point of difference compared to the more commonly found rectangular building forms that characterise much of Sydney's skyline. In this regard the building's height, location and sculptural form are considered to add to its iconic nature and once complete, will make a positive contribution to the diversity and interest of the CBD skyline.
	The buildings ground and lower podium levels have been designed to create vibrant, active and visually engaging façade that will interact on a number of levels with the surrounding public domain, as a result the proposed development is in fact considered to embrace and positively relate with the surrounding area.
It relegates the parkland to the area behind the building and blocks views northward along the South Promenade and partly blocks the view northwards from the southern section of Lime Street.	The relocation of the Landmark Hotel Building was undertaken by the site's master architects, Rogers Harbour Stirk + Partners, in a holistic manner to ensure the changes achieve the optimum outcome for the site, including the public domain.
	The location of Hickson Park offers a distinct benefit as it expands the breadth of open space experiences available to the public on the Barangaroo site rather than providing a single open space experience along the foreshore. Hickson Park's location and orientation also ensures that it provides significant protection from cold winter winds whilst also being open to direct sunlight throughout the day, a fact that represents a significant improvement to the environmental qualities of the waterfront during the winter months.
	The location of the park also has the additional advantage of connecting Hickson Road and the CBD more broadly with the green open space network being provided at Barangaroo. Instead of being separated from Barangaroo's green spine by buildings, the proposed location of Hickson Park better integrates with the City, and will connect pedestrians arriving at the site from the CBD all the way through to Barangaroo Point.
	In light of the above it is not considered that the proposed building 'relegates the parkland' to the area behind the building, but rather open up the opportunity to provide a series of spaces with different attributes whilst also improving connections with the CBD. In this regard it is considered to represent an appropriate design outcome.

The 2007 Concept Plan proposed a total of 338,800 square meters of GFA. The latest series of modifications to the Concept Plan proposes 605,911 square meters of GFA, an increase of 79%.	This is a matter that is more appropriately addressed as part of the Concept Plan Mod 8 (MP 06_0162) application that is presently with the DP&E.
Buildings located in these special locations should be public buildings like the Sydney Opera House or at least provide public viewing areas on their upper floors, not private 'super villa' and 'sky villa' luxury apartments. The public will never have access above floor 22 of the 'standard hotel'	Whilst not being a 'public building' in the same manner as the Sydney Opera House, the proposal will still be publicly accessible in that the ground floor lobby and foyer area, retail arcade and surrounding public domain will be open and accessible to the public 24 hours a day, seven days a week. The public will be able to access key parts of the building where they will be able to enjoy views, entertainment and amenities provided by the hotel and its facilities. It is also noted that the 'super villa' and 'sky villa' are not luxury apartments but rather form and integral part of the hotel
	facility.
Concerns expressed in the submission for Concept Plan Mod 8 relate to this proposal: The views to the south-west from Observatory Hill Park will be significantly adversely affected by the development The Statement of Heritage Impact does not give "a statement of heritage impact" of the tower development on the views south-west from Observatory Hill Park The building will have an adverse impact on the Sydney Observatory. The view of several important night sky objects will be obstructed by the proposed new building at certain times of the year. The Sydney Observatory Sky View Impact Assessment does not attempt to rebut these impacts but tries to argue at there is more sky left to view and that on rainy nights there is no viewing possible This development highlights the inherent defects in the NSW planning system	These matters have been addressed as part of the Concept Plan Mod 8 (MP 06_0162) application that is presently with the DP&E. However we note that a detailed Sky View Impact Assessment was carried out by Lend Lease in conjunction with UNSW Global and was submitted with the application. Following a detailed assessment of the impacts on the Observatory UNSW Global concluded that "the presence of the building is not expected to have a major detrimental impact on the Observatories night time activities." We also note that this matter has also been dealt with in extensive detail as part of Concept Plan MOD 8. With regard to the heritage impact on Observatory Hill Park, it is undeniable that the building will be visible from this park, whilst this is the case it is considered that the addition of the building to the skyline will not have an adverse impact on the integrity of the heritage qualities of the park or a person's ability to appreciate its heritage significance. Observatory Hill sits adjacent to the largest CBD in Australia and there must be a reasonable expectation that views from park to the surrounding area may change over time
Environment Protection Authority	
9 Plans The following plans must be prepared and submitted to EPA for review prior to the commencement of works: Waste Management Plan Construction Noise and Vibration Management Plan Stormwater and Water Management Plan Air Quality Management Plan Reactive Air Quality Management Plan Odour Management Plan Ambient Air Monitoring Program and Reactive Management Strategy Hazardous materials management If any soil needs to be disposed of off-site then it will need to comply	All hazardous materials encountered will be taken to an off-site EPA Licenced Facility for immobilisation and disposal. As no treatment will occur on site, there is no requirement for Crown to obtain an immobilisation approval from the EPA. It will be the requirement of the off-site treatment facility, in accordance with their Conditions of Approval and Environmental Protection Licence, to have in place an immobilisation approval to treat this waste.
with the Waste Classification Guidelines. The proponent must apply to	

EPA for a site specific immobilisation approval.
 EPA has no objection on environmental grounds to see the planning
process proceeding for this project.

