

The University of Manchester The Armitage Centre

Photographs of Site



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Client	The University of Manchester	
Document Title	Photographs of Site	

University of Manchester

Artificial Turf Pitch

Project code: SSL1899
Date: 09-07-2015

Designer: Wesley Bugg

Description: Full Sized Artificial Turf Pitches.

A maintenance factor of 0.8 has been applied to account for environmental conditions and depreciation of light output between cyclical maintenance, including bulk lamp change.

The following results are not showing a maintenance factor and will be the results when first installed and up to the first 100hrs of usage:

Hockey 1 = 636ave/lux at 0.79 uniformity

Hockey 2 = 688ave/lux at 0.70 uniformity

Rugby = 253ave/lux at 0.60 uniformity

Football = 287ave/lux at 0.60 uniformity

Sports Luminaires are mounted at 15m above the surface.
Sports Lighting is Philips double asymmetrical Optivision 96no. MVP507 1xMHN-FC/2000W/230V/740

All luminaires have a zero upward light ration without the use of additional accessories.

The nominal values shown in this report are the result of precision calculations, based upon precisely positioned luminaires in a fixed relationship to each other and to the area under examination. In practice the values may vary due to tolerances on luminaires, luminaire positioning, reflection properties and electrical supply.

Surfacing Standards LTD

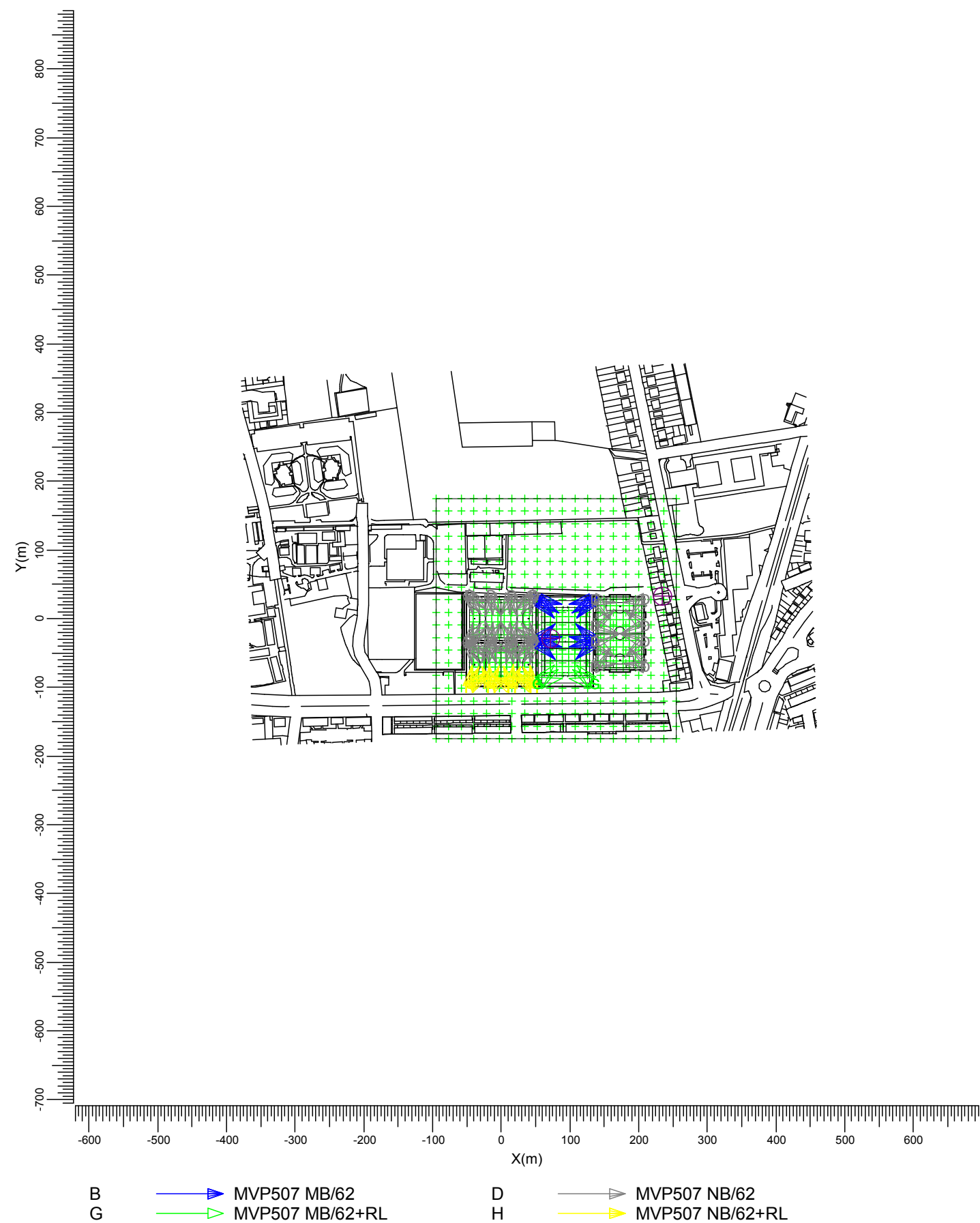
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1. Project Description

1.1 Top Project Overview



Scale
1:7500

2. Summary

2.1 General Information

The overall maintenance factor used for this project is 0.80.

2.2 Observer Information

Code	Observer	Position		
		X (m)	Y (m)	Z (m)
Aa	EvoSpill	71.55	-28.81	-0.00
Bb	nearest property	234.71	32.69	1.80

2.3 Project Luminaires

Code	Qty	Luminaire Type	Lamp Type	Power (W)	Flux (lm)
B	14	MVP507 MB/62	1 * MHN-FC2000W/400V/740	2119.0	1 * 210000
D	60	MVP507 NB/62	1 * MHN-FC2000W/400V/740	2119.0	1 * 210000
G	6	MVP507 MB/62+RL	1 * MHN-FC2000W/400V	2119.0	1 * 210000
H	16	MVP507 NB/62+RL	1 * MHN-FC2000W/400V	2119.0	1 * 210000

The total installed power: 203.42 (kWatt)

Number of Luminaires Per Switching Mode:

Switching Mode	Luminaire Code				Power (kWatt)
	B	D	G	H	
Hockey 1 500lux	0	28	0	0	59.33
Hockey 2 500lux	0	16	0	16	67.81
Rugby	14	0	6	0	42.38
Football	0	16	0	0	33.90
Spillage	14	60	6	16	203.42

Number of Luminaires Per Arrangement:

Arrangement	Luminaire Code				Power (kWatt)
	B	D	G	H	
Football 1	0	2	0	0	4.24
Football 2	0	4	0	0	8.48
Football 3	0	4	0	0	8.48
Football 4	0	4	0	0	8.48
Football 5	0	2	0	0	4.24
Hockey 1 Mast 1	0	12	0	0	25.43
Hockey 1 Mast 2	0	16	0	0	33.90
Hockey 2 Mast 1	0	8	0	0	16.95
Hockey 2 Mast 2	0	8	0	0	16.95
Hockey 2 Mast 3	0	0	0	8	16.95
Hockey 2 Mast 4	0	0	0	8	16.95
Rugby 1	14	0	0	0	29.67
Rugby 2	0	0	6	0	12.71

2.4 Calculation Results

Switching Modes:

Code	Switching Mode
1	Hockey 1 500lux
2	Hockey 2 500lux
3	Rugby
4	Football
5	Spillage

(II)luminance Calculations:

Calculation	Switching Mode	Type	Unit	Ave	Min/Ave	Min/Max
Hockey	1	Surface Illuminance	lux	509	0.72	0.57
Hockey 2	2	Surface Illuminance	lux	550	0.70	0.58
Rugby	3	Surface Illuminance	lux	202	0.60	0.36
Football	4	Surface Illuminance	lux	229	0.60	0.46
Light Spillage	5	Surface Illuminance	lux	91.4	0.00	0.00
EvoSpill	5	Illuminance -> Aa	lux	44.8	0.00	0.00

Obtrusive Light Calculations:

Switching Mode	Observer Code	Luminaire Code	Position			Aiming Angles			Maximum Intensity (cd)
			X (m)	Y (m)	Z (m)	Rot.	Tilt90	Tilt0	
5	Bb	G	52.07	-95.00	15.00	12.76	68.00	0.00	5286

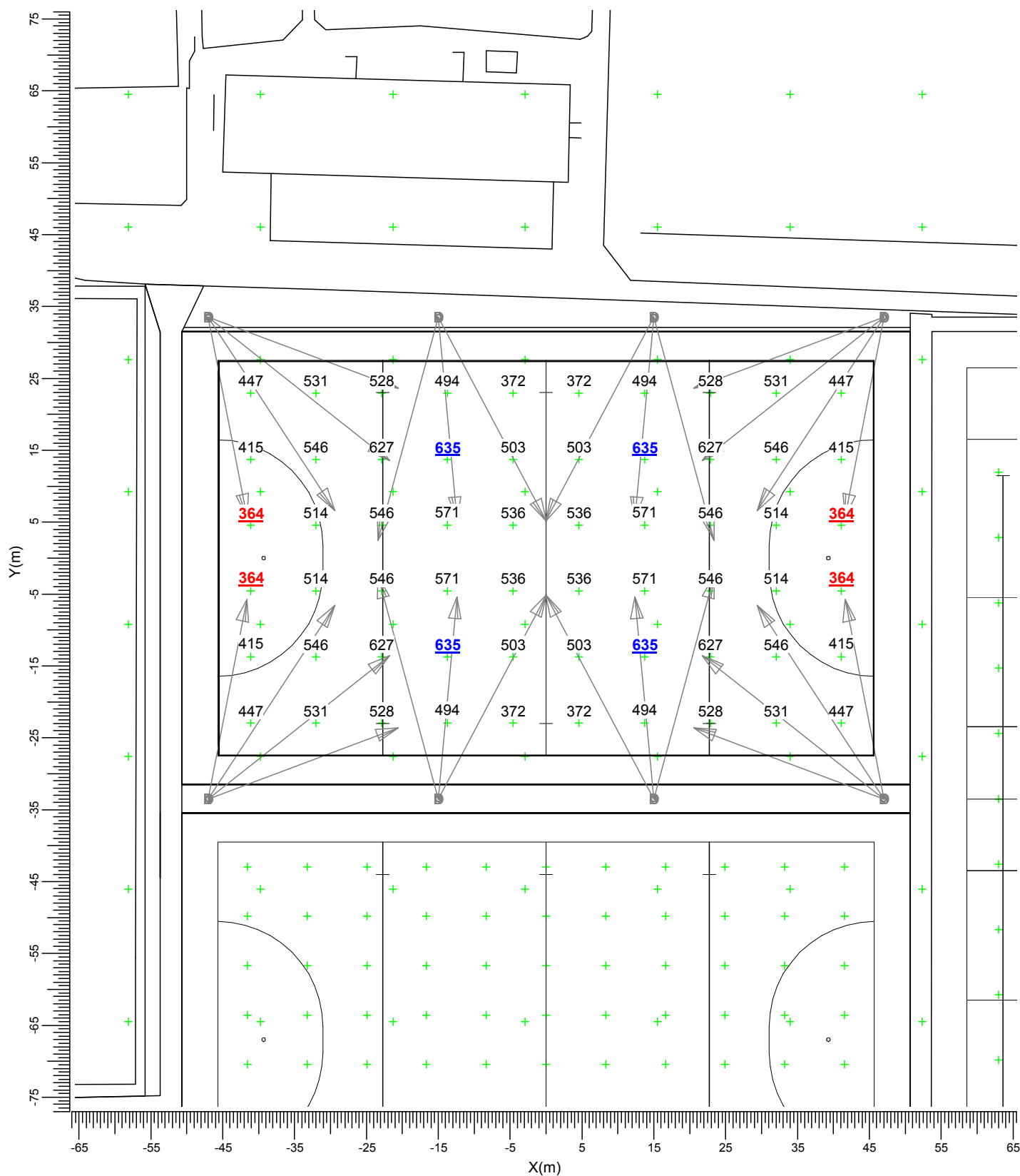
Switching Mode	ULR
1	0.00
2	0.00
3	0.00
4	0.00
5	0.00

3. Calculation Results

3.1 Hockey: Graphical Table

Hockey 1 500lux

Grid : Hockey at Z = -0.00 m
Calculation : Surface Illuminance (lux)



D MVP507 NB/62

Average
509

Min/Ave
0.72

Min/Max
0.57

Project maintenance factor
0.80

Scale
1:750

Hockey 2 500lux

The figure displays a 2D plot with a grid of points and numerical values. The horizontal axis is labeled X(m) and ranges from -65 to 65. The vertical axis is labeled Y(m) and ranges from -145 to 5. A central 12x12 grid of points is highlighted, with values ranging from 385 to 665. The values are arranged in a grid pattern, with some points highlighted in red (385) and blue (665). Arrows indicate a flow from the top towards the bottom, with some points highlighted in red (385) and blue (665). The plot is bounded by X(m) from -65 to 65 and Y(m) from -145 to 5.

H MVP507 NB/62+RL

Scale
1:750

Rugby

[illegible]

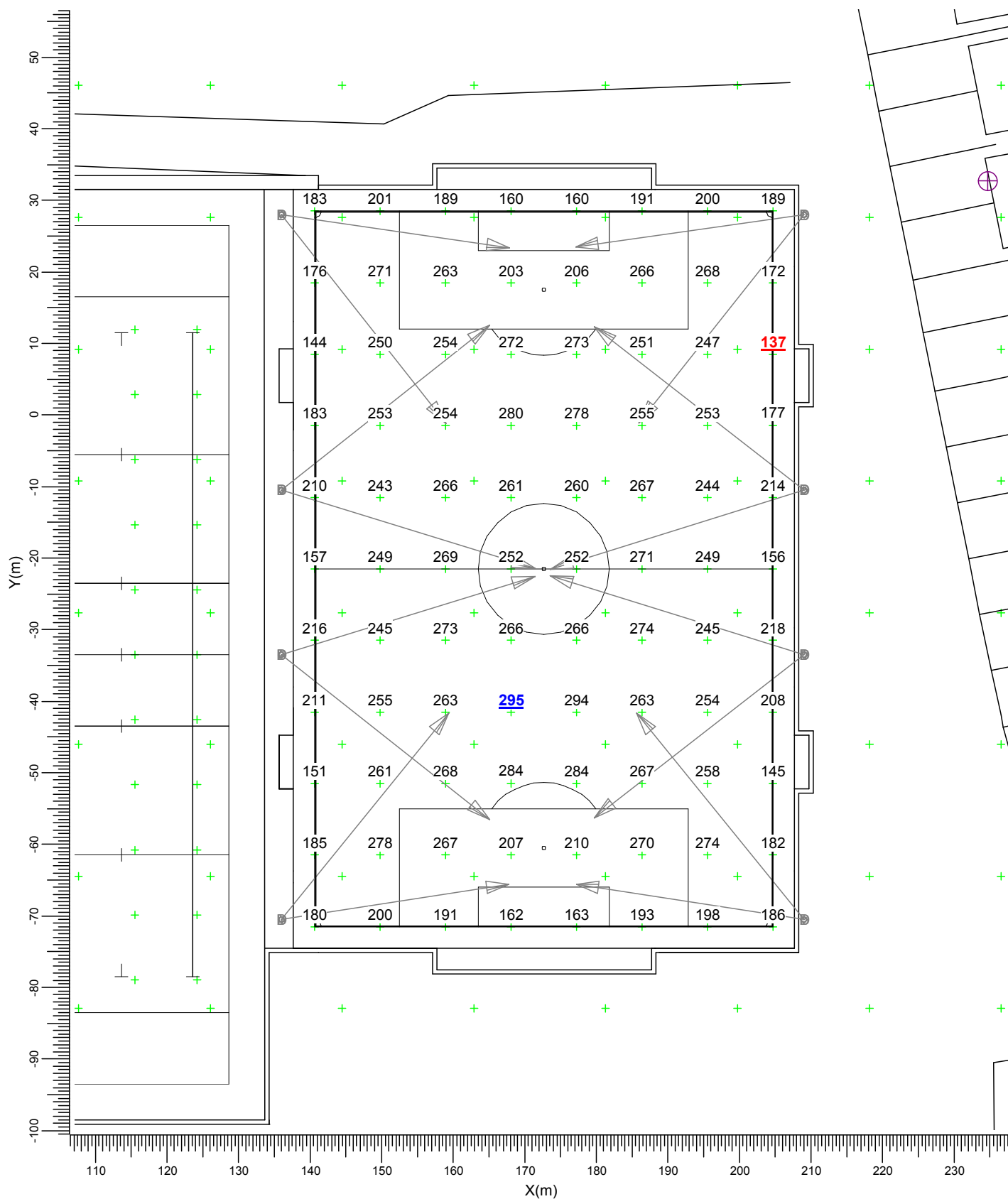
G MVP507 MB/62+RL

Scale
1:750

3.4 Football: Graphical Table

Football

Grid : Football at Z = -0.00 m
Calculation : Surface Illuminance (lux)



D → MVP507 NB/62

Average
229

Min/Ave
0.60

Min/Max
0.46

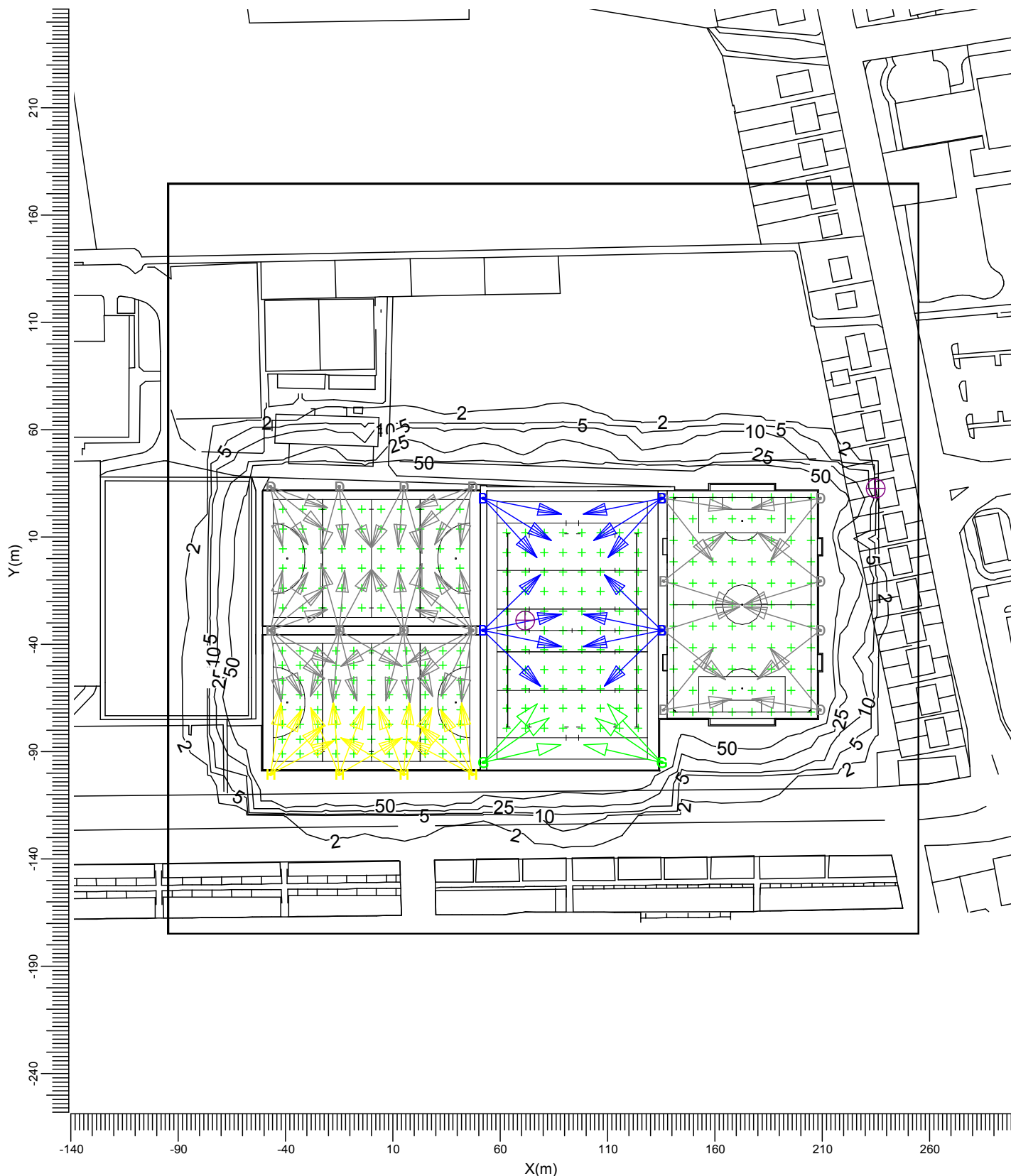
Project maintenance factor
0.80

Scale
1:750

3.5 Light Spillage: Iso Contour

Spillage

Grid : Light Spillage at Z = -0.00 m
Calculation : Surface Illuminance (lux)



B MVP507 MB/62
G MVP507 MB/62+RL

D MVP507 NB/62
H MVP507 NB/62+RL

Average
91.4

Min/Ave
0.00

Min/Max
0.00

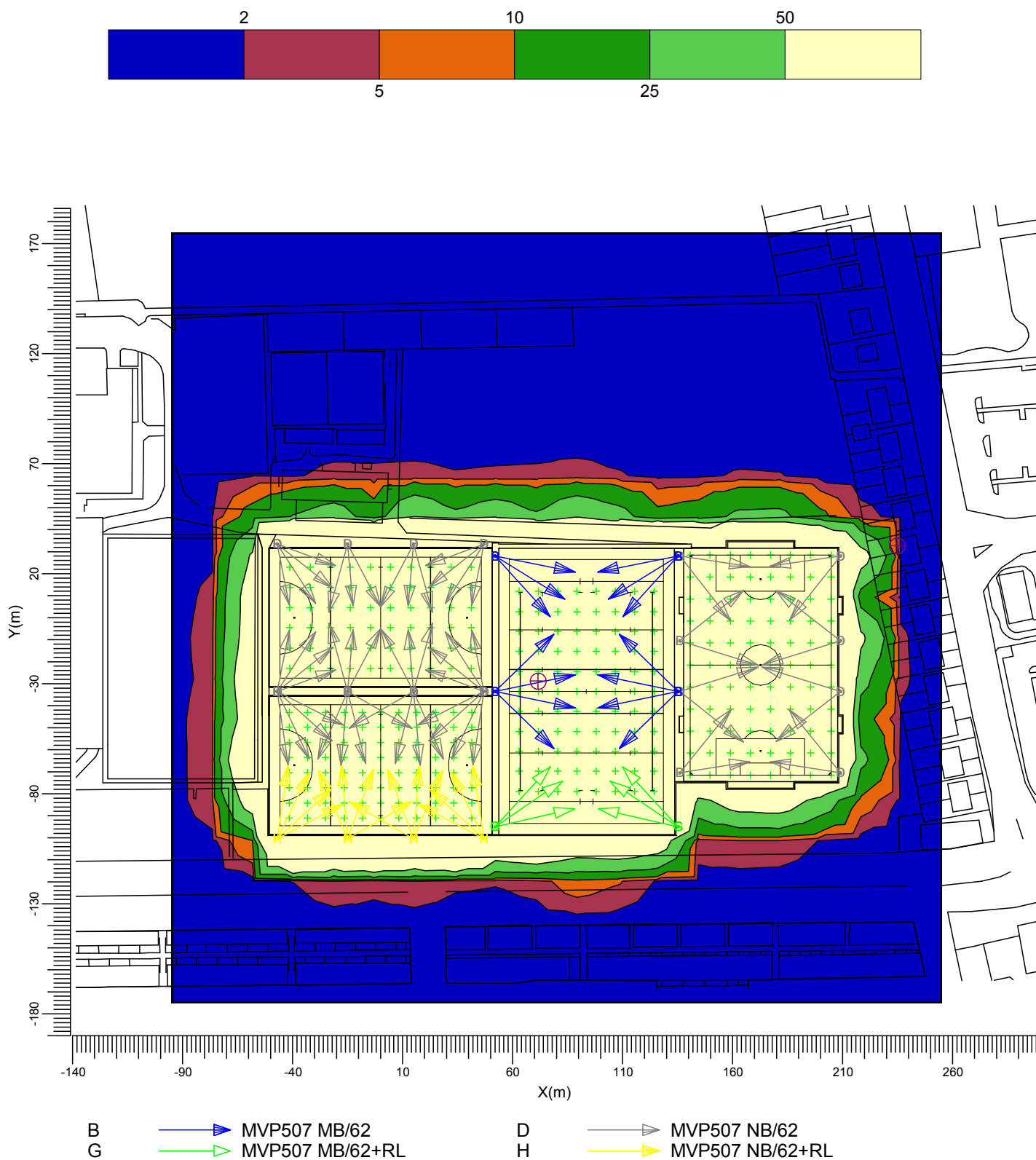
Project maintenance factor
0.80

Scale
1:2500

3.6 Light Spillage: Filled Iso Contour

Spillage

Grid : Light Spillage at Z = -0.00 m
Calculation : Surface Illuminance (lux)



Average
91.4

Min/Ave
0.00

Min/Max
0.00

Project maintenance factor
0.80

Scale
1:2500

3.7 EvoSpill: Iso Contour

Spillage

Grid

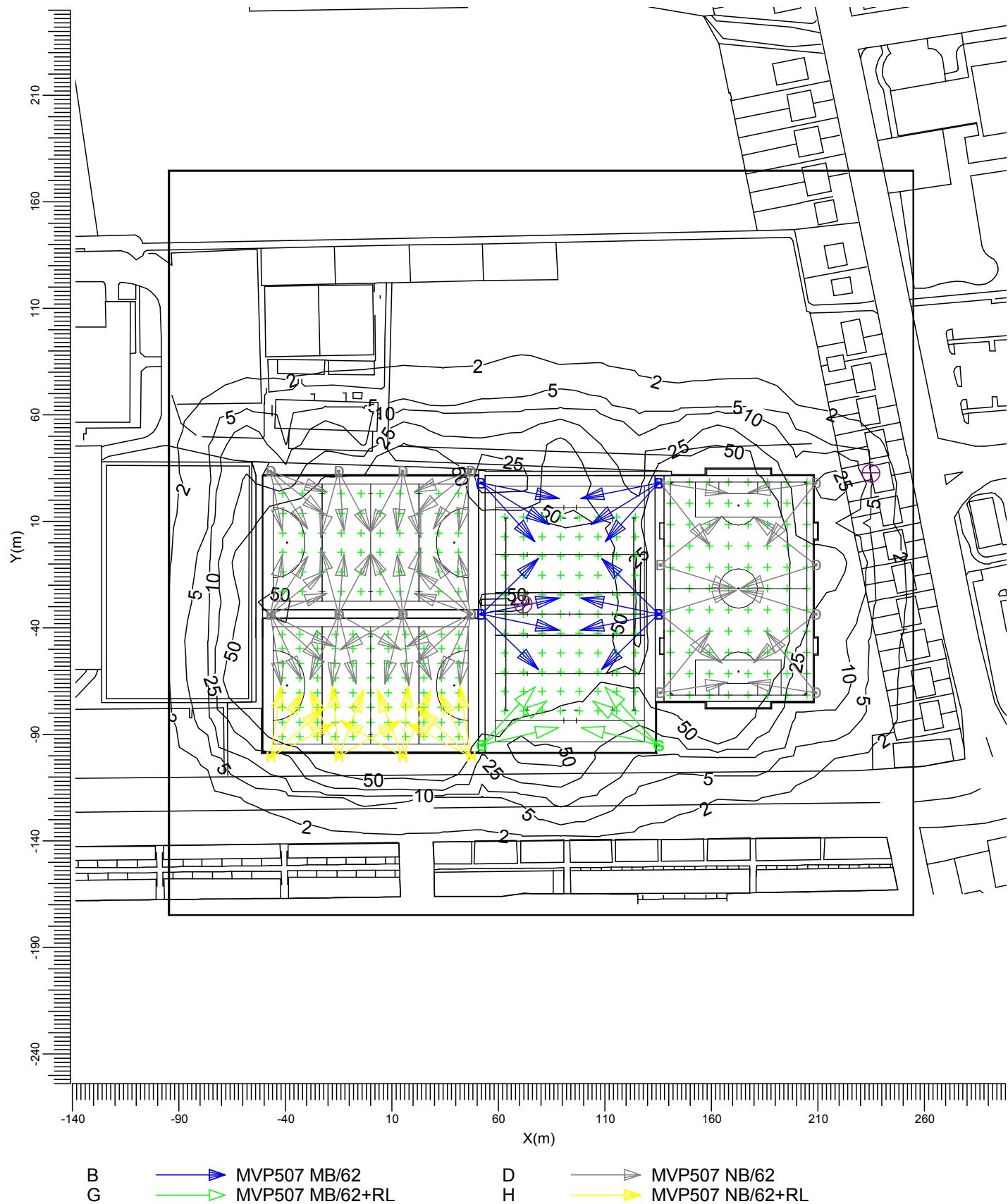
Calculation

Height above grid

: Light Spillage at Z = -0.00 m

: Illuminance towards EvoSpill (lux)

