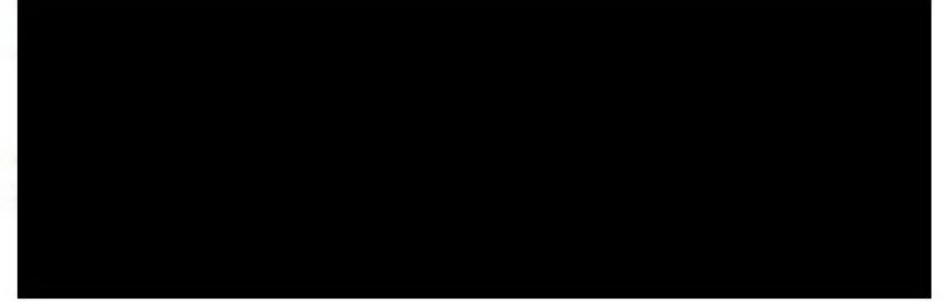


Kevin Blatch & Tracy-Ann Hall
Laurel Lodge
The Street
Stonham Aspal
Stowmarket IP14 6AH



Planning Department
Mid-Suffolk and Babergh District Council

14 January 2021

Dear Sirs,

**Re: White Oak Farm, Norwich Road, Mendlesham, Stowmarket
IP14 6AH**

Planning Application DC/19/01690

The above Planning Permission required under condition 3 that prior to the erection of floodlighting or external lighting, that approval was required.

Location and Setting

White Oak Farm is adjacent to and accessed direct from the A140 and is isolated, other than farms around it.

The nearest domestic property is at Tower Farm 200m from our northern boundary.

Circa 300m from the property, on the opposite side of the A140 is the Mendlesham Business Park, consisting of extensive storage and distribution units, working 24/7 with floodlighting.

Additionally, adjacent to that development is the Mendlesham mast, with 7 sets of red warning lights set evenly over its 300m height.

Arena Lighting

We have a number of horses on site, which require exercise and training in the permitted arena and lunge pen. There are no bridleways leading from our property, so any other exercise by way of hacking, requires loading the horse(s) into transport.

Adjacent to our property on the West side is a farm. The boundary has mature trees along its length, circa 8m high, including alongside the western edge of the menage and lunge pen. During normal working hours there are people and vehicle movements adjacent to our boundary, the other side of the trees. Movement and noise the other side of trees, can scare the horses, potentially making exercise dangerous.

Due to that and other daytime commitments (work/study) it is safer to ride after working hours. With exception of summer, for most months of the year it is dark during those periods.

It is our wish to erect 4No. sports suitable arena lights to both the East and West sides of the menage, plus a further light on each of the East and West sides of the lunge pen. There would be 10 lights in total.

The lights will be placed 6m above the surface on (scaffold) poles and will shine downwards at approximately 45 degrees from vertical, into the arena/pen. This would provide sufficient, but localized light to allow for riding and training.

We have taken professional advice and specific lamps in a suitable arrangement have been suggested. The technical specification for the proposed lamps, calculated luminance levels etc are on the attached documents from 'Lightmyride.co.uk'. The same lights (2No) will be used on the lunge pen, erected as per the menage.

The lights on the East side would be approximately 150m from the edge of the northbound carriageway of the A140. Those lights would face 180 degrees away from the road. The lights on the West side would be 180m from the road, but would face towards the road. However, all lights will be facing downwards toward the arena/lunge pen floor, as it is the surface that is to be lit.

Additionally, between the road and our property are mature trees and shrubs. This screens the road from us and would likewise screen the lighting from the traffic.

Stable Lighting

It is commonly necessary to enter the stables and area immediately in front of the stables, and associated 'buildings' during the hours of darkness or partial light.

This activities undertaken include taking the horses to and from the paddocks, cleaning stables, providing water and preparing food.

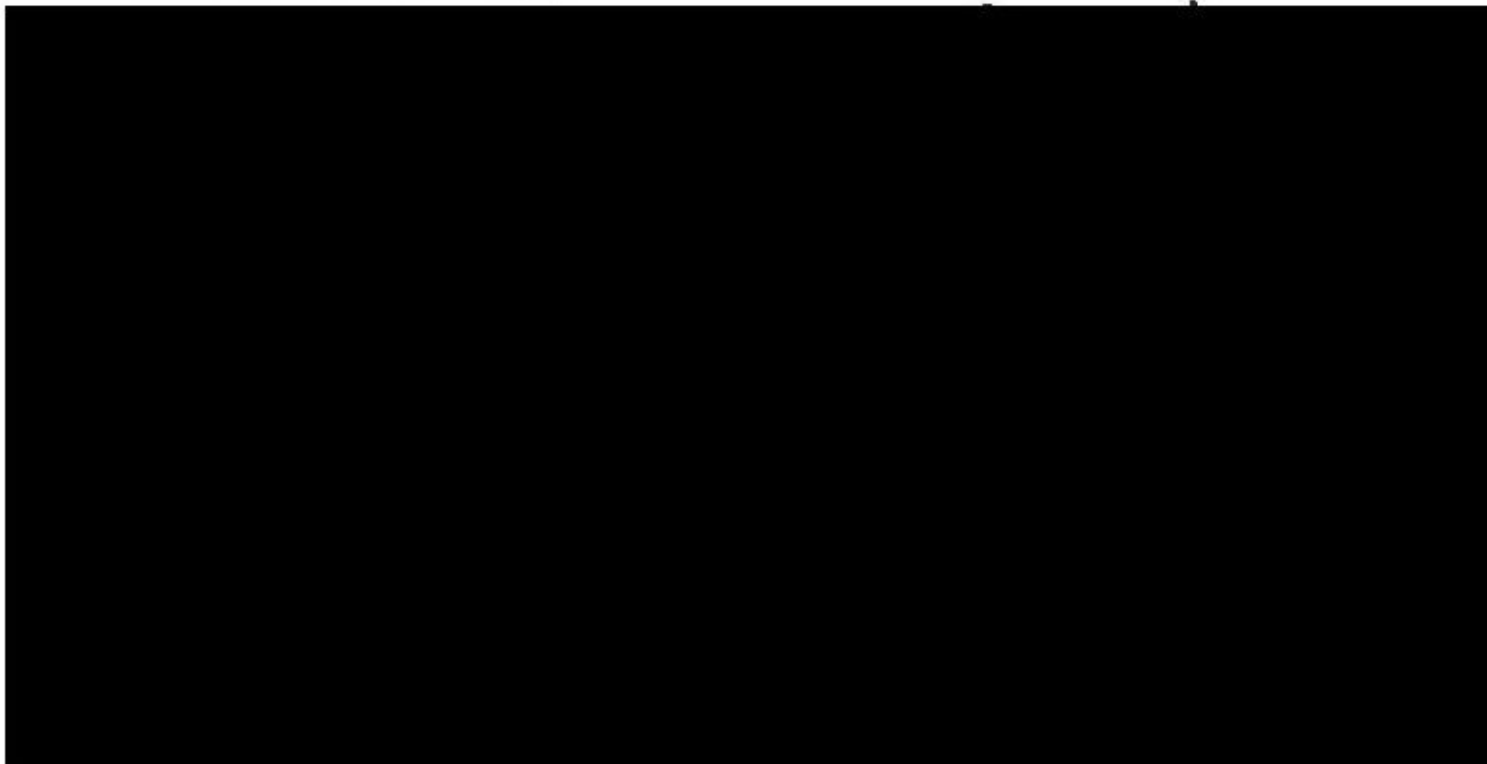
It has proved difficult and is certainly dangerous to do in the dark.

