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NOTES

LIGHTING DESIGN

WITHIN THE PROPOSED LEISURE CENTRE DEVELOPMENT, THERE IS A REQUIREMENT FOR LIGHTING TO THE CAR PARK AND WALKWAYS, THEREFORE THE FOLLOWING WORKS WILL BE REQUIRED:

- THE NEW PROPOSED CAR PARK, 7 x WALL LUMINAIRES, 28 x BOLLARDS & 38 x 6m NEW LIGHTING COLUMNS ARE REQUIRED TO ACHIEVE THE REQUIRED LIGHTING LEVELS. SEE ADJACENT LAYOUT FOR DETAILS.
- ALL EXTERNAL LIGHTING IS TO BE CONTROLLED VIA A 24/7 TIME CLOCK IN CONJUNCTION WITH A PHOTOCELL OVERRIDE.
- WITH RESPECT TO THE OVERALL ASSESSMENT AND CALCULATIONS CARRIED OUT, THE EXTERNAL LIGHTING INDICATED AND POLLUTION LEVELS ARE NOT INFLUENCED BY THE PROPOSED NUMBER AND LOCATIONS OF LIGHTING COLUMNS.
- IN SUMMARY ITS OUR CONSIDERED OPINION THAT THE NEW LIGHTING SCHEME PROPOSED WILL HAVE MINIMAL LIGHTING IMPACT TO THE SURROUNDING AREAS.
- CONTROL MEASURES HAVE BEEN INTRODUCED TO REDUCE OR ELIMINATE WHERE POSSIBLE MINIMISING THE IMPACT OF NUISANCE GLARE, OVERSPILL LIGHTING, HAZE REDUCTION & ZERO UPWARD LIGHT.

BS5489 PROVIDE GUIDELINES FOR LIGHTING PERFORMANCE CRITERIA. THE FOLLOWING ASSUMPTIONS ARE MADE:

- THE AREA TO BE ILLUMINATED IS CLASSIFIED AS A MIXED VEHICULAR AND PEDESTRIAN AREA ON THE SAME SURFACE

NOTE – THE EXTERNAL LIGHTING SCHEME IS TO COMPLY WITH THE FOLLOWING:
IUP: GUIDANCE FOR THE REDUCTION OF OBSTRUCTIVE LIGHT GN01:2020
CIBSE LIGHTING GUIDE LG6 – (2016) THE EXTERIOR ENVIRONMENT

ILLUMINANCE STATISTICS					
DESCRIPTION	SYMBOL	AVG	MAX	MIN	MIN / AVG
ACCESS ROAD	+	17 LUX	46 LUX	5 LUX	0.29
CAR PARK 1	+	12 LUX	30 LUX	5 LUX	0.42
CAR PARK 2	+	11 LUX	33 LUX	5 LUX	0.45
CAR PARK 3	+	11 LUX	19 LUX	5 LUX	0.45
CIRCULATION	+	10 LUX	41 LUX	5 LUX	0.50
PERIMETER	+	11 LUX	56 LUX	3 LUX	0.27
PLAY AREA	+	15 LUX	28 LUX	7 LUX	0.47
POOL ACCESS ROAD	+	11 LUX	31 LUX	5 LUX	0.45
WALKWAY	+	14 LUX	40 LUX	4 LUX	0.29
WALKWAY	+	13 LUX	22 LUX	5 LUX	0.38
WALKWAY	+	13 LUX	30 LUX	3 LUX	0.23

LUMINAIRE DATA	
LUMINAIRE EFFICACY:	115.10lm/W
LUMINAIRE POWER:	79W
LUMINAIRE FLOX:	8978lm
LUMINAIRE COLOUR:	3000K
LUMINAIRE LENS:	FORWARD

A1 – HOLOPHANE FACTOR STREETLIGHT

LUMINAIRE DATA	
LUMINAIRE EFFICACY:	115.10lm/W
LUMINAIRE POWER:	79W
LUMINAIRE FLOX:	8794lm
LUMINAIRE COLOUR:	3000K
LUMINAIRE LENS:	NARROW

A2 – HOLOPHANE FACTOR STREETLIGHT

LUMINAIRE DATA	
LUMINAIRE EFFICACY:	117.82lm/W
LUMINAIRE POWER:	79W
LUMINAIRE FLOX:	9100lm
LUMINAIRE COLOUR:	3000K
LUMINAIRE LENS:	SYMMETRIC