State Member of Parliament

	Key issue raised	Crown response
reenwich	·	·
	d transport Opposition to allocation of 610 off street parking spaces. This is an overestimation of how many parking spaces are needed. It will also encourage people to drive to the casino. The provision of 110 parking spaces for 66 residential apartments is almost two parking spaces per apartment. This is above what is needed for an inner city development that is close to transport and the CBD Concern over the porte-cochere would be located adjacent to the open space in the north. This could put pedestrians at risk. Concern over underground car parking and the impacts it will have on landscaping and vegetation at Barangaroo Central.	Crown has sought to achieve an appropriate balance between providing sufficient car parking to cater for the needs of the development and its users/occupants, whilst keeping sustainability a key priority by promoting the use of public transport in the future. The proposed 610 car spaces are considered necessary to service the needs of the proposal, comprising 500 spaces to serve the hotel and 110 spaces to service the needs of the residential apartments. With regard to residential spaces, it is noted that the type of residential product on offer in the Crown Sydney Hotel Resort building will be high end luxury apartments. Many of the occupants of these apartments are therefore likely to require more than one car space. The proposed 110 spaces represent approximately 1.6 cars per apartment which is considered an appropriate reflection of the likely demand generated by the proposal. Further details are provided in the Supplementary Traffic Response and updated Traffic Assessment Report included Appendices E and H.
Signage	12 illuminated Crown branded signs is too many. It will detract from the public amenity and will be reflected into the harbour.	The proposal is consistent with the objectives and requirements of SEPP64. The signage has been carefully considered designed and located to compliment the building's architecture and will be finished to a high quality to be consistent with the building. The proposed illumination will be backlit thus ensuring that it does not result in unnecessary glare or impacts on the surrounding area. Further to this we note that the scale, form, proportion and positioning of signage is considered appropriate for the building's context and setting on the waterfront and within Barangaroo. The positioning the signage is such that not all signs will be visible from the one viewing angle. For further details regarding signage re to Appendix F of the Architectural Design Statement.
Location	The hotel should not be located on the waterfront The development will create a physical barrier that will reduce integration across Barangaroo and the rest of the CBD The small foreshore land reserved for public use around the site will fail to provide a harbour experience or a public place area The hotel should be moved to areas of Barangaroo South which is dedicated to development	The proposed Crown Sydney Hotel Resort building has been designed to provide an outcome consistent with Concept Plan as proposed to be modified. The issue of where the hotel should be located within Barangaroo South Site is a matter that is more appropriately to be considered as part of the assessment of Concept Plan Mod 8.
Public be	nefit	The proposal will facilitate the ongoing regeneration of the Barangaroo South Precinct as a high quality waterfront

- The proposal represents the worst case scenario for public benefit, with the harbour views monopolised for private benefit
- Little public benefit and represents a private grab for prime public land

foreshore area. A public promenade with cafes, restaurants, bars and retail stores will contribute to the creation of a new vibrant, active and lively area that will be accessible to the public. These facilities are expected to be highly popular with the community and together with the other initiatives and facilities provided within Barangaroo will ensure that there is a significant public benefit realised as a result of the proposal.

A detailed Social Impact Assessment (SIA) of the proposal was carried out by MacroPlan Damasi and accompanied the application. Overall the SIA concluded that the proposal would result in a number of broad public benefits including:

- Employment opportunities during construction and operation.
- Livelihood opportunities targeting the marginalised.
- Closing Sydney's void of premium tourism facilities by an experienced operator.
- Addition to the city's retail offering available to the general public & aligning to future community consumption needs
- Extending opportunity to grow tourism across the whole of NSW (including the Hunter and Perisher) and also
 interstate.
- Civic pride and visitor allure resulting from an iconic structure & defining Barangaroo's place & context relationship with the city.
- New amenities for local residents via a comprehensive strategy to enhance the experience of Barangaroo South for residents, workers and visitors.
- 24-hour activity which ensures public access and will improve safety around the location.
- Crown's commitment to training facilities in western Sydney and in conjunction with the National Centre of Indigenous Excellence at Redfern;
- Increased tourist attraction and business activity generated as a result of additional visitors;

A further Benefit Analysis of the proposal has been carried out and is included at **Appendix L**. As set out in this report the proposal will deliver numerous benefits to Sydney and wider NSW, including but not limited to:

- It will boost the economy, create thousands of new jobs, contribute significant tax revenues to the New South Wales Government and ensure Sydney remains a first class international tourist destination.
- It will provide world class public offering that will become part of the social fabric of the city.
- It will become a vibrant destination that adds to the daily activity of the harbour foreshore and public domain.
- It will deliver some significant and ongoing economic benefits to the local area:
 - During the construction phase (modelled from financial year 2013 to financial year 2018), where the
 economic effect is due to the building activity, Gross State Product is estimated to increase by \$98
 million in 2016/17 (the peak of the construction phase); and
 - During the operations phase (modelled from financial year 2019 to financial year 2031), where the economic effect is due to the activity generated by visitor spending as a result of the operations of Crown Sydney. Once Crown Sydney is operational, Gross State Product2 is estimated to increase by \$638 million in financial year 2022. This increase will be driven by the spending of visitors to Crown Sydney, especially overseas visitors, and the consequent flow-on effects to other industries in the State.

It is expected to directly employ 1,250 people and The Allen Consulting Group found that in total, across New South Wales, between 2,300 and 3,300 additional jobs should be created when Crown Sydney is fully operational in financial year 2022 It is expected to significantly boost New South Wales' export income by an estimated \$513 million in financial year 2021, as a result of additional international visitors to New South Wales. Sydney and New South Wales will benefit from Crown's experience and industry leadership in employment education and training. Extensive learning and development opportunities will be provided for employees. In financial year 2015, Crown College provided approximately 385,000 hours of training to employees in Melbourne and Perth. Since inception Crown has graduated over 7,200 apprentices and trainees. These types of opportunities will be provided to the local Sydney community as part of the Crown Sydney Hotel Resort.

- In order to meet the extremely high service requirements of a six-star facility, Crown currently trains its own employees and operates major in-house training colleges at both Crown Melbourne and Crown Perth. This model will be replicated in Sydney with training colleges to be established in Penrith, at the Penrith Panthers Group's proposed Community Centre and in Redfern, at the National Centre of Indigenous Excellence (NCIE). In particular it is noted that Crown has agreed to partner with the NCIE to help deliver training, mentoring and support for the Crown Sydney Hotel Resort's Indigenous workforce.
- The New South Wales Government's Visitor Economy Action Plan noted that "Investing in critical infrastructure" and "raising the global profile of Sydney and NSW" were two of five key principles, which are critical in boosting tourism to New South Wales. The Crown Sydney Hotel Resort proposal will help deliver on both of these important principles by building Sydney's first six-star luxury hotel and creating an iconic addition to Sydney Harbour which would act as a magnet to attract interstate and international visitors.

Scale

- 275 metres is too high and over 100 metres what is currently approved
- It will be one of the tallest buildings in the CBD and is inconsistent with accepted planning principle and practice
- The building bulk and scale must be reduced. Reduce the number of residential apartments
- The hotel will overshadow public open space including Globe Harbour at Barangaroo South during the morning to afternoon between autumn and spring.
- The tower will create wind tunnels across the Barangaroo South site.
 The north west of the building will not meet wind criterion.

The proposed building has been designed to be a landmark building within the context of Barangaroo and the CBD. The underlying design intent for Wilkinson Eyre Architects has been to create a building that is sculptural in form and which rises to the skyline like an inhabited artwork, thus providing a clear point of difference compared to the more commonly found rectangular building forms that characterise much of Sydney's skyline. In this regard the building's height, location and form is considered to add to its iconic nature and once complete, will make a positive contribution to the diversity and interest of the CBD skyline.

