

Circular No : URA/PB/2010/08-CUDG
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CIRCULAR TO PROFESSIONAL INSTITUTES

NIGHT LIGHTING MASTER PLAN FOR BRAS BASAH.BUGIS (BBB) - ROCHOR (PART) PLANNING AREA

Objective

- 1 The Night Lighting Master Plan for Bras Basah.Bugis is to guide the lighting up of developments to achieve a unique, three-dimensional nightscape for the Bras Basah.Bugis (BBB) area. This Master Plan will be realised incrementally as and when new buildings are developed and when existing buildings undergo major refurbishment.
- 2 To enhance BBB as an arts, culture, learning and entertainment hub, the following developments within the Master Plan boundary (see [Appendix 1](#)) are required to provide night lighting of the buildings in compliance with the prescribed night lighting guidelines:
 - **Arts & cultural uses:** museums, art galleries, art housing, Places of Worship;
 - **Educational uses:** universities, colleges, tertiary institutions, etc.;
 - **Entertainment uses:** theatres, cinemas, etc.;
 - **Buildings with architectural heritage significance:** National Monuments and conservation buildings; and
 - **Buildings at gateway entry points:** key buildings along Selegie Road, Victoria Street and Bencoolen Street.
- 3 The guidelines aim to achieve a coherent and well-coordinated nightscape for the area and provide a recommended framework for the lighting treatment of key selected buildings according to architectural styles and building uses.
- 4 The guidelines also highlight practical issues, such as light trespass, light pollution, light fitting details, as well as energy efficiency and maintenance, which should be considered upfront at the design stage. The detailed Guidelines can be found in [Appendix 2](#).
- 5 More information on the Master Plan can be found in the Night Lighting website at - <http://www.ura.gov.sg/lightingplan>, where all approved lighting designs for developments in BBB will be uploaded for reference. The guidelines on Good Lighting Practices can also be found on this website.

Effective Date

With effect from 02 August 2010

Who should know?

Architects, Lighting Designers, Building Owners and Developers

Definition of Lighting Design and Fixtures

- 6 The night lighting design under the Master Plan refers to the lighting up of the exterior of the building to highlight the design of the building, in particular, the roof or crown, façades, main architectural features, covered walkways and open spaces at street level, using permanent lighting fixtures.
- 7 The light fixtures are to be designed and well-integrated with the overall design of the building and integrated into the building façade. The lighting fixtures shall be located and installed fully within the boundary of the development.
- 8 As a guide, the daily night lighting shall be elegant, tasteful and sensitive to the architecture of the building and well-coordinated with the overall night time streetscape.

Submission and Evaluation Process

- 9 All developments identified in [Appendix 1](#) are required to provide night lighting under the Night Lighting Master Plan.
- 10 All night lighting proposals shall be submitted formally to URA's Development Control Group for approval as part of the Development Application process, using the submission form attached in [Appendix 3](#). To ensure that the external building lighting installation is considered as an integral part of the design of the development, the night lighting proposal must be submitted as part of the development plans at the Provisional Permission (PP) stage.
- 11 To facilitate the submission of night lighting proposals, URA has drawn up a checklist of submission requirements (see [Appendix 4](#)). The checklist provides a step-by-step guide on the design issues to be addressed from the overall lighting concept through to the detailed proposals. The checklist also lists all the supporting drawings and technical information which is required to be submitted to facilitate the evaluation of the lighting proposal.

