

GRID SUMMARY	
Name:	Rugby
Size:	116m x 66m
Spacing:	9.1m x 7.2m
Height:	1.0m above grade

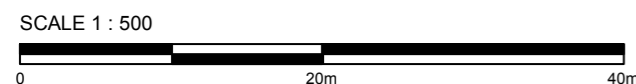
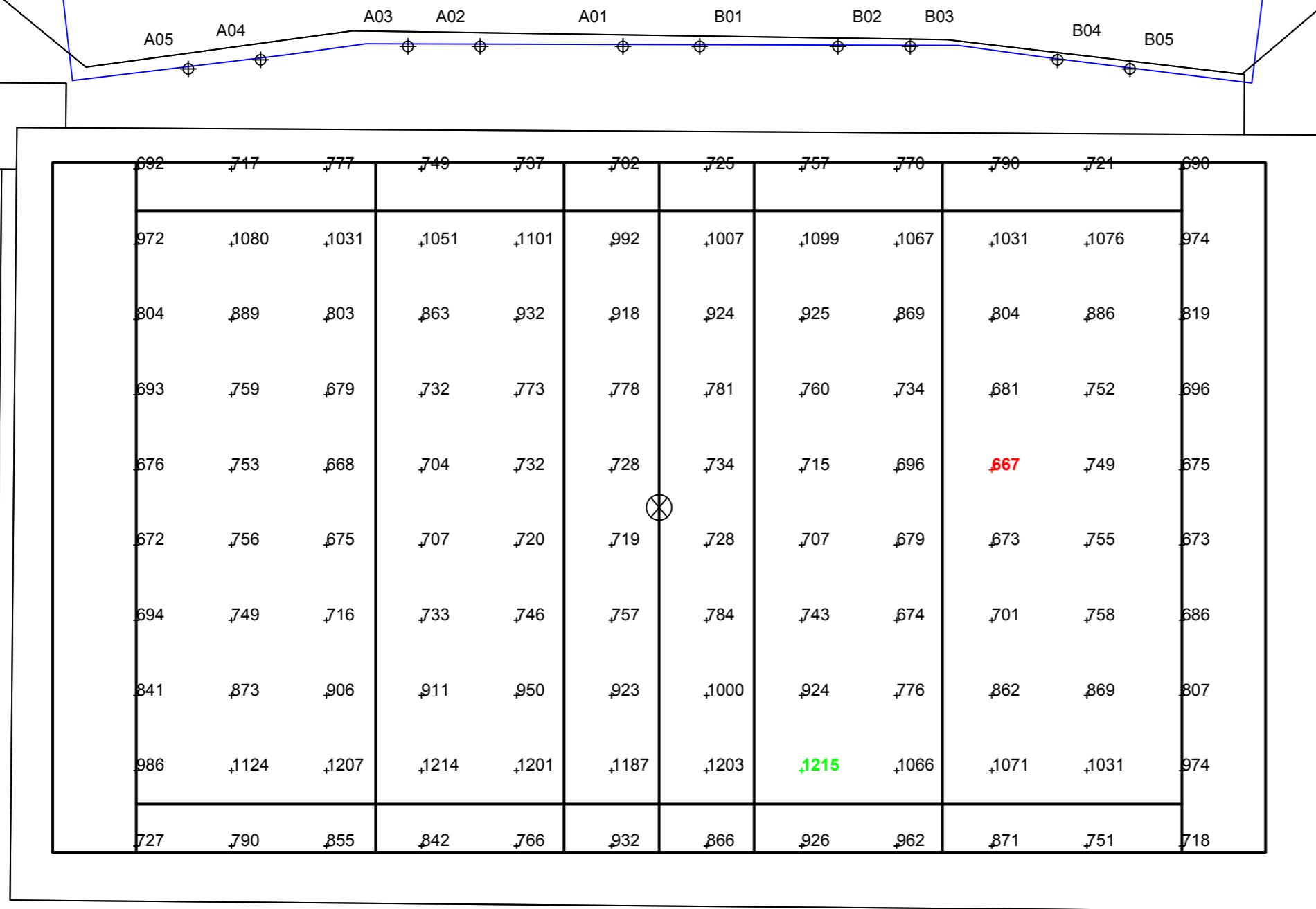
ILLUMINATION SUMMARY			
MAINTAINED HORIZONTAL LUX			
Entire Grid			
Scan Average:	<b>836.57</b>		
Maximum:	1215		
Minimum:	667		
Min / Avg:	0.80		
Min / Max:	<b>0.55</b>		
UG (adjacent pts):	1.57		
CU:	0.71		
CV:	0.18		
No. of Points:	120		
LUMINAIRE INFORMATION			
Color / CRI:	5700K - 75 CRI		
Luminaire Output:	63,600 / 63,600 lumens		
No. of Luminaires:	<b>142</b>		
Total Load:	89.46 kW		
Lumen Maintenance			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
216 LED	38,000	>60,000	>60,000
228 LED	38,000	>60,000	>60,000
Reported per TM-21-11. See luminaire datasheet for details.			

