

# MID COUNTY CO-OP

Installation : EXTERIOR LIGHTING

Project number : DN-SW-0923-002-R01

Customer :

Processed by : XXXXXXXXXX

Date : 19.09.2023

Project description:

Maintenance factor 0.8

Column Height: 4m 0° Tilt

Building Mounted: 3m-3.5m

These plots represent specific ASD products under given conditions. Changes to environment, calculation software accuracy and on site measurement mean real installations may differ from these predictions. This design information constitutes guidance only. Common design parameters have been used in order to carry out all calculations. If any part of the scheme or subsequent luminaires used within the scheme is deemed to be inappropriate, please contact us in order for re-calculations to be carried out, prior to an order being placed. Please ensure that this lighting scheme complies with all requirements, and if further details/ calculations are required please contact ASD Lighting. Final quantities are to be confirmed prior to an order/installation.

The following values are based on precise calculations performed on calibrated lamps and luminaires, and their configurations, whereby gradual, unavoidable deviations can occur in practice. All guarantee claims are excluded for the specified data.

This exclusion of liability applies irrespective of the legal grounds for both damages and consequential damages suffered by users and third parties.

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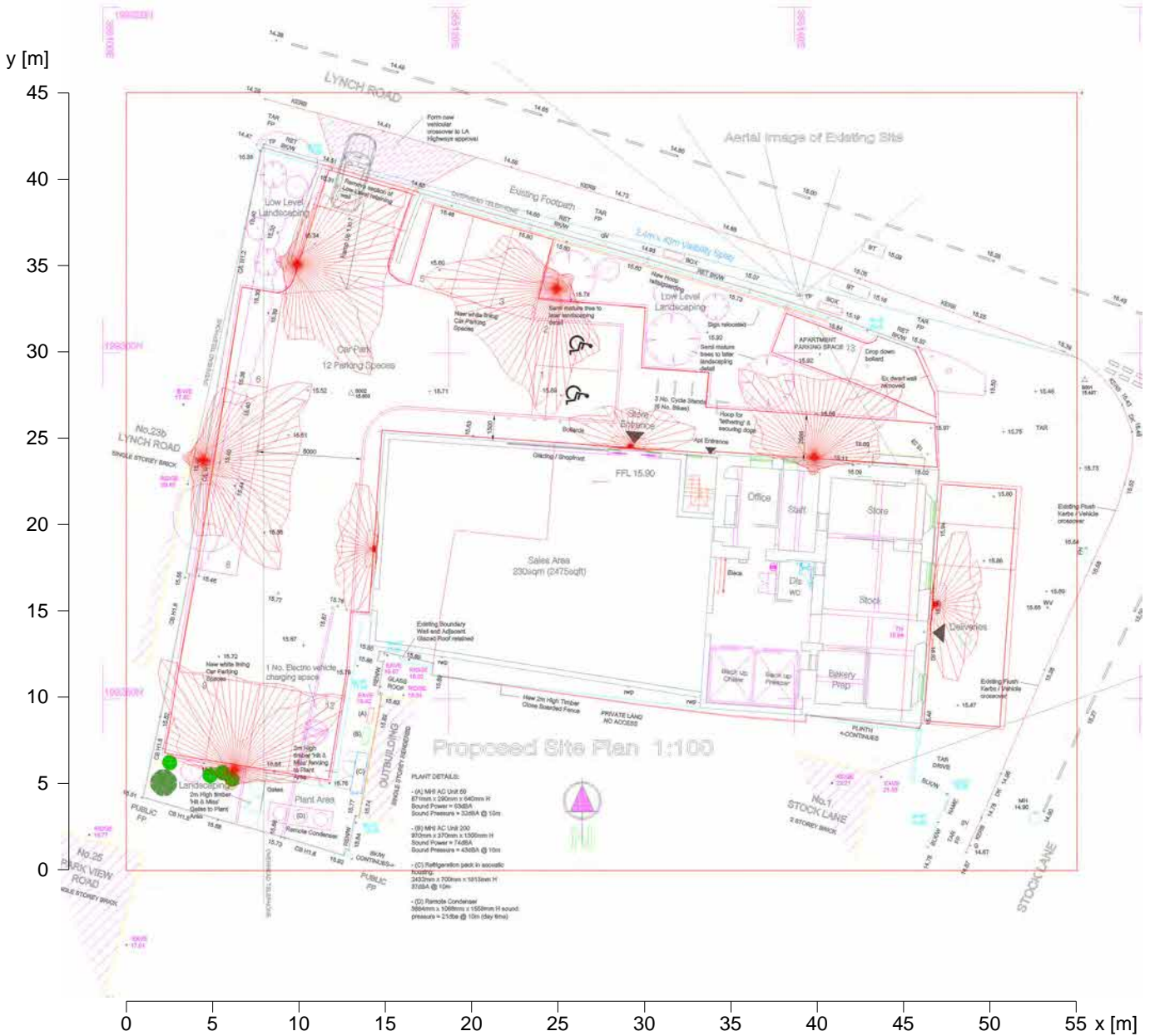
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# 1 Exterior 1