- 12 Approval of the night lighting proposal is subject to:
- a) Compliance with the technical guidelines (specification of lighting levels and fixtures);
 - b) Submission of a Letter of Undertaking to comply with all prevailing operating requirements, for daily night lighting and during festivals and events;
 - c) Compliance with all other planning and urban design requirements for the site; and
 - d) Retention, operation and maintenance of the approved night lighting at the owner's own cost and expense.
- 13 The external night lighting must be reflected in the proposal plans for the development for URA's approval. A retention clause will be included as a condition in the Written Permission (WP) for the development to ensure that the night lighting is retained and operated and will be enforced through the Planning Act on the owner and any subsequent purchaser of the development.
- 14 Any changes to the approved night lighting proposal for the development (e.g. subsequent change in lighting concept, type of lighting equipment and specifications, etc.) are required to be submitted to the URA for evaluation and approval.
- 15 The entire night lighting proposal, including all external building lighting installations, shall be installed and commissioned according to the approved plans and verified and endorsed by URA under the Planning Act. URA's clearance of the completed Night Lighting Installation is required before the Commissioner of Building Control issues the Temporary Occupation Permit (TOP) or Certificate of Statutory Completion (CSC) (in the event the TOP is not required). Details of the submission, requirements and process for seeking PP, WP and clearance of completed works under the Night Lighting Guidelines are included at [Appendix 4](#). The standard processing time to evaluate and approve a complete and compliant submission for the clearance of the completed works is about 4 weeks. Please note that a longer processing time may be required if the submission is incomplete or not in order. The Applicant is to ensure sufficient lead time is allowed to secure the clearance prior to applying to the Commissioner of Building Control for TOP/CSC. The submission is required to include labeled and annotated photographs (in .pdf file format) showing the completed night lighting installation on site. URA will evaluate the photographs submitted and, if necessary, arrange for a site inspection before issuing the clearance letter for the completed works.

- 16 If the external lighting fixtures are not installed and commissioned according to the approved plans, the Applicant or Building Owner will be required to revise the lighting installation to match the approved lighting design or provide reasons for the deviation for the URA's evaluation and approval.
- 17 The night lighting fixtures are to be retained and maintained throughout the entire life of the building and shall not be removed without the prior approval of the URA.

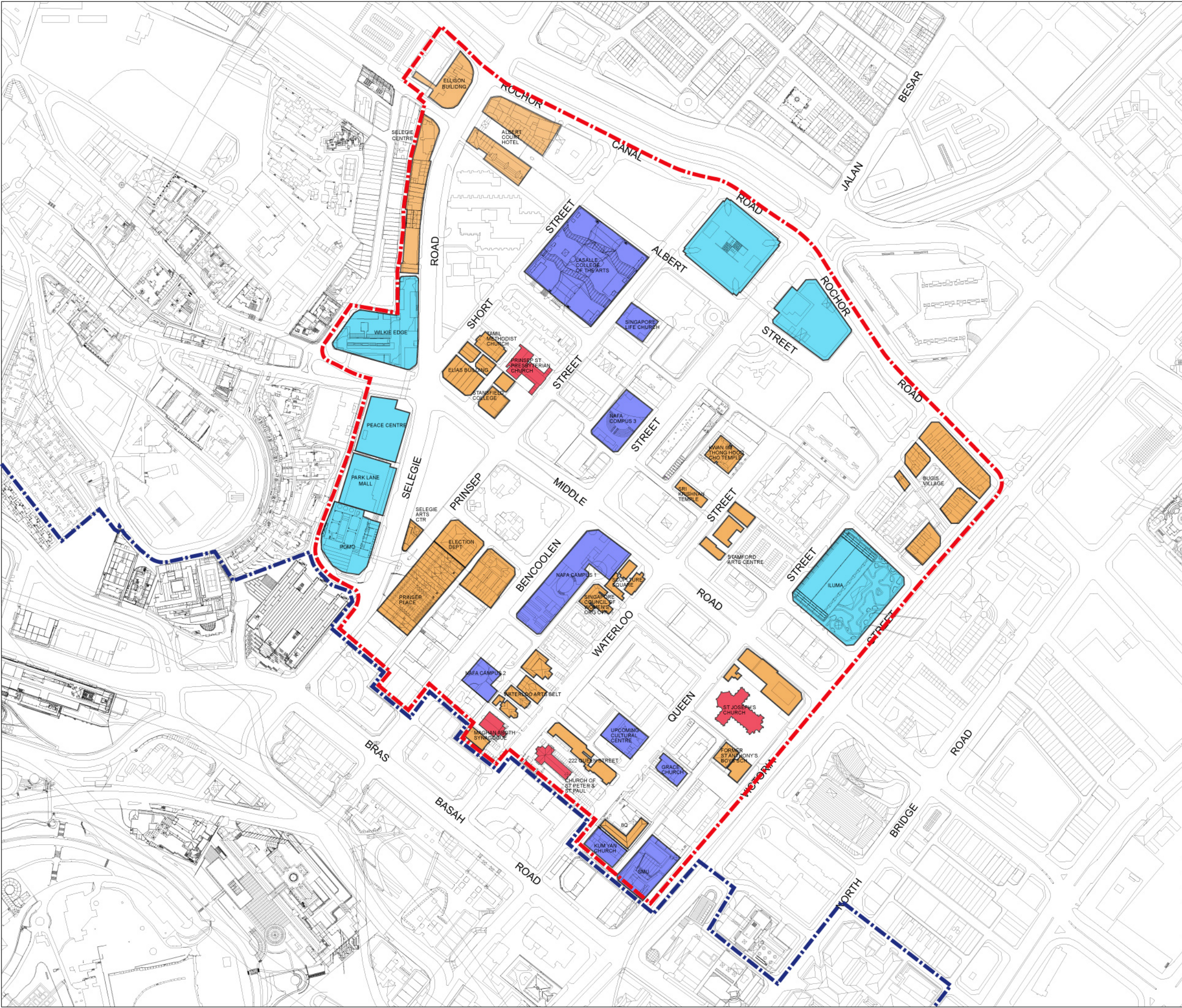
Operation Hours and Maintenance of the Night Lighting