**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗



**We Make It Happen.**

GRID SUMMARY	
Name:	Rugby - Try Area
Size:	116m x 66m
Spacing:	8.3m x 7.2m
Height:	1.0m above grade

ILLUMINATION SUMMARY			
MAINTAINED HORIZONTAL LUX			
Entire Grid			
Scan Average:	<b>618.34</b>		
Maximum:	754		
Minimum:	558		
Min / Avg:	0.90		
Min / Max:	<b>0.74</b>		
UG (adjacent pts):	1.33		
CU:	0.08		
CV:	0.11		
No. of Points:	20		
LUMINAIRE INFORMATION			
Color / CRI:	5700K - 75 CRI		
Luminaire Output:	63,600 / 63,600 lumens		
No. of Luminaires:	<b>142</b>		
Total Load:	89.46 kW		
Lumen Maintenance			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
216 LED	38,000	>60,000	>60,000
228 LED	38,000	>60,000	>60,000

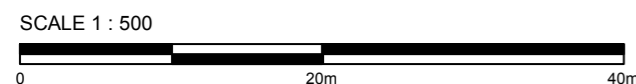
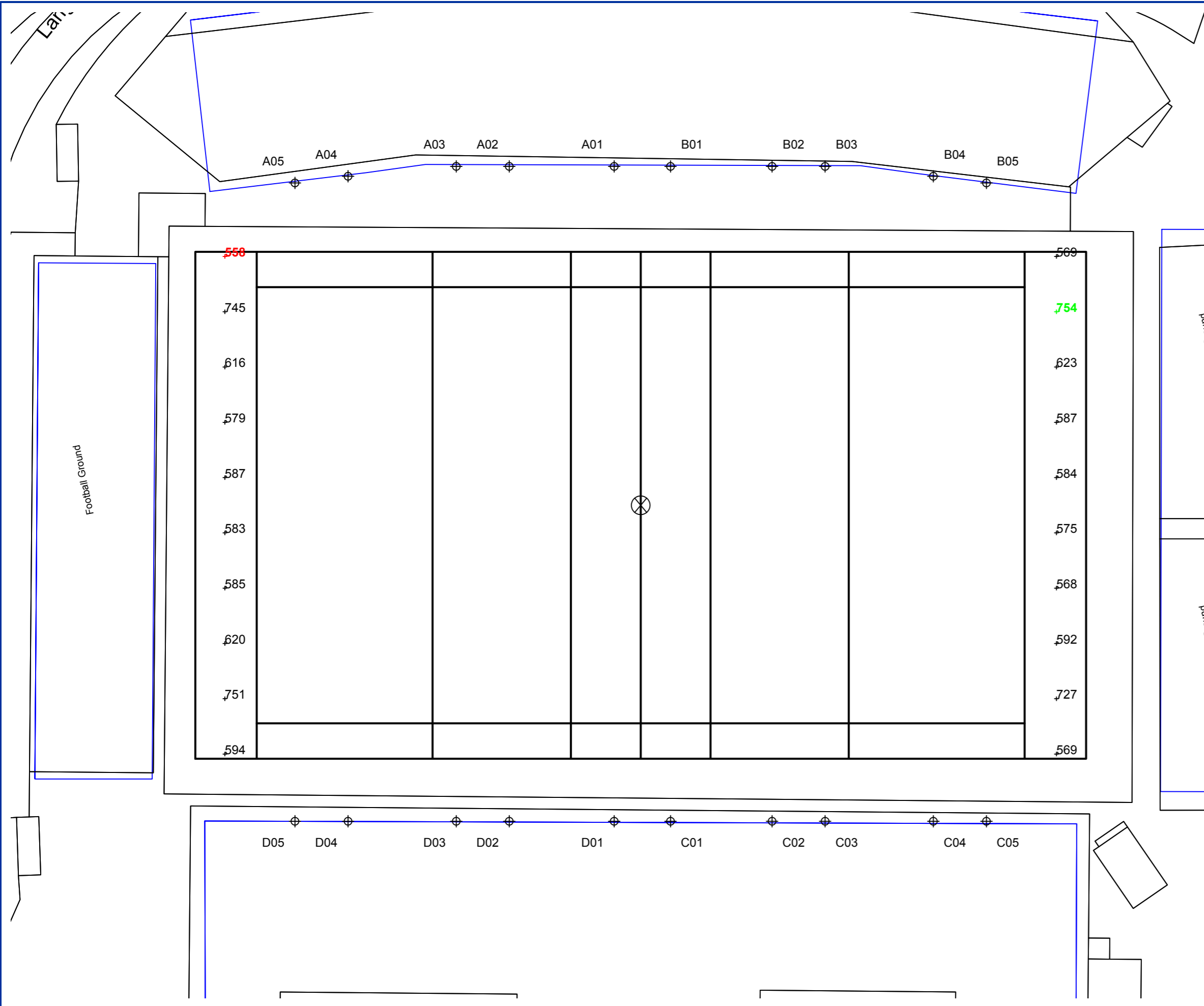
Reported per TM-21-11. See luminaire datasheet for details.