The building is designed in accordance with the building envelopes that are proposed within Concept Plan Mod 8. Detailed analysis of shadow impacts has been carried out as part and demonstrate that an appropriate level of solar access is achieved within the Barangaroo South site, commensurate with the CBD location of the Site, and that the shadow impact on the foreshore on the southern part of the site and adjacent at King Street Wharf have in fact been reduced from that occurring under Modification 7.

A detailed Pedestrian Wind Study was carried out for the proposed development and concluded that wind conditions in all locations achieved a pass against the relevant criterion subject to the implementation of vertical wind control elements at the building's northwest corner and the provision of landscaping along the promenade. Both of these design measures have been included within the proposal.

View corridors

- View corridors will be blocked from homes, parks, reserves and public open spaces in Pyrmont and the CBD, impacting on historic local character and amenity
- Impacts on Sydney Observatory's operations are unacceptable. Views will be lost from the Centauri constellation during August, September and early October.

The taller building forms proposed will be more visible due to their increased height, however as the towers are also slimmer, this gives the opportunity to provide breaks and gaps between buildings enabling view corridors through the site. The proposed hotel building, will bookend the group of buildings in Barangaroo South which now increases in height from south to north and which will redefine the western face of the CBD as viewed from Ballarat Park and Pyrmont Pier Park. The visual impact assessment considers the impact of the proposal on views available from significant viewpoints and concludes that despite the taller building forms being more visible due to their increased height, as the taller buildings are also slimmer, and allow for breaks and gaps between buildings thus enabling view corridors through the site.

With regard to the potential impact on the operations of the Sydney Observatory, a detailed Sky View Impact Assessment was carried out by Lend Lease in conjunction with UNSW Global and was submitted with the application. Following a detailed assessment of the impacts on the Observatory UNSW Global concluded that "the presence of the building is not expected to have a major detrimental impact on the Observatories night time activities." We also note that this matter has also been dealt with in extensive detail as part of Concept Plan Mod 8.

Construction

 Construction is proposed to commence at 7am six days a week and finish at 6pm Monday to Friday and 5pm on Saturday. Local residents already complain about construction work that regularly occurs outside of permissible hours including on Sundays. The cumulative impacts are significant and unfair. Construction is intended to be carried out at the same times as existing construction activities within the Barangaroo South precinct. The final timing of construction hours will however ultimately be subject to any conditions imposed on the development.

A detailed noise assessment has been carried out by Wilkinson Murray for the proposed development, including an analysis of the cumulative impacts of the proposed construction works when carried out alongside other projects within Barangaroo South.

Based on a review of noise levels at The Bond on Hickson Road, Wilkinson Murray have determined that existing noise levels during construction hours already exceed the daytime objective of 55 dBA. Field testing carried out in 2013 identified that the base case traffic noise levels for Hickson Road residencies was 67.1 dBA at the time of measurement. The benchmark for assessing the proposal is therefore to ensure construction traffic related to the Crown Sydney Hotel Resort does not result in an increase to noise levels by more than 2 dBA.

Taking into consideration the forecast construction programme for the Crown Sydney Hotel Resort, the maximum noise level generated by construction traffic is expected to occur around March-April 2018. At this point in time it is forecast that the new operational traffic from Barangaroo South projects will elevate the base case scenario from 67.1dBA to 68.7dBA. Wilkinson Murray calculate that the with the addition of the Crown Sydney Hotel Resort, the total combined operational and construction traffic noise in March 2018 will be 70.5 dBA, representing an increase of 1.8 dBA. It is therefore concluded that traffic noise levels associated with the project will be acceptable as they will not exceed the 2 dBA objective.

Local Councillor

Key issue raised	Crown response
Irene Doutney	
The Social Impact Assessment does not explain the social benefits of the development The social impacts are destructive, rather than constructive The SIA should quantify in monetary terms what the development can offer the community Lack of community consultation throughout this process Consultation was a formality. Further community consultation needs to occur and the community must be asked if they wish to see another casino in Sydney, particularly so close to the Star The development should allow for more affordable housing	A Benefits Analysis for the Crown Sydney Hotel Resort development has been undertaken and is provided at Appendix L. This document provided a detailed overview of the numerous social, community, cultural, tourism and economic benefits that will be realised as a result of the proposed project. A detailed Social Impact Assessment (SIA) of the proposal was carried out by Macro Plan Damasi and accompanied the application. Overall the SIA concluded that the proposal would result in a number of broad public benefits including: Employment opportunities during construction and operation. Livelihood opportunities targeting the marginalised. Closing Sydney's void of premium tourism facilities by an experienced operator. Addition to the city's retail offering available to the general public & aligning to future community consumption needs. Extending opportunity to grow tourism across the whole of NSW (including the Hunter and Perisher) and also interstate. Civic pride and visitor allure resulting from an iconic structure & defining Barangaroo's place & context relationship with the city. New amenities for local residents via a comprehensive strategy to enhance the experience of Barangaroo South for residents, workers and visitors. 24-hour activity which ensures public access and will improve safety around the location. Crown's commitment to training facilities in Western Sydney and in conjunction with the National Centre of Indigenous Excellence at Redfern. Increased tourist attraction and business activity generated as a result of additional visitors. The report found that the potential negative social impacts associated with the proposal are expected to be largely mitigated by the manner of the resort's operation and architectural design. In particular the report notes that the project represents a minimal addition to Sydney's aggregate supply of publicly accessible gambling venues and is therefore considered to be of a minimal risk in this regard. The report recommends that expension, the full details of wh