- 18 Building owners are required to minimally turn on the night lighting on Fridays, Saturdays and Sundays, between 7pm and 11pm, according to the approved night lighting proposal and the guidelines outlined in [Appendix 2](#). The night lighting of the building outside the recommended hours shall be in accordance with the approved night lighting proposal and the guidelines in this Circular.
- 19 The night lighting shall also be turned on during national and district-wide festival and events, subject to the requirements by the relevant authorities.
- 20 I would appreciate it if you could convey the contents of this Circular to the relevant members of your organisation. If you or your members have any queries concerning this Circular, please do not hesitate to contact Executive Architect Ken Do at 6329 3356 (email: ken_do@ura.gov.sg) or our DCG Enquiry Line at Tel: 6223 4811 (email: ura_dcd@ura.gov.sg). We will be pleased to answer queries on this, and any other development control matter. For your information, the past Circulars to the professional institutes are available from our website <http://www.ura.gov.sg>.

Thank you.

FUN SIEW LENG
GROUP DIRECTOR (URBAN PLANNING & DESIGN)
for CHIEF EXECUTIVE OFFICER
URBAN REDEVELOPMENT AUTHORITY

NIGHT LIGHTING MASTER PLAN FOR
BRAS BASAH.BUGIS - ROCHOR (PART)
PLANNING AREA



CLASSIC

- A ■
- B ■

CONTEMPORARY

- C ■
- D ■

- - - BRAS BASAH.BUGIS LIGHTING MASTER PLAN BOUNDARY
- - - CIVIC DISTRICT LIGHTING MASTER PLAN BOUNDARY

* PLEASE REFER TO APPENDIX 2 TABLE A FOR TECHNICAL GUIDELINES FOR THE RELEVANT BUILDING TYPES

DRAWING TITLE :

