

ITEM 3. SYDNEY LIGHTS DESIGN CODE – ADOPTION**FILE NO: S100845****SUMMARY**

The purpose of this report is to seek Council's adoption of the draft Sydney Lights Design Code (the Code).

The draft Code is part of a co-ordinated series of Public Domain Design Codes that provide specific objectives and technical information for the design of the public spaces in the City of Sydney Local Government Area (LGA).

The draft Code is aligned to Sustainable Sydney 2030 aspirations and sustainability targets and includes a program of lighting improvements for pedestrians and cyclists. It establishes key design principles and material and lighting palettes to be used for the City's streets and public spaces.

The draft Code was placed on public exhibition from 4 November to 2 December 2014, and three written submissions were received. A summary of the issues raised in the submissions received and the City's response is provided at Attachment C to this report.

The draft Sydney Lights Code has been reviewed and amended following consideration of external and internal feedback. The amended Code recommended for adoption, with additional text in underlined in red and deleted text ~~struckthrough~~, is provided at Attachment B to this report.

RECOMMENDATION

It is resolved that:

- (A) Council adopt the draft Sydney Lights Design Code with amendments, as shown at Attachment B to the subject report; and
- (B) authority be delegated to the Chief Executive Officer to approve minor updates to the Sydney Lights Code that do not change the policy directions contained in the adopted Code.

ATTACHMENTS

Attachment A: Resolution of Council – 3 November 2014

Attachment B: Sydney Lights Design Code (with amendments)

Attachment C: Response to Submissions

BACKGROUND

1. On 3 November 2014, Council approved the public exhibition of the draft Sydney Lights Design Code (the Code).
2. The Code forms part of a co-ordinated series of Public Domain Design Codes that provide specific objectives and technical information for the design of public spaces in the LGA. These include:
 - (a) Sydney Street Design Code (adopted July 2013) – provides materials palette and design directions for the City’s streets;
 - (b) Sydney Lights Design Code (subject of this report);
 - (c) Sydney Signs Design Code – provides the design manual and guidelines for the City’s signage in the public domain including regulatory, wayfinding, parks and community building signage. Council endorsed the pedestrian wayfinding design manual in December 2013. Code preparation is substantially underway with community building signage palette due for completion in 2015;
 - (d) Sydney Parks Design Code – provides guidelines and requirements for park design and construction. Current draft document currently being reviewed; and
 - (e) Sydney Landscape Design Code – provides guidelines and requirements to establish landscape treatments delivered by private development. Consultants have been engaged with expected draft completion by end of 2015.
3. The Code:
 - (a) updates the draft Interim Sydney Lights Design Code 2006 to reflect Sustainable Sydney 2030 sustainability targets and directions;
 - (b) updates strategic objectives for functional and creative lighting for all areas of the LGA;
 - (c) reviews and confirm lighting levels and lighting palette for all areas of the City of Sydney’s public domain, with particular emphasis on lighting for pedestrians and cyclists;
 - (d) reviews and updates the lighting technical details and specifications to reflect the City’s current portfolio of technologies, including LED lighting and installation approaches, to meet the City’s lighting objectives;
 - (e) develops a creative lighting approach that contributes to legibility and vibrancy in the City in the form of a Creative Lighting Master Plan to guide public / private sector lighting investment; and
 - (f) provides guidelines for the private sector when delivering public domain lighting to ensure alignment with the City’s lighting objectives.
4. Steensen Varming with sub consultants McGreggor Coxall were engaged to assist in the preparation of the Code.

Context

5. The Code applies to all areas within the LGA under the City's control.

Code Format

6. The Code focuses on two main components for the provision of public domain lighting:
 - (a) **Functional Use** – provides a co-ordinated and sustainable approach to the lighting of streets and public spaces and setting lighting levels and standards to provide pedestrians, cyclists and vehicles with a safe and comfortable visual environment at night. This section includes design and technical guidelines and allocates lighting palette, luminaire selections and lighting levels based on street hierarchy, public space context and location; and
 - (b) **Creative Lighting Master Plan** – promote urban design lighting applications to enhance and define the city structure and its legibility at night time, improve the city image and make it an attractive place to visit.