## 1.1 Description, Exterior 1

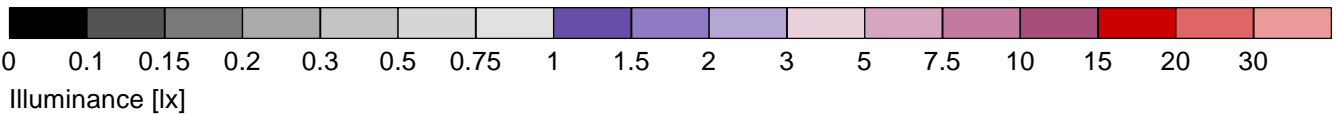
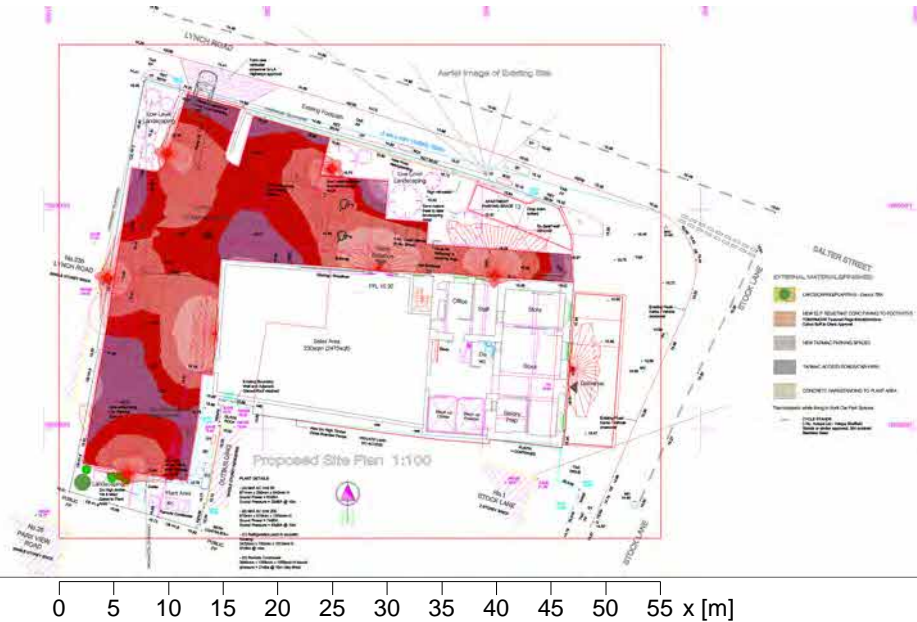
### 1.1.1 Floor plan



# 1 Exterior 1

## 1.2 Summary, Exterior 1

### 1.2.1 Result overview, Measuring area 2.1



#### General



Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	0.80

Total luminous flux	26257.6 lm
Total power	258.4 W
Total power per area (2475.00 m <sup>2</sup> )	0.10 W/m <sup>2</sup>

#### Illuminance

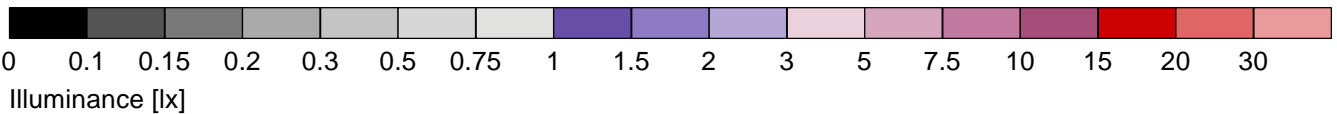
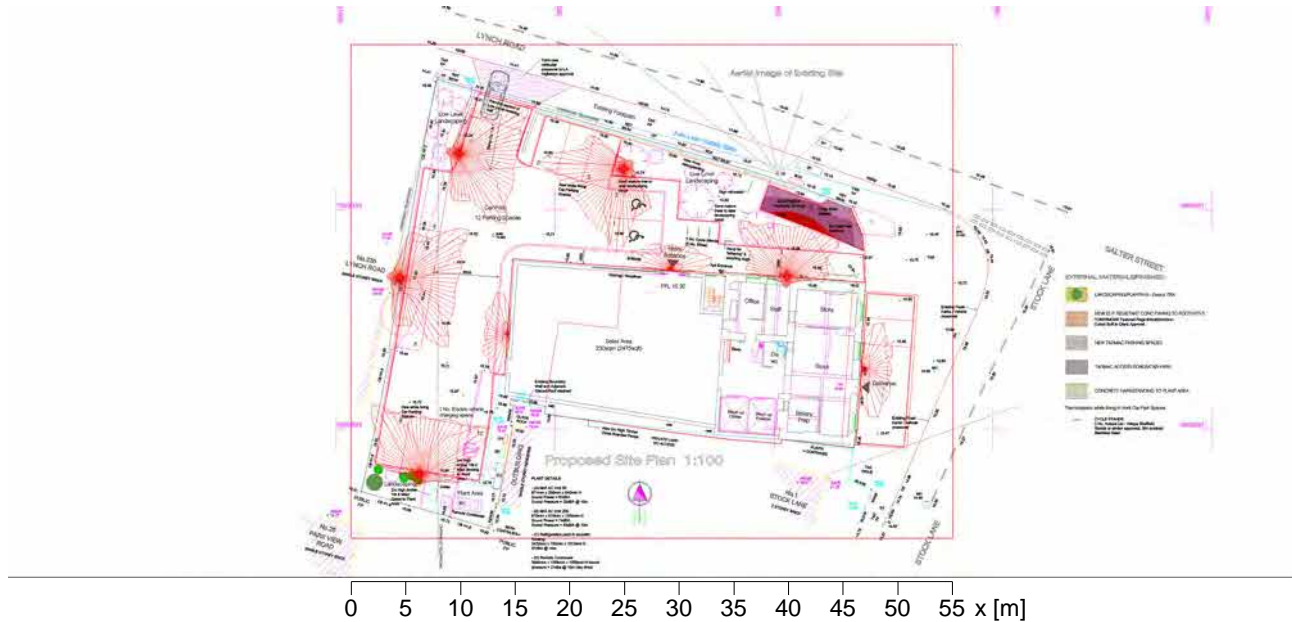
Average illuminance	$\bar{E}_m$	22.2 lx
Minimum illuminance	$E_{min}$	9.5 lx
Maximum illuminance	$E_{max}$	86.7 lx
Uniformity $U_o$	$E_{min}/\bar{E}_m$	1:2.34 (0.43)
Diversity $U_d$	$E_{min}/E_{max}$	1:9.12 (0.11)