NIGHT LIGHTING CLASSIFICATION
FOR BUILDINGS

SCALE : 1 : 4000



DRWG NO : RC/2010/012

DATE : AUGUST 2010

DIVISION : CUDG

PREPARED BY :
HTO MOHD YAZID BIN IDRIS

CHECKED BY :
EA KEN DO



To make Singapore a great city to live, work and play in

GUIDELINES FOR THE EXTERNAL NIGHT LIGHTING OF DEVELOPMENTS IN BRAS BASAH.BUGIS- ROCHOR (PART) PLANNING AREA

- 1 Good night lighting of buildings can help to enhance the image of the BBB district by improving its appearance at night.
- 2 The night lighting plan of the area aims to enhance and emphasise the district as a vibrant arts, culture, learning and entertainment hub. To achieve this objective, the following developments within the boundary of the Night Light Master Plan are required to provide night lighting in compliance with the prescribed night lighting guidelines:
 - **Arts & cultural uses:** museums, art galleries, art housing, Places of Worship;
 - **Educational use:** universities, colleges, tertiary institutions, etc.;
 - **Entertainment use:** theatres, cinemas, etc.;
 - **Buildings with architectural heritage significance:** National Monuments and conserved buildings; and
 - **Buildings gateway entry points:** key buildings along Selegie Road, Victoria Street and Bencoolen Street.

All the identified buildings are required to incorporate external night lighting as part of the overall building design, particularly for the roof or crown, façades, main architectural features, covered walkways and open spaces at street level.

- 3 Supplementary information on Good Night Lighting Practices can be found on the URA website at – <http://www.ura.gov.sg/lightingplan/>

Night Lighting Concept for the Streetscape

- 4 The night lighting of the building facades, crowns and spires will help to create a unique, three-dimensional streetscape for the BBB district. The night lighting guidelines as shown in [Appendix 2 Table A](#) state the relevant lighting specifications for the various building types, which are broadly classified under two categories - Classic and Contemporary. Classic buildings (e.g. National Monuments and conservation buildings) are guided to use lights of a warmer colour temperature while Contemporary buildings (e.g. modern buildings) are guided to use cooler colour temperature lights.
- 5 The guidelines address the method of lighting to achieve the objective of enhancing the key architectural design characteristics and principal use of each building.

Light Trespass and Light Pollution

- 6 There is a growing concern about the excessive use of lights to illuminate the cityscape. Night lighting should thus be executed sensitively to avoid glare, light trespass and light pollution. Pedestrians, residents, drivers, and other fields of vision shall be considered to prevent light spillage and to increase the energy efficiency of the lighting.

Light Fittings and Mounting Details

- 7 Sufficient measures must be taken to ensure that night lighting fixtures and mounting details are fully integrated with the architecture and/or landscape design of the building and screened from view.
- 8 The fixtures are to be located fully within the site boundary and are not to encroach into the adjacent road reserves, etc.
- 9 The night lighting equipment shall have the necessary protective means from damage, theft and harm to the public, for those elements that are accessible to the public.

Energy-Efficient and Maintenance-Friendly

- 10 Light sources that have a high energy-efficiency rating, have a long operating life for easier maintenance. Light sources which are of high economical efficiency, such as compact metal halide lamps, fluorescent lamps, LEDs, or electrodeless lamps, are recommended for use.

Operation Hours

- 11 Building owners are required to turn on the night lights on Fridays, Saturdays and Sundays, from 7.00pm to 11.00pm, and during national and district-wide events and festivals, such as the Night Festival, from 7.00pm to 11.00pm.

Lighting Mock-up / Lighting Trials





- 12 The testing and commissioning of the approved lighting proposal must be done in a manner which does not become a disamenity to the surrounding developments and does not have an adverse impact on the night time skyline. As a guide, the testing of the light fittings should be done either during day-light hours or between the hours of 11.00pm and 4.00am. Building owners are required to submit their testing and commissioning schedules to URA at least 3 days before site testing, for URA's records.
- 13 Building owners are required to liaise and coordinate the testing of the lighting for national and district-wide events and festivals, such as the

Night Festival, with the event organiser via the URA.

Publication

- 14 Building owners are required to allow URA to publish the approved lighting design on URA's website once Written Permission for the lighting proposal has been granted. This will serve as a reference for the design of the night lighting of subsequent adjacent developments to ensure an appropriate design response.