We therefore seek permission to install bulkhead lights external to the buildings. The stables are set out in a 'C' shaped configuration, so the lighting will be on the internal side of the 'C'.

The lighting needs to luminate the area sufficient for taking horses in or out of stables, grooming, etc. The lights would project in a limited fashion to cover an adjacent area only, so would not affect others external to our property. The lights would be positioned under the stable roof overhang, lighting the stable front and floor primarily.

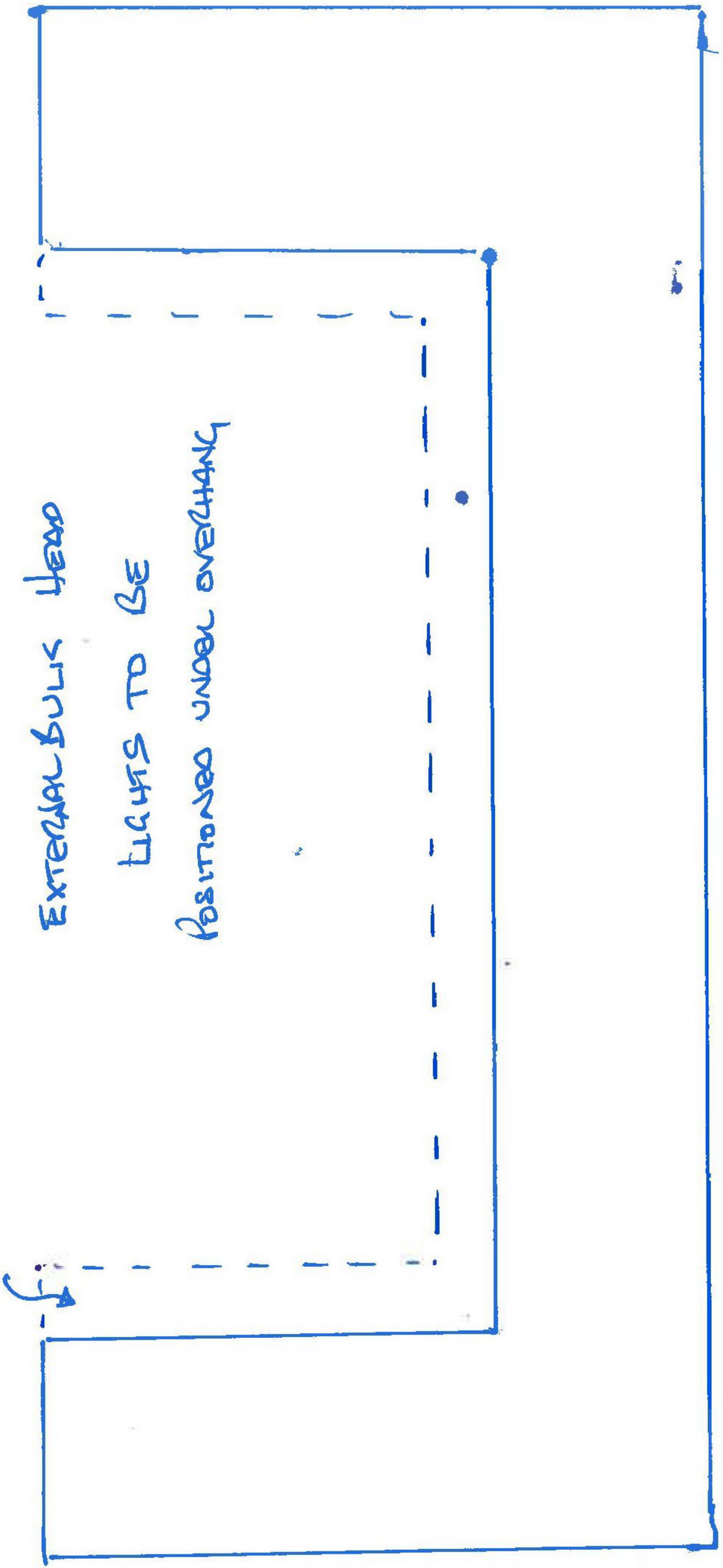
Should you require any further information, we would be pleased to provide it.

Yours faithfully,



STABLES

overhang
post



All dimensions to be checked on site prior to commencement of works. Drawings are scaled for Planners use only.