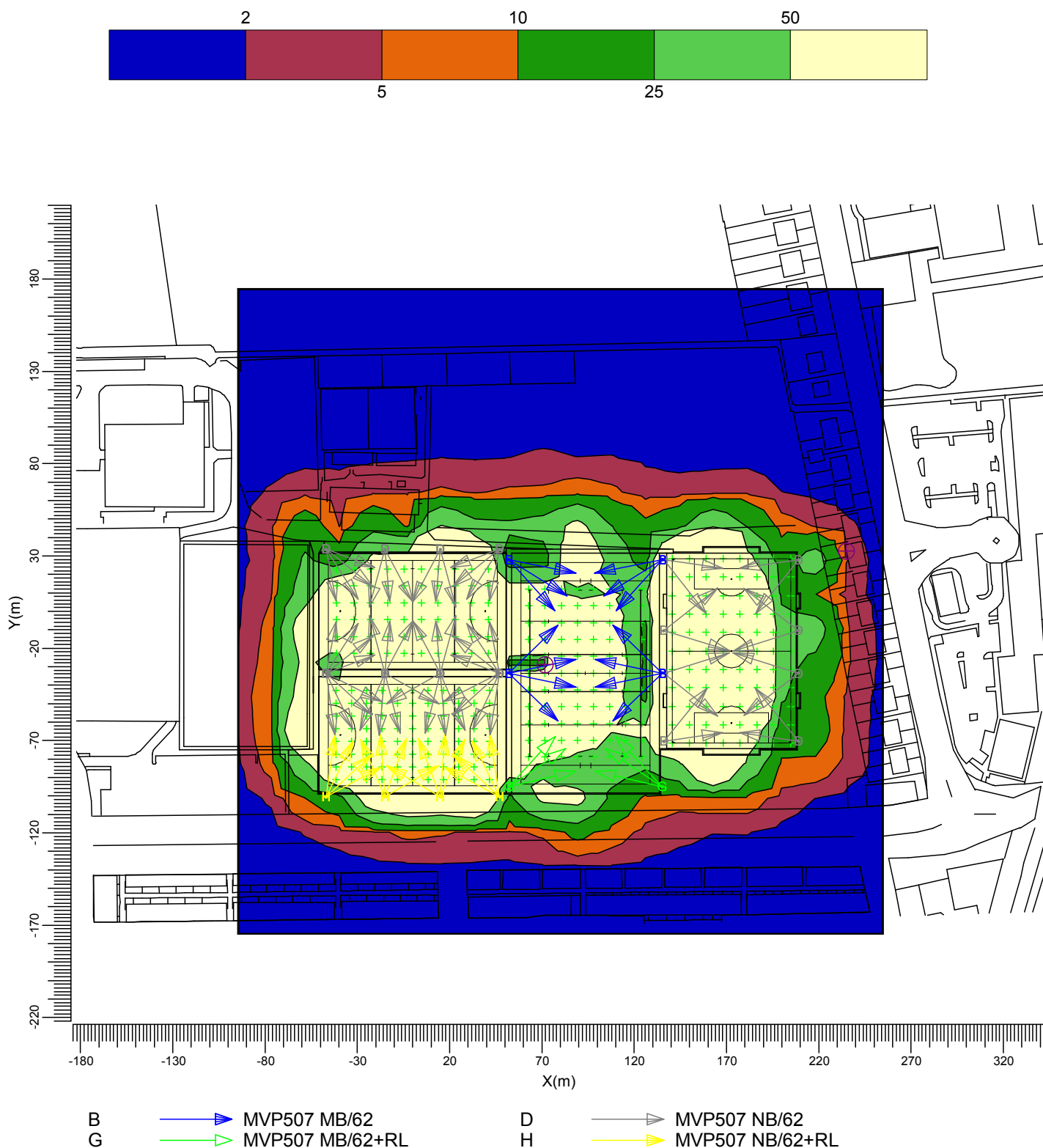
: 1.80 m



3.8 EvoSpill: Filled Iso Contour

Spillage

Grid : Light Spillage at Z = -0.00 m
Calculation : Illuminance towards EvoSpill (lux)
Height above grid : 1.80 m



Average
44.8

Min/Ave
0.00

Min/Max
0.00

Project maintenance factor
0.80

Scale
1:3000

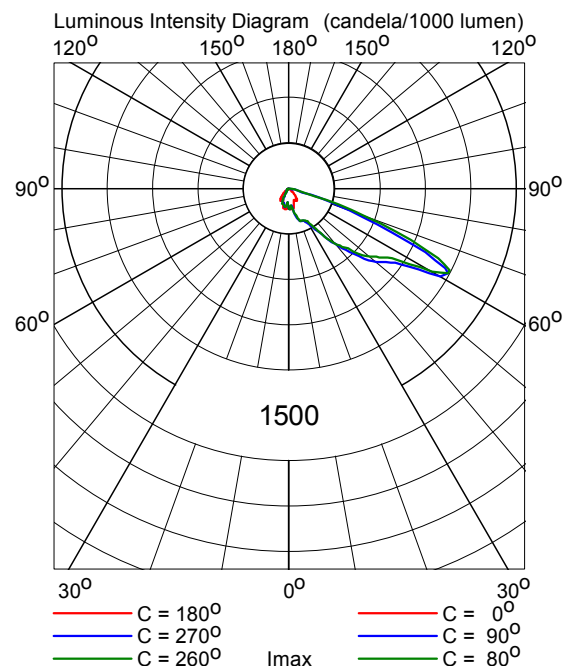
4. Luminaire Details

4.1 Project Luminaires

OptiVision
MVP507 1xMHN-FC2000W/400V/740 MB/62



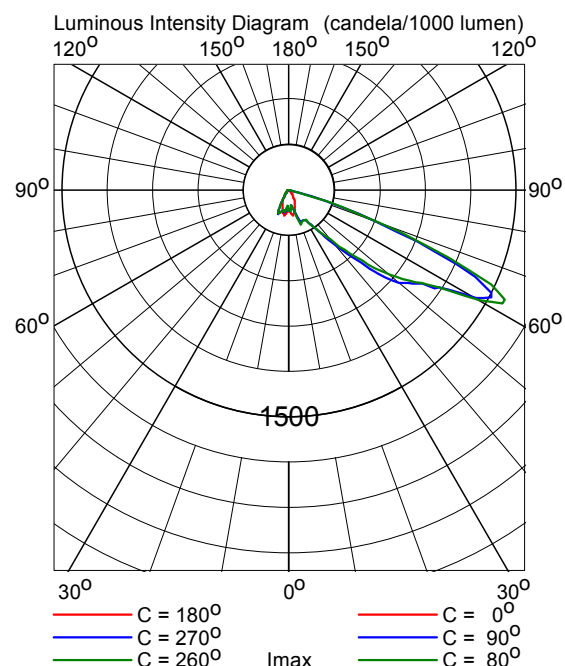
Light output ratios
DLOR : 0.85
ULOR : 0.00
TLOR : 0.85
Ballast : Conventional
Lamp flux : 210000 lm
Luminaire wattage : 2119.0 W
Measurement code : LVMA700000



OptiVision
MVP507 1xMHN-FC2000W/400V/740 NB/62



Light output ratios
DLOR : 0.83
ULOR : 0.00
TLOR : 0.83
Ballast : Conventional
Lamp flux : 210000 lm
Luminaire wattage : 2119.0 W
Measurement code : LVMA700100



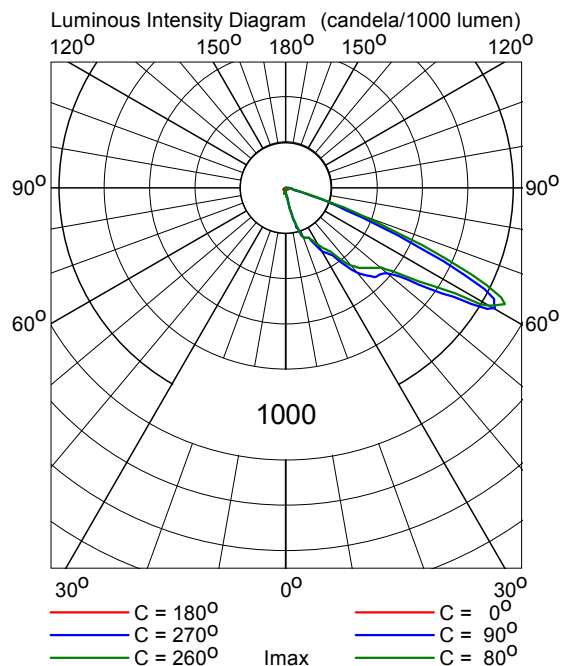
OPTIVISION

MVP507 1xMHN-FC2000W/400V/740 Conventional MB/62+RL

Light output ratios

DLOR : 0.60
ULOR : 0.00
TLOR : 0.60
Ballast : Conventional
Lamp flux : 210000 lm
Luminaire wattage : 2119.0 W
Measurement code : LVA1302001

Note: Luminaire data not from database.



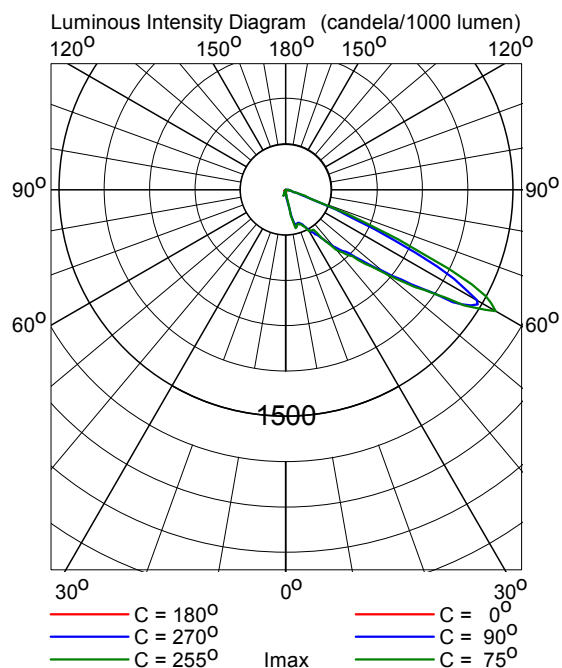
OPTIVISION

MVP507 1xMHN-FC2000W/400V/740 Conventional NB/62+RL

Light output ratios

DLOR : 0.66
ULOR : 0.00
TLOR : 0.66
Ballast : Conventional
Lamp flux : 210000 lm
Luminaire wattage : 2119.0 W
Measurement code : LVA1302001

Note: Luminaire data not from database.



5. Installation Data

5.1 Legends

Project Luminaires:

Code	Qty	Luminaire Type	Lamp Type	Flux (lm)
B	14	MVP507 MB/62	1 * MHN-FC2000W/400V/740	1 * 210000
D	60	MVP507 NB/62	1 * MHN-FC2000W/400V/740	1 * 210000
G	6	MVP507 MB/62+RL	1 * MHN-FC2000W/400V	1 * 210000
H	16	MVP507 NB/62+RL	1 * MHN-FC2000W/400V	1 * 210000

Switching Modes:

Code	Switching Mode
1	Hockey 1 500lux
2	Hockey 2 500lux
3	Rugby
4	Football
5	Spillage

5.2 Luminaire Positioning and Orientation

Qty and Code	Position			Aiming Angles			Switching Modes				
	X (m)	Y (m)	Z (m)	Rot.	Tilt90	Tilt0	1	2	3	4	5
1 * H	-47.00	-100.50	15.00	28.1	66.0	0.0	-	+	-	-	+
1 * H	-47.00	-100.50	15.00	81.5	66.0	0.0	-	+	-	-	+
1 * H	-47.00	-100.50	15.00	64.1	66.0	0.0	-	+	-	-	+
1 * H	-47.00	-100.50	15.00	42.8	66.0	0.0	-	+	-	-	+
1 * D	-47.00	-33.50	15.00	-26.9	66.0	0.0	-	+	-	-	+
1 * D	-47.00	-33.50	15.00	-81.5	66.0	0.0	-	+	-	-	+
1 * D	-47.00	-33.50	15.00	-64.6	66.0	0.0	-	+	-	-	+
1 * D	-47.00	-33.50	15.00	-42.1	66.0	0.0	-	+	-	-	+
1 * D	-47.00	-33.50	15.00	20.5	62.0	-0.0	+	-	-	-	+
1 * D	-47.00	-33.50	15.00	79.0	62.0	-0.0	+	-	-	-	+
1 * D	-47.00	-33.50	15.00	56.8	65.0	-0.0	+	-	-	-	+
1 * D	-47.00	-33.50	15.00	38.3	65.0	-0.0	+	-	-	-	+
1 * D	-47.00	33.50	15.00	-20.5	62.0	0.0	+	-	-	-	+
1 * D	-47.00	33.50	15.00	-79.0	62.0	0.0	+	-	-	-	+
1 * D	-47.00	33.50	15.00	-56.8	65.0	0.0	+	-	-	-	+
1 * D	-47.00	33.50	15.00	-38.3	65.0	0.0	+	-	-	-	+
1 * H	-15.00	-100.50	15.00	94.5	66.0	-0.0	-	+	-	-	+
1 * H	-15.00	-100.50	15.00	69.7	66.0	-0.0	-	+	-	-	+
1 * H	-15.00	-100.50	15.00	30.1	66.0	-0.0	-	+	-	-	+
1 * H	-15.00	-100.50	15.00	112.9	66.0	-0.0	-	+	-	-	+
1 * D	-15.00	-33.50	15.00	-95.1	66.0	-0.0	-	+	-	-	+
1 * D	-15.00	-33.50	15.00	-75.7	66.0	-0.0	-	+	-	-	+
1 * D	-15.00	-33.50	15.00	-29.7	66.0	-0.0	-	+	-	-	+
1 * D	-15.00	-33.50	15.00	-113.7	66.0	-0.0	-	+	-	-	+
1 * D	-15.00	-33.50	15.00	84.7	62.0	0.0	+	-	-	-	+
1 * D	-15.00	-33.50	15.00	62.1	65.0	0.0	+	-	-	-	+
1 * D	-15.00	-33.50	15.00	105.1	65.0	0.0	+	-	-	-	+
1 * D	-15.00	33.50	15.00	-84.7	62.0	-0.0	+	-	-	-	+
1 * D	-15.00	33.50	15.00	-62.1	65.0	-0.0	+	-	-	-	+
1 * D	-15.00	33.50	15.00	-105.1	65.0	-0.0	+	-	-	-	+
1 * H	15.00	-100.50	15.00	85.5	66.0	0.0	-	+	-	-	+
1 * H	15.00	-100.50	15.00	110.3	66.0	0.0	-	+	-	-	+

Qty and Code	Position			Aiming Angles			Switching Modes				
	X (m)	Y (m)	Z (m)	Rot.	Tilt90	Tilt0	1	2	3	4	5
1 * H	15.00	-100.50	15.00	149.9	66.0	0.0	-	+	-	-	+
1 * H	15.00	-100.50	15.00	67.1	66.0	0.0	-	+	-	-	+
1 * D	15.00	-33.50	15.00	-84.9	66.0	0.0	-	+	-	-	+
1 * D	15.00	-33.50	15.00	-104.3	66.0	0.0	-	+	-	-	+
1 * D	15.00	-33.50	15.00	-150.3	66.0	0.0	-	+	-	-	+
1 * D	15.00	-33.50	15.00	-66.3	66.0	0.0	-	+	-	-	+
1 * D	15.00	-33.50	15.00	95.3	62.0	-0.0	+	-	-	-	+
1 * D	15.00	-33.50	15.00	117.9	65.0	-0.0	+	-	-	-	+
1 * D	15.00	-33.50	15.00	74.9	65.0	-0.0	+	-	-	-	+
1 * D	15.00	33.50	15.00	-95.3	62.0	0.0	+	-	-	-	+
1 * D	15.00	33.50	15.00	-117.9	65.0	0.0	+	-	-	-	+
1 * D	15.00	33.50	15.00	-74.9	65.0	0.0	+	-	-	-	+
1 * H	47.00	-100.50	15.00	151.9	66.0	-0.0	-	+	-	-	+
1 * H	47.00	-100.50	15.00	98.5	66.0	-0.0	-	+	-	-	+
1 * H	47.00	-100.50	15.00	115.9	66.0	-0.0	-	+	-	-	+
1 * H	47.00	-100.50	15.00	137.2	66.0	-0.0	-	+	-	-	+
1 * D	47.00	-33.50	15.00	-153.1	66.0	-0.0	-	+	-	-	+
1 * D	47.00	-33.50	15.00	-98.5	66.0	-0.0	-	+	-	-	+
1 * D	47.00	-33.50	15.00	-115.4	66.0	-0.0	-	+	-	-	+
1 * D	47.00	-33.50	15.00	-137.9	66.0	-0.0	-	+	-	-	+
1 * D	47.00	-33.50	15.00	159.5	62.0	0.0	+	-	-	-	+
1 * D	47.00	-33.50	15.00	101.0	62.0	0.0	+	-	-	-	+
1 * D	47.00	-33.50	15.00	123.2	65.0	0.0	+	-	-	-	+
1 * D	47.00	-33.50	15.00	141.7	65.0	0.0	+	-	-	-	+
1 * D	47.00	33.50	15.00	-159.5	62.0	-0.0	+	-	-	-	+
1 * D	47.00	33.50	15.00	-101.0	62.0	-0.0	+	-	-	-	+
1 * D	47.00	33.50	15.00	-123.2	65.0	-0.0	+	-	-	-	+
1 * D	47.00	33.50	15.00	-141.7	65.0	-0.0	+	-	-	-	+
1 * G	52.07	-95.00	15.00	33.9	68.0	0.0	-	-	+	-	+
1 * G	52.07	-95.00	15.00	47.3	68.0	0.0	-	-	+	-	+
1 * G	52.07	-95.00	15.00	12.8	68.0	0.0	-	-	+	-	+
1 * B	52.07	-33.50	15.00	-11.6	68.0	0.0	-	-	+	-	+
1 * B	52.07	-33.50	15.00	11.6	68.0	-0.0	-	-	+	-	+
1 * B	52.07	-33.50	15.00	-44.2	68.0	0.0	-	-	+	-	+
1 * B	52.07	-33.50	15.00	44.2	68.0	-0.0	-	-	+	-	+
1 * B	52.07	28.00	15.00	-31.8	68.0	0.0	-	-	+	-	+
1 * B	52.07	28.00	15.00	-48.0	68.0	0.0	-	-	+	-	+
1 * B	52.07	28.00	15.00	-11.4	68.0	0.0	-	-	+	-	+
1 * G	135.13	-95.00	15.00	146.1	68.0	-0.0	-	-	+	-	+
1 * G	135.13	-95.00	15.00	132.7	68.0	-0.0	-	-	+	-	+
1 * G	135.13	-95.00	15.00	167.2	68.0	-0.0	-	-	+	-	+
1 * B	135.13	-33.50	15.00	-168.4	68.0	-0.0	-	-	+	-	+
1 * B	135.13	-33.50	15.00	168.4	68.0	0.0	-	-	+	-	+
1 * B	135.13	-33.50	15.00	-135.8	68.0	-0.0	-	-	+	-	+
1 * B	135.13	-33.50	15.00	135.8	68.0	0.0	-	-	+	-	+
1 * B	135.13	28.00	15.00	-148.2	68.0	-0.0	-	-	+	-	+
1 * B	135.13	28.00	15.00	-132.0	68.0	-0.0	-	-	+	-	+
1 * B	135.13	28.00	15.00	-168.6	68.0	-0.0	-	-	+	-	+
1 * D	136.00	-70.50	15.00	51.0	68.0	0.0	-	-	-	+	+
1 * D	136.00	-70.50	15.00	8.8	65.0	0.0	-	-	-	+	+
1 * D	136.00	-33.50	15.00	17.1	68.0	0.0	-	-	-	+	+
1 * D	136.00	-33.50	15.00	-38.4	68.0	0.0	-	-	-	+	+
1 * D	136.00	-10.50	15.00	-17.1	68.0	-0.0	-	-	-	+	+
1 * D	136.00	-10.50	15.00	38.4	68.0	-0.0	-	-	-	+	+
1 * D	136.00	28.00	15.00	-8.4	65.0	0.0	-	-	-	+	+

Qty and Code	Position			Aiming Angles			Switching Modes				
	X (m)	Y (m)	Z (m)	Rot.	Tilt90	Tilt0	1	2	3	4	5
1 * D	136.00	28.00	15.00	-51.7	68.0	0.0	-	-	-	+	+
1 * D	209.00	-70.50	15.00	129.0	68.0	-0.0	-	-	-	+	+
1 * D	209.00	-70.50	15.00	171.2	65.0	-0.0	-	-	-	+	+
1 * D	209.00	-33.50	15.00	162.7	68.0	0.0	-	-	-	+	+
1 * D	209.00	-33.50	15.00	-142.1	68.0	0.0	-	-	-	+	+
1 * D	209.00	-10.50	15.00	-162.7	68.0	-0.0	-	-	-	+	+
1 * D	209.00	-10.50	15.00	142.1	68.0	-0.0	-	-	-	+	+
1 * D	209.00	28.00	15.00	-171.9	65.0	0.0	-	-	-	+	+
1 * D	209.00	28.00	15.00	-128.4	68.0	0.0	-	-	-	+	+

Important – Planning permission & notices of consent

Compliance with conditions

- Your planning approval or consent is attached. It will contain conditions that you must comply with.
- Please read the conditions and understand their requirements and restrictions, for example submission and approval of details or measures to protect trees.
- Some conditions will require action before you start development and it is imperative that you seek to have these discharged before any work commences.
- Whilst every effort has been made to group conditions logically, it is your responsibility to ensure that you are aware of the requirements and/or restrictions of all conditions.
- If you fail to comply with the conditions this may result in a breach of planning control and this may lead to enforcement action.
- Failure to comply with conditions may also result in the development not being lawful.
- It is in your interests to demonstrate that conditions have been complied with. Failure to do so may cause difficulties if the property is sold or transferred.
- A fee is payable for each request to discharge conditions.
- For advice on any of these matters, please contact Planning, Manchester City Council, PO Box 532, Town Hall, Manchester M60 2LA or email planning@manchester.gov.uk

Town & Country Planning Act 1990 (as amended)

Planning Permission

Applicant

Mr Paul Maccabee
The University of Manchester
Directorate Of Estates & Facilities
Room G.003 Beyer Building
Oxford Road
Manchester
M13 9PL

Agent (if used)

Mr Tom Betts
Surfacing Standards Ltd
1A Perth House
Corbygate Business Park
Priors Haw Road
Corby
Northamptonshire
NN17 5JG

Part 1 – Particulars of the application/development

Proposal: Installation of external artificial grass sports pitches with associated ball-stop fencing (to a maximum height of 8 metres), perimeter fencing (to a maximum height of 6.5 metres), 15 metre high floodlights and access paths.

Location: The Armitage Centre , Moseley Road, Levenshulme, Manchester, M14 6HE

Date of application: 17 July 2015

Application number: 109519/FO/2015/N2

Part 2 – Particulars of decision

Manchester City Council gives notice that the development referred to in Part 1 has been **Approved** in accordance with the application and plans submitted subject to the condition(s) listed below (if any).

Article 35 Declaration

The application was determined in a positive and proactive manner. During the consideration of this application any issues raised have been discussed with the applicant and resolutions have been sought.

Condition(s) attached to this decision

1) The development must be begun not later than the expiration of three years beginning with the date of this permission.

Reason - Required to be imposed pursuant to Section 91 of the Town and Country Planning Act 1990.

2) Prior to the commencement of above ground works of the hereby approved building, samples and specifications of all boundary treatments, including the acoustic barrier,

shall be submitted to and approved in writing by the City Council as local planning authority. The development shall be carried out in accordance with the agreed details.

Reason - To ensure that the appearance of the development is acceptable to the City Council as local planning authority in the interests of the visual amenity of the area within which the site is located, as specified in policies SP1 and DM1 of the Core Strategy.

3) The development hereby approved shall be carried out in accordance with the following drawings and documents:

Drawings

SSL1899 03 - Proposed Plan REV 6
SSL1899 02 Rev 02 Block Plan of Site
SSL1899 04 Rev 01 Elevation
SSL1899 05 Rev 01 Floodlighting scheme
SSL1899 07 Rev 00 Proposed pitch markings
SSL1899 T Rev 00 - Topographical survey
CC6081 - 15 metre flanged Amaru prepared by Philips

Documents:

Owens Park, University of Manchester Fallowfield Campus Sports Pitch Report'
150714_SK21502_TN02 Transport Statement
University of Manchester Artificial Lighting Scheme and Lighting Impact Statement
prepared by Surfacing Standards Ltd project ref: SSL1899
Environmental Noise Report prepared by Acoustic Consultants Ltd reference
6162/DO/pw October 2015
Flood Risk Assessment Rev A SSL1899 prepared by SSL dated 11th July 2015
Design and Access Statement Rev B SSL 1899 prepared by SSL dated 17th July 2015

Reason - To ensure that the development is carried out in accordance with the approved plans pursuant to policies SP1 and DM1 of the Core Strategy.

4) No development shall commence until a scheme for the provision of a 3-bay non-turf cricket practice facility has been submitted to and agreed in writing by the local planning authority. The scheme shall include details on the design and layout of the facility, a timetable for implementation, measures for fielding practise and a mechanism for ongoing review. The development shall be subsequently undertaken in accordance with the approved details.

Reason: To ensure the provision of off-site cricket practice facilities pursuant to policy EN10 of the Core Strategy.