	In addition to the above, in the event that consent is obtained Crown will look to continually involve the community during the construction and operational process.
	A further detailed Benefits Analysis of the Crown Sydney Hotel Resort development has been undertaken and is provided at AppendixL .
Affected communities The following communities and heritage locations will be affected: Millers Point and Dawes Point Village Precinct Messenger's Cottage for Fort Phillip Signal Station Fort Phillip Station Bureau of Meteorology Fort Street Primary School National Trust Centre Agar Steps Former Grafton Bond Store Former Moreton's Hotel Former MWS stores Sandstone retaining wall on Sussex and Napoleon Street and surrounding trees Heritage terraces and cottages of Munn Street and Merriman Street Terrace group on Agars steps and Kent Street Jenkins street Pyrmont bridge Jones Bay Wharf Sydney Harbour Bridge Messengers Cottage for Sydney Observatory Observatory Hill Park including Boer War Memorial, Bandstand, fences and landscape	The proposed development will be visible from many locations within Sydney, including heritage locations as identified by Councillor Irene Doutney. An assessment of the proposal's impact on heritage has been carried out as part of this application as well as part of the application for Concept Plan Mod 8. While the building will be visible it is not considered that the development will have an unacceptable adverse impact on the surrounding area as suggested.
Overshadowing and height 71 storeys is too high, it creates a blockage for the view for the public of Sydney The views from Headland Park will be adversely affected	The proposed building has been designed to be a landmark building within the context of Barangaroo and the CBD. The underlying design intent for Wilkinson Eyre Architects has been to create a building that is sculptural in form and which rises to the skyline like an inhabited artwork, thus providing a clear point of difference compared to the more commonly found rectangular building forms that characterise much of Sydney's skyline. In this regard the building's height, location and form will add to its iconic nature and once complete, will make a positive contribution to the diversity and interest of the CBD skyline.
	The proposed development will be visible from Headland Park and will undoubtedly change the nature of the view, whils this is the case the change to the view is not considered to be 'adverse' but rather different. Indeed it is considered that the addition of the proposed Crown Sydney Hotel Resort will add to the visual interest of the view to the view available from Headland Park.

Heritage Loss of heritage of Millers Point community The modern design of the building will destroy the character of the area	As illustrated in the Visual Impact Assessment prepared by Virtual Ideas the proposed building will be clearly visible from Millers Point. Whilst this is the case the proposal will not result in the 'loss of heritage' of the Millers Point community as i will not result in any demolition or physical impact on any items or areas of heritage significance. Further to this the mere presence and visibility of the building will also not 'destroy' the character of the area. Even with the proposed development, the Millers Point community will still comprise the same streets, spaces and buildings and will still have the same character feel.
No use of solar power to adhere to good environmental practice Adherence to BASIX is not good enough for such a large development Concern that smoking is allowed in the gaming rooms which will cause a health risk and visitors NSW has been tightening smoking laws, but somehow Crown will be able to allow smoking inside	An ESD Strategy has been prepared for the proposed development by Arup and was provided with the application. The building has been designed to incorporate a number of initiatives that will ensure the building achieves a high level of Environmental Sustainability. The design team is currently working with the Green Building Council of Australia (GBCA) to develop a custom Green Star custom rating for the integrated resort which includes hotel, residential, retail, and restaurants with Crown aiming to achieve a 6 Star rating consistent with world's best practice. In addition to this Crown will also: Obtain a NABERS energy rating for the hotel and will endeavour to achieve a 5 star rating. Meet or exceed BASIX targets.
	The proposed development will also integrate with and take advantage of the Barangaroo Delivery Authority's current site wide infrastructure and energy initiatives as well as source recycled water from the Barangaroo South Recycled Water Plant (RWP) being developed by Lend Lease, which will be reticulated throughout the podium levels of the Crown building for non-potable water uses. Overall the development will achieve a high level of environmental sustainability.
Other	Smoking is permitted within the restricted gaming facility in accordance with Crown's restricted gaming licence. This is not a matter of consideration for this application.
Do not need another casino in Sydney, particularly so close to the Star.	The second secon

Businesses

Key issue raised	Crown response
nalis Architecture and Urban Projects	
Loss of public space Loss of public space that various Governments have fought for This design is opposed to the principles of the 2006 International Competition winning scheme which reserved the entire foreshore, comprising continuous parkland and an edge public street The tower is too far north in terms of the predominant range of towers in the city	The proposal is for a new building located in accordance with the design of the Barangaroo Concept Plan (as modified The configuration and location of the proposed building within the precinct is a matter that is appropriately related to Concept Plan Mod 8 that is currently being considered and assessed by the DP&E.
The tower is excessive in height, bulk and floor space At 34m high and 130m long, the block form and podium is bulky and heavy handed.	The proposed building has been the subject of a detailed design competition process involving a number of world renowned architects. The winning design prepared by Wilkinson Eyre Architects has therefore been informed and developed through a lengthy and iterative design process that has culminated into a high quality iconic design that bef site location and the building's intended status as a key landmark feature.
	As illustrated in the Architectural Design Statement the podium design incorporates terraces on all levels with the faça wrapped in a veil of stone tracery ensuring that it doesn't appear as a single solid mass, but is rather a permeable, transparent and interactive façade that is full of activity and variation in its appearance.
Due to its location and bulk it will overshadow significant parts of Pyrmont and the waters of Darling Harbour	A detailed Shadow Study was prepared for the proposal and provided as part of the application (refer Appendix D of Architectural Design Statement). As shown within this study the proposed building will result in some overshadowing of Pyrmont during the morning of winter months up until 10am. Shortly after 11am the building no longer overshadows Pyrmont. The diagrams also show that no overshadowing of Pyrmont occurs during the summer and the September/March equinox. The level of overshadowing is therefore considered to be acceptable as it does not affect large portions of land and only results in overshadowing for a small portion of the day during mid-winter. It is also noted that the shadow footprint of the proposed building is significantly less than that of the building envelope
	under Concept Plan Mod 8.
The design takes little account of environmental issues; such as exterior sun shading, reflectance and down draft	All of these matters have been taken into consideration in the design of the building. In particular we note that: A Reflectivity Study accompanied the application. Following a detailed assessment of the proposed buildin the report concluded that it will perform well in terms of solar reflectivity and that reflections will not cause unacceptable glare. Glazing for the hotel façade, which sits closer to the street level and thus has greater potential for hazardous glare, will be limited to a reflectivity level of 20% consistent with the provisions of the City of Sydney DCP 2012. Glazing for the other building elements may be up to a maximum of 32%, however due to the curved façade structures of the tower, reflections occurring will be scattered and any glare from individual panels will be only for a short duration, and will be less concentrated toward individual locations. The impact of glare to any one location or building is likely to be reduced and is not expected to result in an