**TECHNICAL GUIDELINES FOR THE EXTERNAL NIGHT LIGHTING OF DEVELOPMENTS IN BRAS BASAH.BUGIS –ROCHOR
(PART) PLANNING AREA**

CLASSIFICATION			CLASSIC		CONTEMPORARY	
			A 	B 	C 	D 
FACADE LIGHTING	Feature Façade Lighting	Flooding	5-100 cd	5-100 cd	10-200 cd	10-200 cd
	Luminous Façade	Facade	30-350 cd	30-700 cd	30-1500 cd	50-1500 cd
LIGHT SOURCES	Colour Temperature (Kelvin)		2500-3500 K	2500-3500 K	3000-5000 K	2500-6500 K
	Colour Rendition (Ra)		Ra 80 or higher			
	Use of Coloured Lighting		Subject to evaluation			Recommended
MOVEMENT	Use of Moving Lights		Subject to evaluation			Kinetic lighting encouraged
	Operation Hours		From 7:00 pm to 11:00 pm on Fridays, Saturdays and Sundays and during national / district-wide events and festivals from 7:00 pm to 11:00 pm			

APPENDIX 3

SUBMISSION FORM FOR NIGHT LIGHTING OF DEVELOPMENTS IN BRAS BASAH.BUGIS - ROCHOR (PART) PLANNING AREA

PART I PARTICULARS OF PROJECT			
Development Name			
Description of Project			
Location			
Lot No		TS/MK No	
Is your development required to be lighted up? (see Appendix 1)			<input type="checkbox"/> Yes <input type="radio"/> No
Has Provisional Permission/ Written Permission been obtained for the development?			<input type="checkbox"/> Yes <input type="radio"/> No
If yes, please attach a copy of the Grant of PP/WP			
Ref No		Decision No	
PART II PARTICULARS OF THE APPLICANT (OWNER / DEVELOPER)			
Name of Firm			
Address			
Tel No		Fax No	
Name of person for contact			
PART III PARTICULARS OF THE QUALIFIED PERSON			
Name of Firm			
Address			
Tel No		Fax No	
Name of person for contact			
PART IV PARTICULARS OF THE PROFESSIONAL QUANTITY SURVEYOR			
Name of Firm			
Address			
Tel No		Fax No	
Name of person for contact			

PART V DESCRIPTION OF LIGHTING PROPOSAL

Please include a separate detailed write-up and any other supporting materials, documents or information, e.g., detailed models, simulations, plans, etc that you deem will help to illustrate and support your proposal.

The attached submission must include the following:

sn	Items	Checklist
i)	Concept of lighting design and installation;	
ii)	Simulations / artist's impression showing the external building lighting proposal in the context of the surrounding (For developments visible from fronting roads, the artist's impression shall be a view from main fronting roads)	
iii)	Annotated plans, elevations and other drawings to a suitable scale;	
iv)	Specifications of lighting fixtures;	
v)	Installation methods;	
vi)	Specifications of lighting levels and colour temperature;	
vii)	Name of lighting designer (if relevant);	
viii)	Energy efficiency standards of the proposed lighting installation; and	
ix)	Letter of Undertaking to comply with the operating requirements as set out in the prevailing guidelines	

Please list down and itemise the additional information that is included in the submission.

PART VIII DECLARATION

I/We certify that the particulars and the information given in this application are true and correct

_____ Name & Signature of Applicant (Owner/Developer)

_____ Date _____ Name & Signature of

Qualified Person _____ Date

SUBMISSION REQUIREMENTS CHECKLIST

1. Write-Up with Appropriate Illustrations

Overall Night Lighting Concept

- a. Please describe the overall building type and use, and the architectural concept adopted for the building in response to the uses within the development and the surrounding context. Please also explain how the architectural concept is expressed in terms of the overall plan, building form and design of the façades and roof areas.
- b. Please describe the broader night lighting concept and how it enhances and complements the architectural concept for the building.