5) The measures to ensure the continuity of the existing sports use of the pitch users on the application site during the construction period (as set out in the approved document titled 'Owens Park, University of Manchester Fallowfield Campus Sports Pitch Report') shall be implemented and complied with in full throughout the carrying out of the development.

Reason: To ensure continuity of sporting use at the site during construction works pursuant to policy EN10 of the Core Strategy.

6) The artificial grass pitches hereby approved shall be constructed in accordance with the design and layout details set out in the planning application.

Reason: To ensure the development is fit for purpose pursuant to policy EN10 of the Core Strategy.

7) Prior to the first use of the development a community use agreement shall be prepared and submitted to and approved in writing by the Local Planning Authority. The agreement shall apply to the artificial grass pitches and the cricket non-turf practice facilities to be secured through condition 4 of this approval and include details of pricing policy, hours of use, access by non-educational establishment users, management responsibilities and a mechanism for review. The development including cricket non-turf practice facilities shall be subsequently used in accordance with the approved agreement.

Reason: To secure well managed safe community access to the sports facility/facilities, to ensure sufficient benefit to the development of sport pursuant to policy EN10 of the Core Strategy.

8) Prior to the first use of the development hereby approved a sport development plan, including annual usage plans and a mechanism for annual review shall be submitted to and approved in writing by the local planning authority. The facilities shall be used in accordance with the agreed sport development plan.

Reason: To ensure that displaced activities are accommodated and that the benefits of the facilities are realised pursuant to policy EN10 of the Core Strategy

9) Prior to the first use of the artificial grass pitches, a Maintenance Scheme for the artificial grass pitches including a maintenance schedule, measures to ensure the replacement of the surface of the Artificial Grass Pitches within a specified period and a mechanism for review shall be submitted to and approved in writing by the Local Planning Authority. The measures set out in the approved scheme shall be complied with in full, with effect from commencement of use of the artificial grass pitches.

Reason: To ensure that the new facilities are maintained and remain fit for purpose, and thereby continue to ensure sufficient benefit of the development to sport pursuant to policy EN10 of the Core Strategy.

10) No development shall commence until surface water drainage works have been implemented in accordance with details that have been submitted to and approved in writing by the local planning authority. The following additional information has to be provided:

- Surface water attenuation:
- Hydraulic calculations for the existing and proposed discharge rates;
- Runoff volume in the 1 in 100 year, 6 hours rainfall be constrained to a value as close as is reasonable practicable to the greenfield runoff volume for the same event, but never exceed the runoff volume from the development site prior to redevelopment;
- Evidence of management of exceedance events should be catered on site without increasing flood risks (both on site and outside the development) - the drainage system must be designed (unless an area is designated to hold and/or convey water as part of the design) so that flooding does not occur during a 1 in 100 year rainfall event in any part of a building (including basements)
- Long and cross sections for the proposed drainage system and finished floor levels.

- Construction details of flow control and SuDS elements.
- Proposal of surface water management during construction period.
- As the proposed development will be building over the culvert, the development should not affect structural stability of the culvert during construction and operation of the site. A CCTV surveys is required to establish exact location and depth and propose a methodology for construction for MCC review.

Reason - To prevent the increased risk of flooding, to improve and protect water quality and ensure future maintenance of the surface water drainage system pursuant to policy EN17 of the Core Strategy.

11) The development hereby approved shall not be occupied until details of the implementation, maintenance and management of any sustainable drainage scheme approved under condition 10 of this approval have been submitted to and approved by the local planning authority. The scheme shall be implemented and thereafter managed and maintained in accordance with the approved details. Those details shall include:

- Verification report providing photographic evidence of construction as per design drawings;
- As built construction drawings if different from design construction drawings;
- Management and maintenance plan for the lifetime of the development which shall include the arrangements for adoption by any public body or statutory undertaker, or any other arrangements to secure the operation of the sustainable drainage scheme throughout its lifetime.

Reason - To prevent the increased risk of flooding, to improve and protect water quality and ensure future maintenance of the surface water drainage system pursuant to policy EN17 of the Core Strategy.

12) Prior to the commencement of development a Construction Management Plan shall be submitted to and approved in writing by the City Council as local planning authority. The development shall be implemented in accordance with the agreed Construction Management Plan. The Plan shall include:

- The routing of construction traffic;
- The identification of the vehicular access points into the site for all construction traffic, staff vehicles and Heavy Goods Vehicles;
- Identify measures to control dust and mud on the surrounding public highway including: details of how the wheels of contractor's vehicles are to be cleaned;
- Specify the working hours for the site;
- Identify advisory routes to and from the site for staff and HGVs;
- Dust management statement;
- Noise management statement.

Reason - In the interest of pedestrian and highway safety, and to ensure that construction works are not prejudicial or a nuisance to adjacent dwellings and properties pursuant to policy DM1 of the Core Strategy.

13) If any lighting at the development hereby approved, when illuminated, causes glare or light spillage which in the opinion of the Council as local planning authority causes detriment to adjoining and nearby residential properties, within 14 days of a written request, a scheme for the elimination of such glare or light spillage shall be submitted to the Council as local planning authority and once approved shall thereafter be retained in

accordance with details which have received prior written approval of the City Council as local planning authority.

Reason - In order to minimise the impact of the illumination of the lights on the occupiers of nearby residential accommodation, pursuant to policies SP1 and DM1 of the Core Strategy.

14) a) Before the development hereby approved commences, a report (the Preliminary Risk Assessment) to identify and evaluate all potential sources and impacts of any ground contamination, groundwater contamination and/or ground gas relevant to the site shall be submitted to and approved in writing by the City Council as local planning authority. The Preliminary Risk Assessment shall conform to City Council's current guidance document (Planning Guidance in Relation to Ground Contamination).

In the event of the Preliminary Risk Assessment identifying risks which in the written opinion of the Local Planning Authority require further investigation, the development shall not commence until a scheme for the investigation of the site and the identification of remediation measures (the Site Investigation Proposal) has been submitted to and approved in writing by the City Council as local planning authority.

The measures for investigating the site identified in the Site Investigation Proposal shall be carried out, before the development commences and a report prepared outlining what measures, if any, are required to remediate the land (the Site Investigation Report and/or Remediation Strategy) which shall be submitted to and approved in writing by the City Council as local planning authority.

b) When the development commences, the development shall be carried out in accordance with the previously agreed Remediation Strategy and a Completion/Verification Report shall be submitted to and approved in writing by the City Council as local planning authority.

In the event that ground contamination, groundwater contamination and/or ground gas, not previously identified, are found to be present on the site at any time before the development is occupied, then development shall cease and/or the development shall not be occupied until, a report outlining what measures, if any, are required to remediate the land (the Revised Remediation Strategy) is submitted to and approved in writing by the City Council as local planning authority and the development shall be carried out in accordance with the Revised Remediation Strategy, which shall take precedence over any Remediation Strategy or earlier Revised Remediation Strategy.

Reason - To ensure that the presence of or the potential for any contaminated land and/or groundwater is detected and appropriate remedial action is taken in the interests of public safety, pursuant to policies DM1 and EN18 of the Core Strategy

15) No activity shall take place on any outdoor pitch/field/court outside the hours of: Monday to Sunday (including bank holidays): 08:00 to 22:00 hrs

Reason - In the interests of residential amenity pursuant to policy DM1 of the Core Strategy.

16) The development hereby approved shall be carried out in accordance with the noise mitigation measures as set out in the Environmental Noise Report reference

6162/DO/pw prepared by Acoustic Consultants Limited and dated October 2015 and including:

- A 3.2m high acoustic barrier containing a 10kg/m² minimum surface density;
- Neoprene washers (inserts) to ball stop fence post / panel fixings to reduce panel rattle and vibration from ball impacts;
- Synthetic turf covering to kickboards fixed to the internal elevation of ball stop fencing around the hockey pitches.

Reason - To secure a reduction in noise impacts from the outdoor playing pitches in the interests of residential amenity pursuant to policy DM1 of the Core Strategy.

17) The floodlights hereby approved for pitches and outside play areas shall be switched off unless the pitches are in use or they are required to be switched on for the purpose of maintenance.

Reason - To keep the impact of the floodlighting on the amenity of the occupiers of nearby properties to a minimum pursuant to policy DM1 of the Core Strategy.

Informatives

This permission does not grant approval under Building Regulations.

Date: 12 November 2015

Signed: 

Julie Roscoe
Head of Planning, Building Control & Licensing

Manchester City Council, P O Box 532, Town Hall, Manchester M60 2LA

Notes

1. This permission refers only to that required under the Town and Country Planning Act 1990 does not include any consent or approval under any other enactment, byelaw, order or regulation.

2 If the applicant is aggrieved by the decision of the local planning authority to refuse permission or approval for the proposed development, or to grant permission or approval subject to conditions, he may appeal to the First Secretary of State in accordance with Section 78(1) of the Town and Country Planning Act 1990 within six months of the date of the notice of the decision.

The Planning Inspectorate have introduced an online appeals service that can be used to make appeals online. This service is available through the Appeals area of the Planning Portal – www.planningportal.gov.uk/pcs. The Inspectorate will publish details of your appeal on the internet (on the Appeals area of the Planning Portal).

This may include a copy of the original planning application form and any supporting documents supplied to the local planning authority. By you or your agent, together with the completed appeal form and information you submit to the Planning Inspectorate. Please ensure that you only provide information, including personal information, that you are happy will be made available to others in this way. If you supply personal information belonging to a third party please ensure you have their permission. More detailed information about data protection and privacy matters is available on the Planning Portal.

Alternatively, appeals can be made on a form which is obtainable from Planning Inspectorate, Customer Support Unit, Room 3/15, Eagle Wing, Temple Quay House, 2 The Square, Temple Quay, Bristol BS1 or by telephone 0117 372 6372.

The First Secretary of State has power to allow a longer period for the giving of a notice of appeal but he will not normally be prepared to exercise this power unless there are special circumstances that excuse the delay in giving notice of appeal.

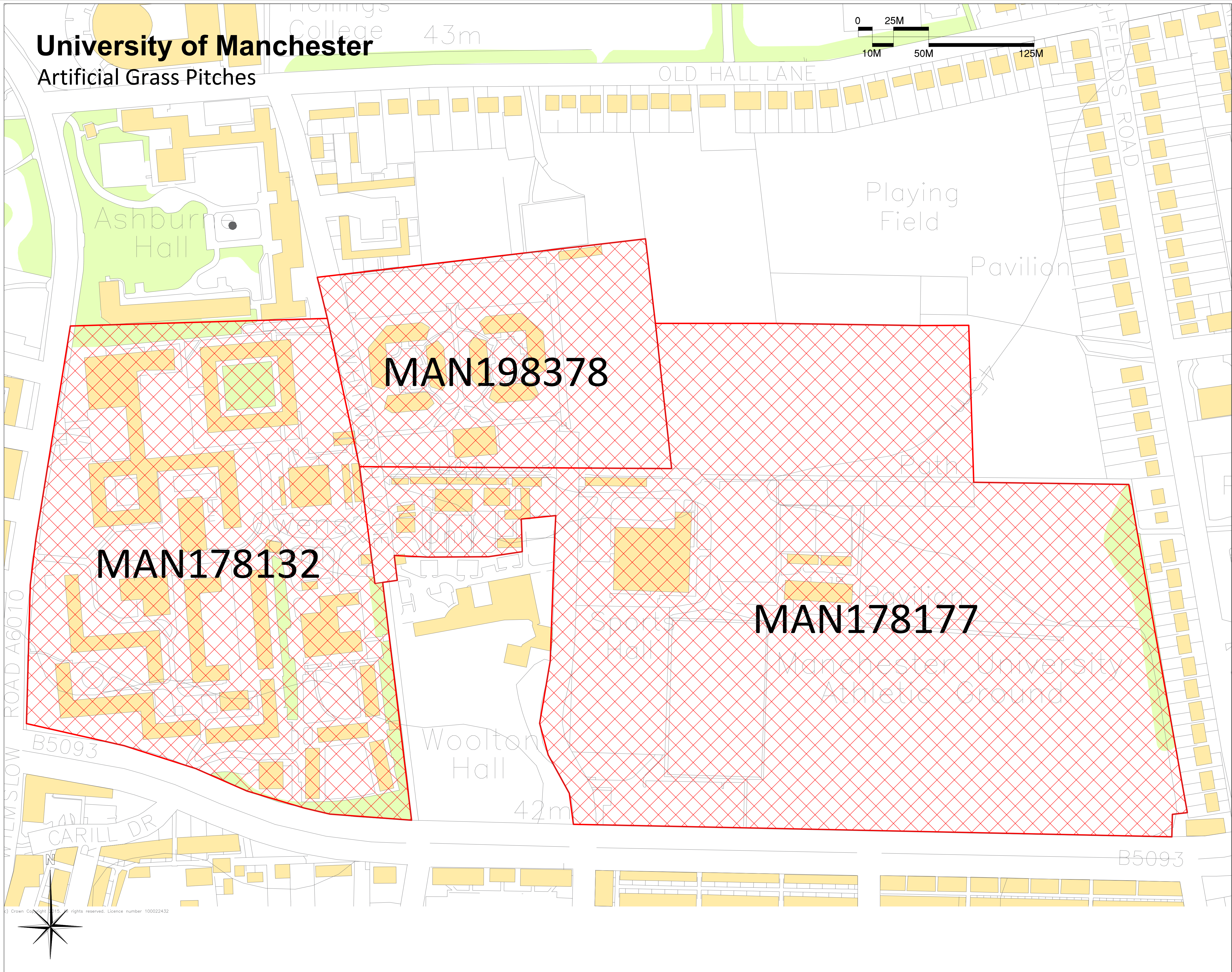
3. The statutory requirements are those set out in Section 79(6) of the Town and Country Planning Act 1990, namely Sections 70(1) and 72(1) of the Act.

4. If either the local planning authority or the First Secretary of State refuses permission to develop land or grants it subject to conditions, the owner may claim that he can neither put the land to a reasonably beneficial use in its existing state nor render the land capable of a reasonably beneficial use by the carrying out of any development which has been or would be permitted.

In these circumstances, the owner may serve a purchase notice on the Council in whose area the land is situated. This notice will require the Council to purchase his interest in the land in accordance with the provisions of Part VI of the Town and Country Planning Act 1990

5. In certain circumstances, a claim may be made against the local planning authority for compensation, where permission is refused or granted subject to conditions by the First Secretary of State on appeal or on a reference of the application to him. The circumstances in which such compensation is payable are set out in Section 114 of the Town and Country Planning Act 1990.

University of Manchester
Artificial Grass Pitches





CONSULTANTS
Surfacing Standards LTD
14 Park House, Coopers
Northfields, NW17 5JG
01509 480702

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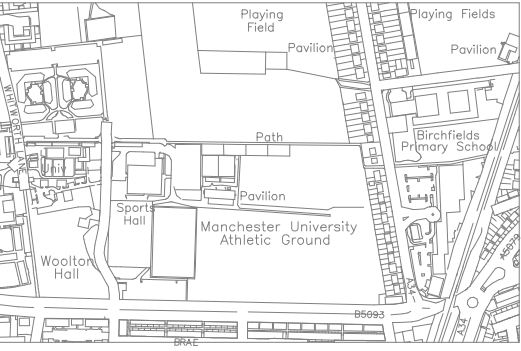
NOTES

02	BOUNDARY UPDATED	SMD	24.07.15
00	PLANNING ISSUE UPDATED	WB	08.07.15
00	PLANNING ISSUE	DR	09.04.15
REV	DESCRIPTION	BY	CHK DATE



Surfacing Standards Limited
SPORTS PITCH CONSULTANTS

KEY PLAN



AUTHOR
Sam McDonald

TITLE
University of Manchester
Artificial Grass Pitches
Site Location Plan

PROJECT SS1899	SCALE 1:1250	SIZE A1
DRAWING No 01		REVISION 02



OptiVision - breakthrough downlight

OptiVision

OptiVision MVP507 is an asymmetric downlighting luminaire that combines compact dimensions with very high efficiency. Available with narrow, medium and wide beams for flexibility in application, it provides excellent control of spill light, glare and upward leakage of light. OptiVision MVP507 can accommodate metal halide lamps for good colour rendering or high pressure sodium lamps for economical operation.

Benefits

- Breakthrough asymmetrical downlighting luminaire combines compact dimensions with high efficiency
- Available with narrow, medium and wide beams for flexibility in use; sharp beam cut-off for excellent control of spill light and limitation of glare and upward light leakage
- Can be used with metal-halide lamps for good color rendering or high-pressure sodium lamps for economical operation

Features

- Compact dimensions
- High efficiency
- Can be used with metal-halide lamps or high-pressure sodium lamps
- Choice of narrow, medium and wide beams
- Control of spill light, glare and upward light leakage

Application

- Sports facilities
- Industrial areas
- Car parks

Specifications

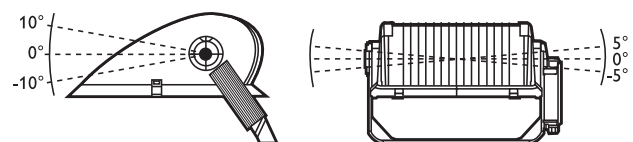
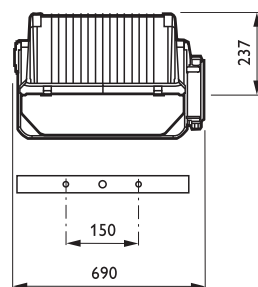
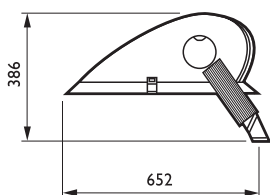
• Type	MVP507	• Installation	On mast headframe, ceiling and wall mounting Protractor scale integrated for aiming Ambient temperature outdoor: 35°C Drag factor (Cx): 0.447 Projected area in horizontal position: 0.127 m ² Max adjustment from the horizontal: -10° / +10°, downlighting only
• Light source	HID: - 1 x MASTER MHN-FC / XW / 1000, 2000 W - 1 x MASTER MHN-LA / XWH / 1000, 2000 W - 1 x MASTER HPI-T Plus / E40 / 1000 W - 1 x MASTER SON-T PIA / E40 / 600 W - 1 x SON-T / E40 / 600, 1000 W	• Maintenance	Lamp access by opening the hinged front glass for in-position lamp replacement Built-in safety switch to cut off current while opening the luminaire, only in MHN-LA lamp versions No internal cleaning required
• Lamp included	Yes (K or light colour 643, 740, 842 or 956) No	• Accessories	Simple aiming device (ZVP507 SAD)
• Optic	Narrow beam (NB) Medium beam (MB) Wide beam (WB)	• Remarks	Equipped with aluminium connection box with ignitor, installed on a separate gear tray (ZVF320) Bracket can be inverted to allow mounting above or below a cross arm Specially designed heat fins Pre-wired external 220 - 240 V / 50 Hz or 380 - 415 V / 50 Hz gear trays are available, to be ordered separately
• Ignitor	Series (SI), integral Semi-parallel (SP), external on a separate gear tray (ZVF320) Parallel (PA), external on a separate gear tray (ZVF320)	• Main applications	Sports, car parks, industrial areas
• Materials and finishing	Housing: non-corrosive, high-pressure die-cast aluminium Glass: thermally hardened, 4 mm thick Mounting bracket: hot-dipped galvanised steel Clips and hinges: stainless steel Reflector: high-reflectivity and high-purity anodised aluminium Finishing in raw aluminium		

Related products



OptiVision MVP507 sports and area flood lighting luminaire

Dimensional drawing



Adjustment possibilities

MVP507

General information

Order code	Product family code	Number of lamps	Lamp family code	Lamp power	Lamp color code	Color	Optic	European Community mark	ENEC mark	Ball Impact Resistance mark
151922 00	MVP507	1	SON-TP	600	-	ALU	WB	CE	ENEC	BIR
151939 00	MVP507	1	SON-T	1000	-	ALU	WB	CE	ENEC	BIR
151946 00	MVP507	1	HPI-T	1000	-	ALU	WB	CE	ENEC	BIR
151953 00	MVP507	1	MHN-LA	1000	842	ALU	WB	CE	ENEC	BIR
151960 00	MVP507	1	MHN-LA	2000	842	ALU	WB	CE	ENEC	BIR
151977 00	MVP507	1	MHN-LA	2000	842	ALU	MB	CE	ENEC	BIR
151984 00	MVP507	1	MHN-LA	2000	842	ALU	NB	CE	ENEC	BIR
152035 00	MVP507	1	MHN-LA	2000	-	ALU	WB	CE	ENEC	BIR
152042 00	MVP507	1	MHN-LA	2000	-	ALU	MB	CE	ENEC	BIR
152059 00	MVP507	1	MHN-LA	2000	-	ALU	NB	CE	ENEC	BIR
152073 00	MVP507	1	MHN-LA	2000	956	ALU	WB	CE	ENEC	BIR
152080 00	MVP507	1	MHN-LA	2000	956	ALU	MB	CE	ENEC	BIR
152097 00	MVP507	1	MHN-LA	2000	956	ALU	NB	CE	ENEC	BIR
546285 00	MVP507	1	SON-T	600	-	ALU	WB	CE	ENEC	BIR
546292 00	MVP507	1	SON-T	1000	-	ALU	WB	CE	ENEC	BIR
546308 00	MVP507	1	MHN-LA	1000	842	ALU	WB	CE	ENEC	BIR
291339 00	MVP507	1	MHN-FC	1000	740	ALU	WB	CE	ENEC	BIR
291346 00	MVP507	1	MHN-FC	2000	740	ALU	NB	CE	ENEC	BIR
291353 00	MVP507	1	MHN-FC	2000	740	ALU	MB	CE	ENEC	BIR
291360 00	MVP507	1	MHN-FC	2000	740	ALU	WB	CE	ENEC	BIR
291490 00	MVP507	1	MHN-FC	1000	740	ALU	NB	CE	ENEC	BIR
291506 00	MVP507	1	MHN-FC	1000	740	ALU	MB	CE	ENEC	BIR
292497 00	MVP507	1	MHN-FC	1000	740	ALU	NB	CE	ENEC	BIR
292503 00	MVP507	1	MHN-FC	1000	740	ALU	MB	CE	ENEC	BIR
292510 00	MVP507	1	MHN-FC	1000	740	ALU	WB	CE	ENEC	BIR

Accessories



ZVP507 SAD

Simple aiming device (ZVP507 SAD)



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www.philips.com/lighting

2011, September 14
data subject to change

Accessories

Order code	Product family code	Description
154275 00	ZVP507 SAD	Simple aiming device



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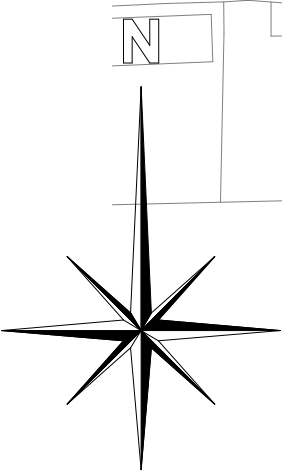
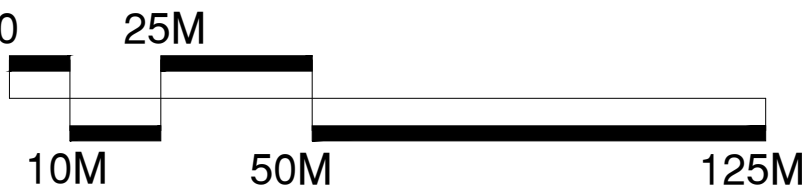
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2011, September 14
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University of Manchester

Artificial Grass Pitches





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01509 480912

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NOTES

00	PLANNING ISSUE UPDATED	WB		08.07.15
00	PLANNING ISSUE	DR		09.04.15
REV	DESCRIPTION		BY	CHK. DATE



Surfacing Standards Limited
SPORTS PITCH CONSULTANTS

KEY PLAN





AUTHOR
Wesley Bugg

TITLE
University of Manchester
Artificial Grass Pitches
Site Location Plan

PROJECT	SCALE	SIZE
SS1899	1:1250	A1
DRAWING No	REVISION	
01	01	



OptiVisor - Precise Engineering

The Philips Optivisor has been specifically designed and engineered to minimise backward light without significant impact of the performance of your sports lighting

Concept

Due to the double asymmetrical reflector, light can sometimes be reflected backwards and although back plates can sometimes work this louvre has been designed and engineered specially around our OptiVision Luminaire, the louvres are set at specific angles across the entire lens to significantly reduce backwards light whilst minimising any impact to the forward throw directed on your sports area.

With Philips Engineering and our in house photometric capabilities you can be sure that your lighting will be directed where it's needed

**The University of Manchester
Oxford Road
Manchester
M13 9PL**

Creation of a new external sports pitches(artificial grass pitches) with perimeter ball-stop fencing, floodlights (artificial lighting) and clean access

At

Fallowfield Student Village – Armitage Sports Campus

Flood Risk Assessment

Client	The University of Manchester Oxford Road Manchester M13 9PL		
Project	Creation of a new external sports pitches(artificial grass pitches) with perimeter ball-stop fencing, floodlights (artificial lighting) and clean access		
SSL project code	SSL1899		
Document title	Flood Risk Assessment		
Document control	Revision	By	Date
	First Issue	TB	03 July 2015
	Revision A	TB	11 July 2015

Surfacing Standards Ltd.
1A Perth House, Corbygate Business Park.
Priors Haw Road, Corby, Northamptonshire. NN17 5JG

T. 01536 400 012
E. info@surfacingstandards.co.uk

www.surfacingstandards.co.uk

International Organization for Standardization (ISO) Quality Management System (QMS) ISO 9001:2008. Registration number GB18982
Member of Sports and Play Construction Association Professional Services Group
Registered in England and Wales under registration number 05154061
VAT number GB 687834179

Flood Risk Assessment

The Proposal

The proposed development will include the creation of a new external sports pitches (artificial grass pitches) with perimeter ball-stop fencing, floodlights (artificial lighting) and clean accesses including:

Hockey:

2no. 101.40 x 63.00m pitches (91.40 x 55.00m pitch size)

Rugby:

1no. 132.00 x 80.00m pitch (122.00 x 70.00 pitch size including in goal areas)

Football:

1no. 106.00 x 70.00m pitch (100.00 x 64.00m pitch size)

Subject Area

The proposed development is situated at:

The Armitage Centre
Moseley Road
Fallowfield
Manchester
M14 6HE

The National Grid reference for the site is 386237, 394032.



Site Description

The site is located within the grounds of the Armitage Sports Centre (University of Manchester Fallowfield Campus), approximately 4km to the south of Manchester city centre within a predominantly residential area of Fallowfield.

Surfacing Standards Ltd.
1A Perth House, Corbygate Business Park.
Priors Haw Road, Corby, Northamptonshire. NN17 5JG

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The subject site comprises a large sports field surfaced in tended grass. Levels were relatively flat with a marginal fall to the South.

A perimeter brick wall some 3-4m in height formed the southern site boundary (which appeared to retain up 1.5m of soils in part), with Moseley Road and residential properties located beyond.

Further residential properties formed the eastern site boundary, with Birchfields Road located beyond.

A series of artificial sports pitches and a car park were present to the West, with further grassed sports pitches present to the North, including a large two storey Victorian pavilion.

The Armitage Sports Centre is located 60m to the North West of the site.

Levels across the sports pitches to the north of the site were approximately one higher than the subject site.

In addition, levels across an area of tended grass located adjacent to the South East of the site were also one higher than the subject site.