	 with regards to down draft it is noted that awnings at ground level as well as the podium structure itself help to protect and mitigate against any down draft effects caused by the tower. The sculptural curved form of the building also helps to reduce the effects of capturing wind that would otherwise occur if the building was designed with a more traditional flat surface. A Pedestrian Wind Study was submitted with the application and concluded that an appropriate wind environment will be provided subject to the incorporation of key mitigation measures, all of which have been included in the design of the building. Awnings and landscaping that are provided with the building and within the surrounding public domain will ensure that pedestrians receive adequate protection from the elements.
 The proposal lacks adequate consideration of its social impacts, such as the negative impact of gambling and smoking Public or affordable housing has not been included in the application which is against the early requirements for a percentage of affordable housing to be provided on the site 	A Benefits Analysis for the Crown Sydney Hotel Resort development has been undertaken and is provided at Appendix L. This document provided a detailed overview of the numerous social, community, cultural, tourism and economic benefits that will be realised as a result of the proposed project. In addition, we note that a Social Impact Assessment (SIA) of the proposal was carried out by MacroPlan Damasi and accompanied the application. Overall the SIA concluded that the proposal would result in a number of broad public benefits including: - Employment opportunities during construction and operation Livelihood opportunities targeting the marginalised Closing Sydney's void of premium tourism facilities by an experienced operator Addition to the city's retail offering available to the general public & aligning to future community consumption needs Extending opportunity to grow tourism across the whole of NSW (including the Hunter and Perisher) and also interstate Civic pride and visitor allure resulting from an iconic structure & defining Barangaroo's place & context relationship with the city New amenities for local residents via a comprehensive strategy to enhance the experience of Barangaroo South for residents, workers and visitors 24-hour activity which ensures public access and will improve safety around the location Crown's commitment to training facilities in Western Sydney and in conjunction with the National Centre of Indigenous Excellence at Redfern Increased tourist attraction and business activity generated as a result of additional visitors. The report found that the potential negative social impacts associated with the proposal are expected to be largely mitigated by the manner of the resort's operation and architectural design. In particular the report notes that the project represents a minimal addition to Sydney's aggregate supply of publicly accessible gambling venues and is therefore considered to be of a minimal risk in this regard.

Affordable housing, otherwise known as Key Worker Housing is not proposed within the Crown Sydney Hotel Resort

		building. Whilst this is the case Key Worker Housing is to be provided within Barangaroo South site as per the approved Concept Plan, which commits to a minimum 2.3% of the total residential GFA being provided for such uses. This commitment has not changed under the current proposal to modify the Concept Plan (i.e. Mod 8), but has resulted in a proportionate increase in the provision of Key Worker Housing to reflect the uplift in residential GFA within the Barangaroo South precinct. Under Concept Plan Mod 8 approximately 3,542m² will therefore be provided as Key Worker Housing, with the longstanding commitment being to focus this housing in a location near or adjacent to Hickson Road. Of the remaining buildings, only R5 or C1 therefore have the potential to accommodate the use. While both buildings have potential under the Concept Plan, Lend Lease's current proposal involves locating Key Worker Housing in the Renzo Piano designed R5 building. It is noted that under Lend Lease's Statement of Commitments, Statement of Commitment No. 29 relates to the provision of Key Worker Housing, thus ensuring that there is a framework and requirement in place for the delivery of this housing. While this housing will not be provided for in the Crown Sydney Hotel resort building, the commitment to provide KWH within Barangaroo South will still be realised.
Clare	Design	
2	Location The site in the north west of South Barangaroo is land dedicated for public use and therefore the proposal will have severe and irreversible negative impacts on public space The proposal includes changing the site boundaries to increase the area for the already oversized building The public space has been significantly reduced by this proposal	The proposed building has been designed in accordance with Concept Plan Mod 8 which is currently being assessed by DP&E. The relocation of the hotel building and the subsequent change to public domain area is matter that will be considered and assessed as part of the Concept Plan Mod 8.
	There will be an increase in overshadowing on the promenade and public space areas. This will affect public enjoyment of the promenade and water's edge. The provision of only some sun on the promenade at lunch time for the workers is not equitable and sunlight to the promenade The proposal's designated park towards the east will be compromised by overshadowing, wind downwash and lack of visual connection west to the water	As illustrated in the Shadow Study that was provided as Appendix D to the Architectural Design Statement, the proposal will result in some overshadowing of the promenade during the morning, with the greatest amount of shadow occurring in the winter months. Whilst this is the case it is noted that the promenade will be in full sunlight from 1pm onwards while the rest of the year (in particular during the summer months) the promenade will receive an extensive amount of sunlight. It is also noted that the proposed building has been designed to fit within the building envelopes set out in Concept Plan Mod 8 and as a result any shadow impacts cast by the proposal will be the same or less than that assessed as part of the Concept Plan.
	The podium The 34m high and 130m long podium is excessive in bulk and scale causing negative impacts on public domain. The perimeter of the podium is poorly activated. The Lime Street frontage is mostly driveways and servicing except two short retail frontages. This is an	The proposed building has been the subject of a detailed design competition process involving a number of world renowned architects. The winning design prepared by Wilkinson Eyre Architects has therefore been informed and developed through a lengthy and iterative design process that has culminated into a high quality iconic design that befits site location and the building's intended status as a key landmark feature.

unacceptable new city street outcome. The full length of the podium that fronts onto Hickson Park is not suitably activated; instead it consists of parking, ramps and driveways.	As illustrated in the Architectural Design Statement the podium design incorporates terraces on all levels with the façade wrapped in a veil of stone tracery ensuring that it doesn't appear as a single solid mass, but is rather a permeable, transparent and interactive façade that is full of activity and variation in its appearance. Active uses including restaurants, retail and the porte cochere line the entire façade of the building, ensuring that the development presents a vibrant active façade in all directions, including Hickson Road. This is clearly illustrated in the architectural visualisations provided within the Architectural Design Statement (refer pages 50-62).
A private casino should not have landmark status The size and design of Globe Harbour has been changed to defer to the prominence of the casino building The casino proposal impacts adversely on the development of Centra Barangaroo by proximity and bulk and severely constricts the park/public domain connections. The southern and western boardwalk tree planting has been modified to emphasise entry into the casino building. This is an entirely inappropriate modification of public space for the benefit of private ownership and casino operations.	Concept Plan Mod 8.