MENAGE

- 8NO FLOOD LIGHTS
- FIXED 6M ABOVE MENAGE SURFACE ON SCAFFOLD POLES
- 4NO LIGHTS FACING DOWNWARDS + EAST
- 4NO LIGHTS FACING DOWNWARDS + WEST

LUNGE PEN

- 2NO LIGHTS, ALL AS ABOVE, 1FACING EAST, 1FACING WEST



For use in connection with Equestrian Equestrian Construction

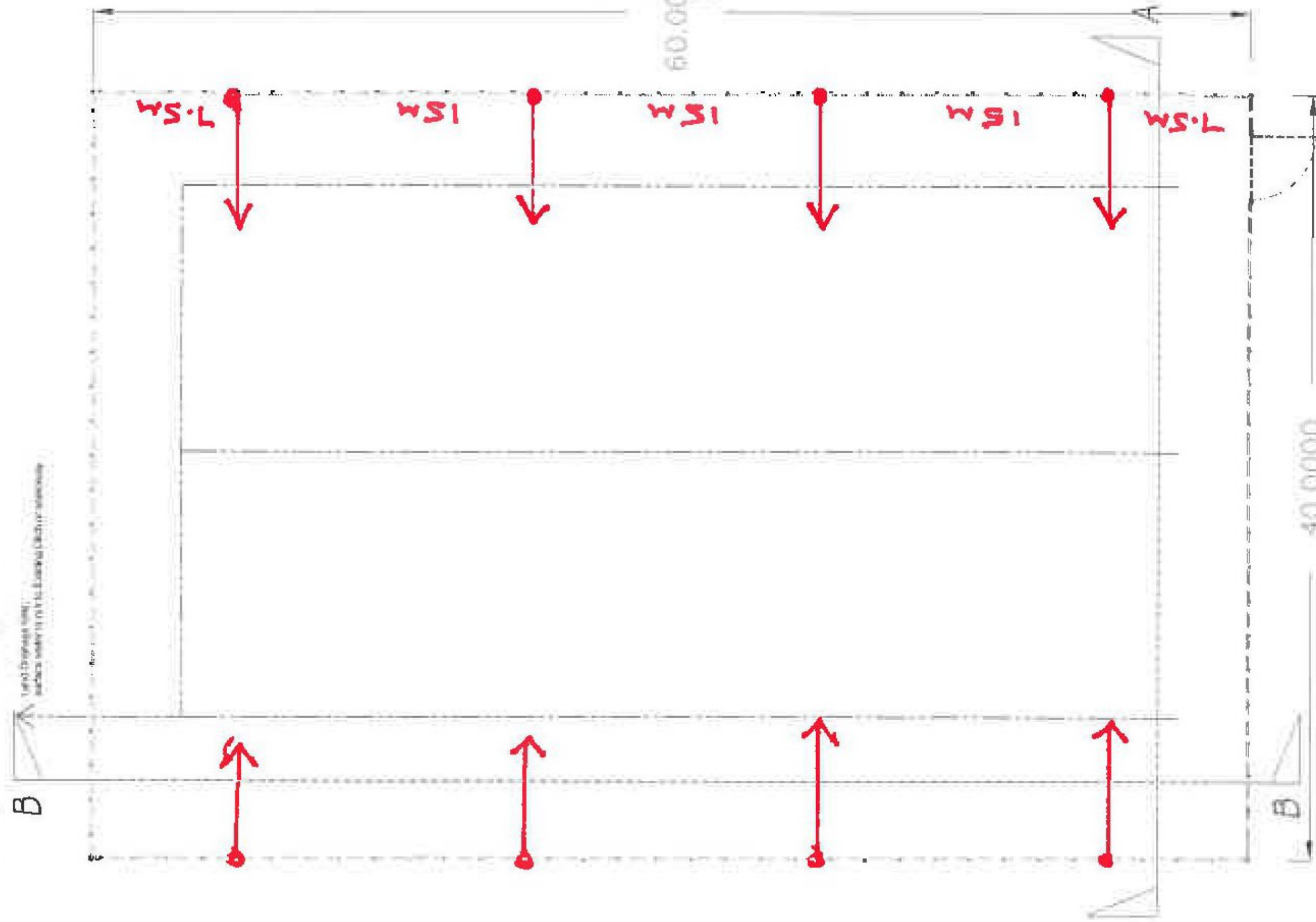
Chapelstone
EQUESTRIAN CONSTRUCTION

No.	Revision	Date
Conditions of acceptance of this drawing are that it is not copied or disclosed to a third party without written permission © 2008.		
Site		
White Oaks Farm Norwich Road Mendlesham Stowmarket IP14 5NE		
Project Proposed Equestrian Facilities Location Plan		
A & P Designs Architectural Plans, Building Consultations & Services Telephone: 01543 268856 Email: info@andpdesigns.co.uk www.andpdesigns.co.uk		
Job Drawing No.	Drawn By	Rev.
5829/01	JPL	
Scale	Date	
1:100 @ A2	March 2019	

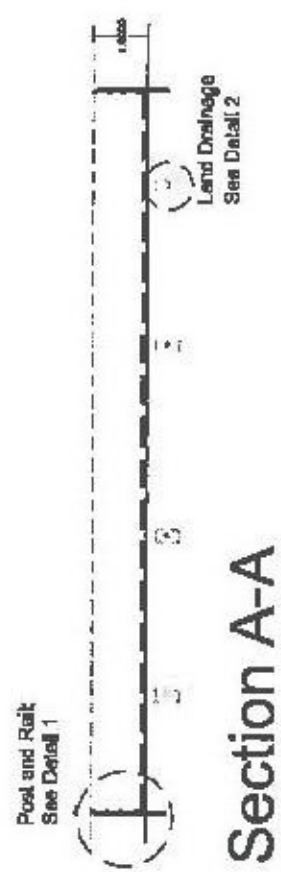


All dimensions to be checked on site prior to commencement of works. Drawings are scaled for Planners use only.

Proposed Menage Plan



Menage (Arena) Plan



Section A-A



Section B-B

○ POSITION OF LIGHT

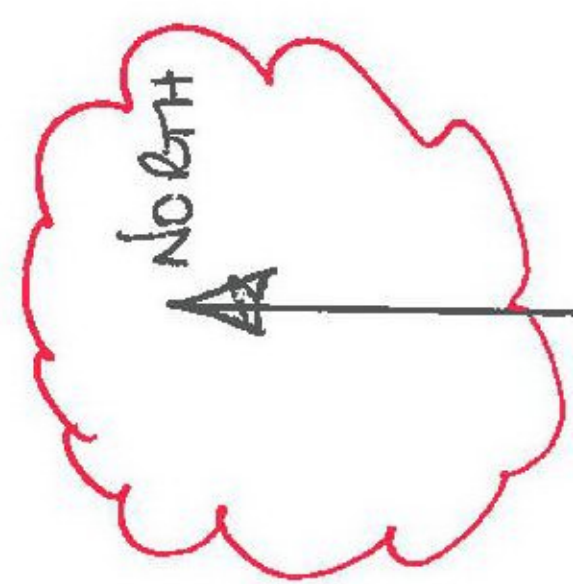
→ DIRECTION OF LIGHT
(LIGHT TO FACE DOWN AT ABOUT 45°)

Trench filled with clean stone 20-30mm diameter for water flow
 100mm OSMA or similar perforated pipe
 Size and depth of drainage channel to be dependent on Soil Conditions present.