#### Type No./Make

- ASD Lighting PLC**
- |   |     |                |                                      |
|---|-----|----------------|--------------------------------------|
| 1   | 5 x | Order No.      | : HWD2-#4K1670-F0                    |
|  |     | Luminaire name | : HWD2-#3K16 700-F0 Gen 5            |
|   |     | Equipment      | : 16 x LED / 222.594 lm              |
| 2   | 3 x | Order No.      | : SEL-#3LED3000-T                    |
|  |     | Luminaire name | : STEALTH ELITE 3000K T LENS LED3000 |
|   |     | Equipment      | : 16 x LED / 176.044 lm              |

## 1.2 Summary, Exterior 1

### 1.2.2 Result overview, Measuring area 2.2



#### General



Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	0.80

Total luminous flux	26257.6 lm
Total power	258.4 W
Total power per area (2475.00 m <sup>2</sup> )	0.10 W/m <sup>2</sup>

#### Illuminance

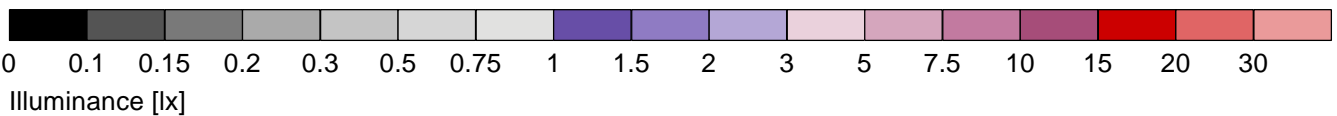
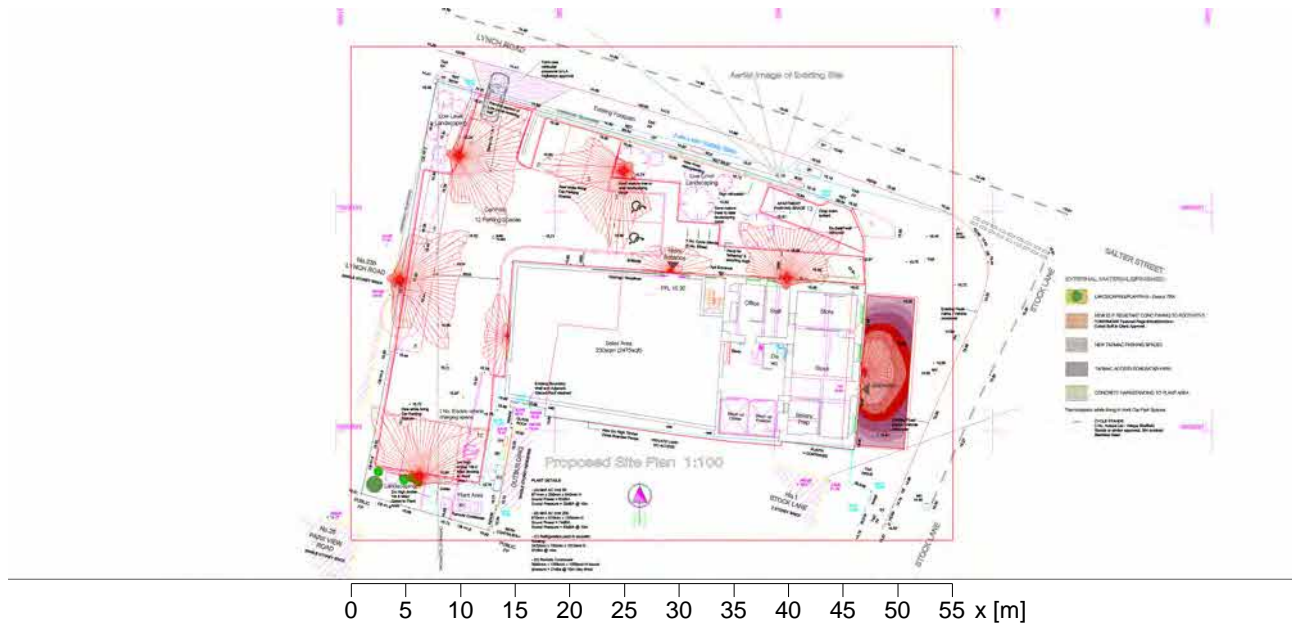
Average illuminance	$\bar{E}_m$	12.1 lx
Minimum illuminance	$E_{min}$	7.7 lx
Maximum illuminance	$E_{max}$	18.3 lx
Uniformity $U_o$	$E_{min}/\bar{E}_m$	1:1.56 (0.64)
Diversity $U_d$	$E_{min}/E_{max}$	1:2.37 (0.42)

