

APPENDIX C CONSOLIDATED MITIGATION MEASURES FOR SSD-32766230

The following outlines the recommended mitigation measures in response to potential impacts identified in Section 9 of this EIS. The structure of mitigation measures is based on the DPIE's hierarchy of approaches for managing impacts identified in the *Guidelines*, as:

- **Performance based measure** identify performance criteria that must be complied with to achieve an appropriate environmental outcome but do not specify how the outcome is to be achieved.
- Prescriptive measure require action to be taken or specify something that must not be done.
- Management based measure identify one or more management objectives that must be achieved through the implementation of a management plan.

Following the implementation of appropriate mitigation measures as recommended, it is determined that the proposal will not result in any significant adverse impacts on the surrounding environment.

This analysis comprises a qualitative assessment consistent with AS/NZS ISO 31000:2009 Risk Management–Principles and Guidelines (Standards Australia 2009). The level of risk was assessed by considering the potential impacts of the proposed development prior to application of any mitigation or management measures. In accordance with the SEARs, the Environmental Risk Assessment (ERA) addresses the following significant risk issues:

- The adequacy of baseline data;
- The potential cumulative impacts arising from other developments in the vicinity of the site; and
- Measures to avoid, minimise, offset the predicted impacts where necessary involving the preparation of detailed contingency plans for managing any significant risk to the environment.

Risk comprises the likelihood of an event occurring and the consequences of that event. For the proposal, the following descriptors were adopted for 'likelihood' and 'consequence'.

Likelihood		Consequence			
А	Almost certain	1	Widespread and/or irreversible impact		
В	Likely	2	Extensive but reversible (within 2 years) impact or irreversible local impact		



Likelihood		Consequenc	Consequence			
С	Possible	3	Local, acceptable or reversible impact			
D	Unlikely	4	Local, reversible, short term (<3 months) impact			
E	Rare	5	Local, reversible, short term (<1 month) impact			

The risk levels for likely and potential impacts were derived using the following risk matrix.

		LIKELIHOOD				
		Α	В	С	D	E
	1	High	High	Medium	Low	Very low
ж	2	High	High	Medium	Low	Very low
NENC	3	Medium	Medium	Medium	Low	Very low
ISEQ	4	Low	Low	Low	Low	Very low
CON	5	Very low	Very low	Very low	Very low	Very low

The results of the environmental risk assessment for the proposed development are presented in the below table and are based upon the range of technical and specialist consultant reports appended to the EIS. The table has directly related mitigation measures responding to each impact also based upon the range of technical and specialist consultant reports appended to the EIS.

N.B. 'O' – Operational; 'C' – Construction

'Pe' – Performance based mitigation measure; 'Pr' – Prescriptive based mitigation measure; 'Ma' – Management based mitigation measure



Table 1 Mitigation Measures

Issue	Potential Impacts	Stage of Project	Likelihood	Consequence	Risk Level	Mitigation Measures	Type of Measure (Pe /Pr/ Ma)	Residual Impact
Built Form and Building Design	Potential impacts to the built form and character of the existing streetscape, pedestrian amenity, community space/activation , privacy at neighbouring developments as well as overshadowing on to the neighbouring dwellings and open space areas.	0	A	2	High	 Impacts to Existing Streetscape –The street wall height, setbacks and façade articulation inform the proposal's integration with the existing streetscape. The proposal responds to potential impacts to the interpretation of the heritage buildings and the historic characteristics of the surrounding area. Impacts to Pedestrian Amenity – The built form responds to potential impacts to pedestrian amenity, specifically in relation to protect of existing view corridors, excessive bulk and scale when viewed from the public domain, and adverse environmental impacts such as solar, wind, and reflectivity impacts. Activation and Community Spaces – The built form has carefully evolved to avoid any adverse impacts to the public domain; rather it enhances community spaces and activation. Façade Materiality – The proposal 	Pr	The proposal will deliver an improved built form outcome and activation within the context of The Rocks. The proposal will result in a neutral to minimal impact on the amenity of the surrounding residential properties and streets.



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						 incorporates a rich and appropriate façade materiality to avoid adverse impacts to the established materiality characteristics of The Rocks precinct. Privacy Impacts – The façade materiality and orientation and location of glazed windows has been carefully considered to mitigate adverse privacy or overlooking impacts into the neighbouring properties. Overshadowing Impacts – The built form and scale has been extensively modelled and refined in order to mitigate adverse overshadowing impacts to the surrounding areas 		
Visual Impact	The development will be visible from a number of public and private viewpoints and may block views to key elements	0	A	2	High	The proposed built form and setbacks has been designed to reduce the perceived bulk of the development and blend with existing heritage items and surrounding character and present overall a more uniform built form that is less visually prominent. The built form design has also been prepared to avoid blocking any view corridors, any highly valued private views from neighbouring developments	Pr	Impacts to views of water and sky will be generally similar with the existing building. The proposal will result in view