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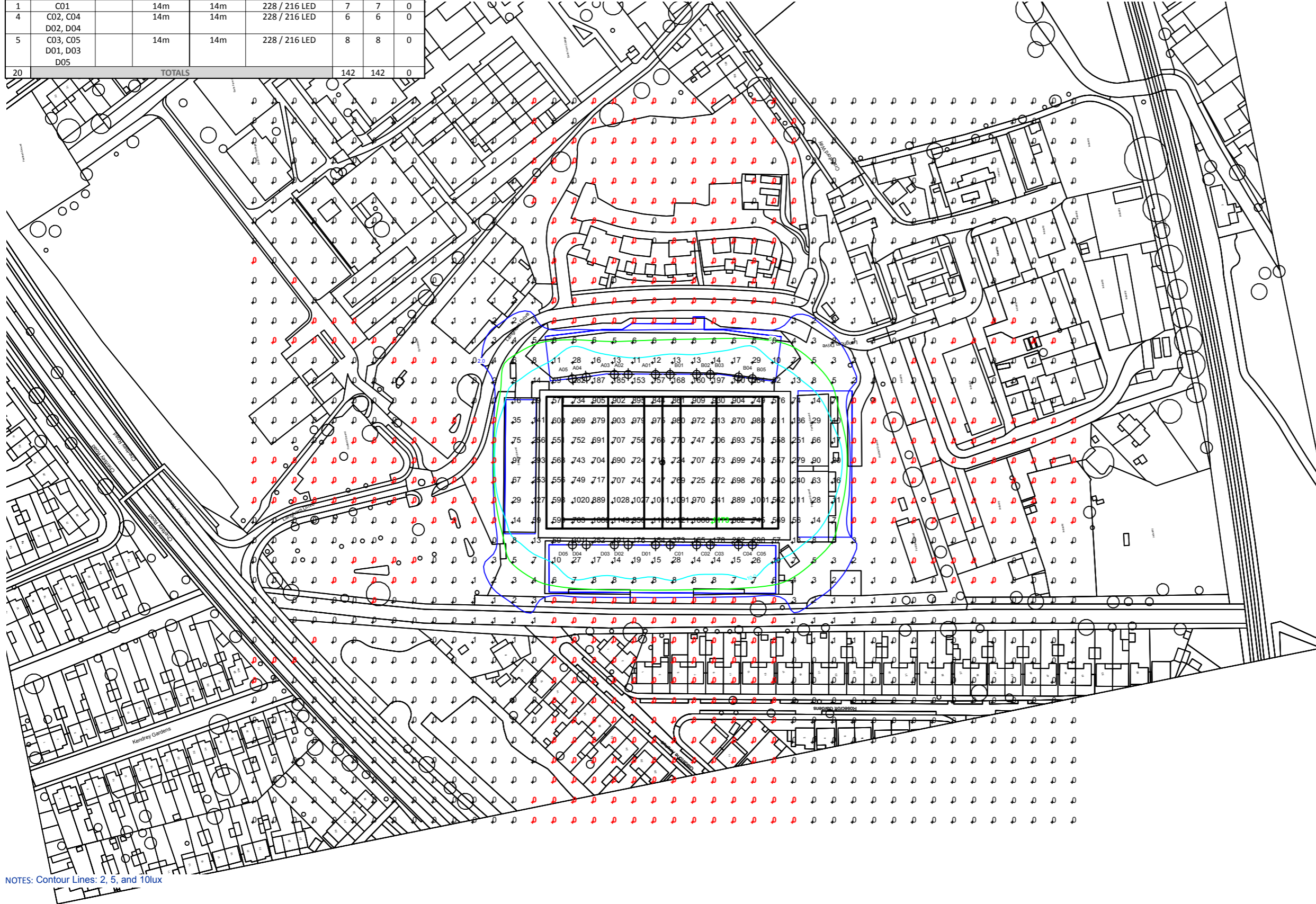
Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗



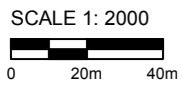
**We Make It Happen.**

**EQUIPMENT LIST FOR AREAS SHOWN**

QTY	Pole		Luminaires					OTHER GRIDS
	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	
1	A01		15.35m	15.35m	228 / 216 LED	7	7	0
4	A02, A04 B02, B04		15.35m	15.35m	228 / 216 LED	6	6	0
5	A03, A05 B01, B03 B05		15.35m	15.35m	228 / 216 LED	8	8	0
1	C01		14m	14m	228 / 216 LED	7	7	0
4	C02, C04 D02, D04		14m	14m	228 / 216 LED	6	6	0
5	C03, C05 D01, D03 D05		14m	14m	228 / 216 LED	8	8	0
20	TOTALS					142	142	0



NOTES: Contour Lines: 2, 5, and 10lux



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗

**Harlequins RFC Premiership Rugby**

Twickenham, London

GRID SUMMARY	
Name:	150m Area Spill
Spacing:	10.0m x 10.0m
Height:	1.0m above grade

ILLUMINATION SUMMARY			
MAINTAINED HORIZONTAL LUX			
Entire Grid			
Scan Average:	49.10		
Maximum:	1173		
Minimum:	0		
Min / Avg:	0.00		
Min / Max:	0.00		
UG (adjacent pts):	8325.07		
CU:	0.82		
No. of Points:	1554		
LUMINAIRE INFORMATION			
Color / CRI:	5700K - 75 CRI		
Luminaire Output:	63,600 / 63,600 lumens		
No. of Luminaires:	142		
Total Load:	89.46 kW		
Lumen Maintenance			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
216 LED	38,000	>60,000	>60,000
228 LED	38,000	>60,000	>60,000
Reported per TM-21-11. See luminaire datasheet for details.			

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**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