Resident group

	Key issue raised	Crown response
High	gate Owners Corporation	
1	This application relies on an unapproved Concept Plan Mod 8.	It is acknowledged that Concept Plan Mod 8 is yet to be approved. Whilst this is the case it is considered appropriate to carry out an assessment of the proposal against the proposed provisions of Concept Plan Mod 8, as the building will only be able to be approved in the event that Concept Plan MOD 8 is approved in the first instance.
	There will be a loss of prime public land if this application is accepted.	The proposal will facilitate the ongoing regeneration of the Barangaroo South Precinct as a high quality waterfront foreshore area. A public promenade with cafes, restaurants, bars and retail stores will contribute to the creation of a new vibrant, active and lively area that will be accessible to the public. These facilities are expected to be highly popular and used by the community and together with the other initiatives and facilities provided within Barangaroo will ensure that there is a significant public benefit realised as a result of the proposal (refer Appendix L).
		With regard to the loss of prime public land the approved Concept Plan incorporates a commitment to provide a minimum of 50% Open Space on the Barangaroo Site. In preparing Concept Plan Mod 8 the proponent for that application has maintained the public domain as a key objective for relocation of the hotel to a land based location.
		As set out in the Response to Submissions document for Concept Plan Mod 8, the amended Concept Plan design

	provides for 11.9ha of RE1 zoned area across the Barangaroo site, which represents 54% of the total site area. Within Barangaroo South, the area of RE1 zone has been reduced as a result of accommodating a larger site area for the hotel. The site area of the hotel has essentially been "extracted" from the previous area of water such that the public domain area (exclusive of water bodies) has been maintained at 52%. Under Concept Plan Mod 8, the pier that was previously occupied by a hotel has now been replaced with a community building. The change envisaged in Mod 8 maintains public access to the pier as a key element of the public domain providing a "over water" experience unique to Barangaroo. In replacing the Hotel, the newly proposed community building is considered to better reinforce the pier as a key component of the public domain experience of the Barangaroo site.
Landmark sightlines will be lost from Observatory Hill.	With regard to the potential impact on the operations of the Sydney Observatory, a detailed Sky View Impact Assessment was carried out by Lend Lease in conjunction with UNSW Global and was submitted with the application. Following detailed analysis UNSW Global notes that from the list of sky targets of concern highlighted by the Sydney Observatory, only the viewing of Omega-Centauri will be affected by the presence of the proposed Crown Sydney Hotel Resort building.
	The Omega-Centauri (NGC5139) globular star cluster passes through the area of night sky that is obstructed by the proposed building during late August, September and early October each year. During these months (or part months) Omega-Centauri is obstructed or potentially affected by light spill from the proposed development for a maximum of 73 minutes on a particular night.
	The Sydney Observatory runs two viewing sessions each night during this period (6:15pm and 8:15pm), with each session lasting for 90 minutes. Hence viewing of Omega-Centauri is affected by the proposed building for only parts of the observation session times during the time it is affected. The SVLA highlights that if the Observatory was able to coordinate their viewing sessions at particular times they could significantly reduce the number and length of impact on these sessions caused by the proposed building. In addition to this the report notes that:
	 in general, viewing targets in the vicinity of the sky obstructed by the proposed building would be done under far from ideal observing conditions, and that the image quality would be relatively poor on most nights; and The Observatory is no longer a research facility, with the observation carried out at the facility being for public education purposes. Observing for public outreach activities does not have the same demanding requirements as observing for research purposes, and that observing from the centre of the City is still considered satisfactory for public education purposes.
	In light of the above UNSW Global conclude that despite impacting on an iconic sky object for parts of the some observing sessions over two months of the year, the "presence of the proposed building is not expected to have a major detrimental impact on the observatories night time activities."

The surrounding road network and current state of the infrastructure cannot support such a large development.	Extensive upgrades to public transport infrastructure within the CBD and Barangaroo (e.g. light rail, Sydney Metro, new Ferry Stop) will significantly improve the accessibility of the development and the wider precinct. With regard to the surrounding road network, it is noted that extensive analysis has been undertaken as part of Concept Plan Mod 8 and concluded that there was little difference in the road network performance due to the minor traffic increase arising from the Concept Plan modification.
500 car parking places is unnecessary for a 'high rollers' casino.	Crown has sought to achieve an appropriate balance between providing sufficient car parking to cater for the needs of the development and its users/occupants, whilst keeping sustainability a key priority by promoting the use of public transport in the future. The proposed 610 car spaces are considered necessary to service the needs of the proposal and consists of 500 spaces to service the hotel and 110 spaces to service the residential apartments.
The surrounding infrastructure and streets will not be able to cope with this development.	An updated Traffic Assessment Report has been prepared and is provided at Appendix H . A detailed analysis of the proposed traffic impacts has been carried out by Arup using computer modelling software LinSig to measure the performance of road and key intersections. The analysis has considered the traffic generated by Crown Sydney during the week, including the a busy Friday evening. The report notes that Traffic generated by the Crown Sydney development in the AM and PM peaks will be counter-cyclical to that of commuter traffic. That is, movements to Crown Sydney are generally outbound in the morning peak, and inbound in the PM peak – the opposite direction to commercial workers travelling to and from the city. This will ensure reduced traffic impacts arising from the proposed development. Following a detailed analysis the report concludes that the road network impacts of the Crown Sydney development are considered modest. For full details of the assessment refer to Appendix H .