50mm SuperTine Rubber: Type All weather chipping
 100-125mm Silica Sand, overlying non woven geotextile membrane
 100-125mm Clean Limestone/Grenite Chips, overlying woven geotextile membrane. To prevent chipping migration.

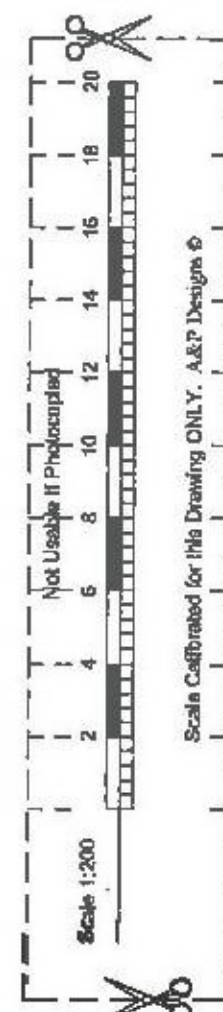
Detail 1
No Scale

Detail 2
No Scale



Chapelstone
EQUESTRIAN CONSTRUCTION

No.	Revision	Date
Conditions of acceptance of this drawing are that it is not copied or disclosed to a third party without written permission © 2008.		
Site: White Oak Farm Norwich Road Mendlesham Stowmarket IP14 5NE		
Project: Proposed Arena Stables with Yard, Lunge Ring & Barn Proposed Details		
A & P Designs Architectural Plans, Building Consultants & Surveyors Telephone: 01263 244646 E-mail: info@aandpdesigns.co.uk www.aandpdesigns.com		
Job/ Drawing No.	5829/08	Drawn By JPL
Scale	1:200 @ A2	Date Feb. 2019



Technical Datasheet

Professional Arena flood

*****5 year warranty*****



Equestrian lighting solutions

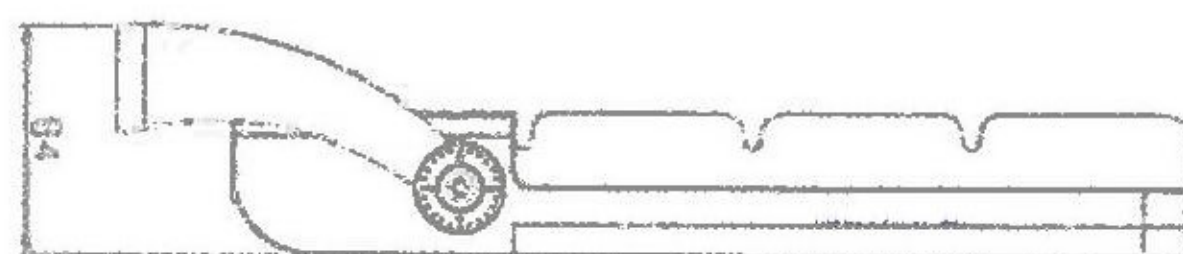
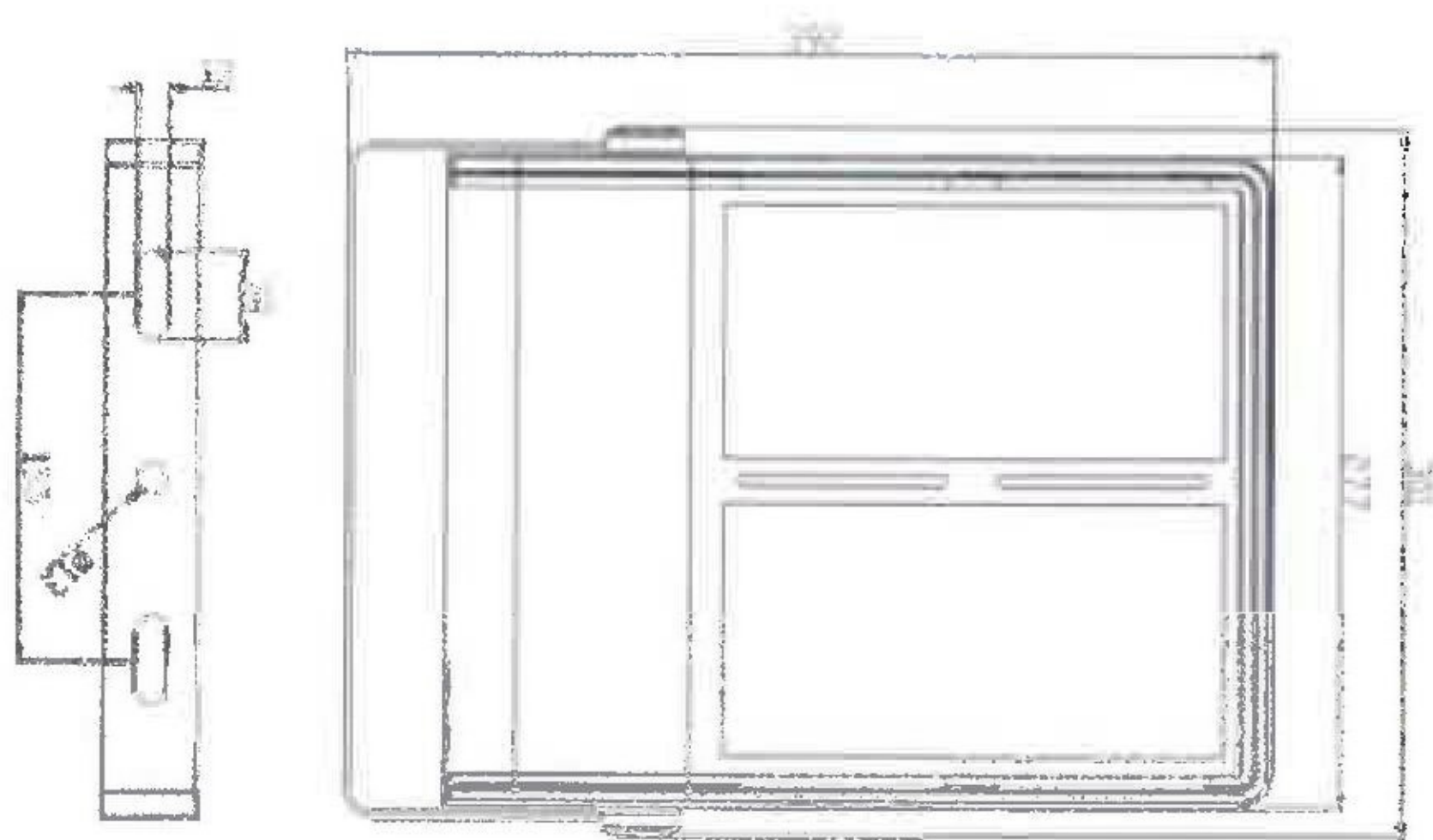


DESCRIPTION

A high efficiency, professional performance floodlight.