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**ILLUMINATION SUMMARY**

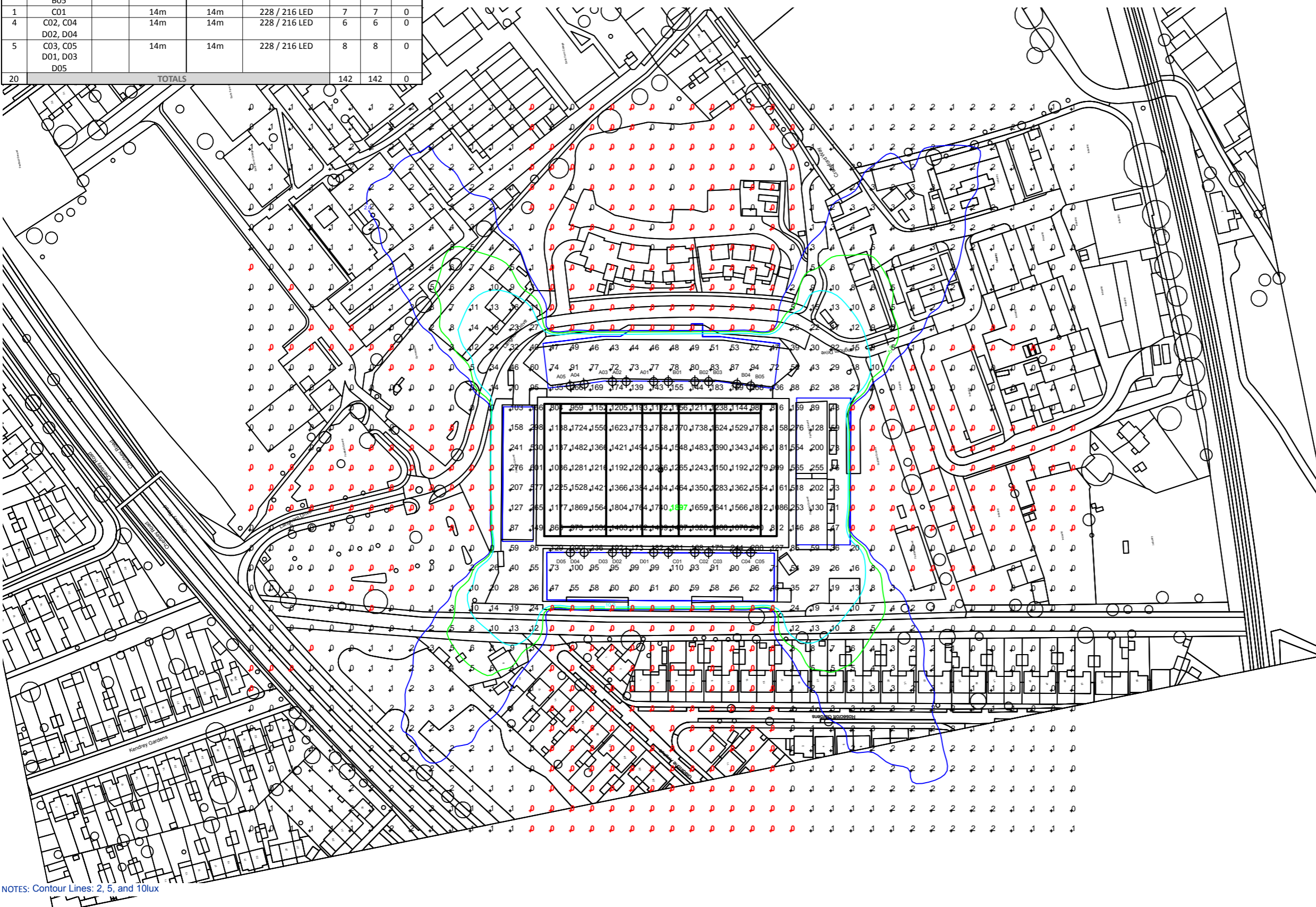
# Harlequins RFC Premiership Rugby

Twickenham, London

EQUIPMENT LIST FOR AREAS SHOWN								
Pole			Luminaires					
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
1	A01		15.35m	15.35m	228 / 216 LED	7	7	0
4	A02, A04 B02, B04		15.35m	15.35m	228 / 216 LED	6	6	0
5	A03, A05 B01, B03 B05		15.35m	15.35m	228 / 216 LED	8	8	0
1	C01		14m	14m	228 / 216 LED	7	7	0
4	C02, C04 D02, D04		14m	14m	228 / 216 LED	6	6	0
5	C03, C05 D01, D03 D05		14m	14m	228 / 216 LED	8	8	0
20	TOTALS					142	142	0

GRID SUMMARY	
Name:	150m Area Spill
Spacing:	10.0m x 10.0m
Height:	1.0m above grade

ILLUMINATION SUMMARY			
MAINTAINED MAX VERTICAL LUX			
Entire Grid			
Scan Average:	85.43		
Maximum:	1897		
Minimum:	0		
Min / Avg:	0.00		
Min / Max:	0.00		
UG (adjacent pts):	6572.09		
CU:	0.82		
No. of Points:	1554		
LUMINAIRE INFORMATION			
Color / CRI:	5700K - 75 CRI		
Luminaire Output:	63,600 / 63,600 lumens		
No. of Luminaires:	142		
Total Load:	89.46 kW		
Lumen Maintenance			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
216 LED	38,000	>60,000	>60,000
228 LED	38,000	>60,000	>60,000
Reported per TM-21-11. See luminaire datasheet for details.			



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NOTES: Contour Lines: 2, 5, and 10lux



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