#### Type No./Make

<b>ASD Lighting PLC</b>	
1	5 x
	Order No. : HWD2-#4K1670-F0 Luminaire name : HWD2-#3K16 700-F0 Gen 5 Equipment : 16 x LED / 222.594 lm
2	3 x
	Order No. : SEL-#3LED3000-T Luminaire name : STEALTH ELITE 3000K T LENS LED3000 Equipment : 16 x LED / 176.044 lm

## 1.2 Summary, Exterior 1

### 1.2.3 Result overview, Measuring area 2.3



#### General



Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	0.80

Total luminous flux	26257.6 lm
Total power	258.4 W
Total power per area (2475.00 m <sup>2</sup> )	0.10 W/m <sup>2</sup>

#### Illuminance

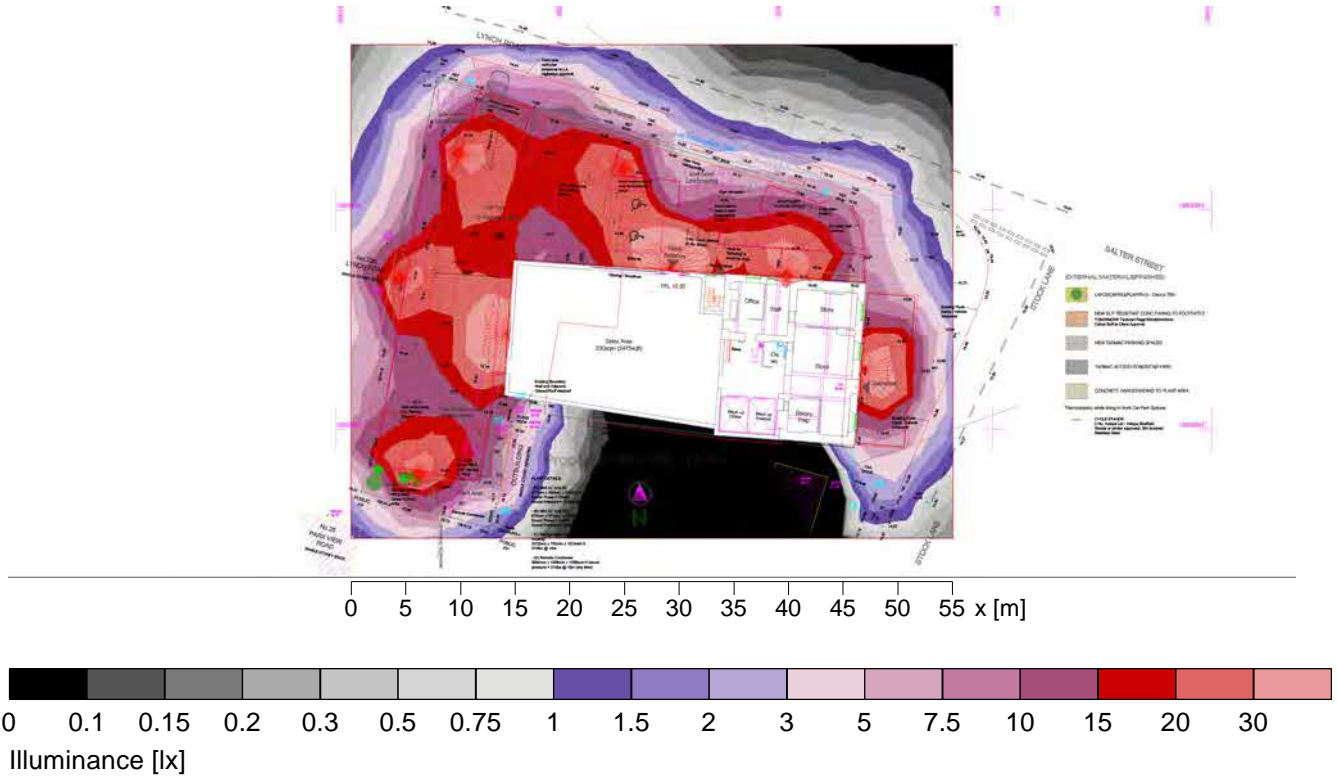
Average illuminance	$\bar{E}_m$	21.2 lx
Minimum illuminance	$E_{min}$	5.5 lx
Maximum illuminance	$E_{max}$	60.7 lx
Uniformity $U_o$	$E_{min}/\bar{E}_m$	1:3.84 (0.26)
Diversity $U_d$	$E_{min}/E_{max}$	1:11 (0.09)