A3 – HOLOPHANE FACTOR STREETLIGHT

LUMINAIRE DATA	
LUMINAIRE EFFICACY:	115.81lm/W
LUMINAIRE POWER:	79W
LUMINAIRE FLOX:	9033lm
LUMINAIRE COLOUR:	3000K
LUMINAIRE LENS:	ASYMMETRIC

A4 – HOLOPHANE FACTOR STREETLIGHT

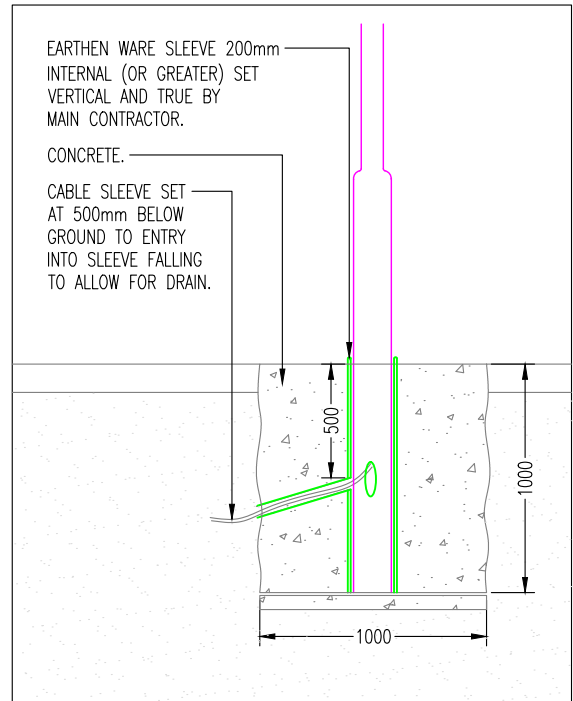
LUMINAIRE DATA	
LUMINAIRE EFFICACY:	67.92lm/W
LUMINAIRE POWER:	12W
LUMINAIRE FLOX:	815lm
LUMINAIRE COLOUR:	3000K
LUMINAIRE LENS:	ASYMMETRIC

B – HOLOPHANE DENVER ELITE BOLLARD

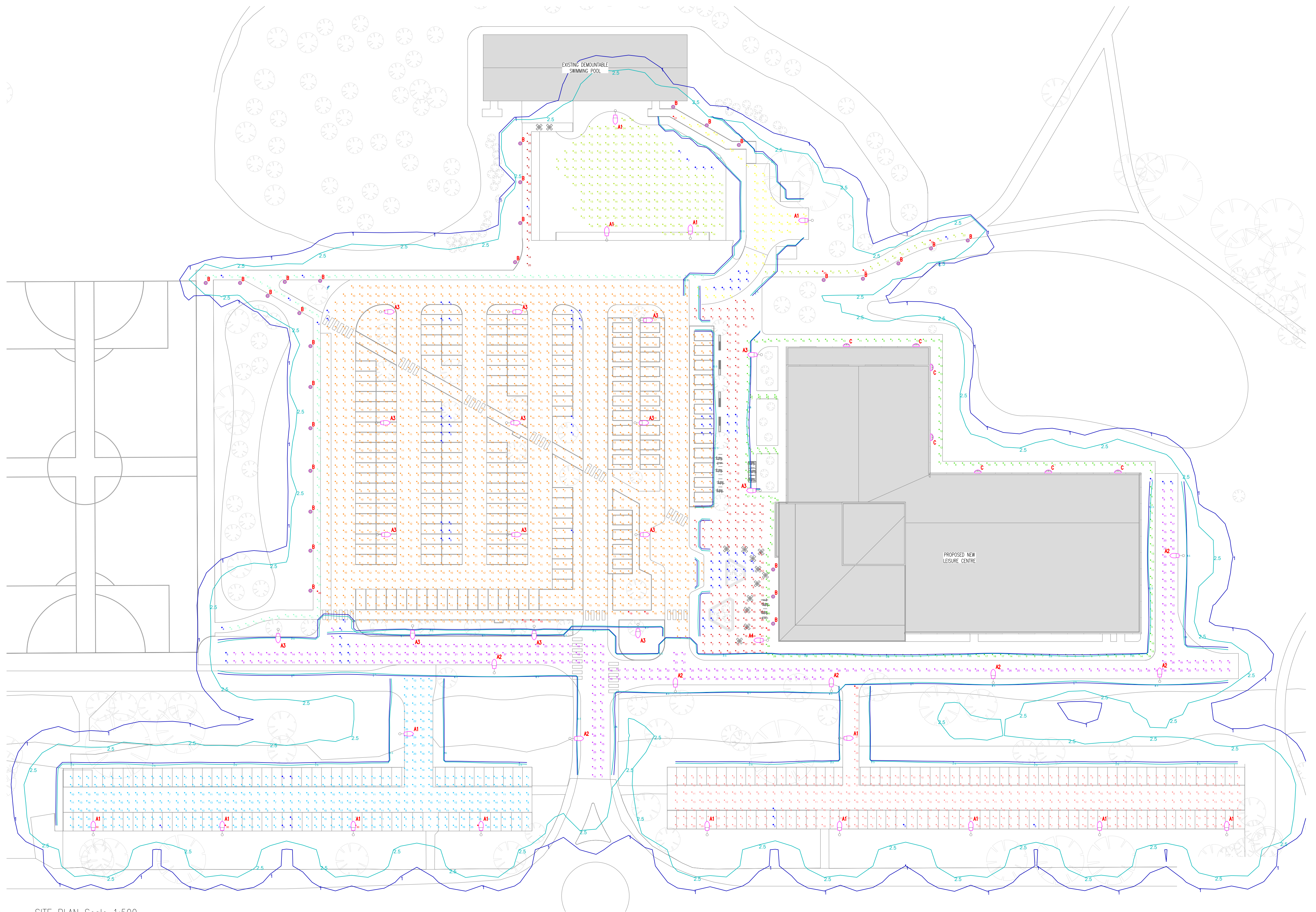
LUMINAIRE DATA	
LUMINAIRE EFFICACY:	95.17lm/W
LUMINAIRE POWER:	12W
LUMINAIRE FLOX:	1142lm
LUMINAIRE COLOUR:	3000K
LUMINAIRE LENS:	NARROW