Key Principles and Directions

7. The Code sets out the following key principles:
 - (a) **Principle 1 - Promote Safety and Inclusive Design** – establish appropriate lighting levels, standards and criteria to promote a safe public domain;
 - (b) **Principle 2 - Enhance Public Spaces Public Life** – promotes provision of appropriate lighting levels to enhance the night time experience and vibrancy of the city to encourage people to stay and enjoy the city at night;
 - (c) **Principle 3 - Promote Sustainability** – use of energy efficient LED technology and lighting practices to reduce greenhouse gas emissions;
 - (d) **Principle 4 - Promote Active Transport** – encourage pedestrian and cycle use at night through appropriate applications of lighting to facilitate clear safe wayfinding and orientation; and
 - (e) **Principle 5 - Respect Distinctiveness and Place** – development of a strategic framework of targeted creative lighting applications to express distinctiveness and place.

Lighting Palette

8. The City is one of the largest users of street lighting in NSW, with 22,000 lights. Of these 13,500 are maintained by Ausgrid and 8,500 by the City.
9. The Code aims to provide a strong visual identity with a consistent language of lighting elements, as well as improve performance of individual items by retrofitting with LED luminaires.
10. The Code does, however, have a degree of flexibility to allow the use of bespoke lighting poles in special circumstances (e.g. Prince Alfred Park and Hyde Park lighting) to express distinctiveness of place.

11. For the City Centre and Village Main streets, the City's Smartpole range will be the main public domain lighting element.
12. The Code also includes the S3 Smartpole range with a special beacon light pole for George Street, which is currently under design development, to provide public domain lighting along the proposed CBD and South Eastern light rail route within the City LGA.
13. Local streets are mainly lit by Ausgrid lighting on timber or galvanised steel poles with outreach arms usually directed to the road carriageway.
14. In 2014, Ausgrid adopted a standard back of pole LED luminaire that provides an energy efficient, low emission option for pedestrian lighting. The fixture includes shields and buffers that will reduce instances of obtrusive lighting effects to adjacent residential properties.
15. As well as the Ausgrid pedestrian lighting, a range of City pedestrian pole top lights that use LED technology is also included in the palette range for use in public spaces and streets where additional lighting is required for pedestrian and cycle amenity. The City pole top light palette includes the light fixture under design development by Tzannes Associates as part of the public domain furniture design project. The delivery of this new pedestrian pole / luminaire is included in a forthcoming smart pole tender.
16. On 3 November 2014, Council resolved that the potential for using solar lighting in public places such as parks, streets and recreation areas be investigated.
17. While this is technically feasible, there are various site constraints such as overshadowing by trees and adjacent buildings, and issues of access, maintenance, metering, and connection into the grid to promote widespread use. Individual pole mounted panels may be installed in some locations such as parks where there are no mains connections, however the cost effectiveness of solar power is derived from providing this technology on larger, single installation sites such as large roof areas.

Pedestrian Lighting Improvement Plan

18. On 3 November 2014, Council endorsed the implementation of a Pedestrian Lighting Improvement Plan, which included a rollout of the Ausgrid back of pole lighting fixtures. These fixtures were trialed along Arthur and Fitzroy Streets, Surry Hills, and have resulted in noticeable improvement to footpath lighting amenity.
19. Phase One of the Plan, which incorporates the Liveable Green Network pedestrian priority routes, will be completed over the three financial years of 2014/15, 2015/16, and 2016/17.

Creative Lighting Master Plan

20. In addition to fulfilling functional lighting requirements, the Code recognises the importance of creative lighting to reinforce a sense of place, and contribute to a lively city experience for people to enjoy.
21. The Code advocates a targeted use of creative lighting applications for selected precincts and elements.

22. Proposals will be developed through preparation of Creative Lighting Implementation Plans that will fully scope proposed projects to ensure co-ordination with functional lighting requirements and broader public domain design, as well allow the private sector to progress the development of a lighting scheme for their buildings in a consistent and co-ordinated manner.
23. The City is currently developing a Creative Lighting Implementation Plan for Martin Place as part of a public domain review and master plan development that is currently underway. The aim is to use lighting in a cohesive manner to express the verticality of Martin Place and showcase distinctive architectural features.
24. The City has been consulting with property owners and developers undertaking building upgrade projects and refurbishments to co-ordinate lighting directions for building façade lighting and enable private sector participation in delivering a co-ordinated lighting vision for Martin Place.