#### Type No./Make

<b>ASD Lighting PLC</b>	
1 5 x	Order No. : HWD2-#4K1670-F0
	Luminaire name : HWD2-#3K16 700-F0 Gen 5
	Equipment : 16 x LED / 222.594 lm
2 3 x	Order No. : SEL-#3LED3000-T
	Luminaire name : STEALTH ELITE 3000K T LENS LED3000
	Equipment : 16 x LED / 176.044 lm

## 1.2 Summary, Exterior 1

### 1.2.4 Result overview, Evaluation area 1



#### General



Calculation algorithm used	Average indirect fraction
Maintenance factor	0.80
Total luminous flux	26257.60 lm
Total power	258.4 W
Total power per area (2475.00 m <sup>2</sup> )	0.10 W/m <sup>2</sup> (1.18 W/m <sup>2</sup> /100lx)

#### Evaluation area 1

#### Reference plane 1.1

	Horizontal
$E_m$	8.83 lx
$E_{min}$	0 lx
$E_{min}/\bar{E}_m (U_o)$	---
$E_{min}/E_{max} (U_d)$	---
Position	0.00 m

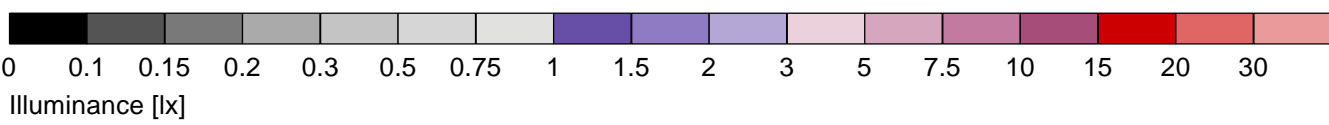
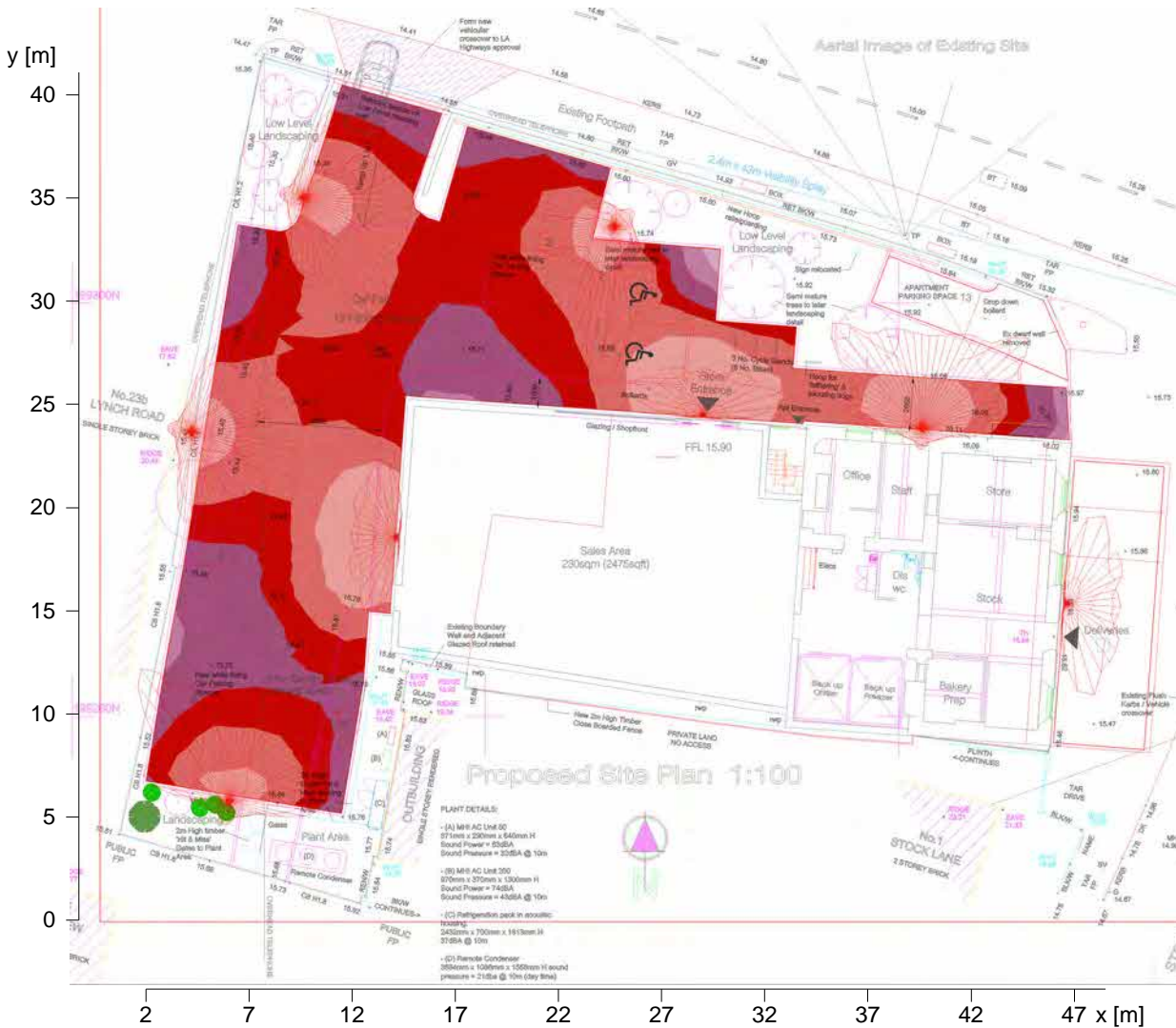
#### Type No./Make