Individual submission

	Key issue raised	Crown response
Heigl	nt	
1	The submission is more than twice the size than the previously approved area and higher than the current CBD height restrictions.	The proposed building has been designed to be a landmark building within the context of Barangaroo and the CBD. The underlying design intent for Wilkinson Eyre Architects has been to create a building that is sculptural in form and which rises to the skyline like an inhabited artwork, thus providing a clear point of difference compared to the more commonly found rectangular building forms that characterise much of Sydney's skyline. In this regard the building's height, location and form is considered to add to its iconic nature and once complete, will make a positive contribution to the diversity and interest of the CBD skyline.
	The original submission was 35 storeys and this is 71 storeys.	This is a matter that is more appropriately addressed as part of the Concept Plan Mod 8 (MP 06_0162) application that is presently with the DP&E.
	This design blocks the view from Sydney Observatory.	A detailed Sky View Impact Assessment was carried out by Lend Lease in conjunction with UNSW Global and was submitted with the application. Following a detailed assessment of the impacts on the Observatory UNSW Global concluded that "the presence of the building is not expected to have a major detrimental impact on the Observatories night time activities." We also note that this matter has also been dealt with in extensive detail as part of Concept Plan Mod 8.
	The size and scale of the building on Sydney's waterfront is inconsistent with the rest of the CBD.	The proposed building has been the subject of a detailed design competition process involving a number of world renowned architects. The winning design prepared by Wilkinson Eyre Architects has therefore been informed and developed through a lengthy and iterative design process that has culminated into a high quality iconic design that befits site location and the building's intended status as a key landmark feature.
Traffi	C	
2	 Concern about the increase in traffic throughout the CBD as a result of 600 new car parking spots. Kent Street is already congested. Do not need more cars along Kent Street Traffic will become unmanageable By placing the building at the western edge of the site, it will cause the public traffic to traverse the site from Hickson Road to the casino and past the public park Sussex Street is already at a bottleneck Kent Street is already congested 	With regard to the surrounding road network, it is noted that extensive analysis has been undertaken as part of Concept Plan Mod 8 with these investigations concluding that there was only a small difference in the road network performance due to the minor traffic increase arising from the Concept Plan modification. Significant investment in infrastructure has been undertaken to provide Barangaroo with a high level of accessibility, particularly in regard to pedestrian access to Wynyard Station. Furthermore, extensive upgrades to public transport infrastructure within the CBD and Barangaroo (e.g. light rail, Sydney Metro, new Ferry Stop) will significantly improve the accessibility of the development and the wider precinct. Refer to the updated Traffic Assessment Report at Appendix H for further details.

Parkii	ng	
3	There is not enough on street parking	The proposal is for a detailed building design for a specific site within the Barangaroo South. The provision of street car parking within Barangaroo South is largely determined by the design and layout of the wider precinct and is therefore a matter that is more appropriately considered and addressed as part of the Concept Plan Mod 8 (MP 06_0162) application. Refer to the updated Traffic Assessment Report at Appendix H for further details.
	As the casino would be restricted to high rollers, parking space demands do not need to meet those of Melbourne's Crown Casino.	Given the unique nature of the integrated resort, the most appropriate method to forecast future traffic generation and parking demand is to refer to similar elements of the existing Crown resort in Melbourne. In this regard Arup (traffic experts for the project) were provided with parking and traffic data by Crown including both video surveillance footage and entry/exit data from Crown's car parking areas. Through the use of this data Arup have been able to forecast with a reasonably high degree of accuracy, the likely traffic generation and parking demand created by the proposed development. Given the unique nature of the proposed development use of this methodology to calculate parking numbers is considered to provide a higher degree of accuracy than application of standardised parking rates under the Sydney LEP 2012.
	110 parking spaces for 66 apartments is almost two spaces per apartment. This is unnecessary.	With regard to residential spaces, it is noted that the type of residential product on offer in the Crown Sydney Hotel Resort building will be high end luxury apartments. Many of the occupants of these apartments are therefore likely to require more than one car space. The proposed 110 spaces represent approximately 1.6 cars per apartment which is considered an appropriate reflection of the likely demand generated by the proposal. Further details are contained in the updated Traffic Assessment Report located at Appendix H .
	Providing 610 car spaces would encourage casino patrons, residents and visitors to drive to the area which would add more congestion to the roads. There is no justification for an increase in private parking spaces.	Crown has sought to achieve an appropriate balance between providing sufficient car parking to cater for the needs of the development and its users/occupants, whilst keeping sustainability a key priority by promoting the use of public transport in the future. The proposed 610 car spaces are considered necessary to service the needs of the proposal. Further details are contained in the updated Traffic Assessment Report located at Appendix H .
Loss of public land		
4	The development will be built on what is dedicated public land. Therefore the proposal needs to demonstrate what public benefit the change of use addresses. This has not been addressed in the submission	The proposal will facilitate the ongoing regeneration of the Barangaroo South Precinct as a high quality waterfront foreshore area. A public promenade with cafes, restaurants, bars and retail stores will contribute to the creation of a new vibrant, active and lively area that will be accessible to the public. These facilities are expected to be highly popular and used by the community and together with the other initiatives and facilities provided within Barangaroo will ensure that there is a significant public benefit realised as a result of the proposal (refer Appendix L).
	The building would be located on what the previously approved Concept Plan had dedicated as a public park. This gave a continuous public park along the western edge of the site, from the northern bay to southern cove. The relocated park will now be overshadowed.	This is a matter that is more appropriately addressed as part of the Concept Plan Mod 8 (MP 06_0162) application that is presently with the DP&E.
	The park is further compromised by the placement of car parking one metre below the park, therefore limiting the ability for deep soil planting over nearly 40% of the park.	The basement has been designed at an appropriate depth to allow a park to be designed that will be able to incorporate significant trees and landscaping with appropriate soil depths to support the vegetation. On site detention and the remainder of the park will still provide deep soil. This matter will be addressed in in further detail as part of any

		application for the future park.
Overs	 shadowing	
5	The development will overshadow the Pyrmont precinct to the west (darling Island, Saunders Wharf and Sydney Wharf). Increase in overshadowing of public space and the water	A detailed Shadow Study was prepared for the proposal and provided as part of the application (refer Appendix D of Architectural Design Statement). As shown within this study the proposed building will result in some overshadowing of Pyrmont during the morning of winter months up until 10am. By shortly after 11am the building no longer overshadows Pyrmont. The diagrams also show that no overshadowing of Pyrmont occurs during the summer and the September/March equinox. The level of overshadowing is therefore considered to be acceptable as it does not affect large portions of land and only results in overshadowing for a small portion of the day during mid-winter. It is also noted that the shadow footprint of the proposed building is significantly less than that of the building envelope under Concept Plan Mod 8.
	The new Headland park will be overshadowed by the building	The new Headland Park is located to the north of the proposed Crown Sydney Hotel Resort building. As a result there will be no overshadowing impacts on this area.
Wind		
6	The building would have an adverse effect of the wind environment and create wind tunnels throughout the site, meaning the public will not be able to enjoy the public spaces	An assessment of pedestrian wind impact has been undertaken for the proposed development by RWDI and was provided with the application. Wind conditions for the proposal were assessed through detailed wind tunnel testing that involved 93 specifically designed sensors that were connected to the model and which reported back to a wind data acquisition system to record wind conditions surrounding the proposal. Wind testing was then taken from 36 different angles to ensure a thorough analysis of potential wind conditions in all environments. Measurements were then taken to evaluate pedestrian comfort at building corners, near building entrances, on adjacent pavements with high pedestrian traffic, and in open plaza areas.
		The results of this analysis indicated that the wind environment around the building is expected to be met at all locations with the exception of around the building's northwest corner, where summer winds from the north-east and north northeast have the potential to result in elevated wind conditions that would affect the levels of pedestrian comfort. In response to this mitigation measures we recommended including the addition of vertical wind control elements at the building's northwest corner, and the provision of landscaping along the promenade and to the north of the building. Both of these mitigation measures have been incorporated into the design of the proposal and as a result wind conditions in all locations will pass the relevant criterion.
Public	c transport	
7	Public transport to the area is inadequate for a development of this size	The government announcement of the metro rail like will significantly improve the accessibility of the Barangaroo Precinct and as a result it is expected more people are likely to visit the area on a frequent basis. In addition the new City Walk Bridge will connect Wynyard Station to Barangaroo providing fast and convenient pedestrian access from Wynyard Station. A new ferry stop will also be added to Barangaroo. Overall the Barangaroo South Precinct will be very well served by high quality public transport connections in the future.