Based on anecdotal evidence, a large brick culvert some 2m in diameter runs approximately east to west across the centre of the site. An access cover for the culvert was present adjacent to the Eastern site boundary. It is understood that the crown of the culvert is located just below topsoil level. The culvert and historic river channel run horizontally through the site (East to West).

Site History

A review of historical Ordnance Survey maps produced by Envirocheck dating back to 1848 illustrates the site is shown as open fields with a couple of cottages in the South Western corner.

In 1894 the site is developed into a school with a railway line directly South of the site. The athletics ground was introduced in the Eastern part of the site in 1908 and the railway line to the east is under construction. Between 1932 and 1934 The University of Manchester grounds are developed and the sports pitches are extended. The sports hall was identified in 1957-88.

Ground Conditions Encountered

During recent ground investigation works, exploratory excavations encountered a similar profile of soils considered to be Reworked Topsoil and / or Made Ground overlying Glacial Till with Collyhurst Sandstone Formation/Chester Pebble Beds at depth.

Infiltration Potential

The near surface Glacial Till soils are considered impermeable and not conducive to the use of soak aways.

The Collyhurst Sandstone and Chester Pebble Beds were encountered as a granular material which is considered permeable.

Indicative infiltration testing was undertaken.

Infiltration was relatively slow and thus only one cycle (or part cycle) was possible during the test period.

Infiltration testing undertaken in shallow trial pits produced very slow infiltration rates and it was not possible to determine a realistic infiltration rate within the time of testing.

Tests undertaken between depths of 0.48 and 2.0m produced rates of between 3.23×10^{-6} m/s and 6.78×10^{-6} m/s.

No evidence of positive drainage was observed during investigations though anecdotal evidence suggests the pitch drains reasonably well and is dry once the surface water has had time to drain after periods of heavy rain.

Geology and Geohydrology of the Area

- Glacial Till Drift
- Chester Pebble Beds Formation (west only)
- Collyhurst Sandstone Formation (east only)

Geohydrology

Superficial deposits in the local area are designated Secondary – undifferentiated aquifer which is assigned in cases where it has not been possible to attribute either category A or B to a rock type.

In most cases, this means that the layer in question has previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type.

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The Chester Pebble Beds Formation and the Collyhurst Sandstone Formation are designated principle aquifers, defined as deposits exhibiting high permeability capable of high levels of groundwater storage.

Such deposits are able to support water supply and river base flows on a strategic scale.

Source protection zone

The site is situated within zone three of a source protection zone.

Assessment Context

The proposed development area is approximately 3.6ha and as such, potential for flooding must be considered with any development proposals and Manchester City Council, the Environment Agency and any other statutory bodies must be consulted as appropriate (via the planning process).

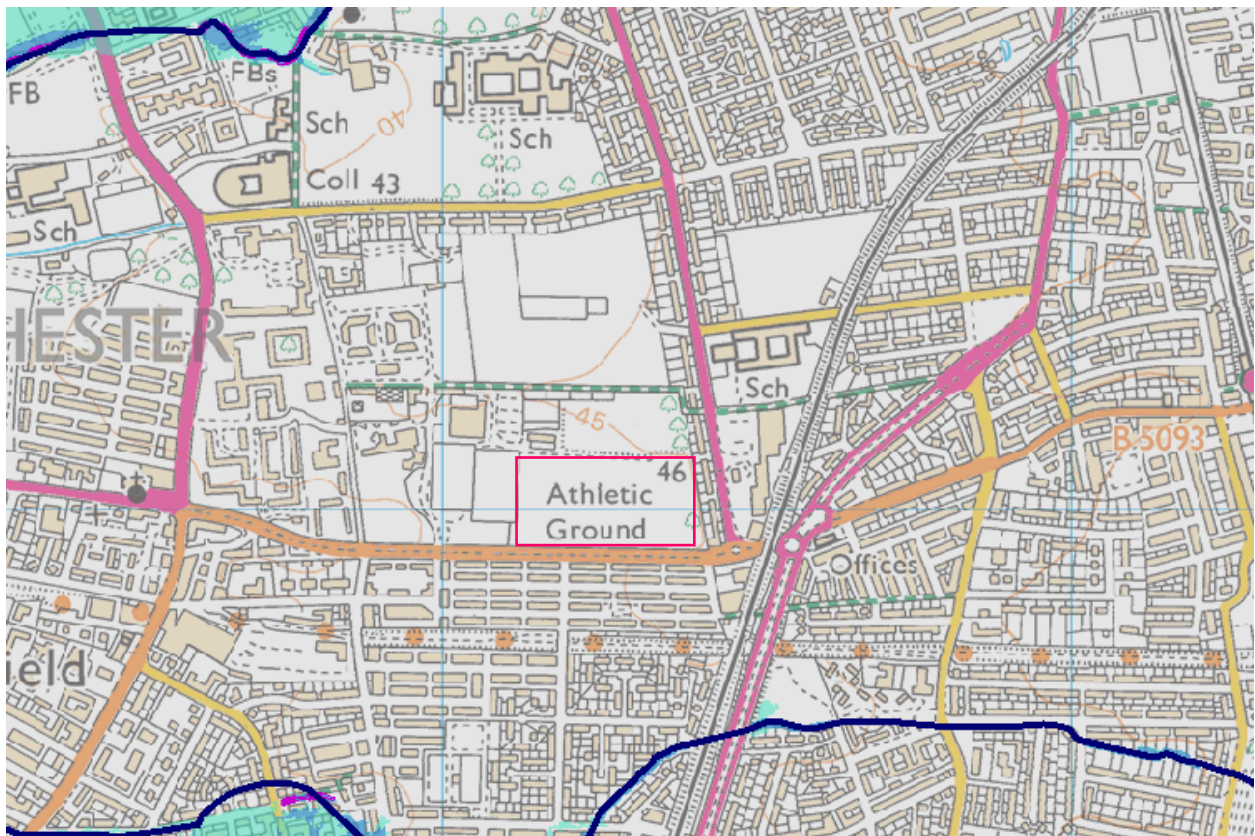
Fluvial / Tidal Flooding

Following a search on the Environment Agency (EA) website, we have established the precise development area is located within a Category 1 Flood Zone.

Flood Zone 1 Low Probability

This zone comprises land assessed as having a less than 1 in 1,000 annual probability of river or sea flooding (<0.1%).

The Environment Agency flood map below shows the development area at a scale of 1:10,000:



Flooding from sewers

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Based on anecdotal evidence, a large brick culvert some 2m in diameter runs approximately east to west across the centre of the site. An access cover for the culvert was present adjacent to the Eastern site boundary. It is understood that the crown of the culvert is located just below topsoil level. The culvert and historic river channel run horizontally through the site (East to West).

We do not have any records of sewer flooding within the vicinity of the proposed development and therefore do not consider the risk of flooding from sewers to be a significant risk to the proposed development.

Development Proposals and Flood Risk Vulnerability

With reference to Table 2 of Planning Practice Guidance to the National Planning Policy Framework, the proposed development for a sports complex with associated vehicular parking would be classified as Water Compatible Development.

An extract from Table 2 of the PPG for Flood Risk and Coastal Change is replicated below in Table 2.4 with the proposed development type highlighted:

Flood Risk Vulnerability Classification	
Vulnerability	Development types
Water-Compatible Development	Flood control infrastructure Water transmission infrastructure and pumping stations Sewage transmission infrastructure and pumping stations Sand and gravel working Docks, marinas and wharves Navigation facilities Ministry of Defence defence installations Ship building, repairing and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location Water-based recreation (excluding sleeping accommodation) Lifeguard and coastguard stations Amenity open space, nature conservation and biodiversity, outdoor sports and recreation and essential facilities such as changing rooms Essential ancillary sleeping or residential accommodation for staff required by uses in this category, subject to a specific warning and evacuation plan
Source: Planning Practice Guidance - 2014	

Flood Risk Vulnerability and Flood Zone Compatibility

Based on the above assessment of the site being greater than one hectare and classified as a 'water compatible development' and with reference to Planning Practice Guidance for 'Flood Risk and Coastal Change' to the National Planning Policy Framework (Table 3), the proposed development of this site would be considered "appropriate".

A copy of Table 3 is presented below to confirm the assessment above.

A sequential test is required.

No exception test is required.

Flood risk vulnerability and flood zone compatibility					
Flood risk vulnerability classification	Essential infrastructure	Water compatible	Highly vulnerable	More vulnerable	Less vulnerable
Zone 1	✓	✓	✓	✓	✓
Zone 2	✓	✓	Exception Test required	✓	✓
Zone 3A	Exception Test	✓	✗	Exception Test	✓

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	required			required	
Zone 3B	Exception Test required	✓	×	×	×
Key: ✓Development is appropriate *Development should not be permitted					
Source: Technical Guide to the National Planning Policy Framework, March 2012					

Sequential Test

As the site exceeds one hectare, a sequential test is required; however as the site is used (and historically designated) as a sports complex the development can be deemed to have passed the sequential test.

Current Conditions

The development site is a grassed playing field.

Surface Water Drainage Strategy

In accordance with the National Planning Policy Framework and Building Regulations, the site should be drained on a separate system with foul water draining to the public sewer and surface water draining in the most sustainable way.

Building Regulations Approved Document H3 clearly outlines the hierarchy to be investigated when considering a surface water drainage strategy in the following order of priority:

- A. An adequate soak away or some other adequate infiltration system, (approval must be obtained from local authority / building control / Environment Agency); or, where that is not reasonably practical
- B. A watercourse (approval must be obtained from the riparian owner / land drainage authority / Environment Agency); or, where that is not reasonably practicable
- C. A sewer (approval must be obtained from the utility owner)

The proposed development and associated surface drainage strategy from this site is such that the surface water will be managed and disposed of at the site boundary, thus complying with the Technical Guidance to the National Planning Policy Framework.

Surface water management and disposal performance will be achieved by the following physical implications to the development (the Artificial Grass Pitches):

1. Adequate attenuation (water storage) within pitch bases (comprising a permeable granular sub-base) to ensure that excess volumes, which would be experienced during a critical storm event, does not bypass the control system;
2. Restricted flow rate equivalent to a Greenfield runoff rate to the agreed storm water drainage outfall, connecting into a local culverted watercourse routed through the development site in a East to West direction; via a Hydro-brake® Flow Control or similar approved product.

Surface Water Drainage Design and Management

FIFA's Quality Concept for Football Turf (Handbook of Requirements January 2012 Edition) requires a 3G artificial turf to provide water permeability (for outdoor uses) >180mm/hr and advises that to ensure adequate drainage of a field, all individual elements of the football turf should satisfy this requirement.

(Please note that artificial rugby and hockey pitches require similar drainage performance characteristics.)

It is intended that a positive drainage scheme (land drainage); shall be installed beneath the 3G Artificial Grass Pitches (AGPs) area comprising UPVC perforated carrier and lateral pipe drains.

Surface water collected from the AGPs will be disposed of via a connection to the underlying culverted watercourse (permission pending) or an alternative appropriate means.

Attenuation Requirements

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Surface water will discharge into the underlying culverted watercourse surface sewer at an agreed and restricted flow, equivalent to a Greenfield runoff rate.

The granular substrate to all AGPs (typically consisting of Type 3 unbound (SHW 800 Series) to comply with BSEN 13285) is intended to provide onsite containment and attenuation within the granular sub-base, before surface water enters the outfall.

The designed surface water drainage solution should be based upon the following criteria, to maintain satisfactory system performance:

- Provide adequate functionality over a period of twenty years.
- Ensure that surface water is removed from the surface area at a rate necessary to prevent surface flooding experienced during acute rain storms and to ensure the facility will not be lost through rain at the highest intensity which may be expected to occur either once every five years or through continuous rainfall of 50mm over a 24 hour period.
- Ensure that surface water is effectively removed from the facility construction to ensure that load bearing capacity of the substrate is not weakened by an increase in moisture content or becomes more susceptible to frost damage.
- Protect the installation from influences of groundwater or surface water from surrounding areas.
- Prevent the risk of uncontrolled flooding elsewhere (to land adjacent to the development).
- Comply with all applicable Sustainable Urban Drainage System (SUDS) requirements with attenuated flows (containment within the granular pitch sub-base) incorporated wherever necessary, without affecting the performance of the pitch.

Flood Compensation

Flood compensation measures will not be required as finished (floor) levels will not affect current flood plain storage onsite.

Overland Flows

Proposals are to design surface water drainage to accommodate the 1 in 5 year storm event.

Clearly there is a risk of this storm event being exceeded, albeit this risk is considered very low.

Foul Water Drainage Strategy

There will be no new foul water discharge from the proposed 3G Artificial Grass Pitches (AGPs) development.

Surface Drainage Maintenance

The drainage system will be designed to minimise maintenance requirements, however, a full maintenance scheme will be established for those elements not being offered for adoption.

Maintenance operations will be carried out by The University of Manchester in perpetuity post development.

Conclusions and Flood Risk from Site Drainage Proposals

- The proposed development includes the creation of a new external sports pitches (artificial grass pitches) with perimeter ball-stop fencing, floodlights (artificial lighting) and clean accesses including:
 - Hockey: 2no. 101.40 x 63.00m pitches (91.40 x 55.00m pitch size)
 - Rugby: 1no. 132.00 x 80.00m pitch (122.00 x 70.00 pitch size including in goal areas)
 - Football: 1no. 106.00 x 70.00m pitch (100.00 x 64.00m pitch size)
- The proposed development area will occupy land at The Armitage Centre and replace an existing grassed playing field.
- Surface water will be attenuated to Greenfield equivalent rates and discharge to underlying culverted watercourse.
- Onsite attenuation is provided by the granular pitch substrate (typically consisting of Type 3 unbound (SHW 800 Series) to comply with BSEN 13285) offering onsite containment and attenuation within the granular sub-base, before surface water enters the outfall.
- Proposals are to design surface water drainage to accommodate the 1 in 5 year storm event.

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- Based on the above, providing the above strategies are implemented, the developed site will improve flood risk status to the development area thus satisfying the principles of the National Planning Policy Framework.

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GUIDANCE NOTES FOR THE REDUCTION OF OBTRUSIVE LIGHT

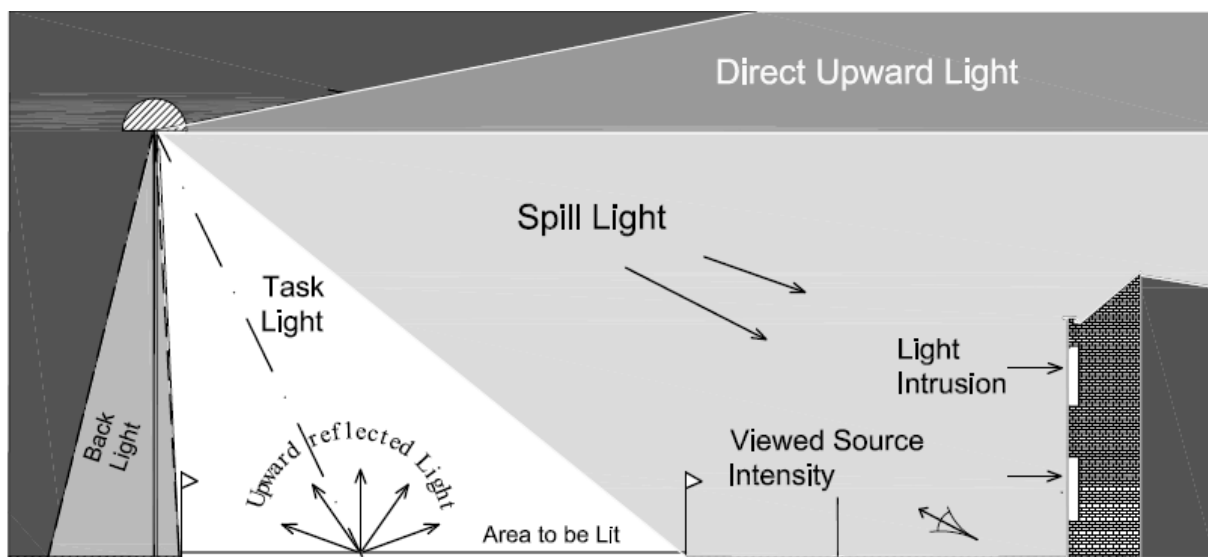
“Think before you light - The right amount of light, where wanted, when wanted.”

Man's invention of artificial light has done much to safeguard and enhance our night-time environment but, if not properly controlled, **obtrusive light** (sometimes referred to as light pollution) can present serious physiological and ecological problems.

Obtrusive Light, whether it keeps you awake through a bedroom window or impedes your view of the night sky, is a form of pollution, which may also be a nuisance in law and which can be substantially reduced without detriment to the lighting task.

Sky glow, the brightening of the night sky, **Glare** the uncomfortable brightness of a light source when viewed against a darker background, and **Light Intrusion (“Trespass”)**, the spilling of light beyond the boundary of the property or area being lit, are all forms of obtrusive light which may cause nuisance to others and waste money and energy. Think before you light. Is it necessary? What effect will it have on others? Will it cause a nuisance? How can you minimise the problem?

Figure 1 – Types of obtrusive light



Do not "over" light. This is a major cause of obtrusive light and is a waste of energy. There are published standards for most lighting tasks, adherence to which will help minimise upward reflected light. Organisations from which full details of these standards can be obtained are given on the last page of this leaflet.

Dim or switch off lights when the task is finished. Generally a lower level of lighting will suffice to enhance the night time scene than that required for safety and security.

“Good Design equals Good Lighting”

Any lighting scheme will consist of three basic elements: a light source, a luminaire and a method of installation.

Light sources (Lamps)

Remember that the light source output in LUMENS is not the same as the wattage and that it is the former that is important in combating the problems of obtrusive light.

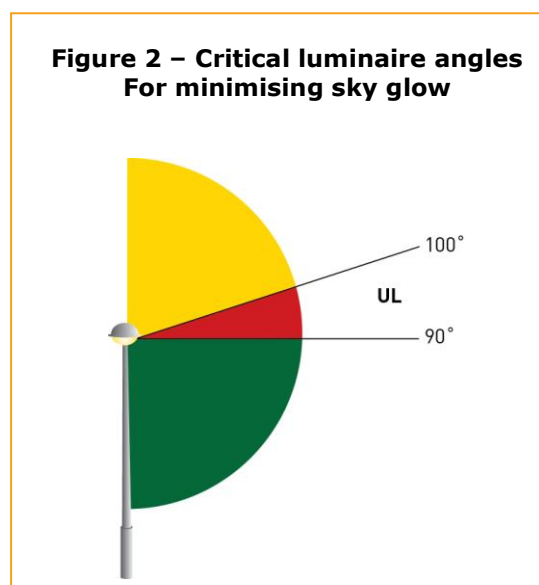
Most nighttime visual tasks are only dependant on light radiated within the visual spectrum. It is therefore NOT necessary for light sources to emit either ultra-violet or infra-red radiation unless specifically designed to do so. It is also understood that light from the shorter wavelengths of the spectrum has important effects on both flora and fauna that should be considered.

Research indicates that light from the blue end of the spectrum has important non-visual effects on the health of the human body, in particular in our sleep/wake patterns. It is therefore important to appreciate that while in obtrusive light terms the use of blue light should be minimised, there are many night-time tasks such as driving and sports where to be fully awake is an important aid to safety.

Luminaires

Care should always be taken when selecting luminaires to ensure that appropriate products are chosen and that their location will reduce spill light and glare to a minimum.

Use specifically designed lighting equipment that minimises the upward spread of light near to and above the horizontal. The most sensitive/critical zones for minimising sky glow are those between 90° and 100° as shown in Figure 2 and referred to as the lower, upward light output zone (UL).



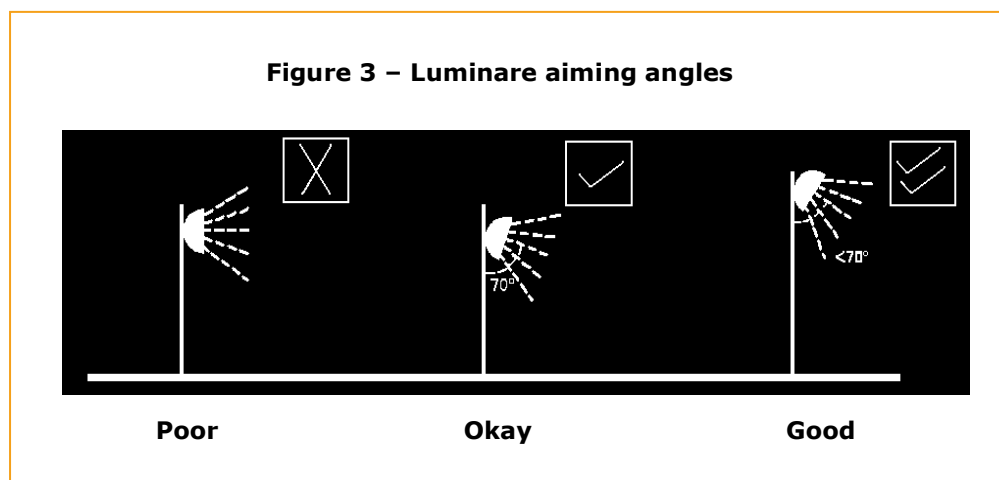
For most sports and area lighting installations the use of luminaires with double-asymmetric beams designed so that the front glazing is kept at or near parallel to the surface being lit should, if correctly aimed, ensures minimum obtrusive light.

Appendices 1 and 2 to these notes gives more details of how to choose and if necessary modify luminaires.

Installation

In most cases it will be beneficial to use as high a mounting height as possible, giving due regard to the daytime appearance of the installation. The requirements to control glare for the safety of road users are given in Table 3.

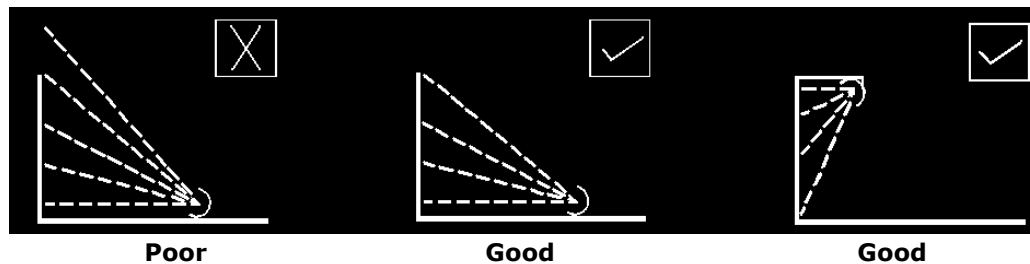
Keep glare to a minimum by ensuring that the main beam angle of all lights directed towards any potential observer is not more than 70°. Higher mounting heights allow lower main beam angles, which can assist in reducing glare. In areas with low ambient lighting levels, glare can be very obtrusive and extra care should be taken when positioning and aiming lighting equipment. With regard to domestic security lighting the ILP produces an information leaflet GN02:2009 that is freely available from its website.



When lighting vertical structures such as advertising signs, direct light downwards wherever possible. If there is no alternative to up-lighting, as with much decorative lighting of buildings, then the use of shields, baffles and louvres will help reduce spill light around and over the structure to a minimum.

For road and amenity lighting installations, (see also design standards listed on Page 5) light near to and above the horizontal should normally be minimised to reduce glare and sky glow (Note ULR's in Table 2). In rural areas the use of full horizontal cut off luminaires installed at 0° uplift will, in addition to reducing sky glow, also help to minimise visual intrusion within the open landscape. However in some urban locations, luminaires fitted with a more decorative bowl and good optical control of light should be acceptable and may be more appropriate.

Figure 4 – Façade Illumination



Since 2006 “Artificial Light” has been added to the list of possible Statutory Nuisances in England, Wales and Scotland. The monitoring of such nuisances will be the responsibility of Environmental Health Officers (EHOs) for which separate guidance is being produced.

With regard to the planning aspect, many Local Planning Authorities (LPAs) have already produced, or are producing, policies that within the planning system will become part of their local development framework. For new developments there is an opportunity for LPAs to impose planning conditions related to external lighting, including curfew hours.

The Scottish Executive has published a design methodology document (March 2007) entitled [“Controlling Light Pollution and Reducing Energy Consumption”](#) to further assist in mitigating obtrusive light elements at the design stage.

ENVIRONMENTAL ZONES

It is recommended that Local Planning Authorities specify the following environmental zones for exterior lighting control within their Development Plans.

Table 1 – Environmental Zones

Zone	Surrounding	Lighting Environment	Examples
E0	Protected	Dark	UNESCO Starlight Reserves, IDA Dark Sky Parks
E1	Natural	Intrinsically dark	National Parks, Areas of Outstanding Natural Beauty etc
E2	Rural	Low district brightness	Village or relatively dark outer suburban locations
E3	Suburban	Medium district brightness	Small town centres or suburban locations
E4	Urban	High district brightness	Town/city centres with high levels of night-time activity

Where an area to be lit lies on the boundary of two zones the obtrusive light limitation values used should be those applicable to the most rigorous zone.

NB: Zone E0 must always be surrounded by an E1 Zone.

DESIGN GUIDANCE

The following limitations may be supplemented or replaced by a LPA's own planning guidance for exterior lighting installations. As lighting design is not as simple as it may seem, you are advised to consult and/or work with a professional lighting designer before installing any exterior lighting.

Table 2 – Obtrusive Light Limitations for Exterior Lighting Installations – General Observers

Environment al Zone	Sky Glow ULR [Max %] ⁽¹⁾	Light Intrusion (into Windows) E_v [lux] ⁽²⁾		Luminaire Intensity I [candelas] ⁽³⁾		Building Luminance Pre-curfew ⁽⁴⁾
		Pre- curfew	Post- curfew	Pre- curfew	Post- curfew	Average, L [cd/m ²]
E0	0	0	0	0	0	0
E1	0	2	0 (1*)	2,500	0	0
E2	2.5	5	1	7,500	500	5
E3	5.0	10	2	10,000	1,000	10
E4	15	25	5	25,000	2,500	25

ULR = **Upward Light Ratio of the Installation** is the maximum permitted percentage of luminaire flux that goes directly into the sky.

E_v = **Vertical Illuminance in Lux** - measured flat on the glazing at the centre of the window.

I = **Light Intensity in Candelas (cd)**

L = **Luminance in Candelas per Square Metre (cd/m²)**

Curfew = **the time after which stricter requirements (for the control of obtrusive light) will apply**; often a condition of use of lighting applied by the local planning authority. If not otherwise stated - 23.00hrs is suggested.

***** = **Permitted only from** Public road lighting installations

(1) Upward Light Ratio – Some lighting schemes will require the deliberate and careful use of upward light, e.g. ground recessed luminaires, ground mounted floodlights, festive lighting, to which these limits cannot apply. However, care should always be taken to minimise any upward waste light by the proper application of suitably directional luminaires and light controlling attachments.

- (2) Light Intrusion (into Windows)** – These values are suggested maxima and need to take account of existing light intrusion at the point of measurement. In the case of road lighting on public highways where building facades are adjacent to the lit highway, these levels may not be obtainable. In such cases where a specific complaint has been received, the Highway Authority should endeavour to reduce the light intrusion into the window down to the post curfew value by fitting a shield, replacing the luminaire, or by varying the lighting level.
- (3) Luminaire Intensity** – This applies to each luminaire in the potentially obtrusive direction, outside of the area being lit. The figures given are for general guidance only and for some sports lighting applications with limited mounting heights, may be difficult to achieve.
- (4) Building Luminance** – This should be limited to avoid over lighting, and related to the general district brightness. In this reference building luminance is applicable to buildings directly illuminated as a night-time feature as against the illumination of a building caused by spill light from adjacent luminaires or luminaires fixed to the building but used to light an adjacent area.