<b>ASD Lighting PLC</b>	
1	5 x
	Order No. : HWD2-#4K1670-F0 Luminaire name : HWD2-#3K16 700-F0 Gen 5 Equipment : 16 x LED / 222.594 lm
2	3 x
	Order No. : SEL-#3LED3000-T Luminaire name : STEALTH ELITE 3000K T LENS LED3000 Equipment : 16 x LED / 176.044 lm

# 1 Exterior 1

## 1.3 Calculation results, Exterior 1

### 1.3.1 Pseudo colours, Measuring area 2.1 (E)

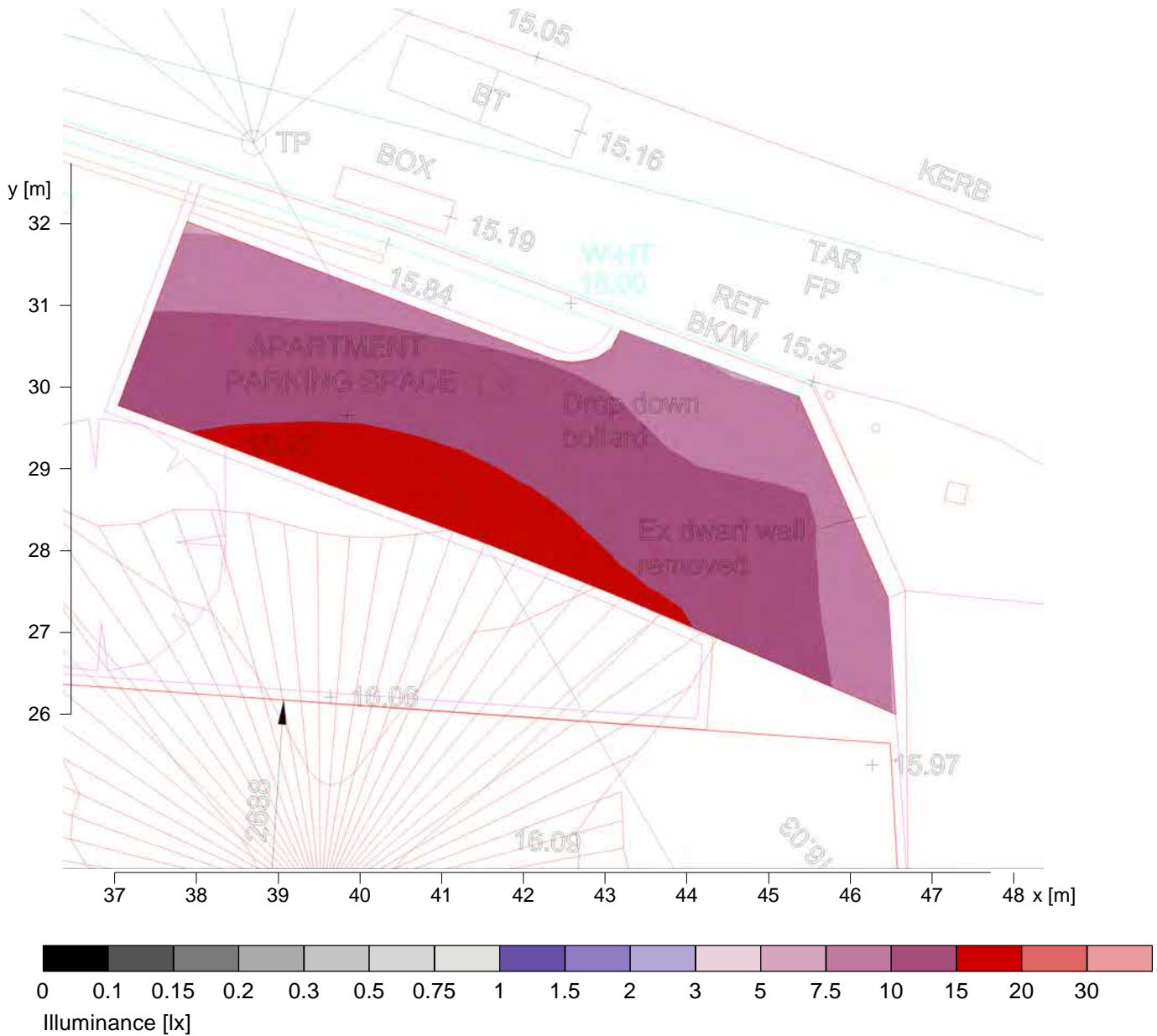


Height reference plane	: 0.00 m
Average illuminance	$\bar{E}_m$ : 22.2 lx
Minimum illuminance	$E_{min}$ : 9.5 lx
Maximum illuminance	$E_{max}$ : 86.7 lx
Uniformity $U_0$	$E_{min}/\bar{E}_m$ : 1 : 2.34 (0.43)
Diversity $U_d$	$E_{min}/E_{max}$ : 1 : 9.12 (0.11)