KEY FEATURES

Asymmetric optical distribution.
Tempered glass lens with an extruded aluminium body and zinc coated stirrup mounting bracket.



IP65

LED

5YR

Code	Type	Watts	Lumens (LM)	IP Rating	Size (L)	Size (W)	Size (H)
LMRFLD50	ASYMMETRIC LED FLOOD	50W	6500	IP65	392mm	301mm	84mm
LMRFLD100	ASYMMETRIC LED FLOOD	100W	* 13000	IP65	392mm	301mm	84mm
LMRFLD150	ASYMMETRIC LED FLOOD	150W	18000	IP65	392mm	301mm	84mm
LMRFLD200	ASYMMETRIC LED FLOOD	200W	26000	IP65	392mm	301mm	84mm

Riding Arena

Installation : Proposed new lighting

Project number : LMR09238
Customer : White Oak Farm
Processed by : KC
Date : 13.11.2020

Project description:

Based on standard external riding area with sand base
30m x 60m
Mounting height:
6M

The following recommendations are widely used in the lighting industry and produced by CIBSE.

The following are recommended average lighting levels:

Outdoor: minimum suggested mounting height 10M
Schooling, Dressage (recreational) 100lux
Schooling, showjumping (recreational) 150lux
Competition, dressage 200lux
Competition, Showjumping 300lux

Indoor: minimum suggested mounting height 6M
Schooling, Dressage (recreational) 300 lux
Schooling Showjumping (recreaitonal) 400 lux
Competition, Dressage 500 lux
Competition, Showjumping 700lux

The minimum level of uniformity (light spread to minimise shadows) for all of the above is 0.5 for outdoor and 0.8 for indoor

The above values should be used as a guide to aim for when lighting any arena, however we understand that in many cases there are factors restricting compliance to these recommendaitons.

The lighting layout within this proposal follows the brief from the client with regard to mounting height and positions.

We have offered a solution based on the design parameters imposed at the time of undertaking the project and we take no respinsibility for the outcome of the installation if the lighting levels are not satisfactory.

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.

Object : Riding Arena
 Installation : Proposed new lighting
 Project number : LMR09238
 Date : 13.11.2020



Equestrian lighting solutions

1 6M 8 fittings

1.1 Summary, 6M 8 fittings

1.1.1 Result overview, Light spill



Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Height (phot centre) [m]:	5.98 m
Maintenance factor	0.85

Total luminous flux of all lamps	122840 lm
Total power	1165.6 W
Total power per area (1800.00 m ²)	0.65 W/m ²

Illuminance

Average illuminance	Em	19.3 lx
Minimum illuminance	Emin	0.2 lx
Maximum illuminance	Emax	64.5 lx
Uniformity Uo	Emin/Em	1:88.2 (0.01)
Diversity Ud	Emin/Emax	1:295 (0)

Type No.\Make

2	8	Litemyride.co.uk
	Order No.	: LMRFLD150
	Luminaire name	: LMRFLD150
	Equipment	: 1 x LED 145.7 W / 15355 lm

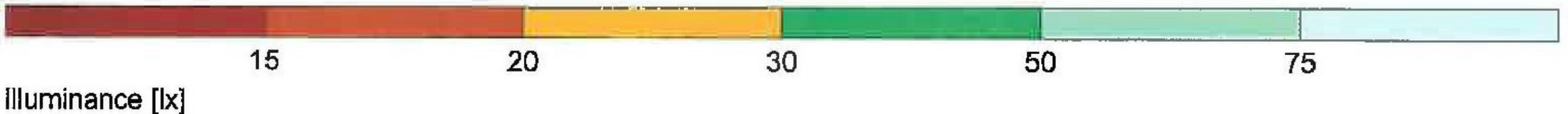
Object : Riding Arena
 Installation : Proposed new lighting
 Project number : LMR09238
 Date : 13.11.2020



Equestrian lighting solutions

1.1 Summary, 6M 8 fittings

1.1.2 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height (phot. centre)	5.98 m
Maintenance factor	0.85
Total luminous flux of all lamps	122840.00 lm
Total power	1165.6 W
Total power per area (1800.00 m ²)	0.65 W/m ² (1.67 W/m ² /100lx)

Evaluation area 1	Reference plane 1.1
	Horizontal
Em	38.8 lx
Emin	9.7 lx
Emin/Em (Uo)	0.25
Emin/Emax (Ud)	0.13
Position	0.00 m

Type No.\Make

2	8	Litemyride.co.uk
	Order No.	: LMRFLD150
	Luminaire name	: LMRFLD150
	Equipment	: 1 x LED 145.7 W / 15355 lm

Object : Riding Arena
 Installation : Proposed new lighting
 Project number : LMR09238
 Date : 13.11.2020