Table 3 – Obtrusive Light Limitations for Exterior Lighting Installations – Road Users		
Road Classification ⁽¹⁾	Threshold Increment (TI)	Veiling Luminance (Lv)
No road lighting	15% based on adaptation luminance of 0.1cd/m ²	0.04
ME6/ ME5	15% based on adaptation luminance of 1cd/m ²	0.25
ME4/ ME3	15% based on adaptation luminance of 2cd/m	0.40
ME2 / ME1	15% based on adaptation luminance of 5cd/m ²	0.84

TI = **Threshold Increment** is a measure of the loss of visibility caused by the disability glare from the obtrusive light installation

Lv = **Veiling Luminance** is a measure of the adaptation luminance caused by the disability glare from the obtrusive light installation

(1) = **Road Classifications** as given in BS EN 13201 - 2: 2003 Road lighting Performance requirements. Limits apply where users of transport systems are subject to a reduction in the ability to see essential information. Values given are for relevant positions and for viewing directions in path of travel. For a more detailed description and methods for determining, calculating and measuring the above parameters see CIE Publication 150:2003.

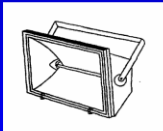
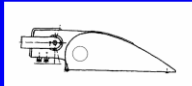
RELEVANT PUBLICATIONS AND STANDARDS:

British Standards: www.bsi.org.uk	BS 5489-1: 2003 Code of practice for the design of road lighting – Part 1: Lighting of roads and public amenity areas BS EN 13201-2:2003 Road lighting – Part 2: Performance requirements BS EN 13201-3:2003 Road lighting – Part 3: Calculation of performance BS EN 13201-4:2003 Road lighting – Part 4: Methods of measuring lighting performance. BS EN 12193: 1999 Light and lighting – Sports lighting BS EN 12464-2: 2007 Lighting of work places – Outdoor work places
Countryside Commission/ DOE	Lighting in the Countryside: Towards good practice (1997) (<i>Out of Print but available on www.communities.gov.uk/index.asp?id=1144823</i>)
UK Government / Defra www.defra.gov.uk	Statutory Nuisance from Insects and Artificial Light – Guidance on Sections 101 to 103 of the Clean Neighbourhoods and Environment Act 2005 Road Lighting and the Environment (1993) (Out of Print)
CIBSE/SLL Publications: www.cibse.org	CoL Code for Lighting (2002) LG1 The Industrial Environment (1989) LG4 Sports (1990+Addendum 2000) LG6 The Exterior Environment (1992) FF7 Environmental Considerations for Exterior Lighting (2003)
CIE Publications: www.cie.co.at	01 Guidelines for minimizing Urban Sky Glow near Astronomical Observatories (1980) 83 Guide for the lighting of sports events for colour television and film systems (1989) 92 Guide for floodlighting (1992) 115 Recommendations for the lighting of roads for motor and pedestrian traffic – Second Edition (2010) 126 Guidelines for minimizing Sky glow (1997) 129 Guide for lighting exterior work areas (1998) 136 Guide to the lighting of urban areas (2000) 150 Guide on the limitations of the effect of obtrusive light from outdoor lighting installations (2003) 154 The Maintenance of outdoor lighting systems (2003)
ILP Publications: www.theilp.org.uk	TR 5 Brightness of Illuminated Advertisements (2001) TR24 A Practical Guide to the Development of a Public Lighting Policy for Local Authorities (1999) GN02 Domestic Security Lighting, Friend or Foe
ILP/CIBSE Joint Publications	Lighting the Environment - A guide to good urban lighting (1995)
ILP/CSS Publications	Joint Code of Practice for the installation, maintenance and removal of seasonal decorations. (2005)
ILP/CfDS Joint Publication www.dark-skies.org	Towards Understanding Sky glow. 2007
IESNA www.iesna.org	TM-15-07 (R) Luminaire Classification System for Outdoor luminaires

NB: These notes are intended as guidance only and the application of the values given in Tables 2 & 3 should be given due consideration along with all other factors in the lighting design. Lighting is a complex subject with both objective and subjective criteria to be considered. The notes are therefore no substitute for professionally assessed and designed lighting, where the various and maybe conflicting visual requirements need to be balanced.

APPENDIX 1 - PROPOSED OUTDOOR LUMINAIRE CLASSIFICATION SYSTEM

Variable Aim Luminaires – General Classifications:

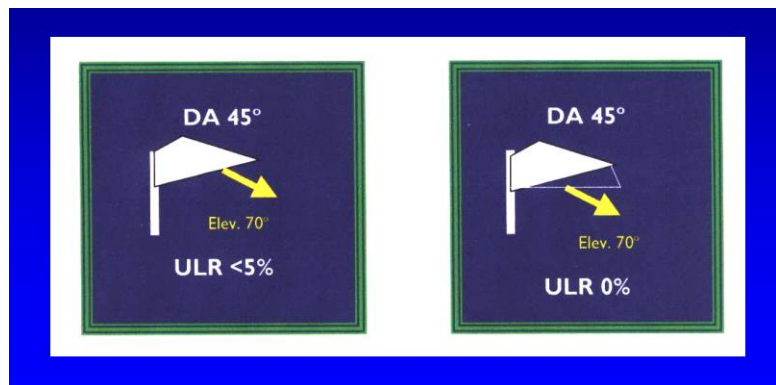
➤ Type A	Symmetrical	
➤ Type B	Asymmetrical	
➤ Type C	Double-Asymmetrical	

Proposed labelling System:

Fixed Position luminaires



Variable Aim Luminaires
(Shown here for a 45° Double-Asymmetric luminaire aimed at 70° – with and without a cowl).



APPENDIX 2 - ILLUSTRATIONS OF LUMINAIRE ACCESSORIES FOR LIMITING OBTRUSIVE LIGHT (images provided by Philips and Thorn)

Cowl (or Hood)



External Louvre



SHIELD



SHEILD "Barn Doors"



Double Asymmetric Luminaire



Simple Hood



Circular Louvre



Cowl & Louvre



Internal Louvre (horizontal)



Internal Louvre (vertical)





MASTER MHN-FC

MASTER MHN-FC 2000W/740 400V XW UNP

Compact quartz metal halide lamps with double pinch

Product data

• General Characteristics

Cap-Base	Double Ended
Cap-Base Information	Cable
Bulb Finish	Clear
Burning Position	p5 [Parallel +/-5D or Horizontal(HOR)]
Life to 5% failures	7000 hr
Life to 10% failures	8000 hr
Life to 20% failures	9500 hr
Life to 50% failures	14000 hr

• Light Technical Characteristics

Colour Code	740 [CCT of 4000K]
Colour Rendering Index	56 (min), 62 (nom) Ra8
Colour Designation	White
Colour Temperature	4200 K
Colour Temperature Technical	4200 K
Chromaticity Coordinate X	380 -
Chromaticity Coordinate Y	419 -
Lamp Luminous Flux EM	210000 Lm
Lamp Luminous Efficacy EM	102 Lm/W
Lumen Maintenance 2000h	85 %
Lumen Maintenance 5000h	75 %
Lumen Maintenance 10000h	70 %
Average Luminance EM	1500 cd/cm2

Lumen Maintenance 1000h	90 %
Lumen Maintenance 14000h	45 %

• Electrical Characteristics

Lamp Wattage	2000 W
Lamp Wattage EM	2032 W
Voltage	400 V
Lamp Voltage	222 V
Lamp Current EM	10.11 A
Dimmable	no

• Environmental Characteristics

Mercury (Hg) Content	105 mg
----------------------	--------

• UV-related Characteristics

PET (NIOSH)	0.030 h.klx
Damage Factor D/fc	3.6 -
UV A	1823 mW/cm2
UV B	492 mW/cm2
UV C	532 mW/cm2
Specific Eff. Radiant Power	410 mW/klm

• Luminaire Design Requirements

Pinch Temperature	350 (max) C
Bulb Temperature	950 (max) C

MASTER MHN-FC

• Product Dimensions

Base Face to Base Face A	290 mm
Overall Length C	357 (max) mm
Diameter D	25.5 (nom), 33 (max) mm
Light Center Length L	177 mm
Arc Length O	108 mm
Cable Length X	58 mm

• Product Data

Order code	213495 00
Full product code	871150021349500
Full product name	MASTER MHN-FC 2000W/740 400V XW UNP

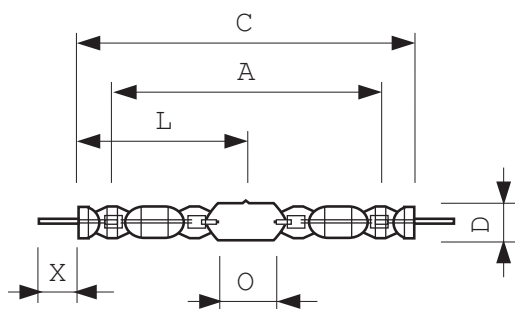
Order product name	MASTER MHN-FC 2000W/740 400V XW UNP
Pieces per pack	1
Packing configuration	1
Packs per outerbox	1
Bar code on pack - EAN1	8711500213495
Bar code on outerbox - EAN3	8711500213495
Logistic code(s) - 12NC	928070405130
ILCOS code	MD-2000/40/2B-H-XW
Net weight per piece	145.000 gr

Warnings and Safety

- Use only in totally enclosed luminaire, even during testing (IEC61167, IEC 62035, IEC60598)

- The luminaire must be able to contain hot lamp parts if the lamp ruptures

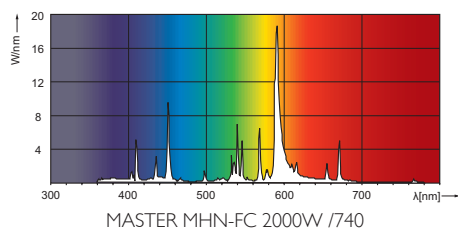
Dimensional drawing



MHN-FC, 1000W/2000W

Product	A (Norm)	C (Max)	D (Norm)	D (Max)	L (Norm)	O (Norm)	X (Norm)
MHN-FC 2000W/740 400V XW	290	357	25.5	33	177	108	58

Photometric data





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www.philips.com/lighting

2012, September 10
data subject to change



Planning

Telephone: +44 (0)161 234 4516
planning@manchester.gov.uk
PO Box 532 Town Hall
Manchester M60 2LA

Application for Planning Permission.
Town and Country Planning Act 1990

Publication of applications on planning authority websites.

Please note that the information provided on this application form and in supporting documents may be published on the Authority's website.
If you require any further clarification, please contact the Authority's planning department.

1. Applicant Name, Address and Contact Details

Title:	Mr	First name:	Paul	Surname:	Maccabee		
Company name	The University of Manchester						
Street address:	Directorate of Estates & Facilities			Country Code	National Number	Extension Number	
	Room G.003 Beyer Building			Telephone number:			
	Oxford Road			Mobile number:			
Town/City	Manchester			Fax number:			
County:				Email address:			
Country:	United Kingdom						
Postcode:	M13 9PL						
Are you an agent acting on behalf of the applicant?				☒ Yes	☐ No		

2. Agent Name, Address and Contact Details

Title:	Mr	First Name:	Tom	Surname:	Betts		
Company name:	Surfacing Standards Ltd						
Street address:	1A Perth House			Country Code	National Number	Extension Number	
	Corbygate Business Park			Telephone number:	01536 400 012		
	Priors Haw Road			Mobile number:			
Town/City	Corby			Fax number:			
County:	Northamptonshire			Email address:			
Country:	United Kingdom						
Postcode:	NN17 5JG			tom@surfacingstandards.co.uk			

3. Description of the Proposal

Please describe the proposed development including any change of use:

The proposed development will include the creation of a new external sports pitches (artificial grass pitches) with perimeter ball-stop fencing, floodlights (artificial lighting) and clean accesses.

Has the building, work or change of use already started? ☐ Yes ☒ No

4. Site Address Details

Full postal address of the site (including full postcode where available)

House:		Suffix:	
House name:	The Armitage Centre		
Street address:	Moseley Road		
Town/City:	Manchester		
County:	Manchester		
Postcode:	M14 6HE		

Description of location or a grid reference
(must be completed if postcode is not known):

Easting:	386036
Northing:	394141

Description:

The Armitage Sports Centre is the main University of Manchester sport facility. It is home to many of the university Athletic Union sport clubs and community teams and offers a diverse range of activities including football, badminton, squash, netball, table tennis, basketball and more.
The proposed development area is a grass playing field, approximately 3.6ha.

5. Pre-application Advice

Has assistance or prior advice been sought from the local authority about this application? ☒ Yes ☐ No

If Yes, please complete the following information about the advice you were given (this will help the authority to deal with this application more efficiently):

Officer name:

Title:		First name:		Surname:	
--------	----------------------	-------------	----------------------	----------	----------------------

Reference:

Date (DD/MM/YYYY): (Must be pre-application submission)

Details of the pre-application advice received:

6. Pedestrian and Vehicle Access, Roads and Rights of Way

Is a new or altered vehicle access proposed to or from the public highway? ☐ Yes ☒ No

Is a new or altered pedestrian access proposed to or from the public highway? ☐ Yes ☒ No

Are there any new public roads to be provided within the site? ☐ Yes ☒ No

Are there any new public rights of way to be provided within or adjacent to the site? ☐ Yes ☒ No

Do the proposals require any diversions/extinguishments and/or creation of rights of way? ☐ Yes ☒ No

7. Waste Storage and Collection

Do the plans incorporate areas to store and aid the collection of waste? ☐ Yes ☒ No

Have arrangements been made for the separate storage and collection of recyclable waste? ☐ Yes ☒ No

8. Authority Employee/Member

With respect to the Authority, I am:

- (a) a member of staff
- (b) an elected member
- (c) related to a member of staff
- (d) related to an elected member

Do any of these statements apply to you? ☐ Yes ☒ No

9. Materials

Please state what materials (including type, colour and name) are to be used externally (if applicable):

Boundary treatments - description:

Description of *existing* materials and finishes:

The installed appearance of existing perimeter ball-stop fencing (up to 6m high) to adjacent hockey pitches is finished to polyester powder coated RAL6005 Dark Green, all supported with an intermediate posts system of matching colour.

Description of *proposed* materials and finishes:

The installed appearance of proposed perimeter ball-stop fencing (up to 6m high) is finished to polyester powder coated RAL6005 Dark Green, all supported with an intermediate posts system of matching colour.

9. (Materials continued)

Vehicle access and hard standing - description:

Description of *existing* materials and finishes:

Existing vehicular and pedestrian accesses are paved with various hard landscaping treatment including concrete and macadam surfaces within The Armitage Centre.

Description of *proposed* materials and finishes:

The installed appearance of hard standing areas (pedestrian clean access, goal storage areas and spectator areas) will be grey / black coloured macadam.

Lighting - add description

Description of *existing* materials and finishes:

The installed appearance of existing artificial lighting system to adjacent artificial hockey pitches includes 15m high sectional steel masts with galvanised finish (brushed silver) mounted with luminaires c/w 2kW lamps and fittings finished powder coated grey.

Description of *proposed* materials and finishes:

The installed appearance of the new artificial lighting system will include 15m high sectional octagonal mid-hinge steel masts with galvanised finish (brushed silver) mounted with luminaires c/w 2kW lamps and fittings finished raw aluminium.

Others - description:

Type of other material:

Artificial Grass Surfaces

Description of *existing* materials and finishes:

The site is an existing grassed playing field and adjacent artificial hockey pitches are surfaced with sand dressed artificial turf (coloured green).

Description of *proposed* materials and finishes:

The proposed pitch playing surfaces shall replicate the visual appearance of fine sports turf, coloured green, and comprising sand dressed artificial turf to hockey pitches and 3G artificial turf to the football and rugby pitches.

Are you supplying additional information on submitted plan(s)/drawing(s)/design and access statement? ☒ Yes ☐ No

If Yes, please state references for the plan(s)/drawing(s)/design and access statement:

SSL1899 01 Existing Location Plan
SSL1899 02 Block Plan of Site
SSL1899 03 Proposed Site Plan
SSL1899 04 Proposed Football AGP Plan
SSL1899 05 Proposed Hockey AGPs Plan
SSL1899 06 Proposed Rugby AGP Plan
SSL1899 07 Football AGP Elevation
SSL1899 08 Hockey AGPs Elevation
SSL1899 09 Rugby AGP Elevation
SSL1899 10 Floodlighting Scheme
SSL1899 11 Isometric View
SSL1899 12 Existing Playing Pitch Arrangement
SSL1899 13 Proposed Playing Pitch Arrangement
SSL1899 T1 Topographical Survey
Appendix A Floodlighting Performance Results
Appendix B Master MHN-FC 2000W
Appendix C Optivision
Appendix D ILP 2011
Appendix E 15m Floodlight Mast
Appendix F Photographs of Site
Appendix G Lighting Impact Statement
Appendix H Flood Risk Assessment

10. Vehicle Parking

Please provide information on the existing and proposed number of on-site parking spaces:

Type of vehicle	Existing number of spaces	Total proposed (including spaces retained)	Difference in spaces
Cars	214	214	0
Light goods vehicles/public carrier vehicles	0	0	0
Motorcycles	0	0	0
Disability spaces	4	4	0
Cycle spaces	0	0	0
Other (e.g. Bus)	6	6	0
Short description of Other	Coaches.		

11. Foul Sewage

Please state how foul sewage is to be disposed of:

Mains sewer ☐ Package treatment plant ☐ Unknown ☐
Septic tank ☐ Cess pit ☐

Other

Not applicable.

Are you proposing to connect to the existing drainage system? ☐ Yes ☒ No ☐ Unknown

12. Assessment of Flood Risk

Is the site within an area at risk of flooding? (Refer to the Environment Agency's Flood Map showing flood zones 2 and 3 and consult Environment Agency standing advice and your local planning authority requirements for information as necessary.)

☐ Yes ☒ No

If Yes, you will need to submit an appropriate flood risk assessment to consider the risk to the proposed site.

Is your proposal within 20 metres of a watercourse (e.g. river, stream or beck)?

☒ Yes ☐ No

Will the proposal increase the flood risk elsewhere?

☐ Yes ☒ No

How will surface water be disposed of?

☐ Sustainable drainage system

☐ Main sewer

☐ Pond/lake

☐ Soakaway

☒ Existing watercourse

13. Biodiversity and Geological Conservation

To assist in answering the following questions refer to the guidance notes for further information on when there is a reasonable likelihood that any important biodiversity or geological conservation features may be present or nearby and whether they are likely to be affected by your proposals.

Having referred to the guidance notes, is there a reasonable likelihood of the following being affected adversely or conserved and enhanced within the application site, OR on land adjacent to or near the application site:

a) Protected and priority species

☐ Yes, on the development site ☐ Yes, on land adjacent to or near the proposed development ☒ No

b) Designated sites, important habitats or other biodiversity features

☐ Yes, on the development site ☐ Yes, on land adjacent to or near the proposed development ☒ No

c) Features of geological conservation importance

☐ Yes, on the development site ☐ Yes, on land adjacent to or near the proposed development ☒ No

14. Existing Use

Please describe the current use of the site:

The proposed development will replace a proportion of the existing grassed field at The Armitage Centre and will replace an existing grass playing pitches (winter and summer) including cricket, football and rugby.

Is the site currently vacant?

☐ Yes ☒ No

Does the proposal involve any of the following?

If yes, you will need to submit an appropriate contamination assessment with your application.

Land which is known to be contaminated?

☐ Yes ☒ No

Land where contamination is suspected for all or part of the site?

☐ Yes ☒ No

A proposed use that would be particularly vulnerable to the presence of contamination?

☐ Yes ☒ No

15. Trees and Hedges

Are there trees or hedges on the proposed development site?

☐ Yes ☒ No

And/or: Are there trees or hedges on land adjacent to the proposed development site that could influence the development or might be important as part of the local landscape character?

☐ Yes ☒ No

If Yes to either or both of the above, you may need to provide a full Tree Survey, at the discretion of your local planning authority. If a Tree Survey is required, this and the accompanying plan should be submitted alongside your application. Your local planning authority should make clear on its website what the survey should contain, in accordance with the current 'BS5837: Trees in relation to design, demolition and construction - Recommendations'.

16. Trade Effluent

Does the proposal involve the need to dispose of trade effluents or waste?

☐ Yes ☒ No

17. Residential Units

Does your proposal include the gain or loss of residential units?

☐ Yes ☒ No

18. All Types of Development: Non-residential Floorspace

Does your proposal involve the loss, gain or change of use of non-residential floorspace?

☐ Yes ☒ No

19. Employment

If known, please complete the following information regarding employees:

	Full-time	Part-time	Equivalent number of full-time
Existing employees	0	0	0
Proposed employees	0	0	0

20. Hours of Opening

If known, please state the hours of opening (e.g. 15:30) for each non-residential use proposed:

Use	Monday to Friday		Saturday		Sunday and Bank Holidays		Not Known
	Start Time	End Time	Start Time	End Time	Start Time	End Time	
Other	08:00:00	22:00:00	08:00:00	22:00:00	08:00:00	22:00:00	☐

21. Site Area

What is the site area?

03.60

hectares

22. Industrial or Commercial Processes and Machinery

Please describe the activities and processes which would be carried out on the site and the end products including plant, ventilation or air conditioning. Please include the type of machinery which may be installed on site:

Not applicable.

Is the proposal for a waste management development?

☐ Yes

☒ No

23. Hazardous Substances

Is any hazardous waste involved in the proposal?

☐ Yes

☒ No

24. Site Visit

Can the site be seen from a public road, public footpath, bridleway or other public land?

☐ Yes

☒ No

If the planning authority needs to make an appointment to carry out a site visit, whom should they contact? (Please select only one)

☐ The agent

☒ The applicant

☐ Other person

25. Certificates (Certificate A)

Certificate of Ownership - Certificate A

Town and Country Planning (Development Management Procedure) (England) Order 2015 Certificate under Article 14

I certify/The applicant certifies that on the day 21 days before the date of this application nobody except myself/the applicant was the owner (*owner is a person with a freehold interest or leasehold interest with at least 7 years left to run*) of any part of the land to which the application relates, and that none of the land to which the application relates is, or is part of, an agricultural holding (*“agricultural holding” has the meaning given by reference to the definition of “agricultural tenant” in section 65(8) of the Act*).

Title:

Mr

 First name:

Tom

 Surname:

Betts

Person role:

Agent

 Declaration date:

08/07/2015

☒

 Declaration made

26. Declaration

I/we hereby apply for planning permission/consent as described in this form and the accompanying plans/drawings and additional information. I/we confirm that, to the best of my/our knowledge, any facts stated are true and accurate and any opinions given are the genuine opinions of the person(s) giving them.

☒

 Date

08/07/2015

**The University of Manchester
Oxford Road
Manchester
M13 9PL**

Creation of a new external sports pitches(artificial grass pitches) with perimeter ball-stop fencing, floodlights (artificial lighting) and clean access

At

Fallowfield Student Village – Armitage Sports Campus

Design & Access Statement

Client	The University of Manchester Oxford Road Manchester M13 9PL		
Project	Creation of a new external sports pitches(artificial grass pitches) with perimeter ball-stop fencing, floodlights (artificial lighting) and clean access		
SSL project code	SSL1899		
Document title	Design & Access Statement		
Document control	Revision	By	Date
	First Issue	TB	03 July 2015
	Revision A	TB	11 July 2015
	REV B	WB	17 July 2015

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Member of Sports and Play Construction Association Professional Services Group
Registered in England and Wales under registration number 05154061
VAT number GB 687834179

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	Author	Dwg No
Drawings	SSL	1899 01
	SSL	1899 02
	SSL	1899 03
	SSL	1899 04
	SSL	1899 05
	SSL	1899 06
	SSL	1899 07
	SSL	1899 T1
	Author	No
Appendices	SSL	A
	Philips Lighting	B
	Philips Lighting	C
	Institution of Lighting Professionals	D
	Philips Lighting	E
	Philips Lighting	F
	SSL	G
	SSL	H
	SSL	I
	SSL	J

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1. Introduction

- 1.1 Surfacing Standards Ltd have been appointed to consider and develop an application for full planning permission for the proposed development at The University of Manchester, The Armitage Centre, Moseley Road, Fallowfield, Manchester, M14 6HE.
- 1.2 In order to assist the application for full planning permission and to facilitate the implementation and delivery of the project; this document describes the project aspirations and illustrates the process that has led to the development proposal, and to explain and justify the proposal in a structured way.
- 1.3 This statement discusses design and access issues regarding the use, amount, layout, scale, landscaping, appearance and context of the scheme. In addition, the wider access implications of the proposal are addressed.

- 1.4 The applicant is:

The University of Manchester
Oxford Road
Manchester
M13 9PL

Paul Maccabee
Client Representative
Capital Projects
Directorate of Estates and Facilities

- 1.5 The applicant's agent is:

Mace Group
3rd Floor East
Eastgate
Castle Street
Castlefield
Manchester
M3 4LZ

Richard Kelly
Project Manager

- 1.5 The planning agent is:

Surfacing Standards Ltd
1A Perth House
Corbygate Business Park
Priors Haw Road
Corby
Northamptonshire
NN17 5JG

MrTom Betts
Consultant

Surfacing Standards Ltd.
1A Perth House. Corbygate Business Park.
Priors Haw Road. Corby. Northamptonshire. NN17 5JG

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2. Design & Access Statement Principles

- 2.1. The National Planning Policy Framework sets out the Government's planning policies for England and how these are expected to be applied.

It sets out the Government's requirements for the planning system only to the extent that it is relevant, proportionate and necessary to do so.

It provides a framework within which local people and their accountable councils can produce their own distinctive local and neighbourhood plans, which reflect the needs and priorities of their communities.

- 2.2 Guidance on information requirements and validation, published by the Town and Country Planning (Development Management Procedure) (England) Order 2015 recommends that a design and access statement is a short report accompanying and supporting a planning application to illustrate the process that has led to the development proposal, and to explain the proposal in a structured way. The level of detail required in a design and access statement depends on the scale and complexity of the application, and the length of the statement varies accordingly. Statements must be proportionate to the complexity of the application, but need not be long. Further published recommendations are:

- Design and access statements help to ensure that development proposals are based on a thoughtful design process and a sustainable approach to access.
- Statements should improve the quality of proposals: in preparing the design and access statement, developers need to consider and subsequently explain the merit of the design and how it relates to the existing setting.
- Design and access statements enable local planning authorities to better understand the analysis which has underpinned the design and how it has led to the development of the scheme. This helps negotiations and decision-making and should lead to an improvement in the quality, sustainability and inclusiveness of the development.
- Design and access statements allow local communities, access groups, amenity groups and other stakeholders to involve themselves more directly in the planning process without needing to interpret plans that can be technical and confusing. This helps to increase certainty for people affected by development and improve trust between communities, developers and planners. It also enables the design rationale for the proposal to be more transparent to stakeholders and the local planning authority.

2.3 What Is Required: The Design Component

The design and access statement should cover both the design principles and concepts that have been applied to the proposed development and how issues relating to access to the development have been dealt with. Statements should evolve throughout the design and development process.