### 1.3 Calculation results, Exterior 1

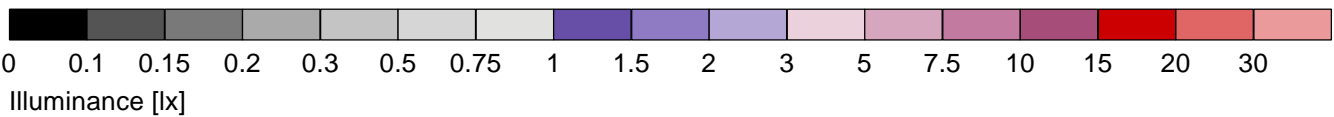
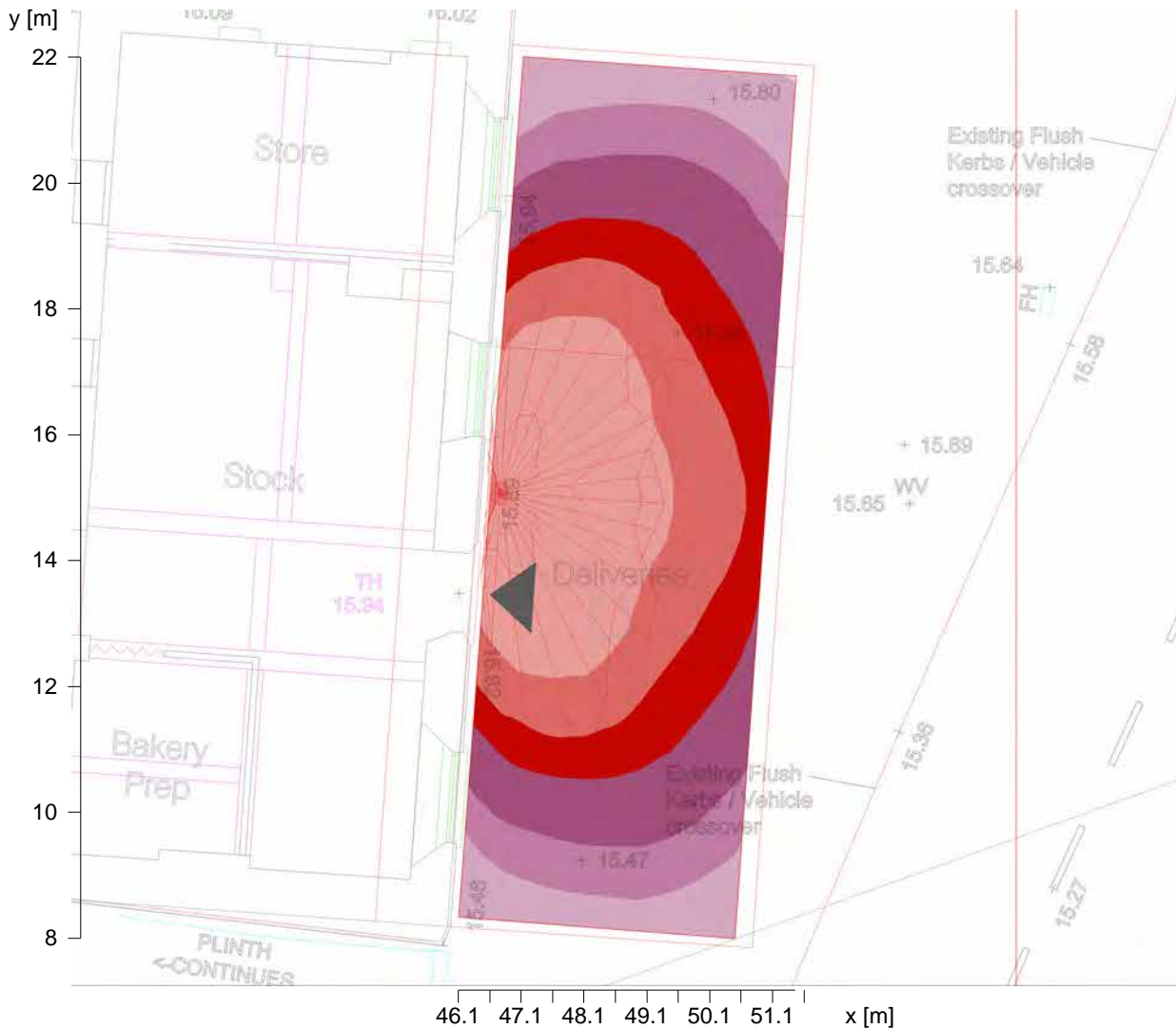
#### 1.3.2 Pseudo colours, Measuring area 2.2 (E)