Equestrian lighting solutions

1 6M 8 fittings

1.2 Calculation results, 6M 8 fittings

1.2.1 Table, Reference plane 1.1 (E)

	12.4	25.8	31.8	28	23.8	20.3	19.1	19.5	20.3	23.4	26.3	29.9	22.9	10.5
	19	41.9	44	36.3	28.9	24	21.7	21.7	23.8	28.4	36.1	42.2	37.4	17.8
[m]	30.2	56.9	59	44.8	34	27.7	24.6	24.6	27.1	33	43.5	57.3	59.8	30.6
55	36.7	65.6	66.2	51.1	37.9	30.2	27	26.8	29.7	36.6	48.9	65.5	67.9	37.8
	30.3	62.5	61.8	50.7	38.4	31.6	28.1	28	30.9	37.3	48.4	61.1	61.6	34
50	20.2	43.4	49.9	46.4	38	31.7	28.7	28.4	31.1	36.8	44.8	52	45.6	22.8
	16.4	35.5	44.5	42.5	36.3	32	29.9	29.6	31.8	36	41.4	45.2	37.2	17.8
45	16.1	36.5	45.5	42.6	37	33	30.7	30.6	32.7	37	43	44.9	36.9	17
	21.6	45.1	53.8	47.7	40.2	34.2	31.4	30.9	33.8	39.6	47.6	54.2	46.8	21.1
40	31.6	62.4	65.7	53.7	42.2	35.9	32.6	32.4	35.5	41.5	52.8	64.8	61.7	34
	38.6	66	71.2	56.5	43.8	36.5	33.5	33.4	36.6	43	55.2	70.8	[74.5]	39
	30.6	60.3	65.7	54.1	42.9	36.3	33.2	32.9	36	42.3	53	65.4	61.9	33.9
35	20.3	44.8	54.7	48.9	41.1	35.4	32.3	32.8	35.1	40.3	48.1	53.2	48.3	23.7
	15.6	36	46.5	44.2	39.1	34.9	32.6	32.6	34.6	38.9	43.6	46.6	37.7	18.3
30	16.2	37.1	45.9	44.5	38.5	34.9	32.8	32.6	34.8	38.2	43.9	46.4	38.3	16.3
	22.2	44.8	54.3	49	40.9	35.5	32.4	32.2	35.1	40.6	48.7	54.8	44.8	20.8
25	32.4	61.7	66.2	53.8	42.6	36.3	33.2	33.1	35.9	42.3	53.1	64.3	61.7	32.4
	37.6	72.6	70.6	56.4	43.6	36.5	33.5	33.4	36.3	43.1	55.7	70.9	70.7	41.1
20	30.9	60.8	65.5	53.9	42.3	35.7	32.4	32.4	35.4	41.6	52.8	65.3	63.5	33.2
	20.1	43.6	53.9	47.8	40.1	34.2	31.1	31.3	34	39.3	47.4	53.1	48.1	23.3
	16	35.6	45	43.4	37.2	32.9	30.7	30.6	32.7	37	42.5	45.9	37.5	17.4
15	16	34.6	44.6	42.8	36.3	31.7	29.7	29.8	32.4	36	42.1	45.1	36.4	17.8
	21.1	42.8	52	45.9	37.4	31.5	28.4	28.6	31.4	37.3	46.5	52.3	44.3	21.5
10	31.4	60.7	60.8	48.6	37.6	31.3	28	28.1	31.3	38	49.5	62.2	60.6	31.7
	36	66.6	65.4	50	37.2	30	27	26.9	30	37.1	49.8	66.1	71.4	38.3
	28.9	58.5	57.9	44.7	33.6	27.4	24.7	24.8	27.5	33.6	44.6	58.1	59	33.4
5	16.5	35.7	41.9	36	28.6	24	21.7	21.6	23.8	28.3	35.9	43.4	41.7	20.5
	(9.7)	22.3	28.1	27.2	23.5	20.4	19.5	19	20	23.6	26.6	30.8	26.6	13.9
	2.5	5.0	7.5	10.0	12.5	15.0	17.5	20.0	22.5	25.0	27.5	[m]		



Height reference plane : 0.00 m
 Average illuminance Em : 38.8 lx
 Minimum illuminance Emin : 9.7 lx
 Maximum illuminance Emax : 74.5 lx
 Uniformity Uo Emin/Em : 1 : 4.01 (0.25)
 Diversity Ud Emin/Emax : 1 : 7.71 (0.13)

Object : Riding Arena
 Installation : Proposed new lighting
 Project number : LMR09238
 Date : 13.11.2020



Equestrian lighting solutions

1.2 Calculation results, 6M 8 fittings

1.2.2 Table, Light spill (E)

[m]	1.3	3.3	6.7	7.9	8.1	7.7	6.4	2.7	1.3	0.8	0.7
80	1.2	6.4	9.3	12.9	9.4	9.7	9	5.5	1.1	1	0.9
	0.8	20.8	31.8	23	19.1	21.3	29.9	17.5	(0.2)	1	1
70	1.3	43	55.3	31.6	25	30.3	52.1	45	0.5	1	1.1
	1.5	37.8	56.4	35	28.2	33.7	55.4	40.4	1	1.4	1.2
60	1.3	22.2	43.6	34.6	29.7	33.4	44	26.2	1.2	1.5	1.2
	1.4	31	54.5	38.8	31.1	36.8	53.8	35.2	0.7	1.5	1.3
50	1.4	37.7	[64.5]	39.6	33.4	39	62.8	53.5	1	1.7	1.3
	1.1	25.2	51	38.2	32	37	50.2	32.4	0.4	0.5	1.2
40	1.3	27.4	48.5	37.6	31.9	36.8	49.2	28.3	0.3	1.4	1.4
	1.1	48.7	63.9	39.6	33	39.2	61.9	47.4	1.7	1.7	1.3
	1.2	34.3	56	38.1	31.5	37.3	55.9	37.8	0.5	1.8	1.3
30	1	24.2	44.3	33.9	30.1	33.8	43.6	25.6	1.7	1.6	1.3
	1.2	38	53.9	34.7	28.2	34.2	53.7	41.7	0.7	1.4	1.2
20	0.7	43.1	54.7	31.4	25.4	31	54.8	50.9	0.8	1.5	1.1
	0.8	19.5	33.4	23.6	19.3	23.4	32.9	23.1	0.9	1.3	1
10	1.7	3.4	10.6	11	8.5	10.8	14.3	3.6	1	1	0.9
	1.3	2.6	6.5	7.8	8	7.8	7.4	3.3	1.3	0.7	0.8
	1	1.7	3.4	4.7	5.4	5.1	3.9	2	1.1	0.8	0.7
		5	10	15	20	25	30	35	40	45	[m]



Height reference plane : 0.00 m
 Average illuminance Em : 19.3 lx
 Minimum illuminance Emin : 0.2 lx
 Maximum illuminance Emax : 64.5 lx
 Uniformity Uo Emin/Em : 1 : 88.25 (0.01)
 Diversity Ud Emin/Emax : 1 : 294.88 (0.00)

