

# Part E: Environmental Assessment

## 16.0 Environmental Assessment

This Part assesses the environmental impacts of the Concept Plan proposal at its maximum development capacity, and addresses the matters for consideration set out in the Director-General's Environmental Assessment Requirements.

In accordance with the requirements of the Director General for the preparation of a planning study to support the proposed inclusion of the CUB site as a State significant site under Schedule 3 of SEPP (Major Projects) 2005, this Part also addresses the suitability of the site and implications of the proposed land uses.

The draft Statement of Commitments is also provided in this Section.

### Director General's Environmental Assessment Requirements

**Table 12** provides a detailed summary of the individual matters listed in the Director General's Environmental Assessment Requirement (EAR) and / or identifies where each of these requirements has been addressed in this report and the accompanying technical studies.

In addition **Table 13** provides a summary of the recommendations arising from the Minister's Expert Advisory Panel and indicates the consistency of the proposed Concept Plan with those recommendations.

**Table 12 – Director General's Requirements**

Director-General's Requirements	Report location
<b>State significant site study requirements</b>	
<b>Special Provision</b>	On 23 June and 21 July 2006, The Minister for Planning declared that redevelopment of the Carlton United Breweries Site and adjoining lots on Kensington Street, within the City of Sydney Local Government Area, for mixed uses and public open space was development to which Part 3A of the Environmental Planning and Assessment Act 1979 applied.  On 28 August 2006, the Minister for Planning authorised submission of a Concept Plan for the project, pursuant to Section 75M of the Act.
<b>State significant site Study requirements</b>	
A state significant study will need to include (but not limited to ) the following: Address the criteria at Clause 8(2) of the Major Projects SEPP	Part B Section 3.0
Address the criteria for Sate Significant Sites in the attached Draft Guidelines dated 24 July 2006, with particular focus on criterion (a)	Part B Section 3.0
Summarise and document any consultation with the Council of the City of Sydney, any other relevant agencies, and the community and explain how issues raised by the Council, agencies or the community have been addressed	Part A Section 2.0 and summary table included at <b>Appendix E.</b>
Detail the proposed land use controls (including zoning) and justify the necessity for these controls against the existing planning instruments;	Part B Section 4.0 and 5.0

Director-General's Requirements	Report location
Indicate the future approval regime for development on the site sought by identifying the circumstances when Part 3A or Part 4A (including exempt or complying development) would apply.	Part B Section 5.3
<b>General Requirements</b>	
<b>The Environmental Assessment (EA) must include</b>	
Executive Summary	Executive Summary, p.i
Description of the proposal Including the need for the project, alternatives considered and the various components and stages of the project;	Part B Section 3.0, Part D Section 7.0
Consideration of relevant SEPPs and applicable planning instruments	Part B Section 4.8
Environmental Risk Analysis identifying Environmental Impacts of the project	Part D and Part E Sections 16 to 24 inclusive, and supporting technical consultant reports.
Draft Statement of Commitments	Part D Section 25.0
Project Justification	Part B Section 3.0
Statement of Validity	Provided
Draft Planning Agreement detailing public benefits to be provided	Part D Section 25.2
<b>Key Issues</b>	
<b>Carlton United Breweries Expert Advisory Panel (EAP)</b>	
Demonstrated consistency with recommendations of the EAP report to the Minister dated 31 August 2006. Any variations to be justified by similar or better outcome	Part D Section 16.1 and Summary at Table 13
<b>Urban Design, Development Controls and Land Uses</b>	
<ul style="list-style-type: none"> <li>- <b>Urban Design, development controls and land Uses</b></li> <li>- Methodology and justification for selecting configuration of CUB proposal mix of land uses and density of development.</li> <li>- Alternative options for built form, densities and development parameters</li> <li>- Site Analysis of existing natural and built form bulk and scale of surrounding development; landmark buildings; density; heights; topography; streetscape; shadows; view corridors; connectivity; street address, open space, vegetation; traffic management and road hierarchy.</li> <li>- SEPP 65 compliance</li> <li>- GFA on precinct or allotment basis</li> <li>- Built form and design quality controls for future development of site</li> <li>- Visual analyses and photomontage of the development</li> <li>- Noise Impacts</li> <li>- Demonstration that the amount and location of commercial and retail land uses will be viable</li> <li>- Provide 1:500 model</li> </ul>	Part C Section 6.0, Part D Sections 7.0 to 12.0 inclusive Part E Sections 16.0 to 23.0 inclusive