C – HOLOPHANE DENVER ELITE WALL

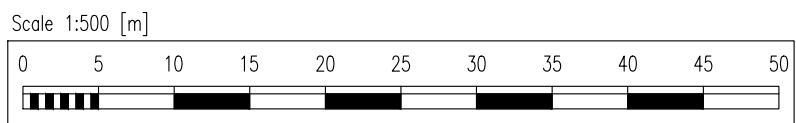
LIGHTING & EMERGENCY LIGHTING LEGEND		
SYMBOL	DESCRIPTION	MANUFACTURER REF
A1	EXTERNAL LED 6m COLUMN MOUNTED LUMINAIRE.	HOLOPHANE EUROPE REF: FTS.3.LA103.FM
A2	EXTERNAL LED 6m COLUMN MOUNTED LUMINAIRE WITH SPILL SHIELD.	HOLOPHANE EUROPE REF: FTS.3.LA103.NR
A3	EXTERNAL LED 6m COLUMN MOUNTED LUMINAIRE WITH SPILL SHIELD.	HOLOPHANE EUROPE REF: FTS.3.LA103.SY
A4	EXTERNAL LED 6m COLUMN MOUNTED LUMINAIRE WITH SPILL SHIELD.	HOLOPHANE EUROPE REF: FTS.3.LA103.AY
B	EXTERNAL ILLUMINATED BOLLARD.	HOLOPHANE EUROPE REF: DEB.L013.PAY.00
C	EXTERNAL WALL MOUNTED LUMINAIRE.	HOLOPHANE EUROPE REF: DEW.L013.NR.CGL



TYPICAL COLUMN INSTALLATION DETAIL N.T.S



SITE PLAN Scale 1:500
EXTERNAL LIGHTING LAYOUT



THIS DRAWING IS PRODUCED IN ACCORDANCE WITH ARCHITECTS/MIN CONTRACTORS DRAWING REFERENCE

1790-SBA-RM-XX-DR-A-5003_S

REV	DESCRIPTION	TVC	JF	26.11.20
A	UPDATED TO LATEST ARCHITECT PLANS			
REV	DESCRIPTION	DRN	CHK	DATE

PLANNING

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Project Name
C7403 Reading
Rivermead Leisure Centre

Drawing Title
Site Plan
External Lighting Layout

Engineer NM Checked by JF Drawn by BA

Date 19.11.20 Scale 1:500 Size A1

Drawing Number
Project Originator Volume Level Type Role Number Revision
C7403 - TLP - RM - 00 - DR - E - 801 A