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	including the waterside, heritage buildings, view corridors, views to the opera house and views to the sky.					or any iconic landscapes from public areas. The built form has been prepared to minimize impacts to views of water and sky.		impacts onto neighbouring rooftops and buildings, however, these are not considered iconic or significant.
European Heritage	Potential impacts to the heritage values of the surrounding heritage items and the heritage area.	Ο	A	2	High	A Heritage Interpretation Strategy should be prepared for the site by a suitably qualified heritage consultant as a condition of the approval. Prior to the issue of a Construction Certificate a Photographic Archival Recording should be undertaken of the place and must be prepared in accordance with the NSW OEH Heritage Division's Guidelines for 'Photographic Recording of Heritage Items Using Film or Digital Capture'.	Ma	The proposed demolition of the square detractive, contemporary building will not result in any negative heritage impacts and the proposed built form and mitigation measures will ensure the



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								development will be delivered with a positive heritage outcome.
Archaeological Heritage	There is moderate potential that artefact rich wells or cesspits could be retained with partial integrity, at the site. The proposed excavation may expose and potentially impact relics of State significance.	С	C	2	Medium	 Prior to the commencement of works at the site, an archaeological induction should be given by a suitably qualified archaeologist to lead contractors. No works are to occur to the former Playfair Meatworks walls within the basement area. Extant slab is lifted within the basement levels, this is to be monitored by archaeologists. Within the remainder of the site, an unexpected finds procedure should be implemented. Should human remains be identified, the relevant procedure should be enacted. 	Ма	Any unexpected finds will need to be managed and handled appropriately during the construction works.



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Aboriginal Cultural Heritage	Potential direct or indirect harm to Aboriginal objects or places.	С	E	4	Very Low	An ACHAR has been prepared, informed by consultation with the relevant RAP groups. The ACHAR identifies that the following mitigation measures be implemented for any unexpected objects or places at the site: Archaeological Finds Procedure : Should any archaeological deposits be uncovered during any site works. Human Remains Procedure : In the unlikely event that human remains are uncovered during the proposed works, the human remains procedure should be implemented.	Ма	Any unexpected finds will need to be managed and handled appropriately during the construction works.
Noise and Vibration (Operation)	Potential noise impacts to surrounding, sensitive residential and commercial receivers from changes to traffic, plant items as well as operation of the	0	В	3	Low	The Noise Impact Assessment assesses that the proposal will not result in any acoustic impacts from traffic changes as the development will reduce the anticipated traffic to and from the site. The proposal does not include any plant works; these will be undertaken as part of the detailed design phase. The plant areas will be able to comply with relevant noise criteria subject to industry standard acoustic screening measures.	Ма	Any complaints received for acoustic impacts at the neighbouring receivers are to be appropriately recorded and addressed to



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	intended ground level indoor/outdoor dining areas as well as the rooftop communal area.					 The Noise Impact Assessment identifies management measures to mitigate acoustic impacts from the proposal. These include: Internal music to be limited to 75dBALA10. No music played in outdoor seating areas. All operable windows and doors to external seating areas are to be closed after 12am (i.e., midnight). Removal of glass or waste should be done internally and must not be taken after 10:00pm and before 7:00am. Complaints number and signs to patrons reminding them to be mindful to be provided. 		Ensure the appropriate noise profile is achieved
Noise and Vibration (Construction)	Potential noise increase during the construction phase and vibrations causing potential	С	D	3	Low	 The Noise Impact Assessment identifies the appropriate management measures to ensure the proposed construction will not result in any noise and vibration impacts that exceed the relevant thresholds: Construction noise management, 	Ма	Any complaints received for acoustic impacts at the neighbouring receivers are



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	pedestrian discomfort and structural damages to neighbouring buildings, especially heritage buildings.					 including the possible acoustic treatment. Consistency with the construction management plan and conditions of consent for construction traffic. Compliance with the appropriate, indicative safe distances and vibration mitigation measures Use and allocation of management of airborne noise and vibration impacts Site specific vibration monitoring to manage the heritage structures surrounding the site. This includes establishing the appropriate trigger levels and alter/alarm procedures. Use of alternative equipment when appropriate, use of acoustic enclosures as well as noise management for cranes and piling equipment. General management measures include consultation, notification, complaints handling and set-up of contingency plans. 		to be appropriately recorded and addressed. Appropriate monitoring is to be maintained during the construction works for any structural impacts to surrounding buildings, especially with regard to the heritage buildings.



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Wind	Potential impacts to the pedestrian wind comfort to the surrounding area. Westerly winds at the proposed outdoor seating area at the upper ground floor and the communal terrace area experiencing winds above the pedestrian wind comfort criteria.	0	C	3	Low	 A Pedestrian Wind Impact Assessment found the proposal would not result in any adverse wind impacts to the surrounding areas. Specific, mitigation measures are recommended to ensure the on-site, outdoor areas achieve the relevant pedestrian comfort levels: Arbour structure above the upper ground floor seating area. 1.5m high shrubbery following the terrace wall at the communal terrace. The western most seating bench back is recommended to be a minimum of 1m high. 	Pe	Subject to the recommended mitigation measures the proposal will not result in any substantial impacts to the future wind environment at the site and across the surrounding area.
Solar Reflectivity	Solar reflections off of the proposed development facades exceed	0	С	2	Low	As part of the detailed design work, prior to Construction Certificate, the development is to integrate glazing across the relevant portions of the façade with a lower reflectivity coefficient of 10%.	Pr	Solar reflections will not exceed the disability glare