Director-General's Requirements	Report location
<p><b>Streetscape and Public Domain</b></p> <ul style="list-style-type: none"> <li>- Relationship of urban public spaces and their adjoining built form and how urban public spaces will be useable</li> <li>- Hierarchy and purpose of street patterns and relationship between streets, footpaths and buildings</li> <li>- Relationship between public domain and ground floor uses</li> <li>- Links connection and access between site and surrounds and how connections will function</li> <li>- CPTED principles to be incorporated in design of public domain</li> </ul>	<p>Part D Section 9.0</p>
<p><b>Transport and Access</b></p> <ul style="list-style-type: none"> <li>- <b>TMAP</b></li> <li>- Existing and future transport networks, traffic generation, circulation and car parking</li> <li>- Provision of public transport</li> <li>- Pedestrian and cycle access</li> <li>- Pedestrian connection to heavy rail services and major bus interchange at Central/Broadway</li> <li>- Onsite management measures to reduce car dependence by car sharing</li> </ul>	<p>Part D Section 13.0, Part E Section 21.0 and Transport Report by Masson Wilson Twiney included at <b>Appendix M</b></p>
<p><b>Heritage</b></p> <ul style="list-style-type: none"> <li>- Heritage Impact Statement</li> </ul>	<p>Part D Section 11.0 and Part E Section 19.0 Heritage Impact Assessment prepared by Godden Mackay Logan included at <b>Appendix S</b></p>
<p><b>Utilities Infrastructure and Storm Water Management</b></p>	<p>Part C Section 6.11, Part D Section 14.0 and Infrastructure Report prepared By Robert Bird included at <b>Appendix P</b></p>
<p><b>Development Staging</b></p>	<p>Part D Section 15.0</p>
<p><b>Ecological sustainable development consistent with 3 CBDs Green house initiative and 5 star greenhouse level.</b></p>	<p>Part D Section 14.0, Part E Section 22.0 and ESD report prepared by Ove Arup included at <b>Appendix U</b></p>
<p><b>Consultation Requirements</b></p> <ul style="list-style-type: none"> <li>- City of Sydney Council;</li> <li>- Central Sydney Planning Committee;</li> <li>- Transport agencies; Department of Housing; NSW Heritage Office; Department of Environment and Conservation; Department of Commerce (Government Architect); Utilities and Emergency Services</li> </ul>	<p>Part A Section 2.0 and Summary Table included in <b>Appendix E</b></p>

**Table 13 - Recommendations of the Expert Advisory Panel**

CUB Expert Advisory Panel Key Issues to be addressed	
<b>Park</b>	
1. The park should be located on the southern boundary central to the site with public streets on all sides.	The park is located on the southern perimeter of the site between O'Connor Street, Chippen Lane, Irving Street and Carlton Street.
2. Buildings around the park should match the heights of heritage buildings No. 22 & 23 resulting in heights to a maximum of 25 metres.	All building envelopes around the park have a street wall height of 25 metres.
3. To maximise sun to the park between 12 & 2 pm in winter building heights throughout the site should maintain an appropriate sun access plane.	All building envelopes are within a sun access plane generated to preserve sun access to the park between 12 and 2 pm mid winter.
4. Development across the site should also maintain an appropriate sun access plane in order to minimise overshadowing of the surrounding Chippendale buildings between 12 & 2pm in winter.	All building envelopes are within the sun access plane generated to preserve surrounding Chippendale between 12 and 2 pm. One location within Chippendale is identified where additional shadow is cast in Wellington Street. See Part E Section 20.2.
<b>Heritage</b>	
5. The Heritage focus should be on the Brewery Square with the retention and adaptive reuse of buildings numbered in the adopted Conservation Plan as 30, 26, 36, 22 & 23 and the Brewery Yard 52.	All buildings numbered are proposed to be conserved and adaptively reused.
6. Other heritage buildings of moderate heritage significance which generally have a lack of integrity and intactness could be removed if they provide the opportunity to deliver better urban design outcomes for the site. These include those numbered 35A, 35B, 32 & 13A.	Buildings 13A, 32 and 35B are proposed to be demolished. Building 13 A was investigated further and assessed to be of less than moderate significance. The demolition of each of the buildings will result in a better urban design outcome when compared with the outcome if the buildings were retained. This is discussed in detail in Part E Section 19.0 of the report.
<b>Height</b>	
	The Height of the proposed building envelopes is described and discussed in detail in Part D Section 12.0 of the report
7. Buildings on the southern boundary of the site should be a maximum of 15 metres to relate to the warehouses and related buildings in Chippendale.	All building envelopes on the southern boundary are 15 metres. Additional height setback from the boundary is proposed, as contemplated by recommendation 14 of the EAP.
8. Buildings on the western site boundary along Abercrombie Street should be 20 – 25 metres high at the property boundary, to act as a transitional form on this boundary. The actual height should have regard to the buildings on the western side of Abercrombie Street and the existing Brewery buildings.	Building envelopes on Abercrombie Street are generally between 20-25 metres at the property boundary. Additional height setback from the boundary is provided as contemplated by recommendation 14 of the EAP. Some variation to the height recommended by EAP is proposed.
9. Buildings on Broadway on the northern site boundary west of Balfour Street should be 45 meters high to relate to the 42 metre height limit on the other side of Broadway, and include an articulation at the 25 metre high level to complement the proposed podium height on the eastern side of Balfour Street.	Complies in every respect.
10. Buildings on Broadway on the northern site boundary east of Balfour Street should have a 25 metre podium with a maximum of 2 towers above. The buildings should sit below the FAC height limit and be separated by a minimum distance of 25 metres. The towers will relate to the height of the UTS Tower, act as a gateway to the city and provide the benefit of removing development pressure from other parts of the site.	Complies in all respects, other than the separation distance at the southern 'pinch point' is 24 metres but widens to 35 metres approximately at the Broadway frontage.
11. Buildings on the western side of Kent Road, south of the proposed towers on Broadway, should be restricted to a maximum of 45 metres.	Building envelopes exceed 45 metres. Additional height setback from the dominant street frontage is provided as contemplated by recommendation 14 of the EAP