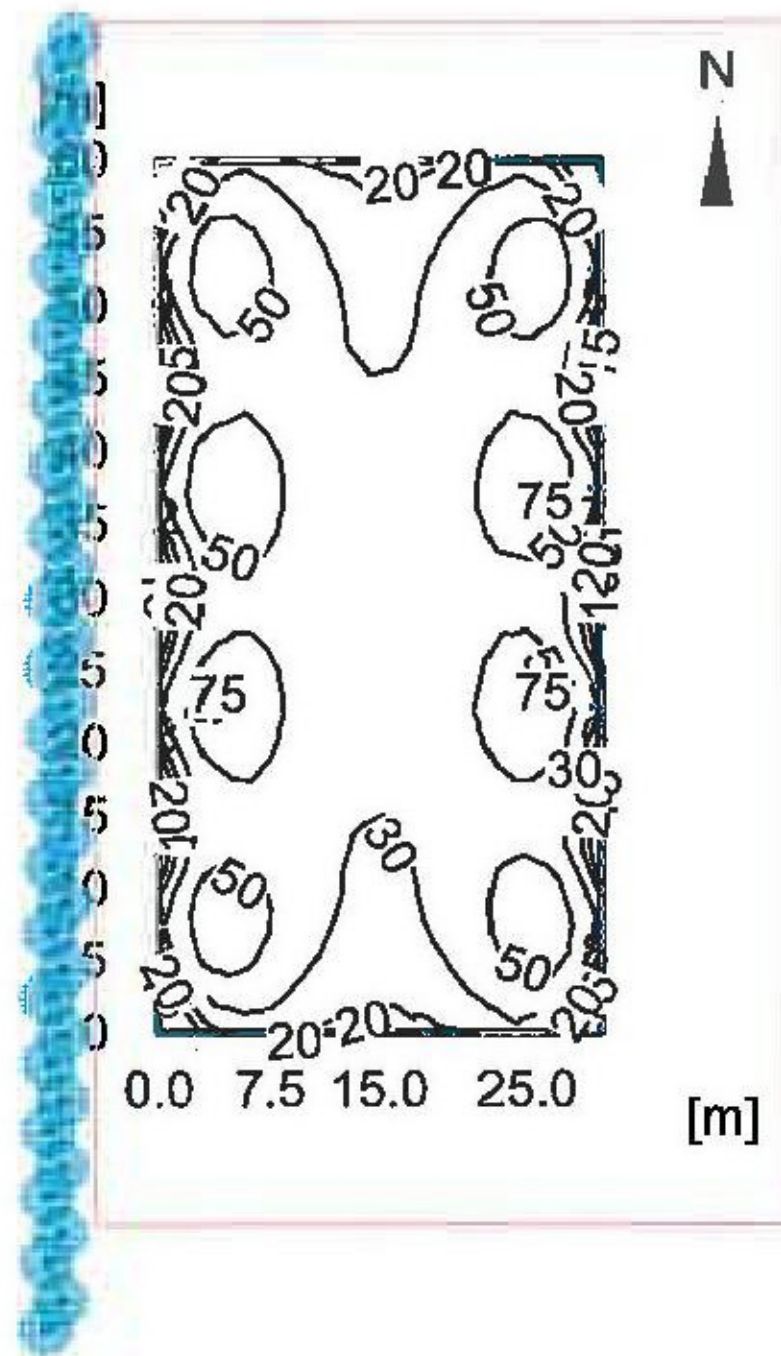
Object : Riding Arena
 Installation : Proposed new lighting
 Project number : LMR09238
 Date : 13.11.2020



Equestrian lighting solutions

1.2 Calculation results, 6M 8 fittings

1.2.3 Isolines representation, Reference plane 1.1 (E)



Illuminance [lx]

Height reference plane	:	0.00 m
Average illuminance	Em	: 38.8 lx
Minimum illuminance	Emin	: 9.7 lx
Maximum illuminance	Emax	: 74.5 lx
Uniformity Uo	Emin/Em	: 1 : 4.01 (0.25)
Diversity Ud	Emin/Emax	: 1 : 7.71 (0.13)

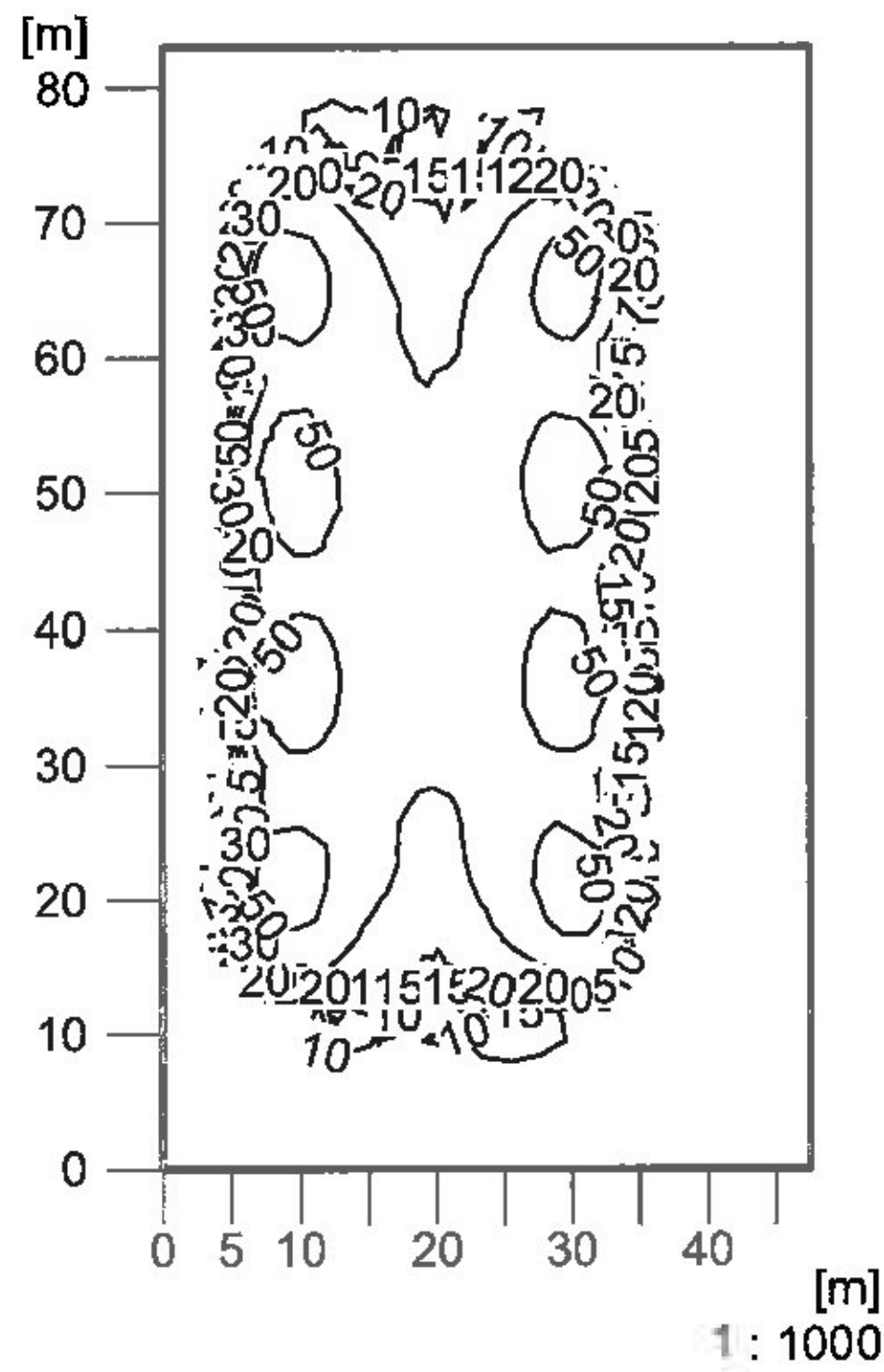
Object : Riding Arena
 Installation : Proposed new lighting
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 Date : 13.11.2020