A design and access statement for a planning application should explain the design principles and concepts that have been applied to particular aspects of the proposal. These are:

- Scale: Scale is the height, width and length of a building or buildings in relation to its surroundings.
- Amount: The amount of development is how much development is proposed. For residential development, this means the number of proposed units for residential use and for all other development, this means the proposed floor space for each proposed use.
- Layout: The layout is the way in which buildings, routes and open spaces (both private and public) are provided, placed and orientated in relation to each other and buildings and spaces surrounding the development.
- Landscaping: Landscaping is the treatment of private and public spaces to enhance or protect the amenities of the site and the area in which it is situated through hard and soft landscaping measures. Statements should also explain the function of the landscaping, for instance for sustainable drainage purposes, providing shading or other climate change adaptation purposes, and explain how it will be maintained.
- Appearance: Appearance is the aspect of a place or building that determines the visual impression it makes, including the external built form of the development, its architecture, materials, decoration, lighting, colour and texture.

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2.4 What Is Required: The Access Component

It is important to note that the requirement for the access component of the statement relates only to 'access to the development' and therefore does not extend to internal aspects of individual buildings.

Statements should explain how access arrangements will ensure that all users will have equal and convenient access to buildings and spaces and the public transport network.

The statement should address the need for flexibility of the development and how it may adapt to changing needs.

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3. Design & Access Statement

3.1 Site Description



The Armitage Sports Centre is the main University of Manchester sport facility.

It is home to many of the university Athletic Union sport clubs and community teams and offers a diverse range of activities including football, badminton, squash, netball, table tennis, basketball and more.

The site is a grass playing field, approximately 3.6ha.

The site is located in a primarily residential area and residential properties bounding the site on one side (Eastern).

The site does benefit from a walled boundary to the South where the site adjoins Moseley Road and residential properties situated along the Southern side of this carriageway.

To the North and West, the site connects to the wider University campus with associated sports facilities and provisions immediately abutting the proposed development area.

Site levels are relatively flat, although the local topography generally falls to the South East.

Please refer to Appendix F Photographs of Site for images of the subject area.

The University's main sports hub is located at the Armitage Centre which forms part of the Fallowfield Campus. There are a number of facilities which comprise the existing Armitage Sports Centre, including:

- Double Sports Hall
- 70 station gym
- Conference / activity room

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- Dance Studio
- squash courts
- Two standard size sand dressed AGPs
- Four 5-a-side 3G AGPs
- Two polymeric surface tennis courts
- Grass playing pitches including:
- Five football pitches
- Two rugby pitches
- Lacrosse pitch
- Cricket square and outfield (summer only) and
- Changing pavilion.

3.2 Purpose and Use

The proposed development will include the creation of a new external sports pitches (artificial grass pitches) with perimeter ball-stop fencing, floodlights (artificial lighting) and clean accesses including:

Hockey:

2no. 101.40 x 63.00m pitches (91.40 x 55.00m pitch size)

Rugby:

1no. 132.00 x 80.00m pitch (122.00 x 70.00 pitch size including in goal areas)

Football:

1no. 106.00 x 70.00m pitch (100.00 x 64.00m pitch size)

The provision of the new external sports pitches (artificial grass pitches) will create extended provision at The University of Manchester for the benefit of students and its partner organisations to gain the maximum sports developmental outcomes.

The pitches will be available for eighty hours a week with expected use of sixty two hours a week and forty two hours a week during vacations.

Hockey pitches will be used for National League hockey matches and potentially national squad training.

These facilities are also associated within the wider campus redevelopment proposals as the new sports pitches will form part of the mitigation for the loss of the rugby pitch for student accommodation as identified in the adopted Development Framework for the site.

Extended use during the daytime and evenings is possible because the proposed artificial grass pitches are more resilient during winter weather conditions.

The new artificial grass pitches will offer a variety of pitches and training areas for respective designated sports within the same enclosed playing space to support development plans into grassroots development as well as national level competition and elite training.

3.3 Amount

The proposed development has been prepared in accordance with published Design Guidance Notes pertinent to external artificial sports facility provision including:

- England Hockey
- The International Hockey Federation
- The Football Association
- Rugby Football Union
- World Rugby
- Sport England

The amount of development for each sport is proposed as follows:

Hockey		
Aspect	Quantity	Area (m2)
Sand dressed artificial turf pitch area	1no. 101.4 x 63m	12776.4
Macadam surfaced spectator area	1no. 101.4 x 4m	405.6
PCC slab surfaced mowing margin	1no. 399 x 0.6m	240
Macadam surfaced clean access (pedestrian / maintenance and emergency)	83 x 3m	249
Total		13671m2

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Rugby		
Aspect	Quantity	Area (m2)
3G artificial turf pitch area	1no. 132 x 80m	10560
PCC slab surfaced mowing margin	1no. 305 x 0.6m	183
Total		10743m2

Football		
Aspect	Quantity	Area (m2)
3G artificial turf pitch area	1no. 106 x 70m	7420
Macadam surfaced spectator area (including 2no. goal storage areas)	1no. 106 x 4m	424
Macadam surfaced goal storage areas – lateral	2no. 7.5 x 2m	30
Macadam surfaced goal storage areas – longitudinal	2no. 30 x 3m	180
PCC slab surfaced mowing margin	1no. 267 x 0.6m	160
Macadam surfaced clean access (pedestrian / maintenance and emergency)	4 x 6m	24
Total		8238m2

3.4 Construction Work

The proposed sequential development works necessary to implement the development will comprise:

Type
Site Establishment
Site Clearance, Excavations and Groundwork
Drainage
Pitch Base
Artificial Turf Playing Surfaces with Shock Pads
Perimeter Ball-Stop Fencing
Sports Equipment, Site Furniture, Signage and Sundries
Floodlights
Reinstatement
Performance Testing
After Care
Maintenance Equipment and Storage

3.5 Layout

The proposed development will replace a proportion of the existing grassed field at The Armitage Centre and will replace and existing grass playing pitches (winter and summer) including cricket, football and rugby.

The AGP will be sited close to existing onsite facilities and amenities; enabling convenient access to and from changing rooms offering changing accommodation and administration facilities.

This location will also afford convenient pedestrian, maintenance and emergency access as well and providing for suitable management, supervision and security.

The close proximity of onsite car parking is ideal for community involvement and participation.

The close proximity of existing facilities help to create a safe, vibrant and successful place and an accessible environment.

3.6 Scale

New perimeter fencing is required around the external sports pitches (artificial grass pitches) to provide an adequate ball-stop to retain balls within the field of play and also to offer a degree of security to the facility.

The proposed overall height for new open steel mesh fencing and entrance gates to all external elevations will range from 4.50m to 8.00m above ground level.

Floodlights are required around the pitch to facilitate use during evenings and throughout the winter months, thereby enabling the facility to be used to its full potential.

The proposed floodlight systems comprise 15.00m high masts mounted with associated luminaires.

3.7 Building level

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Finished (floor) levels to the external sports pitches (artificial grass pitches) will approximately reflect existing ground levels and the new pitches may be designed to accommodate a (minor) balanced cut and fill of the existing sub-grade materials onsite resulting in improved symmetry to longitudinal and lateral profiles.

As necessary, this re-modelling of the sub-grade materials (once surfacing materials are removed) is expected to be a minor exercise given existing shallow and relatively even topography. Proposed earthworks may produce dual surface gradients (longitudinal and lateral), resulting in a diagonal axis containing an approximate 1:100 (1%) maximum slope. This is necessary to preserve unbiased ball roll characteristics.

3.8 Landscaping

It is acknowledged that the proposed development will replace a large proportion of the existing grassed playing field at The Armitage Centre.

With the exception of hard landscaping, ground surrounding the development shall be reinstated to grass (soft landscaping) to enable effective grounds maintenance to the wider playing fields.

All natural reinstatement works shall be implemented in accordance with BS 4428 Code of Practice for General Landscape Operations.

No further soft landscaping or planting scheme works are planned.

Hard landscaping treatment around the facility is restricted to macadam paving necessary to form clean access for pedestrians and vehicular access for maintenance as well emergencies.

3.9 Appearance

The intention is develop the pitch with minimal visual impact when viewed from any adjacent properties looking into the external sports pitches (artificial grass pitches), which is necessary to satisfy Local Policies which seek to ensure that proposals are sympathetic to its surroundings and will not impact on the visual amenity of the area and the amenity of neighbouring residents.

The proposed finished appearance of principal pitch features is as follows:

3G Artificial Turf Playing Surface

The installed appearance of the playing surface will comprise a 3G artificial turf containing a 60mm pile and partially in-filled with silica sand (for stability) and granulate rubber (for performance), and supplemented with a shock pad when required for rugby performance characteristics. This is consistent with current Rugby Football Union (RFU) and Football Association (FA) technical requirements and recognised as the most suitable artificial playing surface for community competition and youth development.



Example of 3G artificial turf installed

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Sand Dressed Artificial Turf Playing Surface

The new sand dressed artificial turf with associated shock pad laid onto the completed base formation, must be compliant with FIH Certified National Pitch quality standards (England Hockey Category 2).



Example of sand dressed artificial turf installed

Perimeter Ball-Stop Fencing

The installed appearance of perimeter ball-stop fencing will be finished to polyester powder coated RAL6005 Dark Green, all supported with an intermediate posts system of matching colour.

This fencing will appear fitting and discreet against a rural background.

The fencing type will be steel open mesh fencing containing a general 200x50mm aperture (and 66x50mm rebound aperture at lower level). Fence panels are insulated from the posts using neoprene washers to be fitted to every fence post / mesh fixing point to aid noise reduction and acoustic attenuation by reducing rattle and vibration from ball impacts.

Panels are fixed onto posts with 8mm galvanised security bolts to (U shape) brackets containing threaded inserts and neoprene washers (inserts) to reduce panel rattle and vibration from ball impacts. Panel connectors are applied at horizontal panel joins to increase the overall rigidity of the product.



Example of perimeter ball-stop fencing discreet against a rural background

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Perimeter fencing is necessary around a 3G Artificial Grass Pitch (AGP), to ensure the adequate long term protection of the valuable asset for a variety of vital reasons as follows:

- To contain balls within the pitch during training, competition and recreational activities.
- To protect the playing surface from contamination that will severely compromise the longevity of the artificial turf playing surface.
- To help prevent unauthorised use and vandalism.

With the proposal located within the secured playing field, we consider perimeter fencing around the facility will be unobtrusive to the immediate adjacent environment.

Floodlights

The installed appearance of the new artificial lighting system will include 15m high sectional octagonal mid-hinge steel masts with galvanised finish (brushed silver) mounted with luminaires c/w 2kW lamps and fittings finished raw aluminium.



Example of efficient floodlight to a 3G ATP

Hard Standing Areas (Goal Storage Areas / Pedestrian Clean Access / Spectator Areas)

The installed appearance of hard standing areas (pedestrian clean access, goal storage areas and spectator areas) will be grey / black coloured macadam.



Example of clean access

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3.10 Pedestrian And Vehicular Access

The new facilities will be segregated from the surrounding playing fields with new fencing and access gates to maintain site security out of permitted opening hours.

Pedestrian access during the day and during evenings and weekends is provided from the existing entrances to The Armitage Centre.

Vehicular access to the site will be gained from existing driveway adjoining Moseley Road.

For further information please refer to Appendix J_Transport Statement.

3.11 Inclusive Access

Disabled access has been carefully considered throughout the whole design and applied wherever possible. The intention is to provide a smooth transition to and from areas within the sports ground, for use by people of all ages and abilities.

The site is compatible currently for disability parking and access with appropriate circulation routes.

All pedestrian paths shall be compliant with Disability Discrimination Act (DDA) regulations and Sport England's Technical Design Guidance Note 'Accessible Sports Facilities 2010'.

The proposed pitch playing surfaces shall replicate the qualities of fine sports turf.

The type of proposed playing surfaces are credited within Sport England's guidance document 'Selecting the Right Artificial Surface for Hockey, Football, Rugby League and Rugby Union' Issue 002 / December 2010 as:

Hockey:

Surface for competition and training (regional / national)
Preferred surface for competitive hockey and suitable for football training

Football:

Surface for high level competition/training (national/international)
Preferred football surface

Rugby:

Surface for high level competition/training (national/international)
Rugby surface suitable for football

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4. Planning Statement

4.1 The Proposal in Context / Proposal Justification

The University of Manchester Fallowfield Campus Development Framework was endorsed by Manchester City Council's Executive in December 2014.

The Development Framework was prepared to guide the redevelopment of the campus in accordance with relevant policies within the Manchester Core Strategy (2012) and guidance set out in the Fallowfield District Centre Action Plan (2010-2020).

The Development Framework sets out the principles for the redevelopment of the Fallowfield Campus and identifies the following in respect of the sports pitches and replacement facilities:

The University is committed to upgrading its sport facilities. There is currently good provision of pitches (artificial and grass); however, further investment is required to ensure that the site continues to provide excellent sport provision for students, staff and the wider community.

This application forms part of the overall mitigation package for the site redevelopment and this application is being brought forward in advance of the main submission to facilitate the early delivery of the AGPs as part of the mitigation required for the development.

4.2 Justification for the Proposal

There is a need in planning policy terms to provide replacement sports pitches to compensate for the loss of the existing sports pitch proposed for the development of the new halls of residence.

The need to provide replacement sports provision is established in the National Planning Policy Framework and planning guidance published by Sport England.

There is a requirement to relocate the two hockey pitches from the Regional Hockey Centre at Belle Vue as part of the planning permission for the creation of the new Speedway facility and Belle Vue Sports Village.

The facilities are to be provided at the Armitage Centre as part of the relocation strategy, which will continue to ensure that the requirements for hockey clubs in this area can continue to be met within the local area.

The provision of two full sized hockey AGPs at the Armitage Centre would clearly result in a loss of existing grass pitches.

Based on the current layout the following pitches would be lost (in part or fully) or require relocation as a result of the creation of the new hockey AGPs:

- Rugby 1
- Football 3
- Football 4
- Cricket

The creation of the two additional AGPs would additionally require a further reconfiguration of the University's existing pitches and decrease the space available for grass playing pitches.

The demand for the new facilities to replace the pitches to be lost is primarily generated by the University sports teams.

The University wants to retain the Fallowfield Campus as its primary sports hub.

There is also a desire to facilitate the majority or all of the training requirements for the University sports teams at the Armitage Centre to minimise the use of external facilities and generally enhance the student experience.

The existing AGPs at the site are also extensively used by local sports clubs, schools and the wider community and the proposals represent a significant opportunity to increase the local community's access and participation in sport.

Currently, AGPs are used by Didsbury Northern Hockey Club for training and weekend fixtures and Brooklands Manchester University Hockey Club for weekend fixtures.

The ability to re-provide and enhance access for these users, including summer sports camps, is important to the University.

4.3 Pre Application Consultation

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The proposed creation of the new sports pitches has been discussed with planning and sport officers from Manchester City Council.

4.4 Principle of the Development

Sport England will be a statutory consultee on this planning application as the proposal affects a playing field.

The following details are provided to enable Sport England's informed assessment of whether the proposed benefits to sport associated with development would be sufficient to outweigh the detriment associated with the impact on the playing field and satisfy exception policy E5 of Sport England's playing fields policy 'A Sporting Future for the Playing Fields of England 1997'.

This policy statement defines in planning terms what is considered a 'playing field', which is; the whole of a site that encompasses at least one playing pitch. A playing pitch is a delineated area, which together with any run off is of 0.2 hectares or more.

The aim of the policy is to ensure that there is an adequate supply of quality pitches to satisfy the current and estimated future demands of the pitch sports.

The following details are provided to enable an assessment:

Requirement	Detail provided
Impact the proposed development would have on playing pitch provision including proposed summer / winter playing pitches	It is acknowledged that the removal of an existing usable playing field, approximately sized 3.6ha to enable the development of the proposed external sports pitches (artificial grass pitches) is unavoidable.
Existing community use of the playing field	<i>Football</i> The University Men's and Ladies' Football Clubs use the grass football pitches for British University and College Sports (BUCS) games on Wednesday afternoons during term time. The University has four men's football teams and three ladies football teams. Football pitches 3, 4 and 5 are used by the Men's 3rd and 4th XIs and the Ladies' 1st, 2nd and 3rd XIs; however a maximum of one game per pitch is played on Wednesday afternoons; this equates to a maximum of five games across the five grass pitches on Wednesday afternoons. No training takes place on the grass pitch and the University teams either use the existing AGPs or external facilities. The football pitches at the Armitage Centre are also used by two local clubs in local leagues: Old Mancunians AFC (Lancashire Amateur League); and Manchester Vets (Tameside Veterans League) at weekends. Old Mancunians have a total of four teams, with the 1st, 2nd and 3rd XIs using the Armitage Centre pitches for home fixtures with their 4th XI using the University's sports ground in Wythenshawe. Manchester Vets has two teams that play home fixtures at the Armitage Centre. It would be anticipated that on average two to three fixtures (approximately half) would be accommodated at the Armitage Centre at weekends between both clubs. The pitches are not currently used to their full capacity, this is primarily due to the University's maintenance regime for the pitches and its ability to accommodate fixtures at peak times (Wednesday and weekends) on its existing facilities without 'doubling up'. If required the pitches Football 1 and Football 2 would be capable of accommodating an additional game at peak

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	times (match days). There is also football use of the existing AGPs, however this is generally on an ad-hoc 'pay and play' basis. It is also noted that the most recent assessment (undertaken by Technical Surfaces) of the two existing AGPs at the Armitage Centre identified that there is too much football play taking place on the sand dressed pitches at present and that this is having an adverse impact on the surface. <i>Rugby</i> The rugby pitches are only used by University teams for Wednesday afternoon BUCS fixtures. The University Rugby Club operates three Men's teams and two Ladies teams. In addition there is one Men's Rugby League team. A maximum of one game per pitch takes place on Wednesday afternoons during term time. Rugby 1 pitch is only used for rugby union games and rugby 2 pitch can be used for both rugby union and league. The University also has one rugby pitch at Wythenshawe which is also utilised for BUCS games on Wednesday afternoons. Over the previous season (2014/15) all rugby league fixtures took place at Wythenshawe, with the Armitage Centre being used for rugby union. There are normally three games (across both codes) that take place at the University's facilities on Wednesday afternoons (in very occasional instances where a fourth pitch is required Broughton Park is used). All existing training takes place on the existing AGPs or at external venues. There is no external or weekend use of the rugby pitches. <i>Lacrosse</i> The Lacrosse pitch at the Armitage Centre is not a standardised size and is not used by the University's Lacrosse team except on very limited occasions, normally ad-hoc practice. The University recorded one game taking place on this pitch during the 2014/15 season which related to the University's 'development' team. The University's Lacrosse club has a partnership agreement with Timperley Lacrosse Club and all University BUCS games take place at the pitches at Timperley's pitches. The existing AGPs at the Armitage Centre are used for training. <i>Cricket</i> The Cricket pitch at the Armitage Centre is only occasionally used with approximately 15 matches being played on the pitch either from Wednesday or weekend fixtures in 2014. The pitches are only utilised by the University and this
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	tends to be Men's 5th and 6th XIs and Ladies 1st XI. The majority of the University fixtures take place at local club cricket grounds, with training taking place at local indoor venues.
Community use of the proposed sports facility	<i>Hockey</i> The two proposed AGPs would primarily be used to meet the demand for pitches generated from the loss of the facilities at Belle Vue. The University is currently working with England Hockey to implement a hockey development plan. England Hockey views the proposals as a significant opportunity to increase participation in the sport, particularly for students and juniors. This would become the only four pitch facility outside of private schools and as such is a significant opportunity for hockey. <i>Football</i> At present the primary community use is from local football teams as previously identified which use the Armitage Centre facilities at weekends. The teams primarily use the two pitches that are being retained at the Armitage Centre. Over the previous season football pitches 3, 4 and 5 at the Armitage Centre were used a total of nine times at weekends, which represents a very low level of use. The proposed AGP (or grass pitch) would be available for use by both football clubs for weekend fixtures and could accommodate more than this level of usage. Alternatively the existing, retained pitches could accommodate two consecutive games in the instances where a third grass pitch was required. It should also be noted that there is capacity at Wythenshawe to accommodate further use at weekends and this will increase with the creation of the two additional pitches. The proposed AGP (or grass pitch) would also be available for use by the wider community and will further serve to improve accessibility to sports pitches in this area and help to reduce pressure on the existing facilities. The pitches would also be available for local schools to use and the University is working with the FA to determine additional usage requirements. <i>Rugby</i> There is no weekend use of the rugby pitches at present by the community or local clubs. Initial discussions have taken place with the RFU Development Officer for the local area to determine additional usage for local clubs and schools.
Community access formally secured through a community use agreement	Although no formal community use agreement shall be put in place but the University are working with the relevant NGBs and interested groups to ensure that opportunities to increase participation in sport are

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	maximised. The University facilities are accessible for community use at present and this accessibility will be further enhanced through the provision of the new AGPs. The new pitches will be available for eighty hours a week with expected use of sixty two hours a week and forty two hours a week during vacations. The proposed AGPs provision at the Armitage Centre will significantly increase the capacity of the venue to accommodate multiple games at peak times on Wednesday afternoons. The proposed long term strategy is currently being agreed with Sport England, Manchester City Council and The University's advisors.
Sport related benefits of the proposed artificial grass pitch for the applicant and the community. This explanation should provide detail on the deficiencies of the existing facilities and set out how the new facilities will address such deficiencies and help with the delivery of sport and meet community facility needs. Furthermore, the explanation should provide details regarding which sports the new artificial grass pitches will accommodate.	The proposed works are scheduled to take place during the 2015/16 winter season and proposed sports related benefits are currently being agreed with Sport England and The University's advisors. Such discussions are ongoing between the University, Manchester City Council and Sport England in order to agree the overall package of mitigation required for the development identified in the Development Framework for the site. However, the significant benefits from the proposed AGPs will form a key component of the overall mitigation package. An example of these discussions and agreements are; • increasing the capacity of the site for sport; • providing appropriate facilities for the University to meet its sporting needs including training facilities; • Increasing the potential of the site to accommodate further community use; • Providing facilities, which will help to meet the overall sporting needs in Manchester. • Suggest rewording the existing sentence to say that
Explanation of which sports the new artificial turf pitch will accommodate	The proposed playing surfaces are credited within Sport England's guidance document 'Selecting the Right Artificial Surface for Hockey, Football, Rugby League and Rugby Union' Issue 002 / December 2010 as: Hockey: Surface for competition and training (regional / national) Preferred surface for competitive hockey and suitable for football training Football: Surface for high level competition/training (national/international) Preferred football surface Rugby: Surface for high level competition/training (national/international) Rugby surface suitable for football
Proposed surface type	Hockey:

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	Sand dressed artificial turf with associated shock pad (England Hockey Category 2) Football: 3G artificial turf containing a 60mm pile. Rugby: 3G artificial turf containing a 60mm pile with associated shock-pad
Accurate site plans (to scale) showing the existing and (if applicable) proposed winter and summer playing pitch layouts on the playing field. This information is required in order to make an informed assessment of what impact the proposed development would have on playing pitch provision.	Please refer to drawings SSL1899 06 Existing Pitch Markings SSL1899 07 Proposed Pitch Markings. The University's proposals for the replacement playing pitches would affect pitches Rugby 1, Rugby 2, Football 3, Football 4, Football 5, Lacrosse and Cricket. The pitches have been configured in their current layout for approximately 40 years, save the addition of pitch Football 5 in 2003. There are occasional tournaments held at the grounds which would temporarily alter the layout of the pitches, however these are infrequent. There are playing pitches owned by Manchester Grammar School to the north and east of the Rugby 2 pitch. These pitches are used by the Grammar School for rugby on Wednesday afternoons and Saturday mornings.

Given the above details, we hope Sport England will agree that the proposed development is acceptable under the following exception policy:

E5 – The proposed development is for an indoor or outdoor sports facility, the provision of which would be of sufficient benefit to the development of sport as to outweigh the detriment caused by the loss of the playing field or playing fields.

Exception E5 is, in essence a cost / benefit analysis exercise which seeks to balance the sporting benefits associated with a facility against the costs to pitch sports associated with the loss of playing field.

4.5 Facility Management

The University currently has two AGPs at the Armitage Centre which it maintains. These are permitted to be in operation from 8am until 10pm seven days a week and it is intended to gain permission for the new facilities with the same opening hours of usage. The ongoing pitch maintenance activities that occur on an ongoing basis and that would be extended to the new pitches include:

- Lighting inspection annually
- Lighting repairs annually increasing each year for replacement lamps etc...
- Lighting capacitor replacement every 2 - 3 years
- University staff pick litter from the pitches daily
- University staff drag brush the surface on a weekly basis
- Contractor weed kill the pitch perimeter at least annually
- Contractor removal and replacement of contaminated sand on a yearly basis
- Contractor's carry out seam repairs to artificial grass surfaces from year 3 onwards

The University also commissions an annual assessment of the AGPs to identify work that needs to be undertaken to the surfaces to prolong their life or to maintain these to the required standards.

The long term maintenance of the University's pitches is secured through a rolling five year budget. The University financial procedures do not allow the provision of a sinking fund for audit compliance reasons.

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The University would commit to the long term maintenance of the pitches through Long Term Maintenance planning (LTM). The University has a 5 year LTM plan, updated annually, in which it identifies all essential maintenance works for sports facilities. The University Estates Directorate fund and manage the agreed scope of works each year. Resurfacing of the pitches or any other high cost maintenance would be included in the 5 year plan at the appropriate time.

The University's rolling budget for maintenance of the sports pitches effectively operates as a long term management fund for its facilities.

4.6 Maintenance Considerations and Sustainability

The maintenance of the facility will be managed by the University on a daily and weekly basis with specialist equipment utilised as necessary to perform specialised reports and annual and biannual maintenance routines.

The artificial grass pitches will be maintained in line with the manufacturers' recommendations.

4.7 Design Standards

The schedule of works necessary to implement the proposed developments will be designed and must be constructed in accordance and full compliance of the following sources of appropriate technical guidance and performance quality standards:

Artificial Grass Pitches

- The Football Association (FA) Guide to Football Turf Pitch Design Principles and Layouts
- FIFA Quality Concept for Football Turf – Handbook of Requirements – January 2012 – FIFA*1 certification required (or equivalent IATS standard)
- FIH Certified National Pitch - A pitch that meets the set of field test requirements described in the FIH Handbook of Performance, Durability and Construction Requirements for Synthetic Turf Hockey Pitches and uses a National Turf product, which is suitable for other international matches (not global level) and higher level national competitions (national level turf).
- Rugby Football Union: Artificial Grass Pitches for Rugby and Association Football: Performance Standards and Design Guides for Community Use Pitches and Training Areas
- World Rugby Performance Specification for Artificial Surfaces for Rugby - Regulation 22 (henceforth referred to as 'IRB Regulation 22'): Including anticipated changes to Head Injury Criteria (HIC) characteristics / requirements

Ball-Stop Fencing

- BS EN 15312:2007 A1:2 Free access multi-sports equipment – Requirements, including:
- Clause 5.5.1.2.1 Resistance to repeated impact of footballs
- Clause 5.5.1.2.2 Very intense forceful impact resistance to player's kicks

Pathways

- Sport England Design guidance Note – Accessible Sports Facilities – Issue 003 / April 2010

Floodlighting

- The Institute of Electrical Engineers Wiring Regulations BS7671 (The Seventeenth Edition Wiring Regulations).
- England Hockey
- Rugby Football Union (RFU)
- The Football Association (FA) Guide to Football Turf Pitch Design Principles and Layouts
- BS EN 12193:2007 Light and lighting. Sports lighting
- The Institution of Lighting Professionals (ILP): Guidance Notes for The Reduction of Obtrusive Light GN01:2011

Generally

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Registered in England and Wales under registration number 05154061
VAT number GB 687834179

- Works must comply with current Building Regulations and British / European Standards applicable to the proposals

4.8 Planning Policy and Guidance Review

National Planning Policy Framework

We believe the proposal is in accordance with the National Planning Policy Framework (NPPF), published by the Department for Communities and Local Government, March 2012; specifically in the following policy terms:

Paragraph 73

NPPF paragraph 73 confirms that access to high quality open spaces and opportunities for sport and recreation can make an important contribution to the health and well-being of communities.