KEY IMPLICATIONS

Strategic Alignment - Sustainable Sydney 2030

25. *Sustainable Sydney 2030* is a vision for the sustainable development of the city to 2030 and beyond. It includes 10 strategic directions to guide the future of the city, as well as 10 targets against which to measure progress. This report is aligned with the following strategic directions and objectives:
 - (a) Direction 2 - A Leading Environmental Performer – Sydney Lights promotes the use of energy efficient LED technology to reduce greenhouse gas emissions;
 - (b) Direction 4 - A City for Walking and Cycling – Sydney Lights promotes pedestrian and cycle focussed lighting to support safety and identify key routes for night time journeys;
 - (c) Direction 5 - A Lively and Engaging City Centre – Sydney Lights promotes creative use of lighting to define precincts and highlight landmarks and features of the city at night time.
 - (d) Direction 7 - A Cultural and Creative City – Sydney Lights supports artistic application of lighting for public art proposals; and
 - (e) Direction 9 - Sustainable Development, Renewal and Design – Sydney Lights gives guidance and standards for the provision of sustainable public lighting for urban renewable areas.

Organisational Impact

26. No staffing processes or other internal impacts to the City are expected.
27. The adoption of this Code will greatly assist in co-ordination of public domain projects.

Social / Cultural / Community

28. The Code will promote the development of streets and public spaces that are more inviting and accessible for use and community interaction.

Environmental

29. In 2011, the City commenced a roll-out new energy-efficient LED street and park lighting, which will halve electricity use and carbon pollution compared to conventional lights and save nearly \$800,000 a year in electricity bills and reduced maintenance costs.
30. The Code updates the current lighting technical guidelines to reflect the City's lighting sustainability LED initiatives, as well as ensure that public domain lighting delivered by the private sector is aligned to the City's sustainability targets.
31. The Pedestrian Lighting Improvement Plan will increase overall energy consumption and greenhouse gas emissions. The project will add 736 tonnes of CO₂ per year on completion, which equates to a 1.7 per cent increase in Council's 2012/13 carbon footprint. This increase will be partially off-set by the better than expected carbon reductions being achieved by Council's existing LED public lighting retrofit program. In addition, if the existing Ausgrid roadway lights were replaced by energy efficient LED lights at the same time, then an overall saving of 3600 tonnes of CO₂ could be achieved.

Economic

32. Improving lighting quality of streets and public spaces will have a positive economic impact through increased pedestrian use and encouragement of further street activation and outdoor dining.

BUDGET IMPLICATIONS

33. Funds are available in the capital works program – Lights, Poles and Electrical Renewal – to undertake Phase One of the Pedestrian Lighting Improvement Plan over a three year period.
34. The Creative Lighting Master Plan implementation has an allocation of \$1,000,000 in the ten year Long Term Financial Plan. The proposed focus of this expenditure will be to progress creative lighting schemes for Martin Place and the City's monuments and artworks, which will initially involve preparation of creative lighting feasibility studies and detailed design documentation.

CRITICAL DATES / TIME FRAMES

35. Phase One of the Pedestrian Lighting Improvement Plan, which covers the Liveable Green Network pedestrian priority routes, will be delivered over the three financial years of 20 14/15, 2015/16 and 2016/17.
36. It is envisaged that implementation of the Creative Lighting Master Plan will be a long-term rollout over the next 10 to 25 year period. In many instances, it is anticipated that implementation will be incorporated as part of streetscape capital works projects or provided by the private sector in partnership with the City.

OPTIONS

37. Not proceeding with adoption of the draft Code will result in continued use of the Interim Lighting Design Code 2006. This option is not recommended, as the Interim Code needs to be updated and reviewed to reflect Sustainable Sydney 2030 directions and initiatives in LED lighting, and give developers clear directions on the City's current lighting requirements and ensure the public have a co-ordinated city.

PUBLIC CONSULTATION

38. The draft Code was exhibited for public comment from 4 November to 2 December 2014.
39. The exhibition was advertised on the City's website, in The Sydney Morning Herald and local press publications. The public exhibition webpage received 296 unique visits and 55 downloads
40. At the conclusion of the exhibition period, three written submissions were received. These submissions have been summarised and responded to in Attachment C.
41. Key issues arising from the submissions include heritage impacts, sustainability, safety, and reduction of light spill to preserve a dark night sky for astronomy.
42. A proposed amended version of the Code is provided in Attachment B. Additional text is shown underlined in red and deleted text ~~struckthrough~~.
43. The proposed changes are minor, for the clarification of the draft and the correction of typos and graphics. It is considered that these amendments do not substantially change the strategic directions of the Code and therefore re-exhibition is not warranted.
44. The City's website has been updated to include a Public Domain webpage to provide convenient access to the City's Public Domain Design Codes and resources, particularly for developers and contractors.

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