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	the disability glare threshold.							threshold and will not adversely impact driver safety or pedestrian comfort.
Light Spill	Adverse spill light, bright light and artificial sky glow impacts	0	E	4	Very Low	 The detailed design of any external light fixtures are to be prepared prior to Construction Certificate in accordance with the relevant technical parameters in accordance with: AS/NZS 4282:2019 (Control of the obtrusive effects of outdoor lighting) National Construction Code 2019 (NCC) Green Star Buildings (Credit 35) AS/NZS 3000 Electrical installations (known as the Australian/New Zealand Wiring Rules) AS 1158.3.1 Lighting for roads and public spaces Part 3.1 Pedestrian area (Category P) lighting - Performance and 	Pe	Nil



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						design requirements.		
Flooding Risk	Flood inundation and damages during the 1% AEP and PMF flood events	0	E	5	Low	 A Flooding and Stormwater Report provides an assessment of the flooding, stormwater quantity and quality control measures proposed as part of the development. The proposed hotel accommodation floor levels will be built to the flood planning level (1% AEP + 500mm freeboard) and the basement levels and through-site link from Cambridge Street will have a floor levels protected up to the PMF level. 	Pr	Flooding occurring on the site and causing associated damage. This is considered a low risk.
Water Quantity /Quality	Adverse Impacts to the quantity of stormwater runoff from the site Adverse impacts to the quality of stormwater runoff from the	0	D	3	Low	 The Flooding and Stormwater Report provides an assessment of the flooding, stormwater quantity and quality control measures proposed as part of the development as well as recommended mitigation measures in response to the stormwater quality requirements. An OSD tank is proposed with a volume of 45m3. This will meet Sydney Water's requirement OF 83 L/s permissible site discharge. 	Pe, Pr	Maintenance of stormwater management infrastructure and continued flood depth during flood events, consistent with the existing



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	site.					 14 x OceanProtect Psorb cartridges (or the approved equivalent) recommended to be included within the OSD tank to meet the relevant water quality targets. 		environment.
Contamination	Potential contamination sources or area of environmental concern (AEC) within site	С	Ε	4	Very Low	 The Detailed Site Investigation (DSI) has identified a series of measures to respond to unexpected sources of contamination on the site which include: unexpected finds protocol, waste classification during offsite disposal further testing should groundwater be intercepted 	Ма	Subject to the management measures outlined within the DSI, the site can be made suitable for the proposed development.
Hazardous Building Materials	Adverse environmental and health impact from the hazardous materials across the existing 'Clockwork Tower' Building.	С	D	4	Low	 A Specification for the Removal of Hazardous Building Materials and a Targeted Destructive Hazardous Building Materials Assessment identify the relevant guidelines and measure to appropriately remove any hazardous material at the site. This includes: Sampling and removal of any asbestos containing material with the appropriate inspections, monitoring and certification by 	Ма	ODS refrigerants systems in good working order do not need to transition to alternative systems until



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						 the appropriately qualified specialists. Handling and removal of any synthetic mineral fibre in accordance with the relevant national codes and guides. Lead containing paints are to be appropriately avoided or to be replaced/removed. The relevant dust or fumes controls and any replacement/removal works are to be undertaken in accordance with the relevant Australian Standard. Any ozone depleting substances (ODS) should be appropriately decanted and disposed and replaced with a non ODS alternative. Any unexpected, suspected hazardous materials encountered will require the appropriate cease of works and assessment of the materials. 		2029. All other Hazardous materials will be managed and removed appropriately.
Universal Design	Non-compliance with Disability Discrimination	0	E	5	Very low	Adoption of performance solutions to achieve compliance with BCA. This will be resolved prior to issuance of a CC.	Pe	Nil



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	Act 1992, BCA and Australian Standards							
Construction Traffic Impacts	Construction traffic impacts to the local road network.	С	В	4	Low	A Construction Traffic Management Plan is to be prepared by the future, appointed contractor with measures identified by the preliminary construction management plan.	Ма	The CTMP will establish the relevant response measures to any traffic impacts generated due to the proposed construction works.
Safety	The proposal is unlikely to introduce new types of crimes into the local area, but rather may have the potential to	0	С	3	Medium	 The detailed design will need to consider: Inclusion and extent of CCTV surveillance cameras. Lighting and wayfinding to reduce crime risks. Training and placement of staff within the 	Ма	The proposed operation will adapt and introduce the appropriate management measures in response to



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	generate increased risk of crime in the area					 hotel to identify and reduce crime risks. Maintain a clear and well managed site to further deter crime. The management of existing frequent crimes in The Rocks Adaptive management measures on Friday and Saturday nights, and Saturday and Sunday mornings, Tailored risk management approaches for specific areas Management of patrons leaving the site in a respectful manner 		the locations and times for concentrated incident risk.