	Community consultation Community consultation	
8	The proposal never had a thorough independent review	An international design competition was conducted under the supervision of an expert advisory panel to identify a principal architectwith an iconic design for the Crown Sydney Hotel Resort. Expressions of interest were sought from eight of the world's leading architecture firms with experience in image in copic and more specifically, experience in designing large scale resorts and iconic public buildings. The EOI included requirements to design and deliver an iconic world-class building on Sydney Harbour that would become a destination for international tourists. The firms were: - Adrian Smith and Gordon Gill Architecture, Chicago; - Kohn Pedersen Fox Associates, New York; - Pelli Clarke Pelli Architects, New Haven, Connecticut; - Renzo Piano Building Workshop, Genoa; - Rocco Design Architects, Hong Kong; - UN Studio, Amsterdam; - Wilkinson Eye Architects, London; and - 5 Plus Design, Hollywood, California. From these eight firms a shortlist was selected and invited to participate in an invitation-only design competition for the Principal Architect and Concept Design for the Crown Sydney Hotel Resort. The shortlist comprised: - Adrian Smith and Gordon Gill Architecture; - Kohn Pedersen Fox Associates; - Wilkinson Eye Architects, London; and - Renzo Piano Building Workshop, Genoa. Requests for Proposals were issued in December 2012 and submissions were due in April 2013. The firms presented their designs to a jury panel in Sydney at the end of April. The panel consisted of representatives from Crown, Lend Lease and the Barangaroo Delivery Authority, as well as a prominentarchitectrepresenting the then NSW Department of Planning and Infrastructure, and an observer from the City of Sydney. The jury unanimously recommended Wilkinson Eyre Architects (WEA), and in May 2013 Crown announced that WEA would be the Principal Architect for the Crown Sydney Hotel Resort. Following lodgement of the application the building design is also now the subject of a detailed design review that is being carried out by an independ
	There was no adequate and meaningful community consultation	Crown has undertaken extensive community consultation prior to submission of the application, the full details of which are set out in the Consultation Summary Report that accompanied the application, key initiatives included: A dedicated consultation website for the proposal.

South	ern Cove The Southern Cove was introduced as a requirement by the competition Jury	 Stakeholder briefings and community presentations. Personal door to door knocking. Postcards and community brochures were sent out to the surrounding community. In addition to the above, in the event that consent is obtained Crown will look to continually involve the community during the construction and operational process. The Southern Cove, now known as Watermans Cove has been maintained within proposal. The location of the proposal
9	after the international competition for the site, and has been part of every change in the concept plans. The location of this development not only diminishes the quality of the public park, but also effectively removes the southern cove and the introduction of water deep into the development.	will provide for an active frontage to the Watermans Cove and public park to the north and will still contribute to the creation of high quality public domain space as illustrated in the architectural visualisations. A deep water cove of similar dimensions to the current proposal has been maintained as per the original proposal. This matter has been addressed in further detail within the Concept Plan Mod 8 (MP 06_0162) application.
Misce	Illaneous	
10	There is already one Casino in Sydney – that is enough.	This is not a matter of consideration for this application.
	The Star is in too close proximity to this proposal. Do not need another Casino so close to The Star	This is not a matter of consideration for this application.
	The initial concept plan which was approved in 2007 had a GFAof 388,300 square meters. This latest proposal will take the GFAto 661, 686 square meters. This will make the final GFAapproximately 70% on what was originally approved in the concept plan.	This is a matter that is more appropriately addressed as part of the Concept Plan Mod 8 (MP 06_0162) application that is presently with the DP&E.
	This Development Application has been prepared in accordance with Mod 8 of the concept plan. Mod 8 has not yet been approved, therefore it is difficult to understand a process which might approve a DA for an unapproved concept plan.	It is acknowledge that Concept Plan Mod 8 is yet to be approved. Whilst this is the case it is considered appropriate to carry out an assessment of the proposal against the proposed provisions of Concept Plan Mod 8, as the building will only be able to be approved in the event that Concept Plan Mod 8 is approved in the first instance.
	The three Lend Lease towers are unsightly, bulky and intrusive on the waterfront.	This is not a matter of consideration for this application.
	Only billionaires can get away with developments such as this one.	This is not a matter of consideration for this application.
	The building should not be illuminated 24/7. This will impact on surrounding residents.	Lighting associated with the proposed signage has been designed to minimise glare. The proposed illuminated signage would be designed and controlled so as not to detract from the amenity of the surrounding residents.
	This building is described as a new icon for Sydney and compares itself with the other Sydney icons, the Sydney Harbour Bridge and the Sydney Opera House. Neither of these were designed as icons. This proposed icon however is an icon not for public infrastructure or culture, but to commerce – it is surmounted by a logo for the Casino group and so advertised itself as an icon to gambling.	The proposed building design by Wilkinson Eyre Architects was the winner of an international design competition that involved numerous award winning international architects. The design competition was run by Crown with the specific intent and goal of designing and delivering an iconic world-class building on Sydney Harbour that would become a destination for international tourists.
	35 storeys was approved by BDA and NSW Government in 2013. Mod 8 has increased that height to 71 storeys, which includes luxury apartments above the hotel/casino. Crown now claims that if they cannot build the apartments the entire development is not feasible. If the original hotel/casino was not viable, then why did the BDANSW State Government approve it?	This is a matter that is more appropriately addressed as part of the Concept Plan Mod 8 (MP 06_0162) application that is presently with the DP&E.