Paragraph 74

NPPF paragraph 74 confirms that existing open space, sports and recreational buildings and land, including playing fields, should not be built on unless the loss resulting from the proposed development would be replaced by equivalent or better provision in terms of quantity and quality in a suitable location; or the development is for alternative sports and recreational provision, the needs for which clearly outweigh the loss.

This proposal satisfies the above planning objectives and is beneficial to the advancement of sports activity and development. It will deliver genuine beneficial outcomes as follows:

- Implement social, recreational and cultural facilities and services for community needs to enhance the sustainability of the University and the surrounding Manchester area.
- Provide access to high quality open spaces and opportunities for sport and recreation can make an important contribution to the health and well-being of communities.
- Compensate the loss of a usable playing field resulting from the proposed development by an equivalent, better provision by more robust / resilient artificial grass pitches.

The proposed development will provide a clean, safe and modern facility to inspire sporting participation and will enhance the existing sport and recreation provision.

It will provide a genuine asset for the applicant and local community sporting groups and organisations.

It will encourage and inspire more people of all ages to participate in sport.

For these reasons, we believe the following objectives have been satisfied:

- Supporting and enhance the continued regeneration.
- Promotion of social inclusion and community cohesion.
- Health and wellbeing.
- Promoting more sustainable development.

The National Planning Policy Framework introduced a presumption in favour of sustainable development and this can be set out as three dimensions – Economic Role, Social Role and Environmental Role.

This scheme aims to contribute to the above areas.

- Economic Role – providing a self sufficient and sustainable facility for use by the University and its wider community.
- Social Role – providing a modern facility that will encourage recreational activity to youth and the wider community with the benefits to health and wellbeing associated with this.
- Environmental Role – ensuring that the existing natural environment is not harmed and that the facilities are designed to conserve and reduce energy wastage wherever possible.

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Manchester City Council Core Strategy (2012)

The Manchester City Council Core Strategy sets out the local planning policies for the determination of planning applications in the City.

It specifies in Policy EN10 Safeguarding Open Space, that:

The Council will seek to retain and improve existing open spaces, sport and recreation facilities to the standards set out above and provide a network of diverse, multi-functional open spaces. Proposals will be supported that:

- Improve the quality and quantity of accessible open space, sport and recreation in the local area
- Provide innovative solutions to improving the network of existing open spaces, increase accessibility to green corridors, and enhance biodiversity
- Improve access to open space for disabled people

Proposals on existing open spaces and sport and recreation facilities will only be permitted where:

- Equivalent or better replacement open space, sport or recreation facilities will be provided in the local area; or
- The site has been demonstrated to be surplus for its current open space, sport or recreation function and the City wide standards set out above are maintained, and
- it could not fulfil other unsatisfied open space, sport or recreation needs, and
- a proposed replacement will remedy a deficiency in another type of open space, sport or recreation facility in the local area; or
- The development will be ancillary to the open space, sport or recreation facility and complement the use or character.

4.9 Impact Mitigation

The design process for the proposed external sports pitches (artificial grass pitches) has considered and incorporated a variety of features to assist in reducing the impact of the development to immediate neighbours and the local environment including:

Vehicular parking provision	Onsite parking provision can accommodate the expected vehicular traffic both during the day and during evenings and weekends for community users – please refer to Appendix J_Transport Statement. Green travel opportunities including walking and cycling will also continue to be promoted by The University whenever possible. The pitches are in close proximity to the main University halls of residence, a large student population and main bus route therefore has the benefit of being highly accessible by non-car modes of transport by its main user groups.
Controlled hours of use	Limitation of the lighting impact will be controlled by the strict management of permitted operating times. It is intended that time clocks will be installed to ensure lights are extinguished at the curfew hour every night of use. Time clocks will be set to operate within a pre-programmed time including a seasonal changeover facility for BST and GMT.
Sympathetic appearance	The finish of proposed artificial grass playing surfaces will offer a similar appearance to amenity grass. The open steel mesh ball-stop fencing (polyester powder coated Dark Green RAL6005) will be discreet against a rural background. The 15m high floodlight masts will offer a slim-line profile, which will minimise daytime impact.

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Acoustic attenuation	Fence panels will be insulated from the posts using neoprene rubber washers to be fitted to every fence post / mesh fixing to aid noise reduction by reducing rattle and vibration from ball impacts. Also, unlike a small ball-court, playing lines shall be permanently marked at a distance of 3m to 5m away from the pitch perimeter to mitigate balls impacting onto the fence.
Efficient floodlight design	The proposed artificial lighting design complies with the requirements for an Environmental Zone E2, which is low district brightness, for example a village or relatively dark outer suburban locations. All floodlight luminaires are designed with a zero upward light ration (without the use of additional accessories) and this will result in low vertical overspill onto adjacent land. The front glass of every floodlight is limited to a low fitting angle above the horizontal plane, resulting in a minimal floodlight appearance with reduced area of reflector visible to onlookers.

4.10 Sustainability

The proposed development will require the substantial removal and development of a proportion of grassed land at The Armitage Centre; however a variety of efficiencies will be applied to the construction stage to mitigate environmental impact and benefit the carbon footprint of the development.

Significant reduction in the use of energy and / or water, and reduce waste in the construction and operation of the facility will be achieved by:

- Excavations limited to the removal of turf and topsoils only.
- Imported granular sub-base aggregates to form the pitch foundations shall be locally sourced from local quarries or suppliers to reduce transportation.
- The implementation of the development does not require water supplies.
- Control gears for the floodlight system shall include photocell units and time clocks, to ensure artificial lighting does not illuminate before dusk and lighting does not exceed the permitted curfew hour.
- For the artificial turf playing surface, modern textile manufacturing methods and technology continues to advance. As such, it is common place for artificial sports surfaces to recycled at the end of their life cycle and be re-made into new similar surfaces. It can be expected that technologies will enable this environmental sustainability to be common place in the future, to the benefit of this proposal when refurbishment is due after an initial life cycle.
- With regards to the granulate rubber infill used within 3G artificial grass surfaces, this material is a recycled product produced from previous vehicle tyres.

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End of document

Published by	Tom Betts, Consultant
Signature	
Issued	03 July 2015

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TECHNICAL NOTE

Project:	FALLOWFIELD CAMPUS SPORTS PITCH PROPOSAL
Project No:	SK21502
Date:	14 TH JULY 2015
Subject:	TRANSPORT IMPACT

1. Purpose

- 1.1 The University of Manchester is to submit an application for full planning permission a proposal to create new external sports pitches (artificial grass pitches) at the Armitage Centre on the Fallowfield Campus.
- 1.2 The proposal seeks to construct the following artificial grass pitches:
 - 2 no. hockey pitches
 - 1 no. rugby pitch
 - 1 no. football pitch
- 1.3 This technical note has been produced to examine the transport and parking implications of the proposal.

2. Existing Sports Pitch Provision

- 2.1 The red line boundary for the proposal currently provides the following grassed pitches:
 - 1 no. rugby pitch
 - 3 no. football pitches
 - 1 no. lacrosse pitch
- 2.2 In summer the area within the red line boundary is used as a cricket pitch.
- 2.3 In addition, the following other pitches are currently available at the Armitage Centre. These pitches are outside the red line boundary.
 - 1 no. rugby pitch
 - 2 no. football pitches
 - 2 no. hockey pitches (all weather)
- 2.4 The existing rugby pitch above has been identified for removal in the adopted Development Framework as part of the redevelopment of the student accommodation on the Campus. A planning application for this will be submitted later this year.
- 2.5 A total of 10 sports pitches are currently available at the Armitage Centre. In addition to this the University maintains a number of football, hockey and rugby pitches at Wythenshawe and Belle Vue. The University also has an existing arrangement with Timporley Lacrosse team to use its pitches, as the lacrosse pitch at the Armitage Centre does not meet the required dimension standards.

3. Existing Parking Arrangements

- 3.1 The Armitage Centre is served by a large car park located to the east of the Centre building and north of the Pavilion. An additional parking area is provided to the south of the Armitage Centre adjacent to the Moseley Road Campus access junction. This car park has been observed to be used mainly by away team car drivers and coaches.
- 3.2 In addition, when fixtures are occurring, parking is provided to the south of the main car park and north of the existing hockey pitches.
- 3.3 Table 3.1 provides details of the existing parking provision serving the Armitage Centre.

Location		Standard	Accessible	Coach	Total
1	Armitage Centre Main Car Park	117	4	0	121
2	Armitage Centre Overspill	10	0	0	10
3	Moseley Road Car Park	97	0	6	103
Total		224	4	6	234

Table 3.1: Armitage Centre Parking Provision

- 3.4 The number of spaces available at the overspill parking area to the south of the main car park has been estimated based on maximum surveyed occupancy, as this area is unmarked.
- 3.5 A number of parking occupancy surveys have been undertaken of the usage of the Campus parking areas. This has been undertaken as part of the Transport Assessment that will be included in a planning application for the proposed redevelopment of the Fallowfield campus halls of residence. The application for this will be submitted later this year. The occupancy surveys were undertaken on the following four occasions during the winter sports season:
- Wednesday 28th January
 - Sunday 15th February
 - Wednesday 25th February
 - Thursday 26th February
- 3.6 All of the surveys were undertaken during the second semester before the Easter holidays. The surveys on Wednesday 28th January and Wednesday 25th February coincided with a 'busy' Wednesday existing sports pitch use.
- 3.7 Table 3.2 shows the maximum parking occupancy recorded at key periods during the parking surveys.

Location		Wednesday (28.01.15) 2.30pm	Sunday (15.02.15) 12.30pm	Wednesday (25.02.15) 12.30	Wednesday (26.02.15) 2.30pm	Thursday (27.02.15) 1.15pm	Thursday (27.02.15) 7.15pm
1	Armitage Centre Car Park	55%	47%	46%	62%	39%	30%
2	Armitage Centre Overspill	100%	100%	40%	70%	90%	10%
3	Moseley Road Car Park	21%	12%	8%	21%	6%	8%
Total		42%	34%	29%	44%	26%	19%

Table 3.2: Armitage Centre Parking Area Occupancy

- 3.8 The surveys show that the peak demand for parking occurs on a Wednesday at 2.30pm. This coincides with the peak pitch use at the Armitage Centre. The peak occupancy of coach parking spaces on the Moseley Road car park occurred on Wednesday afternoon, with a maximum of five spaces in use.
- 3.9 The surveys show that even at peak pitch activity periods the car parks are currently operating significantly under capacity. Site observations also show that there is no overspill parking from the Armitage Centre to other areas of the Campus or externally on to the wider network.
- 3.10 A very high number of users of the Armitage Centre were also observed to access the facility by non-car modes.
- 3.11 It was noted during the surveys that a number of taxi vehicles were using the main car park at the Armitage Centre as a layover between call-outs.

4. Existing Sports Pitch Usage

- 4.1 The Armitage Centre is the main University of Manchester sport facility. It is home to many of the University Athletic Union sport clubs and community teams. It offers a diverse range of activities, including football, badminton, squash, netball, table tennis, basketball and more.
- 4.2 At the end of each semester the building is also used for exams. During this period it is noted that the main car park occupancy is very high. However, this will not be impacted upon by the pitch proposal.
- 4.3 The pitches within the red line boundary are currently used for home fixtures for a number of University and local community teams. These fixtures generally occur on a Wednesday afternoon and Sunday. Surveys of the usage of the existing parking areas serving the Armitage Centre show that Wednesday afternoons (from 2pm) are the peak periods of activity at the Armitage Centre.
- 4.4 Team training events are also held throughout the week at the Armitage Centre and other University sporting locations in Manchester.
- 4.5 Figure 4.1 shows the number of pitches in use on a 'busy' Wednesday during the winter season. All of the pitches are in use on a 'busy' Wednesday with the exception of the lacrosse pitch, which is infrequently used due to its sub-standard dimensions.

Tables below show pitch usage for the Armitage and Wythenshawe Sites

Armitage Centre Busy Wednesday 5th November 2014

Key

 No Use

	12		13		14		15		16		17		18	
	0	30	0	30	0	30	0	30	0	30	0	30	0	30
Synthetic Pitch A					Mens Hockey 2nd team		Mens Hockey 5th team		AU training					
Synthetic Pitch B			Womens Hockey 2nd team		Womens Hockey 4th team		Mens Hockey 5th team		Womens Hockey 4th team					
Grass Football 1					Mens Football 1st team									
Grass Football 2					Mens Football 3rd team									
Grass Football 3					Womens Football 1st team									
Grass Football 4					Womens Football 2nd team									
Grass Football 5					Womens Football 3rd team									
Grass Rugby 1					Mens Rugby Union 1st team									
Grass Rugby 2					Womens Rugby Union 1st team									
Lacrosse														

Figure 4.1: Existing 'busy' Wednesday Pitch Fixtures

- 4.6 The majority of fixtures on the pitches start at 2pm and finish at 3.30pm, with the exception of matches on existing Hockey Pitch B which has a match starting at 1pm and finishing at 2.30pm and another match starting immediately afterwards.
- 4.7 The parking surveys were undertaken on a 'busy' Wednesday at 2.30pm to coincide with peak pitch activity and parking activity. The surveys recorded the parking demand crossover associated with the timing of fixtures on Hockey Pitch B.

5. Proposal

5.1 The proposal will provide the following artificial grass pitches:

- 2 no. hockey pitches
- 1 no. rugby pitch
- 1 no. football pitch

5.2 The creation of the new external pitches will remove the following grassed provision from the red line boundary:

- 1 no. rugby pitch
- 3 no. football pitches
- 1 no. lacrosse pitch

5.3 Following the development of the new external pitches the following pitches will be available at the Armitage Centre:

	Existing	Proposed
Total Pitch Provision	10	9
Existing Hockey Pitches (outside red line)	2	2
Rugby (red line)	1	1
Rugby (outside red line)	1	1
Football (red line)	3	1
Football (outside red line)	2	2
Lacrosse (red line)	1	0
Hockey (red line)	0	2

Table 5.1: Armitage Centre Pitch Provision

- 5.4 The proposal will result in a net reduction in external pitch provision at the Armitage Centre.
- 5.5 The rugby pitch (outside the red line) has been identified for removal in the adopted Development Framework to facilitate the redevelopment of the student accommodation. An application for this redevelopment will be submitted later this year. For the purposes of this assessment it has been assumed that the rugby pitch will be retained.
- 5.6 The increase in hockey pitch provision aims to meet a shortfall in hockey pitch provision in the Manchester area. It is envisaged that hockey fixtures will be given priority at the new Armitage Centre facilities, with demand for other non-hockey fixtures accommodated between all of the University's sports estate, such as Wythenshawe.
- 5.7 A forecast of the future Wednesday afternoon peak fixtures has been made. This is based on the existing fixtures on a 'busy' Wednesday and the assumption that the new hockey pitches will be fully booked during this period. It is also assumed, as a worst-case, that matches on the existing Hockey Pitch B will continue to start earlier with a cross over period between matches during which time the parking demand will be present for both matches on Pitch B, coinciding with a 2.30 parking peak demand period. To acknowledge this the number of fixtures on the existing hockey pitches at 2.30pm is shown as three matches in both the existing and future scenario.
- 5.8 Table 5.2 shows the 'busy' Wednesday pitch use forecast with the new external pitch provision. The assessment shows that the number of fixtures occurring at the peak pitch activity time (Wednesday 2.30pm) remains as existing.

	Existing Fixtures	Future Fixtures
Total Pitch Activity	10	10
Hockey (existing)	3	3
Rugby (red line)	1	1
Rugby (outside red line Phase 1a)	1	1
Football (red line)	3	1
Football (outside red line)	2	2
Lacrosse (red line)	0	0
Hockey (AGP) new	0	2

Table 5.2: Changes to Peak Pitch Fixtures (Busy Wednesday at 2.30pm)

5.9 In order to forecast the change in demand for parking that will occur on a 'busy' Wednesday as a result of the changes to type of pitches available an estimate has been made of the number of players using currently using each pitch and the number of players in the future, following the proposed changes to pitch type.

5.10 For the purposes of the assessment this estimate is entirely based upon the number of players on the pitch at any time. In reality, each team will also have substitutes, coaches, referees and other attending people. However, as the same method has been used to compare existing and future the approach is considered consistent and suitable to allow an understanding of proportional changes in parking demand when considered against the existing surveyed demand. The number of players for each sport is shown below:

- Hockey: 22 players per pitch
- Rugby Union: 30 players per pitch
- Football: 22 players per pitch

5.11 Table 5.3 shows the changes in players per pitch that will occur as a result of the proposal.

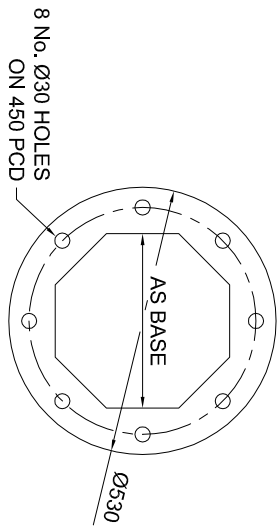
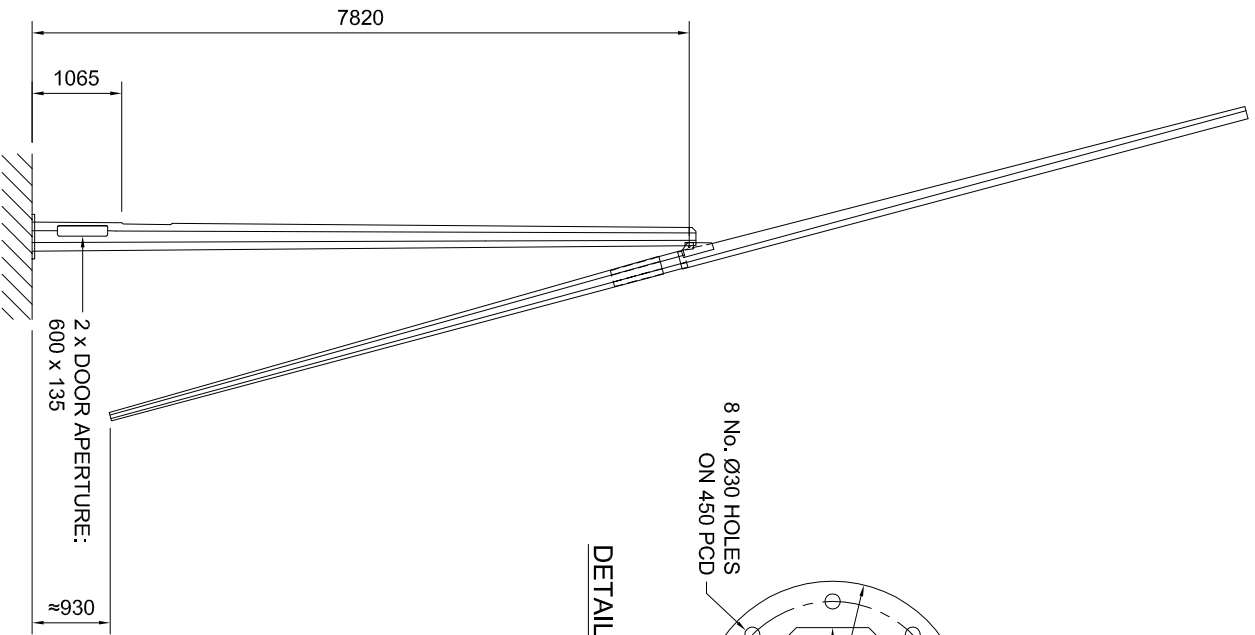
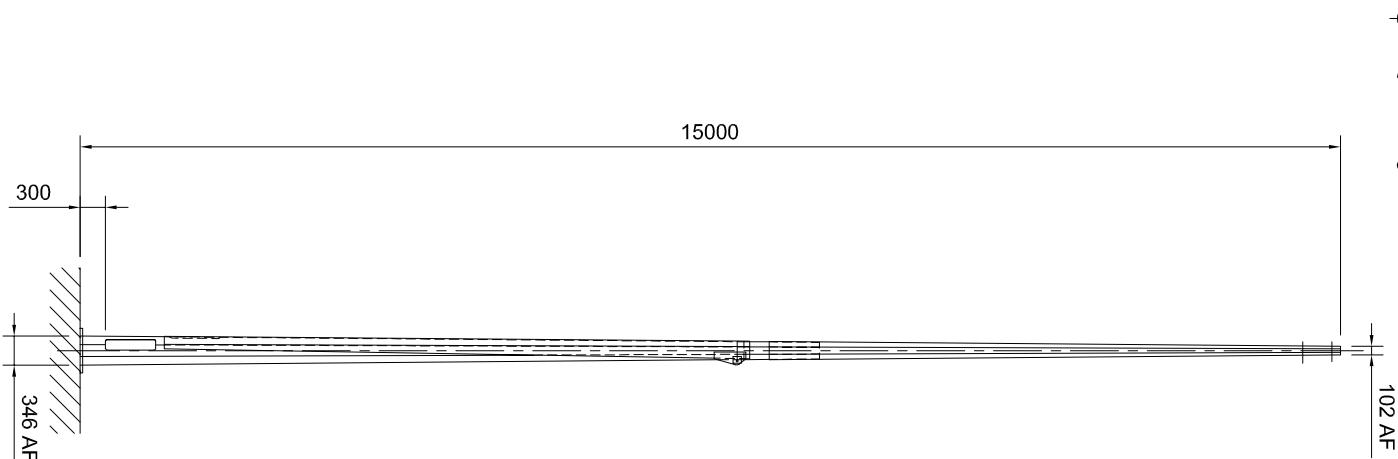
	Existing Fixtures	Future Fixtures
Total Players (All Pitches)	236	236
Hockey (existing)	66	66
Rugby (red line)	30	30
Rugby (outside red line Phase 1a)	30	30
Football (red line)	66	22
Football (outside red line)	44	44
Lacrosse (red line)	0	0
Hockey (AGP) new	0	44

Table 5.3: Changes to Players per Pitch (Busy Wednesday at 2.30pm)

- 5.12 The forecast shows that in terms of 'busy' Wednesday pitch activity that the maximum number of fixtures and number of players using Armitage Centre external areas will remain the same following the introduction of the proposal. On this basis, it is concluded that the recorded parking demand will also remain the same.

6. Impact & Conclusions

- 6.1 The parking surveys in section 3 show that the parking areas currently used by people attending activities at the Armitage Centre are operating under capacity, even during maximum pitch attendance periods on a Wednesday afternoon. It is also shown that there is sufficient space in the Moseley Road car park to accommodate more coaches than recorded on a 'busy' Wednesday afternoon.
- 6.2 The forecast of future activity at the peak time for the sports pitches is shown to remain the same following the introduction of the proposal. On this basis, parking demand associated with the maximum pitch attendance time will remain the same as recorded in the surveys.
- 6.3 The provision of more artificial grass pitches will enable more of the University teams to train during weekday evenings at the Armitage Centre. Any additional training activity will be spread during the evenings and weekends. The parking surveys show that during the evening and at the weekend there is sufficient capacity on the parking areas to accommodate this demand. Furthermore, any increase in training at the Armitage Centre will not result in as many pitches being in use, or as many players being in attendance, simultaneously as occurs on the 'busy' Wednesday examined in this assessment.
- 6.4 The Transport Assessment that will be submitted with the planning application later this year for the redevelopment of the student accommodation on Campus has examined the operation of the existing signalised access onto Moseley Road and local road safety conditions. This assessment shows that the junction is currently operating well beneath acceptable capacity thresholds, with minimal queuing and delay, and that there are no prevalent safety issues at this location. The sport pitch proposal will not significantly alter the operation of the access junction, as the number of people using the pitches during the peak pitch use period will remain the same as existing. Attendance at any additional training events on the new pitches will be spread throughout the week during evening periods and will not coincide with critical highway network peak periods.
- 6.5 This technical note demonstrates that the sport pitch proposal will not have a material impact upon the Armitage Centre parking areas and will not significantly impact upon the operation of the surrounding highway network, in terms of capacity and safety.



DETAIL OF FLANGE PLATE

Nominal Height :	15000mm
Total Length :	15000mm
Planting Depth :	N/A Flange Plated
Column Top AF :	102mm
Column Base AF :	346mm
Height to Door :	300mm
Door Size :	600 x 135
Column Weight :	590 Kg
Reference No. :	Z

Notes

All Dimensions in Millimetres unless stated otherwise.
Where multiple views are shown 3rd Angle Projection is assumed.

Revisions		
Rev.	Description	Date



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Title 15m FLANGED AMARU²
MID HINGED COLUMN

Drwg No. CC6081 Scale:NTS
Sheet 1 of 1

Drawn By: NT Chkd: AS

Ref.

Contract:

Customer:

Date: 09/09/11

Artificial Grass Pitches

43m

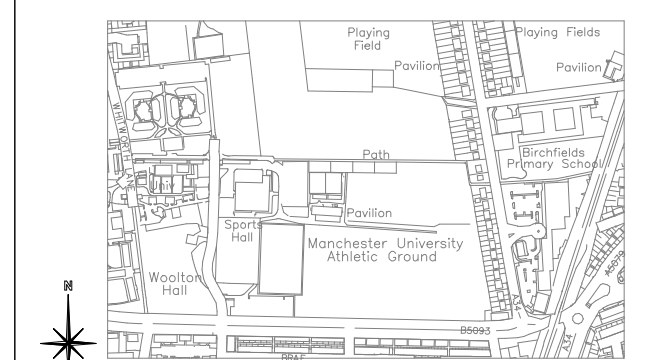


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02	BOUNDARY UPDATED	SMD	24.07.15
00	PLANNING ISSUE UPDATED	WB	08.07.15
00	PLANNING ISSUE	DR	09.04.15
REV	DESCRIPTION	BY CHK	DATE



KEY PLAN

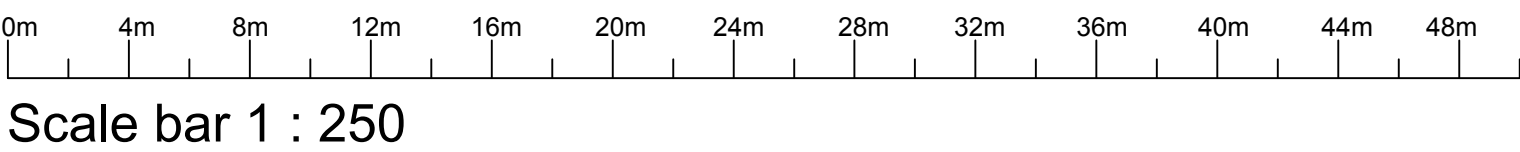


AUTHOR

Wesley Bugg

TITLE
University of Manchester
Artificial Grass Pitches
Block Plan of Site

PROJECT	SCALE	SIZE
SSL1899	1:1250	A1
DRAWING No		REVISION
02		02



NOTES:-

DG Double Gate
SG Single Gate

Twin bar sport rebound
fencing in RAL 6005
(dark green)

6.5m high twin bar
panel system
fence with 1.2m
sport rebound
panel and 1.5m
netting over. Total
height 8m.

