HOARE LEA LIGHTING

St Matthews Church
Lighting Design Concept

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P2

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1.0 Introduction
Overview
The purpose of this documents is to carry out an in-depth lighting design exercise to establish the most appropriate lighting solutions for each space. Outlining the fundamental principles of the design as a whole, then breaking each section down to more detailed sections.
2.0 Lighting Design Principles
Volume, Feature and Task Lighting

Lighting plays a critical role in creating a practical but at the same time visually pleasing environment that respect the architectural form.

Task lighting and Volume lighting should work together to achieve this. In the St Matthews Church Volume lighting should pick up on vertical surface and ceiling whilst task lighting should be restricted to the task plane.

Feature lighting will be used to highlight the key architectural or symbolic elements allowing them to draw ones eye and become the feature of the space.
2.1 Lighting Layers

*Volume Lighting - Precedent Images*

*Feature Lighting - Precedent Images*

*Task Lighting - Precedent Images*
3.0 Site Breakdown
Zone Breakdown

St Matthews Church is broken down into a number of rooms which each have their own styles and key features. The following pages will break down each area and focus on their key characteristics and how each will be related to one another.
4.0 Vestibule
Design Principles

The Vestibule is the main entrance to the church, entering through the base of the tower which dates back to 1849.

The key feature within this space is the screen, regularly used as a place of prayer by visitors.

Due to the large doors the vestibule receives good daylight into the space through large glazed doors. This intern means daylight and artificial light should be balanced to help minimise the contrast from moving from outside to inside.
4.2 Design Proposal

Directional downlights in front of doors to help balance contrast between daylight and artificial lighting.

Opportunity to frame archway to enhance architectural form and produce wayfinding guide for church entrance.

Dimmed downlights for ambient illumination.

Directional spotlights to the enhancing colour and form, producing visual dominance making it stand out as the key feature of the space.
Option 2 – Subtle Approach – Higher base ambient lighting

Description: LED Spotlight
Mounting: Track Mounted
Optic: 15° & 30°
Performance: 1000 lm
Narthex

5.0
5.1 Design Principles

Design Principles

The Narthex is the linking space from the entrance vestibule to the main church areas, built in 1984 it has a very different interior aesthetic to other areas of the church.

The Narthex is a key congregation area for visitors and holds many of the stations of the cross and other significant symbols. The key objective of this space is to provide base illuminance for general congregation as well as to help navigate visitors through to the main church.
5.2 Design Proposal

- **Additional downlight luminaires to landing walkway, possibility of using current mounting locations.**
- **Wash ceiling to create high level volume lighting, mounted in window edge detail.**
- **Adjustable downlights for base illuminance and to highlight visually significant elements e.g. the icon.**
- **Possibility for feature lighting to wall, locations TBC.**
- **Linear spot light luminaire providing illumination and emphasising colour and texture of the stained glass window.**
- **Remove existing linear light, replace with adjustable downlights for ambient illumination.**
- **Wash stone wall, enhancing texture of stonework, helping to highlight movement from old building to modern extension.**
Design Principles

The main hall of St Matthews Church is a grand space with large stone arches and lavish with symbolic décor. The key principle of this space is to not light everything, selecting key architectural and symbolic aspects to focus on, allow the interior to speak for itself.

The base principles as covered previously in this document will be defined in the following pages to help express each of the key lighting elements.
7.2 Design Proposal

- **Ambient task lighting provided by high level spotlights**
- **Wall wash behind wall detail to create mid level volume lighting and wash decorative wall covering**
- **Wash ceiling to create high level volume lighting, lifting the space.**

- **Highlighting arches and window reveals to enhance architectural forms and maintain a sense of mid level volume**
- **Key feature element of the space, numinous spotlights to highlight ornate wall detail and alter, enhancing colour and texture of relief details drawings ones eye to the front of the church and speakers.**
- **Option to highlight organ with high level spotlights**
7.3.1 Main Soffit Lighting

High Level Soffit Lighting Detail

A linear LED strip mounted within a detail along the upper cornice detail will be used to wash the soffit with light. This will help to create a sense of volume within the space and accentuate the colour and texture of the wooden slats and ceiling features.

Description: Linear LED Diffuse

Mounting: Surface mounted behind lip detail

Optic: Opal Diffuse

Performance: 15W/m
7.3.2 Front Soffit Lighting – Option 1

**Spot Lighting**

It is important to light soffit at the front of the church, especially as this soffit has natural daylight contribution during daylight hours.

This first option is to use track mounted spotlights to flood the ceiling with light creating a higher intensity and overall coverage than the main space.

Description: LED Spotlight
Mounting: Track Mounted
Optic: 15° & 30°
Performance: 1500lm
7.4 Feature Lighting

Uplighting to arches and spotlighting key architectural elements, mounted in concealed locations.

Feature Lighting - Precedent image
7.4.1 Alter Lighting – Scene 1

**Spotlighting to Alter / Screen**

The alter screen is the key feature element of the space. This will be lit using four spotlights of varying beam angles to give an even spread of light to each panel.

Positioning and aiming of luminaires is critical to produce the optimum lit effect, through the use of track mounted spotlights this can will be tweaked in commissioning stages of the design process.

**Description:** LED Spotlight

**Mounting:** Track Mounted

**Optic:** 15° & 30°

**Performance:** 1500lm
7.4.3 Alter Lighting – Spotlight Locations

Spotlighting to Alter / Screen

These spotlights will be mounted on vertically mounted on to the back of the column. This will help to hide the luminaires from site for most of the congregation, while retaining current power provisions.

Description: LED Spotlight
Mounting: Track Mounted
Optic: 15° & 30°
Performance: 1500lm
**Window Niche Lighting Detail**

To light each of the window alcoves a small linear LED produce can be mounted onto each ledge. This will highlight the arches while providing vertical illumination to the space making it feel brighter, more spacious and welcoming.

**Description:** LED Flat Beam Linear
- Mounting: Surface mounted with detail
- Optic: 48° x 25°
- Performance: 15W/m
Similarly to the window niche detail each of the arch alcoves will be lit in a similar way. Washing the insides of the arches accentuates the grand stature of these architectural elements.

Arch Lighting Detail

Description: Linear LED Diffuse
Mounting: Surface mounted behind lip detail
Optic: Opal Diffuse
Performance: 15W/m