

Form 1 – Application for Approval of Development

Swan and Canning Rivers Management Act 2006 – Part 5 – section 72(1)

1. Applicant details

The applicant is the person with whom the department, on behalf of the Chief Executive Officer, will correspond, unless an authorised agent has been appointed to act on behalf of the applicant, in which case correspondence will be sent direct to the agent.

Name			
Position (if applicable)			
Organisation (if applicable)			
Contact person			
Postal address			
Town/Suburb		State	Postcode
Telephone	Work	Mobile	
Email			

I give authority for an agent (as identified at item No. 3) to act on my behalf during the assessment of the application ☐ YES ☐ NO

If 'YES', please provide Agent's details at item No. 3

Applicant signature



Date

--

2. Landowner details

All owner(s) of the land **must sign this application**. Where land is owned by the Crown or has a management order granted to a local government or other agency, this application must be signed by the relevant landowner or management body as required under section 72(5)(a) of the Act. If there are more than two landowners, please provide the additional information and signature(s) on a separate page.

Details of first landowner

Name			
Position (if applicable)			
Organisation (if applicable)			
Contact person			
Postal address			
Town/Suburb		State	Postcode

I consent to this application being made.

First landowner signature



Date

--

Details of second landowner (if applicable)

Name			
Position (if applicable)			
Organisation (if applicable)			
Contact person			
Postal address			
Town/Suburb		State	Postcode

I consent to this application being made.

Second landowner
signature

--

Date

--

3. Authorised agent details (if applicable)

The applicant must sign the form and tick the authorisation under item No. 1 to provide authority for an appointed authorised agent to act on their behalf.

Details of authorised agent

Name			
Position (if applicable)			
Company/agency (if applicable)			
ACN/ABN (if applicable)			
Postal address			
Town/Suburb		State	Postcode
Telephone	Work	Mobile	
Email			
Authorised Agent signature		Date	

4. Location of proposed development

Certificate of title information	Volume		Folio	
	Diagram/plan/deposit plan no.	& Lot 0 on Plan 4480		
Lot No.(s)	& Lot 0 on Plan 4480			
Location				
Reserve No.(s) (if applicable)				
Street No.(s) and name				
Town/Suburb				
Nearest road intersection	& The Esplanade and Bessell Ave			