6.5m high twin bar
panel system
fence with 1.2m
sport rebound
panel

3m high twin bar
panel system
fence with 1.2m
sport rebound
panel

3.2m high acoustic
barrier

T:\suppliers info\contractors\SIS\SIS LDDG.JPG

UNIVERSITY
OF
MANCHESTER

PROPOSED
FOOTBALL_PITCH
LAYOUT

1:250	SCALE	SM	DRAWN
24_03_16	DATE	-	APPROVED

SIS (UK) Ltd
Tavistock Works
Glasson Industrial Estate
Manyport
Cumbria
CA15 8NT
Tel : 01900 817837
philb@sispitches.com

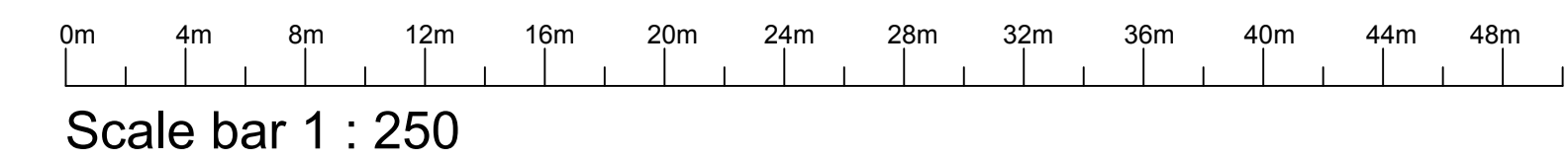
REV	AMENDMENT	DRAWN	CHECKED
SIS-MUK1586	07	G	
PRODUCT No.	PRG No.	REV	

LINE MARKINGS

- FULL SIZE PITCH = WHITE (INLAID)
- 7 v 7 PITCH = YELLOW (INLAID)
- 9 v 9 PITCH = BLUE NIBS SHOWN ON PERIMETER + BLUE LINES (PAINTED)
- 5 v 5 PITCH = RED NIBS SHOWN ON PERIMETER + RED LINES (PAINTED)

PROPOSED FOOTBALL PITCH LAYOUT - INLAID AND PAINTED LINES

UNIVERSITY OF MANCHESTER



NOTES:-

DG Double Gate

SG Single Gate

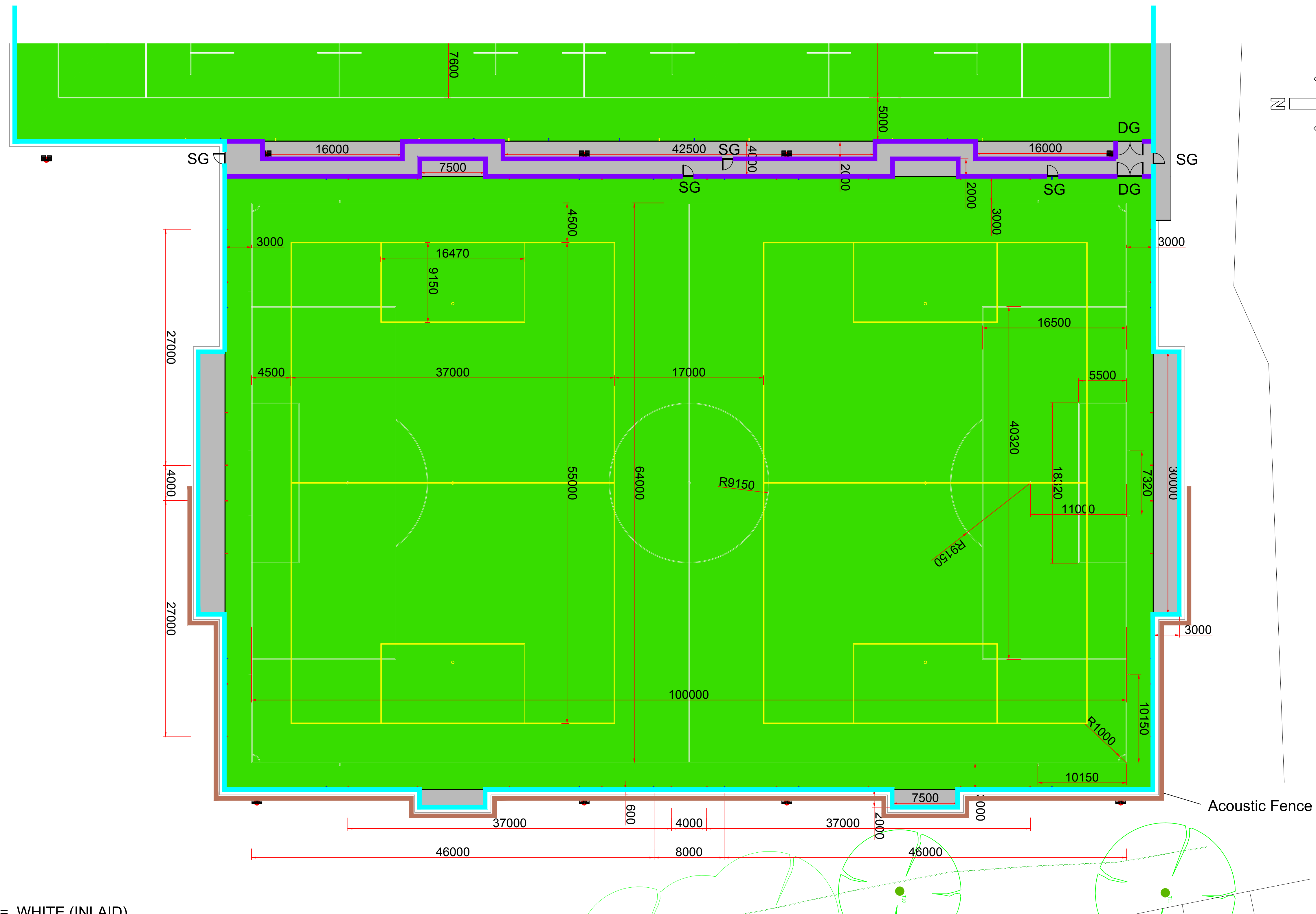
Twin bar sport rebound
fencing in RAL 6005
(dark green)

6.5m high twin bar panel system fence with 1.2m sport rebound panel and 1.5m netting over. Total height 8m.

6.5m high twin bar panel system fence with 1.2m sport rebound panel

3m high twin bar panel system fence with 1.2m sport rebound panel

3.2m high acoustic barrier



LINE MARKINGS

FULL SIZE PITCH = WHITE (INLAID)

7 v 7 PITCH = YELLOW (INLAID)

9 v 9 PITCH = BLUE NIBS SHOWN ON PERIMETER

5 v 5 PITCH = RED NIBS SHOWN ON PERIMETER

PROPOSED FOOTBALL PITCH LAYOUT - INLAID LINES ONLY

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TITLE

UNIVERSITY
OF
MANCHESTER

CLIENT

PROPOSED FOOTBALL_PITCH LAYOUT

WORKING TITLE

DRAWING TITLE	
1:250	SM
SCALE	DRAWN

24_03_16	-
DATE	APPROVED

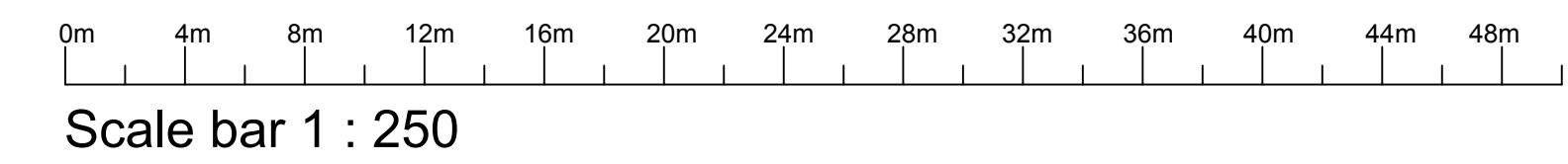
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philb@sispitches.com

REV	AMENDMENT	DRAWN	CHECKED
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PROJECT No.		DRG No.	REV

UNIVERSITY OF MANCHESTER

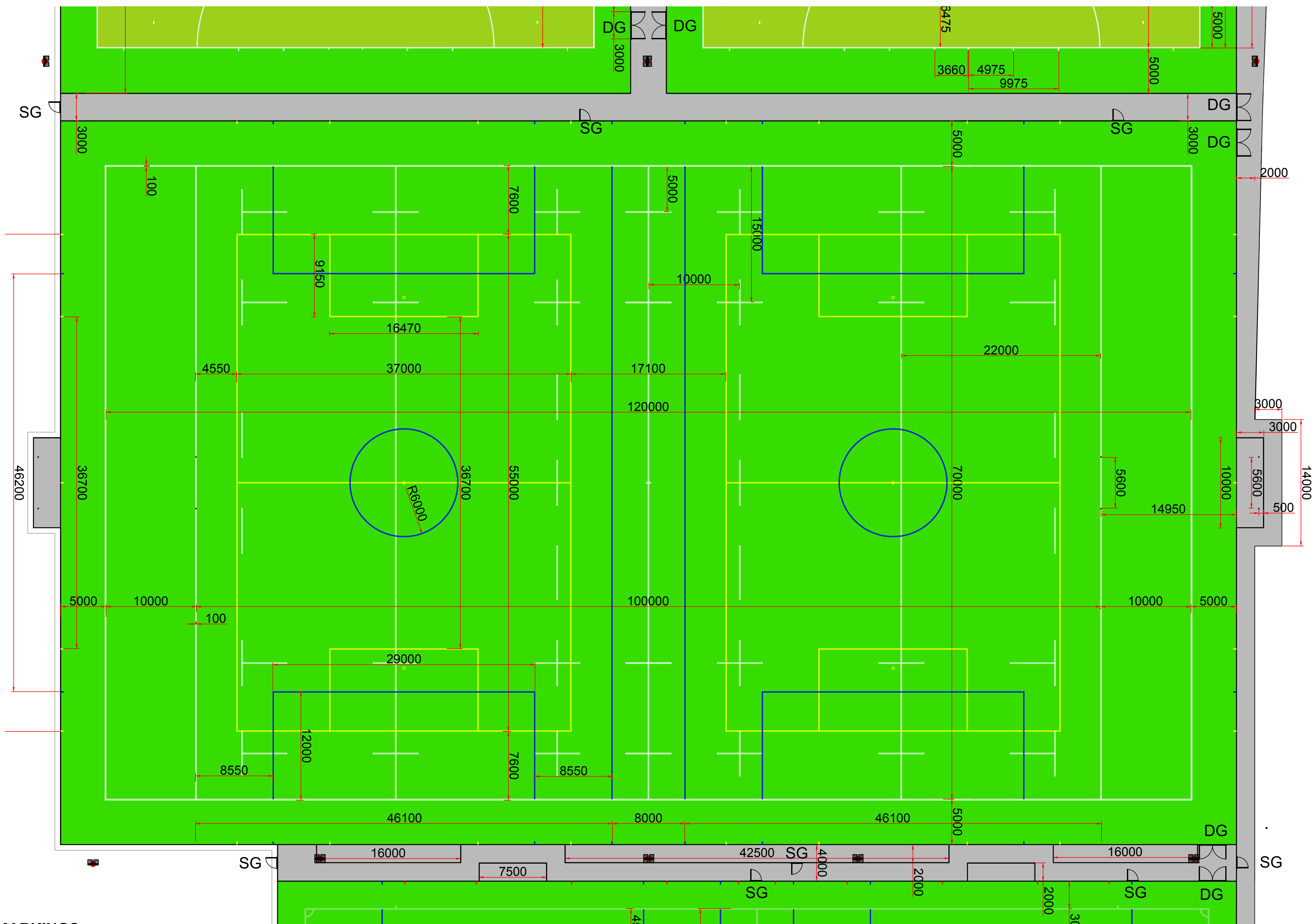
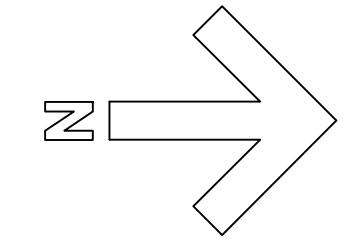


NOTES:-

DG Double Gate

SG Single Gate

Twin bar sport rebound
fencing in RAL 6005
(dark green)



LINE MARKINGS

FULL SIZE PITCH = WHITE (INLAID)

9 v 9 PITCH = BLUE NIBS SHOWN ON PERIMETER +
BLUE LINES (PAINTED)

7 v 7 PITCH = YELLOW NIBS SHOWN ON PERIMETER +
YELLOW LINES (PAINTED)

PROPOSED RUGBY PITCH LAYOUT - INLAID AND PAINTED LINES

T:\suppliers info\contractors\SIS\SIS LOGO.JPG

TITLE

UNIVERSITY
OF
MANCHESTER

CLIENT

PROPOSED RUGBY_PITCH LAYOUT

WORKING TITLE

1:250

SM

16

24_03_16	-
DATE	APPROVED

SIS (UK) Ltd

Tavistock Works
Glasson Industrial Estate
Maryport

Cumbria
CA15 8NT
Tel : 01900 817837

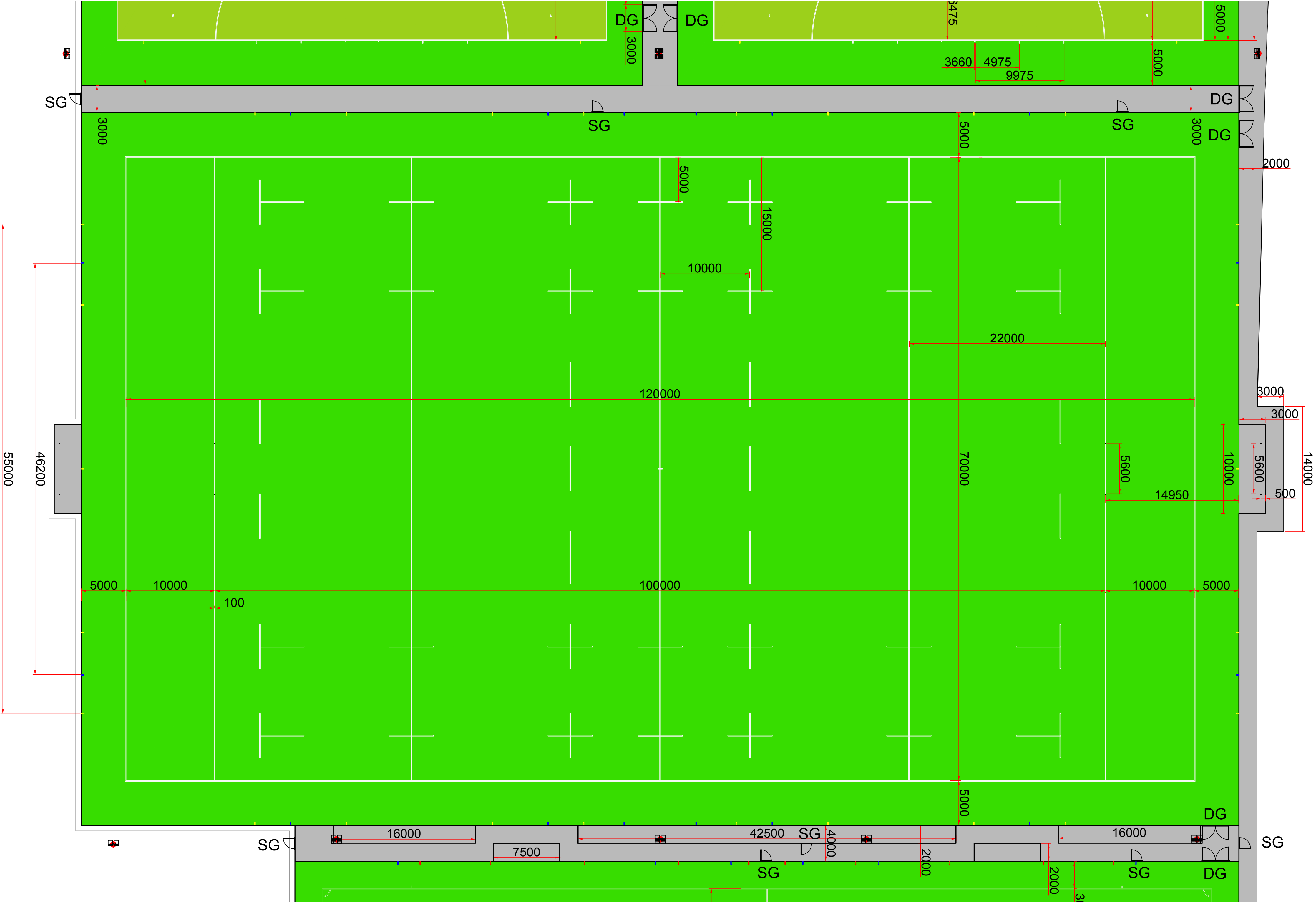
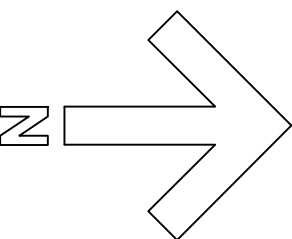
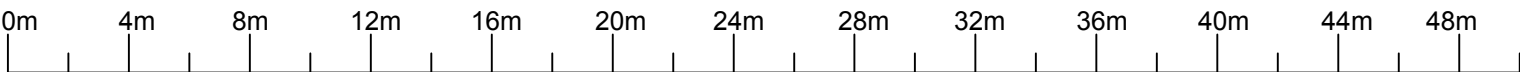
philb@sispitches.com

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AMENDMENT	DRAWN	CHECKED
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MUK1586	09	H
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No.	DRG No.	REV
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LINE MARKINGS

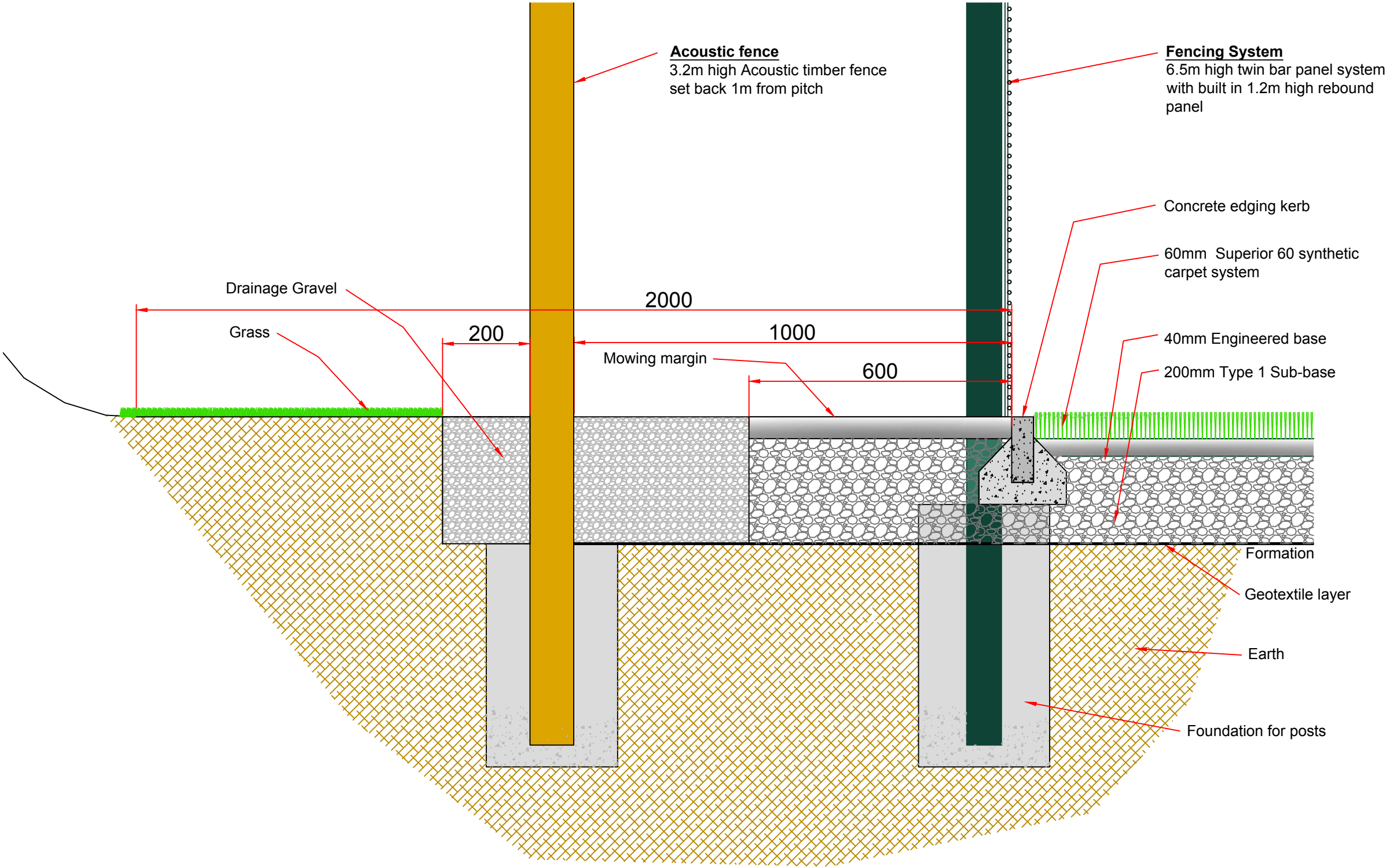
- FULL SIZE PITCH = WHITE (INLAID)
- 9 v 9 PITCH = BLUE NIBS SHOWN ON PERIMETER
- 7 v 7 PITCH = YELLOW NIBS SHOWN ON PERIMETER

PROPOSED RUGBY PITCH LAYOUT - INLAID LINES ONLY

NOTES:-
DG Double Gate
SG Single Gate
Twin bar sport rebound fencing in RAL 6005 (dark green)

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-		
UNIVERSITY OF MANCHESTER		
PROPOSED RUGBY_PITCH LAYOUT		
1:250	SM	
24_03_16	-	
SIS (UK) Ltd Tavistock Works Glasson Industrial Estate Maryport Cumbria CA15 8NT Tel : 01900 817837 philb@sispitches.com		
REV	AMENDMENT	DRAWN
SIS-MUK1586	10	H





0m 0.2m 0.4m 0.6m 0.8m 1m 1.2m 1.4m 1.6m 1.8m 2m

Scale bar 1 : 10

PROPOSED FOOTBALL PITCH - ACOUSTIC FENCE DETAIL

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JOB TITLE

UNIVERSITY
OF
MANCHESTER

CLIENT

PROPOSED
FOOTBALL_PITCH
ACOUSTIC_FENCE_DETAIL

DRAWING TITLE

1:10

SCALE

SM

DRAWN

20_06_16

DATE

-

APPROVED

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Tavistock Works
Glasson Industrial Estate
Maryport
Cumbria
CA15 8NT
Tel : 01900 817837
philb@sispitches.com

REV AMENDMENT DRAWN CHECKED

SIS-MUK1586

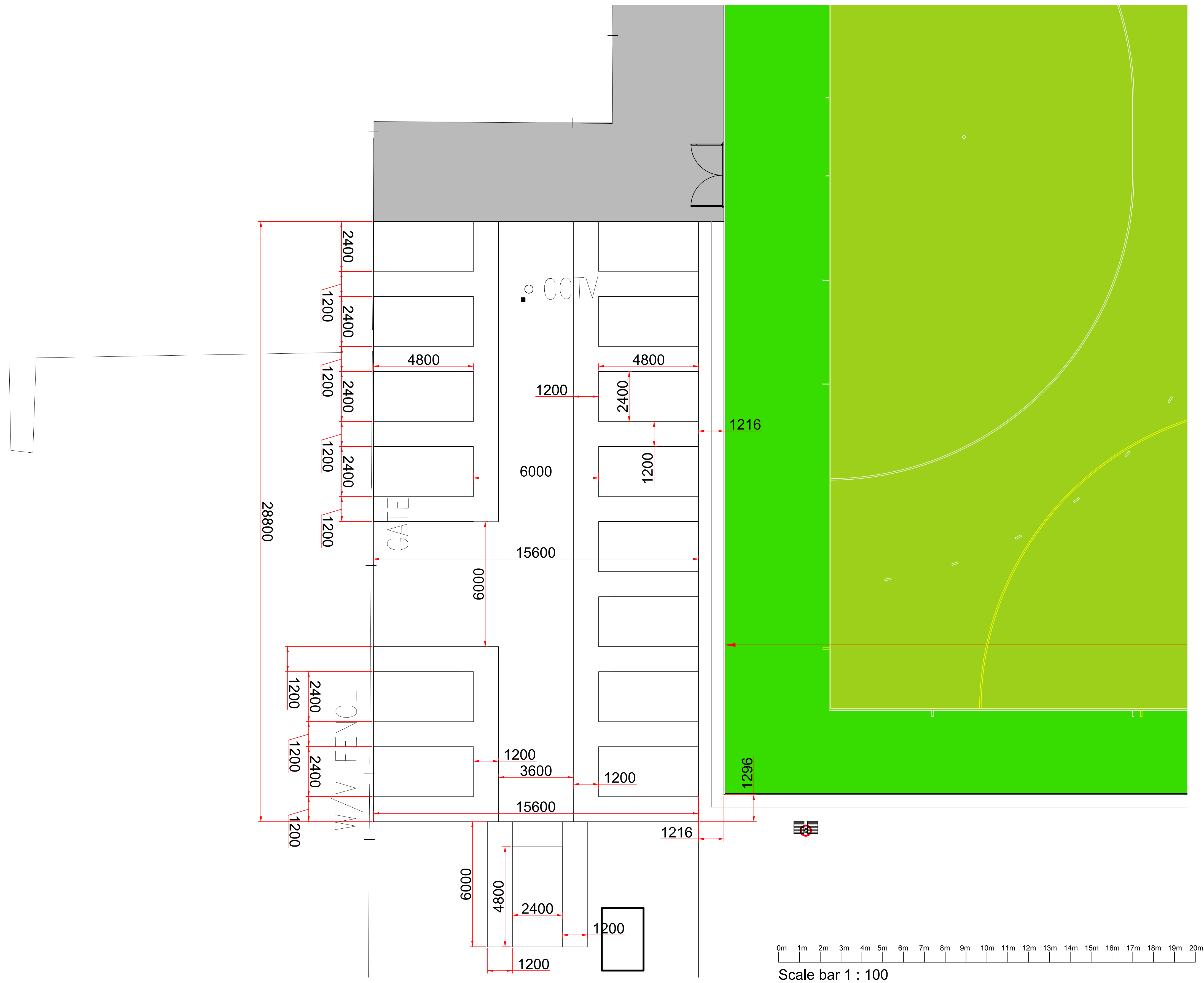
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PROJECT No.

DRG No.

REV



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UNIVERSITY
OF
MANCHESTER

PROPOSED
CAR_PARK
LAYOUT

1:100

SM

16-12-16

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Glasson Industrial Estate
Maryport
Cumbria
CA15 8NT
Tel : 01900 817837
phib@sispitches.com

REV	AMENDMENT	DRAWN	CHECKED
SIS-MUK1586	13	-	-