CUB Expert Advisory Panel Key Issues to be addressed	
12. Buildings on the eastern side of Kent Road, located adjacent to the south of the heritage listed Administration Buildings (numbered 10A and 10B in the Conservation Plan) should match the heights of those buildings.	Building envelopes are consistent with the height of the Administration Building
13. New buildings on both the eastern and western sides of Kensington Street located between the buildings mentioned in recommendation 11 above and the northern side of Outram Street should be to a maximum height of 25 metres.	Building envelopes are a maximum of 25 metres.
14. Additional height to the above recommendations may be possible if set back from the building within a 45 degree set back from the dominant street. Roof top developments, as well as being set back, should not be visually dominant from the adjoining street or increase shadows on parks or the Brewery Courtyard.	The height of building envelopes has been increased by projecting a 45 degree plane from the dominant street frontage.
<b>Design Excellence</b>	The requirements of the EAP in relation to design excellence has been incorporated as provisions in the proposed SEPP Amendment and will be a matter for consideration by the consent authority in the determination of future Project Applications for the site.
15. Architectural competitions should be held for all buildings over 25 metres in height. For the two towers on Broadway the competition should include international architects.	See comment above
16. To ensure design quality across the whole site for all buildings and the public domain, a Design Review Panel should be established to be involved in the design development and to provide recommendations to the approval authority. The panel should also be involved in assessing the architectural competitions and in ensuring that design quality follows through to the completed works.	See comments above
17. A variety of architects and urban designers should be used across the site to ensure visual diversity. The selection of architects should be endorsed by the Design Review Panel.	See comments above. It is noted that under the terms of the Design Excellence competition for the site which ranked the scheme by Cox Richardson, Tzannes Associates and Sue Barnsley Design first, it is understood that the team is entitled to be appointed architects for two buildings under the terms of that Design Competition.
<b>Street layout</b>	
18. The street layout should have two streets parallel to Broadway, spaced to relate to the heritage buildings, with a further street relating to the extension of O'Connor Street on the eastern sector of the site.	The street layout is consistent with this recommendation. The layout is described and discussed in detail in Part D Sections 7.0, 8.0 and 9.0 of this report.
19. Streets perpendicular to Broadway should be based on Balfour Street with two narrow streets at block mid points east and west of Balfour. Care needs to be taken in the planning of the narrow streets to ensure safety.	The street layout is consistent with the panels recommendations. See comments below in relation to safety and design.
20. Street edges should contain active uses particularly within the proposed narrow north south streets where issues of public amenity and safety may arise.	Active uses are included at street level. The design of the lanes has been undertaken with regard to CPTED principles and recommendations of the CPTED report prepared by Elton Consulting included at <b>Appendix AA</b> .
21. The street layout should relate to surrounding areas by maximising pedestrian linkages while avoiding short cuts for traffic.	Particular care was taken in the development of the street layout to prevent rat runs through the site and surrounding Chippendale. See Transport Report prepared by Masson Wilson Twiney included at <b>Appendix M</b> .
22. The street layout should be designed to meet the necessary statutory and design requirements in relation to traffic management within and without the site.	The street layout has been designed in accordance with the relevant standards.

CUB Expert Advisory Panel Key Issues to be addressed	
<b>General Recommendation</b>	
23. Car Parking should comply with the City Council's car parking code and the number of entry points to car parks from the street should be minimised.	The proposed parking provision is consistent with the Sydney LEP 2005. The proposed SEPP amendment includes the current rates as a development standard.
24. The concept plan approved for the site should achieve the following SEPP 65 compliance levels for solar access within individual buildings within each proposed street block. The panel considers that achievement of 70% compliance for the overall site with no block below 60% would be acceptable in the consideration of the highly urbanised location of the site.	The Concept Plan is able to meet SEPP 65 solar access based on the methodology outlined in Part D Section 20.6 of the report.
25. There should be a diversity of uses within the site to reflect the range of commercial, residential and educational activities in the nearby area including the opportunity for student housing. Commercial space should be concentrated on Broadway to create a buffer for the residential area.	A diversity of uses is provided for as recommended. Commercial space is concentrated on Broadway.
26. To ensure a diversity of uses the minimum proportion of either commercial or residential development within the site should be 30%.	The proposed split in uses is 59% residential and 41% commercial and retail uses.
The concept plan approval for the site shall nominate the maximum gross floor area available within each street block to ensure that the maximum site FSR is not breached. The bulk, scale, height and density of buildings within each street block should conform to the design principles enumerated in the panel's recommendations.	GFA is provided for each Development Block. The built form is consistent with the EAPs recommendations.
The panel recommends that the community park be located in the centre of the site on the southern boundary to be close to the Chippendale community, with surrounding buildings matching the scale of the heritage buildings.	The location of the main community park is consistent with the EAPs recommendation.