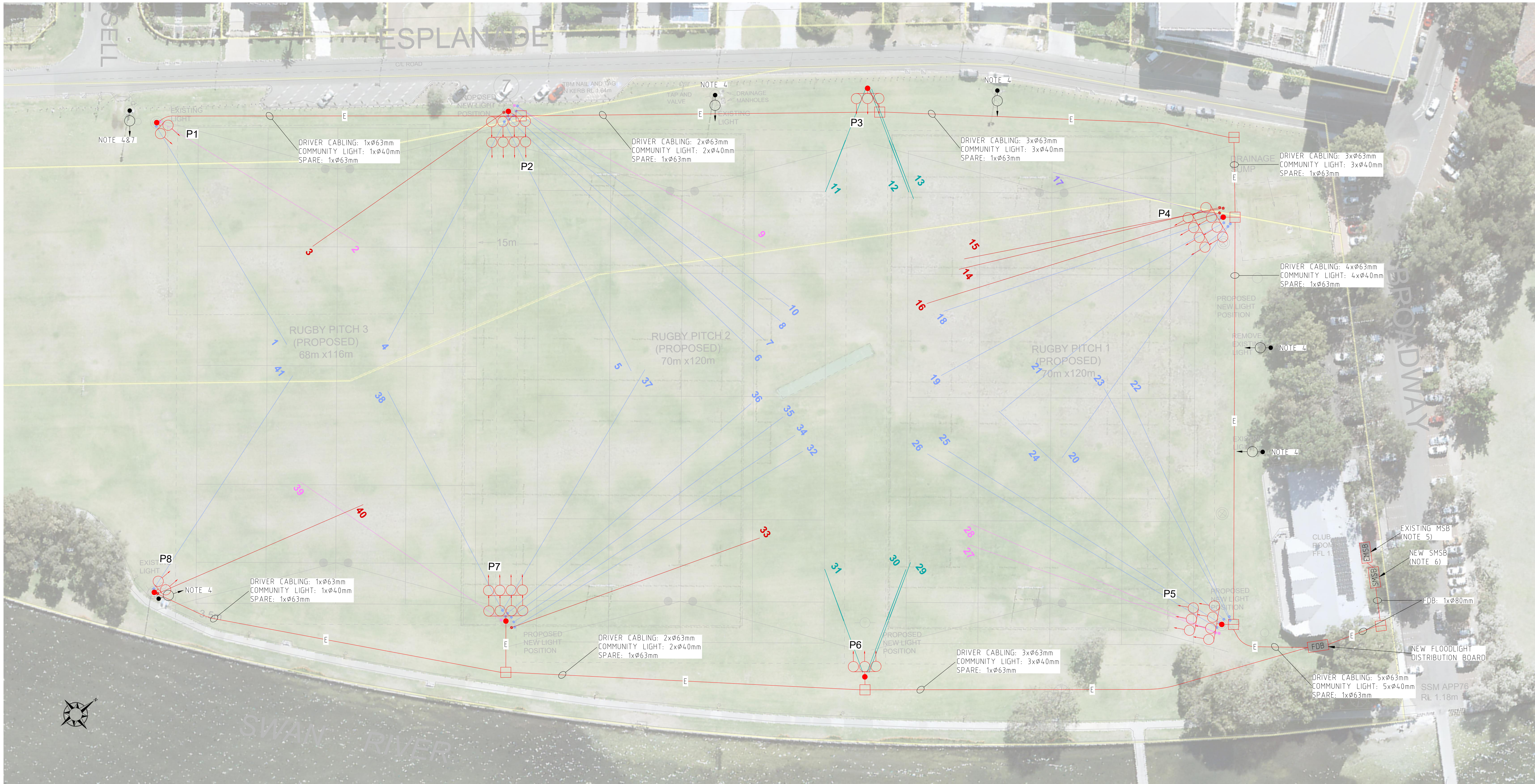
5. Details of proposed development

Please provide a written description of the proposed development (refer to the Development Application Guidelines for further details on what information to include in this section).

Estimated cost of development	
Current use of land	
Proposed development	

0 10 20 40 60
Full Size 1:1 : Half Reduction 1:2
SCALE (mm)

ALL DIMENSIONS ARE
IN MILLIMETRES
DRAWN IN ACCORDANCE
WITH AS1100-1992
DO NOT SCALE
THIRD ANGLE PROJECTION



SITE PLAN
SCALE 1:500 @ A1

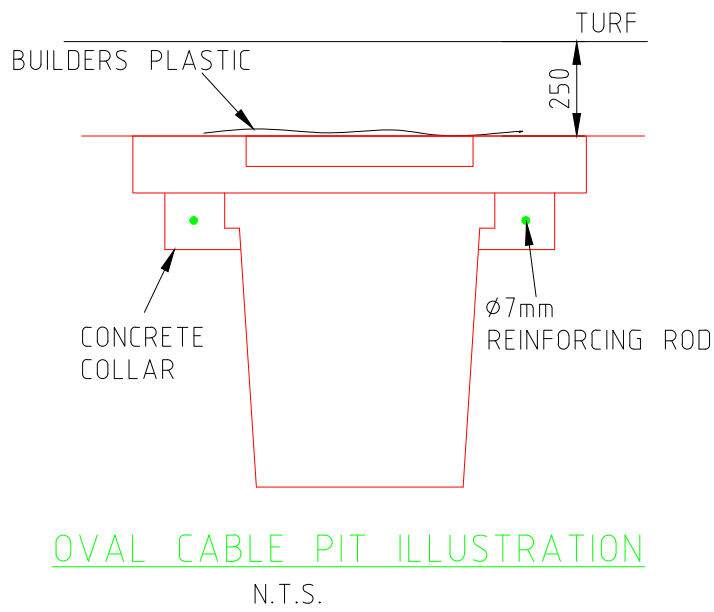
NOTES:

1. MACHINE TRENCHING IN THE VICINITY OF THE TREE DRIP LINE IS PROHIBITED. HAND TRENCHING REQUIRED WITH CARE TO AVOID ANY DAMAGE TO TREE ROUTES. ALTERNATIVE ROUTES TO BE AGREED ON WITH CONSULTATION WITH THE CITY OF NEDLANDS.
2. SURVEY AND PEG LOCATIONS OF POLES. CONFIRM LOCATIONS WITH THE CITY'S REPRESENTATIVE PRIOR TO INSTALLATION TO CLEAR TREES AND OBSTRUCTIONS.
3. COORDINATE WITH THE CITY TO REMOVE EXISTING POLES AND LUMINAIRES AND DISPOSE OFF SITE. BURY FOOTINGS AND MAKE EXISTING CONDUITS REDUNDANT.
4. REMOVE EXISTING POLE AND LUMINAIRES AND DISPOSE OFF SITE. BURY FOOTING IN ACCORDANCE WITH SPECIFICATION.
5. EXISTING M.S.B. MOUNTED ON CLUBROOM TO BE RE-LABELLED TO "BUILDING MAIN DISTRIBUTION BOARD".
6. NEW S.M.S.B. FINAL LOCATION SHALL BE DETERMINED ON SITE IN CONSULTATION WITH CITY OF NEDLANDS.
7. EXISTING FLOODLIGHT POLE & MSB. APPLY TO W.P. FOR DISCONNECTION.

POLE LOCATIONS GPS CO-ORDINATES (MGA94)		
POLE #	EASTING	NORTHING
P1	265985.329	6814004.684
P2	266099.589	6814020.990
P3	266116.785	6813875.383
P4	265998.170	6813864.370
P5	265985.329	6814004.684
P6	266099.589	6814020.990
P7	266116.785	6813875.383
P8	265998.170	6813864.370

LEGEND

- XXXX SWITCHBOARD/DISTRIBUTION BOARD
- CABLE PIT (ACO 66)
- E CABLE/CONDUIT ROUTE
- PROPOSED FLOODLIGHT
- EXISTING POLE TO BE REMOVED



WARNING

CONTRACTOR TO CONFIRM THE LOCATION OF ALL SERVICES PRIOR TO COMMENCEMENT OF WORKS.

WARNING

BEWARE OF UNDERGROUND SERVICES
The locations of underground services are approximate only and their exact position should be proven on site. No guarantee is given that all existing services are shown.

BEWARE OF OVERHEAD POWER LINES
Minimum clearances for Streetlight Pole/Luminaire to Overhead Power Lines
Low Voltage - 1m
High Voltage - 3m
Extra High Voltage - 6m
COMPLY WITH AS/NZS7000 CLEARANCES

SAGE CONSULTING ENGINEERS
Pty. Ltd.
UNIT 1, 17 FOLEY STREET
BALCATTA
WESTERN AUSTRALIA 6021
TEL: (08) 9388 9745
FAX: (08) 9388 9256
Email: msage@inet.net.au
A.C.N. 644 065 529

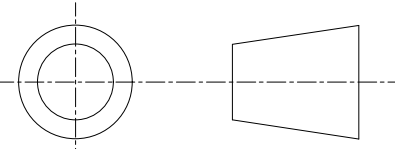
Copyright of this drawing is vested in:
SAGE CONSULTING ENGINEERS
and the contents are solely for the use of the client and Project identified on this drawing.