Detailed Night Lighting Proposals

- c. Please describe the detailed night lighting proposal for the building. In particular, how the night lighting proposal relate to the specific uses within the development and the architectural design of developments.
- d. Please provide a summary of the lighting proposal using the format provided in [Appendix 5](#) for the URA to include in the Night Lighting website once the lighting proposal is approved.

2. Drawings

- a. Please provide detailed drawings showing the proposed locations of all the proposed light fittings to achieve the desired overall night lighting concept and accentuate the architectural design of the façades and roof areas.
- b. The detailed drawings should include mounting details to illustrate how all the different lighting fixtures are integrated into the architectural detailing of the façades and roof areas. All night lighting fixtures should, as far as possible, be integrated with the external building elements/façades/special architecture features.
- c. Please also submit details to illustrate the measures taken in the choice and placement of the light fittings to ensure that they do not result in light spillage or trespass into the building or the adjacent developments.

3. Rendered Perspectives

- a. Please provide rendered perspectives of each of the building to illustrate the night lighting from street level from the main approaches to the façade.
- b. Additional views of the detailed lighting proposal at each of the individual zones of the building may be provided to further illustrate specific features of the proposal.

4. **Technical Information**

- a. Please provide illustrations of each of the light fittings together with their full technical specifications. Please also provide reasons for your selection and how the proposed fittings best achieves the desired overall lighting concept.
- b. Please refer to [Appendix 2 - Table A](#) and provide relevant information on the proposed lighting specifications. Please use [Appendix 2 - Table A](#) to declare your compliance with the guidelines. Where the proposal deviates from the guidelines, please provide justifications for your alternative proposal, in relation to the architectural and night lighting concept, for our evaluation and consideration.
- c. Please indicate the quantity of light fittings on the lighting layout plans.
- d. Please illustrate how the glare to the surrounding buildings is minimised.
- e. Please indicate the energy efficiency for the proposed external lighting. Please note that you are to ensure that the efficiency is to be equal to or less than 5 Watts per sqm.

5. **For Clearance of Completed Works**

- a. The night lighting Installations are to be implemented according to the approved plans and verified and endorsed by the URA under the Planning Act. URA's clearance of the completed Lighting Installation is required before the Commissioner of Building Control issues the Temporary Occupation Permit (TOP) or Certificate of Statutory Completion (CSC) (in the event the TOP is not required).
- b. The building owner is to submit confirmation of the completed works to URA to seek URA's clearance of the completed Lighting Installation. The standard processing time to evaluate and approve a complete and compliant submission is about 4 weeks. Please note that a longer processing time may be required if the submission is incomplete or not in order. The Applicant is to ensure sufficient lead time is allowed to secure the clearance prior to applying to the Commissioner of Building Control for TOP / CSC.
- c. The submission is required to include accurately labeled photographs (in .pdf file format) showing the completed Lighting Installations. URA will evaluate the photographs submitted and, if necessary, arrange for a site inspection before issuing the clearance letter for the completed works.
- d. Applicants are also required to declare upfront to the Commissioner of Building Control at the point of application for TOP or CSC (in the event the TOP is not required), that URA's clearance is required for Lighting Installations before issuance of TOP, or CSC (in the event the TOP is not required).

APPENDIX 5

NIGHT LIGHTING PROPOSAL

Night Lighting Design for	(Name of Development)
Name of Qualified Person	(Name of Qualified Person)
Name of Lighting Designer	(Name of Lighting Designers)
Summary of the Approved Night Lighting Design (in front 10 – Arial)	
<p>Please insert Night Lighting Rendering(s) here</p>	
Please limit to 1 page	

I, _____ (owner/developer) _____ (name of development), give consent to the Urban Redevelopment Authority to post the above details on its official website once Written Permission for the lighting proposal has been granted.

Name: _____ Signature: _____ Date: _____