



 ENGINEERING PROJECT MANAGEMENT DARWIN. GEELONG. CAIRNS. TOWNSVILLE. PERTH. BALLARAT admin@hksolutions.com.au www.hksolutions.com.au					
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CITY OF KALAMUNDA
RAY OWEN OVAL SPORTSFIELD LIGHTING
GLADYS RD, LESMURDIE WA 6076
SITE PLAN

PAGE No 02 OF 06	PROJECT No 23169 - E002	DRAWING No ELECTRICAL	DISCIPLINE C	REV. A1	SHEET SIZE A1
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DRAWN	SK	CITY OF KALAMUNDA					
CHECKED	-	RAY OWEN OVAL SPORTSFIELD LIGHTING					
DESIGNED	JT	GLADYS RD, LESMURDIE WA 6076					
CHECKED	-	LOCALITY PLAN AND DRAWING SCHEDULE					
APPROVED	-						
Date Approved	-						
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		03 OF 06	23169	E100	ELECTRICAL	C	A1



1. THE CONTRACTOR SHALL ALLOW FOR FINAL MEASUREMENT AND RECORDING OF HORIZONTAL ILLUMINANCE AND UNIFORMITIES ON THE FIELD OF PLAY IN ACCORDANCE WITH CLUB COMPETITION PERFORMANCE LEVEL ACCORDING TO AS2560.2. AS PART OF LIGHTING MEASUREMENT THE CONTRACTOR SHALL ALLOW FOR ON-SITE NIGHT AIMING OF LUMINAIRES TO PROVIDE TUNING AND IMPROVEMENTS TO LIGHTING PERFORMANCE AND REDUCTION OF LIGHTING SPLIT AS PART OF ITS COMMISSIONING.
2. OBTRUSIVE LIGHTING WAS CALCULATED AT THE PROPERTY BOUNDARIES USING A GRID PLANE 20M HIGH WITH 5M HORIZONTAL & 2M VERTICAL POINT GRID SPACING. THE CALCULATIONS WERE PERFORMED WITH AG32 SOFTWARE USING A LIGHTING ZONE 'A3' & L1 CURVE/FIELD CONDITIONS AS PER AS4282-2019.

OBTRUSIVE LIGHTING CALCULATION SUMMARY					
APPLICABLE STANDARD: AS/NZS 4282:2019 ENVIRONMENTAL ZONE: A3 CONDITIONS: NON-CURFEW L1 LUMINAIRE LLF: 1.0					
SEGMENT LABEL	CALC TYPE	UNITS	CALC MAX	AS4282 LIMIT	AS4282 COMPLIANT?
OBTRUSIVE\LIGHT_RES_BOUNDARY EAST	LUMINOUS INTENSITY	Cd	11891	12500	YES
	VERTICAL ILLUMINANCE	LUX	6.3	10	YES
OBTRUSIVE\LIGHT_RES_BOUNDARY NORTH	LUMINOUS INTENSITY	Cd	10283	12500	YES
	VERTICAL ILLUMINANCE	LUX	0.7	10	YES
OBTRUSIVE\LIGHT_RES_BOUNDARY WEST	LUMINOUS INTENSITY	Cd	11137	12500	YES
	VERTICAL ILLUMINANCE	LUX	0.4	10	YES

Obtrusive Light - Compliance Report

AS/NZS 4282:2019, A3 - Medium District Brightness, Non-Curfew L1
Filename: 23169 - RAY OWEN OVAL (02)
9/04/2024 3:32:43 PM

Illuminance

Maximum Allowable Value: 10 Lux

Luminous Intensity (Cd) At Vertical Planes

Maximum Allowable Value: 12500 Cd

Calculations Tested (10):			Calculations Tested (10):		
Calculation Label	Test Result	Max. Item	Calculation Label	Test Result	Max. Item
OB RES WEST_II_Seg1	PASS	0.4	OB RES WEST_C_Seg1	PASS	0.4
OB RES NORTH_II_Seg1	PASS	0.7	OB RES NORTH_C_Seg1	PASS	0.7
OB RES EAST_II_Seg1	PASS	2.3	OB RES EAST_C_Seg1	PASS	2.3
OB RES WEST_II_Seg2	PASS	1.7	OB RES WEST_C_Seg2	PASS	1.7
OB RES EAST_II_Seg2	PASS	2.0	OB RES EAST_C_Seg2	PASS	2.0
OB RES WEST_II_Seg3	PASS	2.6	OB RES WEST_C_Seg3	PASS	2.6
OB RES EAST_II_Seg3	PASS	5.1	OB RES EAST_C_Seg3	PASS	5.1
OB RES WEST_II_Seg4	PASS	6.3	OB RES WEST_C_Seg4	PASS	6.3
OB RES EAST_II_Seg4	PASS	4.3	OB RES EAST_C_Seg4	PASS	4.3
OB RES WEST_II_Seg5	PASS	1.6	OB RES WEST_C_Seg5	PASS	1.6
OB RES EAST_II_Seg5	PASS	1.6	OB RES EAST_C_Seg5	PASS	1.6
OB RES WEST_II_Seg6	PASS	1.6	OB RES WEST_C_Seg6	PASS	1.6
OB RES EAST_II_Seg6	PASS	1.6	OB RES EAST_C_Seg6	PASS	1.6
OB RES WEST_II_Seg7	PASS	1.6	OB RES WEST_C_Seg7	PASS	1.6
OB RES EAST_II_Seg7	PASS	1.6	OB RES EAST_C_Seg7	PASS	1.6
OB RES WEST_II_Seg8	PASS	1.6	OB RES WEST_C_Seg8	PASS	1.6
OB RES EAST_II_Seg8	PASS	1.6	OB RES EAST_C_Seg8	PASS	1.6

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SCOPE OF WORK.

OBTRUSIVE LIGHTING SUMMARY

1:1000 AT ORIGINAL SIZE

ALL DIMENSIONS SHOWN IN MM. DO NOT SCALE FROM DRAWINGS.
DIMENSIONS TAKE PRECEDENCE. IF IN DOUBT REFER TO HK SOLUTIONS.

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		04 OF 06	23169	E101	ELECTRICAL	C	A1

PRELIMINARY

City of Kalamunda