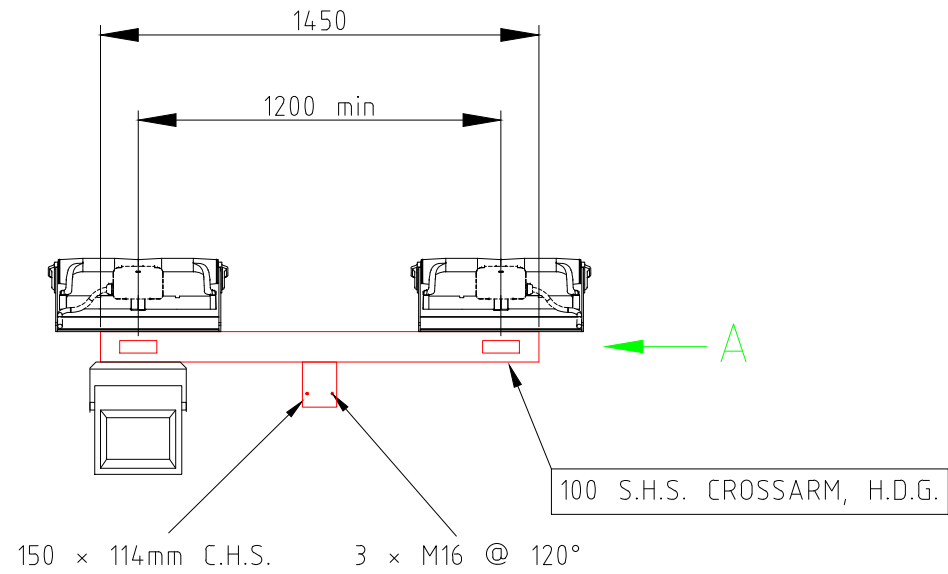


ELECTRICAL SERVICES
CITY OF NEDLANDS
CHARLES COURT RESERVE
SITE PLAN

DESIGNED	C.L.	DRAWN	J.H.	CHECKED	C.L.
DATE	09/05/2025	SCALE	1:500 @ A1	PROJECT No.	DRAWING No.
3171					E1A
					SHEET 1 OF 9

0 10 20 40 60
Full Size 1:1 : Half Reduction 1:2
SCALE (mm)

ALL DIMENSIONS ARE IN MILLIMETRES	
DRAWN IN ACCORDANCE WITH AS1100-1992	THIRD ANGLE PROJECTION
DO NOT SCALE	



HEADFRAME (2 FLOODLIGHTS)
(1:25 @ A1)

