Lendlease

Document Review
Lendlease document received on:

1. Accepted
2. Accepted with comments
3. Rejected

Lendlease Checked by Jia Wen Lee
Date: 11/12/2019

Accepted documents are considered to conform to the design intent, but does not mean acceptance of dimensions, details, size or weights; nor does it relieve the designer from responsibilities for errors, omissions and/or compliance with obligations and/or responsibilities of the contract.



Our Town Hall Project

Albert Memorial Lighting Strategy

OTH-ARU-ZZ-XX-RPT-E-0004

October 2019

Rev P01

Suitability code
D2 - Suitable For Tender

Introduction

- Design Objectives
- Reference Documents
- Key Principles

Lighting Proposal

- Approach & Implementation
- Heritage Luminaires

Luminaire Datasheets

Introduction

This sketchbook report outlines the specialist lighting design scheme proposals which have been developed in collaboration with the wider design team and stakeholders for the Listed Building Consent application for Albert Memorial.

As well as communicating the design progress, the main goal of this report is to provide information on the lighting character, justifications of lighting decisions and indications on the character of light that will be provided to the Memorial.

Design Objectives

- Heritage significant luminaires will be retained and restored
- The lighting proposal will define the architectural features of the monument and emphasise it within the square
- The lighting installation will be sympathetic to the heritage and fabric of the monument
- Appropriate flexibility and controls will be incorporated into the lighting scheme
- Light sources will assist in ‘future-proofing’ the scheme, have high energy efficiency and intelligent controls
- Maintenance burden and operational costs will be minimised where possible

Reference Documents

This document should be read in conjunction with the following document:

- OTH-ARU-EE-ES-DWG-E-15402 for the Albert Memorial lighting layout

Key Principles

1. All heritage luminaires will be restored.
2. All luminaires installed post-1938 will be removed.
3. Modern luminaires will visually unobtrusive.

Lighting Proposal

Approach

Focused illumination of the monuments will celebrate the historic significance of the square, and particular emphasis will be placed on the earliest remaining structure in the project - the Albert Memorial.

Implementation

Albert memorial will be the boldest, brightest monument in the square, with spotlights used to pick out the finer details within the structure, and linear lighting to graze light across textures in the stonework and highlight each of the four arches.

These modern luminaires used will be finished in a custom RAL colour as will be specified by the architect to blend in with the stonework, and cabling will run through hollow sections of the new proposed railing. Remote drivers will be housed in nearby access chambers.

The proposed luminaires will have optics and glare control accessories integrated within them as required to minimise glare. The purposeful application of light and shade to specific areas of the stonework will provide visual contrast to the monument. The exact beam angles specified will be confirmed following a mock up.

The linear luminaires will be surface mounted on the ground on the upper step behind the new proposed railing. This will ensure the fittings are visually unobtrusive, partially protected and do not act as a source of glare to members of the public. The spotlights will be mounted on the new proposed railing, angled accordingly during lighting commissioning and locked into place to avoid tampering. The exact mounting detail of the spotlights will be detailed by the architect following confirmation of the proposed locations determined by a mock up.

Lighting to the steps will be provided by the four heritage lighting columns surrounding the Albert Memorial, which will be restored to reflect their original design and refurbished with LED technology. A warm white light has been specified and a domed glass housing will be fitted to the LED module within the luminaire to ensure the modern technology used is visually sympathetic to the heritage luminaire.



Lighting Proposal

Heritage Luminaires



PAST

- 1865 (left)
- Four gas burner columns (xH14a)
- 1900 (right)
- Modifications to the housing shape.





PRESENT

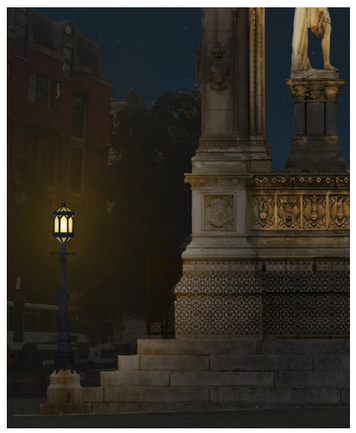
- Four electric columns.
- Original xH14a base and modern housing with additional spotlight.





FUTURE

- Restore column base of xH14a to 1849 version.
- Replica upper housing of 1849 version.



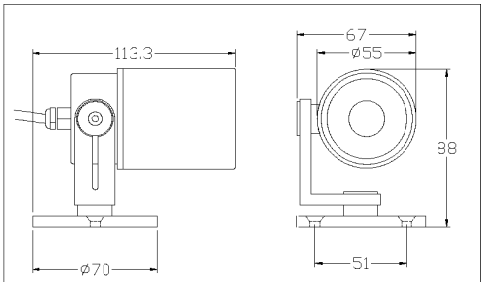
Project Title: **Manchester Town Hall** **Luminaire Specification Sheet**

Job No.: **256650**

Manufacturer:	Mike Stoane	**Light source type:**	LED
Product range:	Frog Type X	**Light source colour:**	RGBW
Mounting:	Surface mounted to railing	**Colour rendering:**	Ra>80 at 2700K
Finish:	RAL colour TBC by architect	**Max Colour Variation:**	<3SDCM
Accessories:	See notes.	**Rated luminous flux:**	2000lumens
Protection rating:	IP66	**Input power / efficacy:**	25.4W, 82lm/W
Optical distribution:	TBC following mock up	**Driver location:**	Remote, see notes.
Luminaire Lifetime:	50,000hours	**Dimmable & type:**	DMX
Lifetime Basis:	L80B10	**Emergency:**	No



Luminaire Image



Luminaire Dimensions

General Notes:

i. Refer to luminaires particulars specification for additional requirements.

ii. Luminaire to be provided with all necessary installation accessories.

Notes:

1. Bespoke mounting bracket required to mount luminaire to railing. Exact mounting locations TBC following mock up.

2. Optical accessories required TBC following mock up. Allow for 1no. honeycomb louvre/glare protection snoot and 1no. elliptical beam lens per fitting.

3. Drivers to be housed inground within IP67 rated enclosures.

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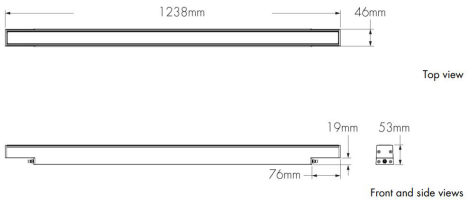
Project Title: **Manchester Town Hall** **Luminaire Specification Sheet**

Job No.: **256650**

Manufacturer:	Lumenpulse	**Light source type:**	LED
Product range:	Lumenfacade Nano	**Light source colour:**	RGBW
Mounting:	Surfance mounted to upper step	**Colour rendering:**	Ra>80
Finish:	RAL colour TBC by architect	**Max Colour Variation:**	<3SDCM
Accessories:	See notes.	**Rated luminous flux:**	404 lumens
Protection rating:	IP66	**Input power / efficacy:**	8W, 50.5lm/W
Optical distribution:	TBC following mock up	**Driver location:**	Remote, see notes.
Luminaire Lifetime:	100,000 hours	**Dimmable & type:**	DMX
Lifetime Basis:	L80B10	**Emergency:**	No



Luminaire Image



Luminaire Dimensions

General Notes:

i. Refer to luminaires particulars specification for additional requirements.

ii. Luminaire to be provided with all necessary installation accessories.

Notes:

1. Provide with manufacturer's proprietary surface mounting kit.

2. Drivers to be housed inground within IP67 rated enclosures.

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