Height reference plane		: 0.00 m
Average illuminance	$\bar{E}_m$	: 12.1 lx
Minimum illuminance	$E_{min}$	: 7.7 lx
Maximum illuminance	$E_{max}$	: 18.3 lx
Uniformity $U_o$	$E_{min}/\bar{E}_m$	: 1 : 1.56 (0.64)
Diversity $U_d$	$E_{min}/E_{max}$	: 1 : 2.37 (0.42)

### 1.3 Calculation results, Exterior 1

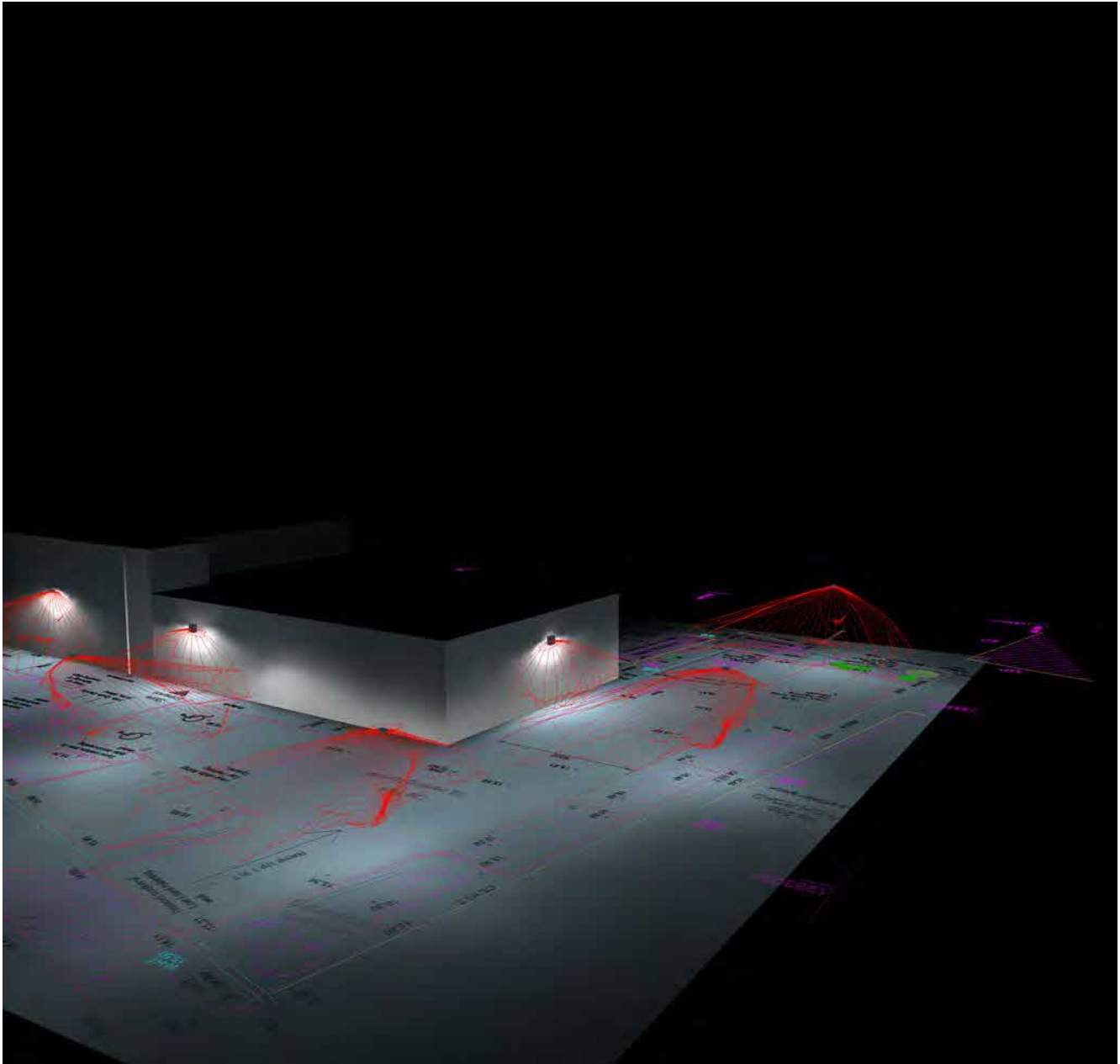
#### 1.3.3 Pseudo colours, Measuring area 2.3 (E)



Height reference plane		: 0.00 m
Average illuminance	$\bar{E}_m$	: 21.2 lx
Minimum illuminance	$E_{min}$	: 5.5 lx
Maximum illuminance	$E_{max}$	: 60.7 lx
Uniformity $U_o$	$E_{min}/\bar{E}_m$	: 1 : 3.84 (0.26)
Diversity $U_d$	$E_{min}/E_{max}$	: 1 : 11.01 (0.09)

### 1.3 Calculation results, Exterior 1

#### 1.3.4 3D luminance, View 1



### 1.3 Calculation results, Exterior 1

#### 1.3.5 3D luminance, View 2