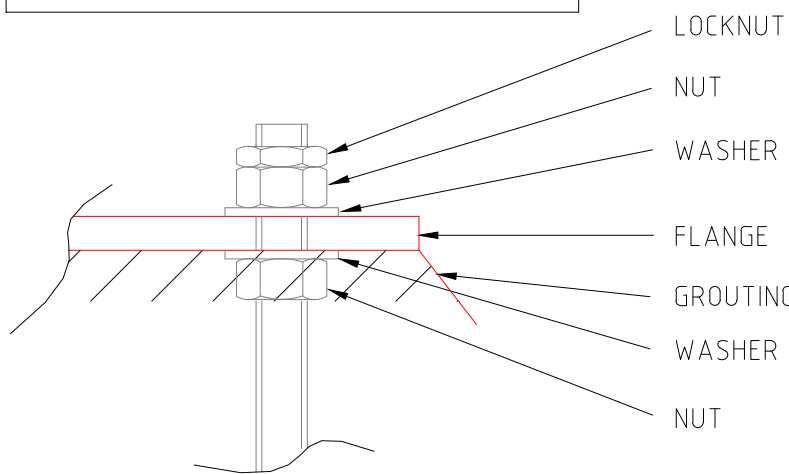
FLOODLIGHT
No. #

FLOODLIGHT LABEL
ON CROSS ARM

POLE #
CIRCUIT #
FROM
MSB

POLE LABEL

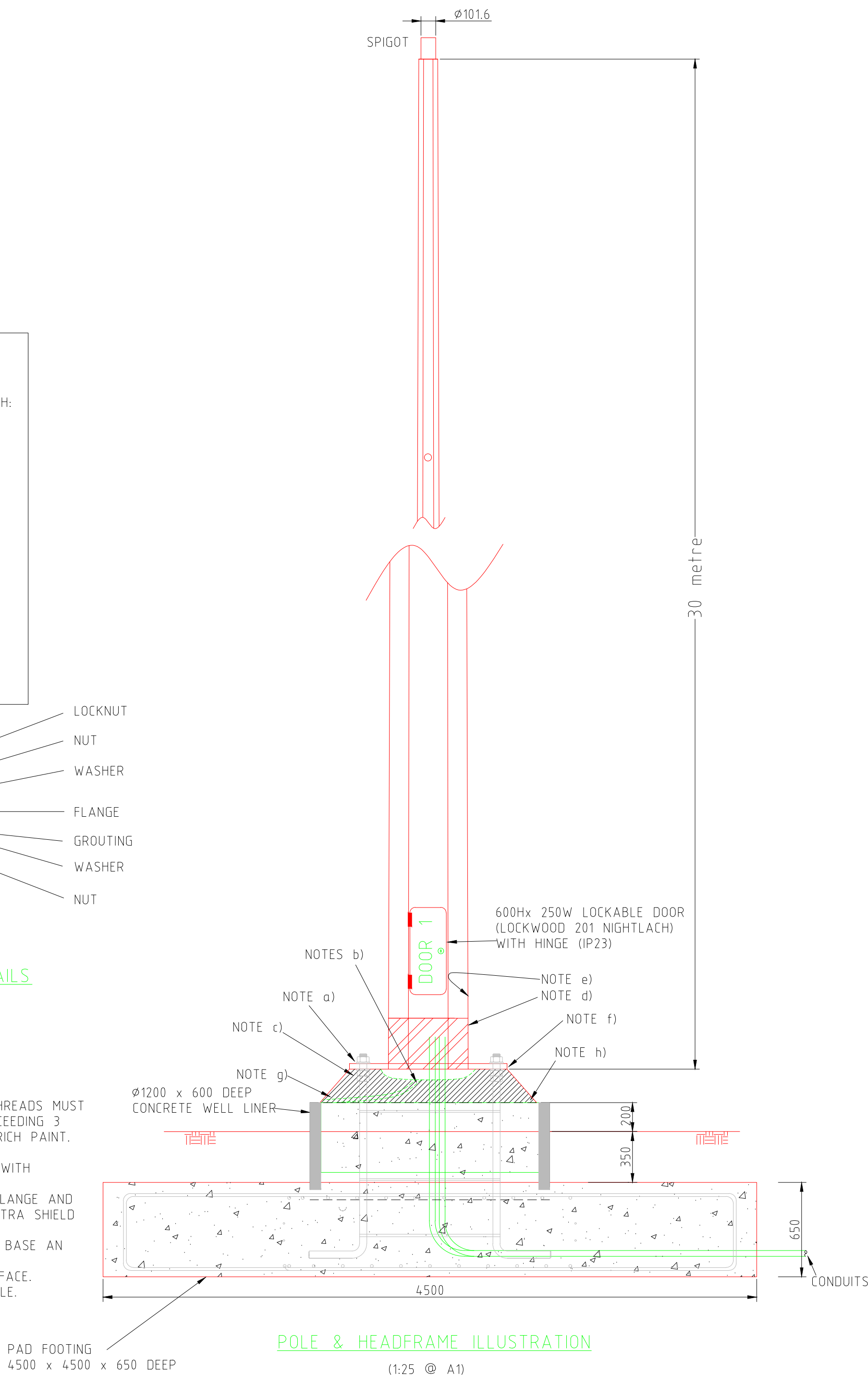
BASIC WIND SPEED REGION A
TERRAIN CATEGORY 1
SPEED PROBABILITY V500
IMPORTANCE LEVEL 2 COMPLY WITH:
AS/NZS 1111
AS/NZS 1112
AS/NZS 1554
AS 1163
AS 1170.2
AS/NZS 1594
AS 1798
AS 2159
AS 3600
AS/NZS 3679
AS/NZS 3834
AS 3996
AS 4100
AS 4600
AS 4680
AS/NZS 4671
AS 4676
AS/NZS 4677