Equestrian lighting solutions

1.2 Calculation results, 6M 8 fittings

1.2.4 Isolines representation, Light spill (E)



Illuminance [lx]

Height reference plane	:	0.00 m
Average illuminance	Em	: 19.3 lx
Minimum illuminance	Emin	: 0.2 lx
Maximum illuminance	Emax	: 64.5 lx
Uniformity Uo	Emin/Em	: 1 : 88.25 (0.01)
Diversity Ud	Emin/Emax	: 1 : 294.88 (0.00)

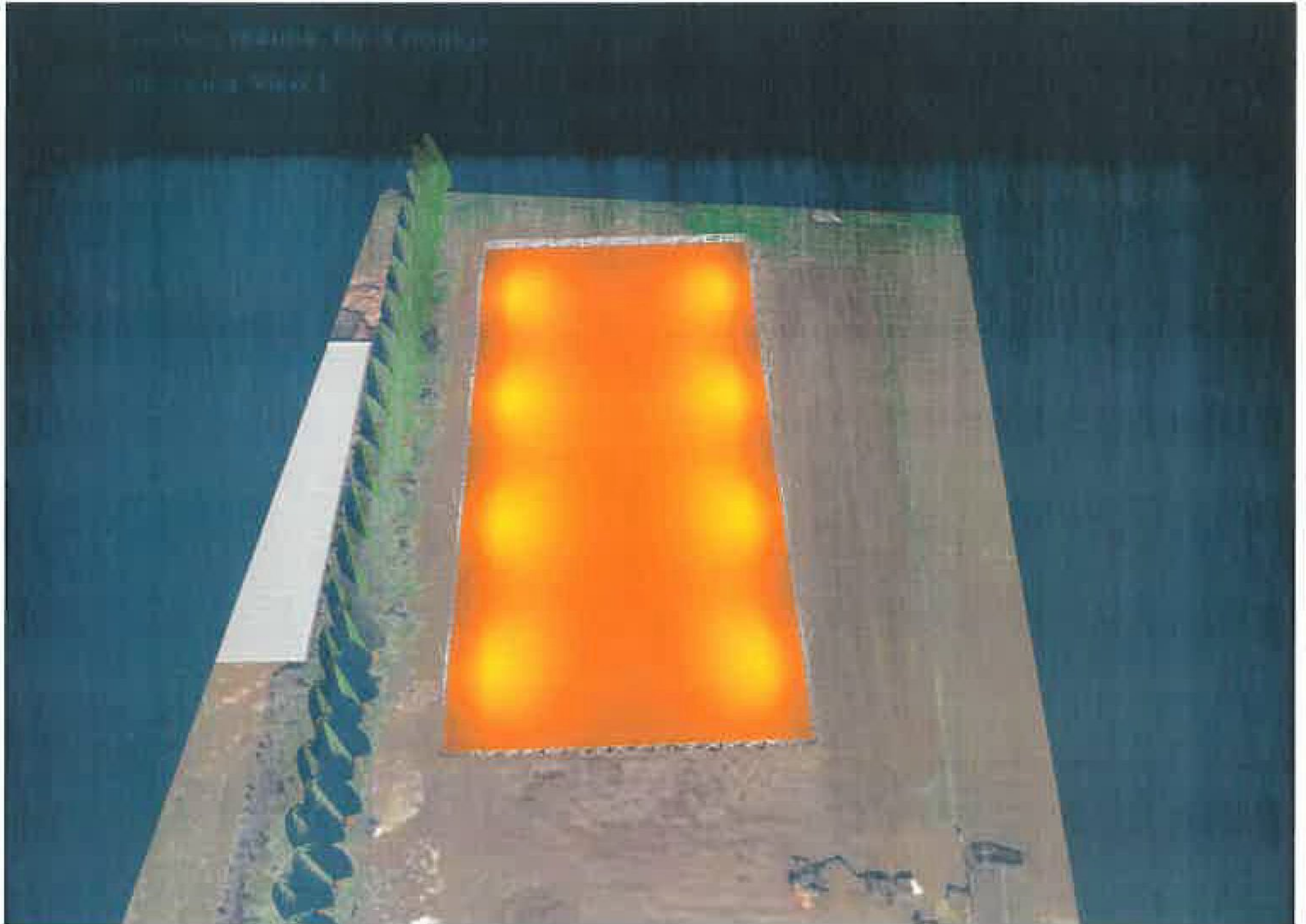
Object : Riding Arena
Installation : Proposed new lighting
Project number : LMR09238
Date : 13.11.2020



Equestrian lighting solutions

1.2 Calculation results, 6M 8 fittings

1.2.5 3D luminance, View 1



Object : Riding Arena
Installation : Proposed new lighting
Project number : LMR09238
Date : 13.11.2020



Equestrian lighting solutions

1.2 Calculation results, 6M 8 fittings

1.2.6 3D luminance, View 2