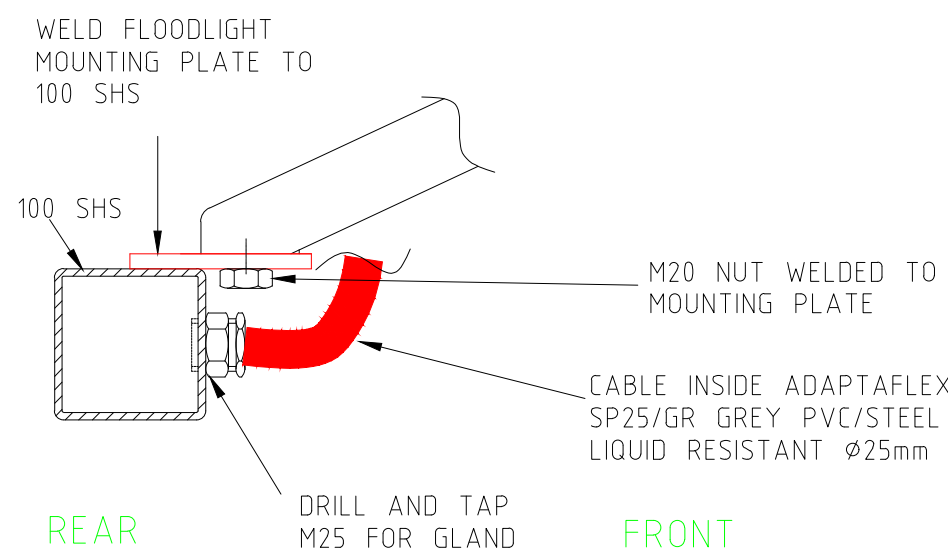
HOLDING DOWN BOLT DETAILS
NOT TO SCALE

POLE BASE NOTES:

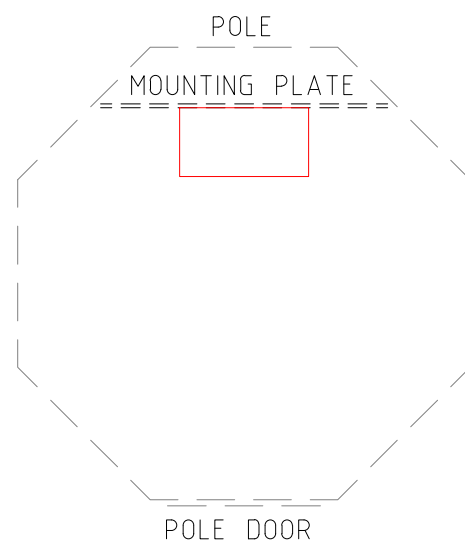
- 12 x M30 @ 550 PCD (TYPICAL TO POLE MANUFACTURERS' DESIGN) AT LEAST 2 THREADS MUST BE EXPOSED. CUT ANY BOLT LENGTH EXCEEDING 3 THREADS & COAT WITH INORGANIC ZINC RICH PAINT.
- GRADE GROUT INSIDE POLE TO DRAIN.
- SEAL GROUT INSIDE & OUTSIDE OF POLE WITH SIKAGARD 700S.
- COAT HOLDING BOLTS, NUTS, WASHERS, FLANGE AND POLE UP TO 350mm WITH GULL GRAY ULTRA SHIELD BY SHIELD COAT.
- SPRAY FISH OIL ONTO INTERIOR OF POLE BASE AN FLANGE.
- FINISH POLE FOOTING WITH NON-SLIP SURFACE.
- CUT DRAIN FLUSH WITH GROUT INSIDE POLE.
- PROVIDE CONCRETE WELL LINER



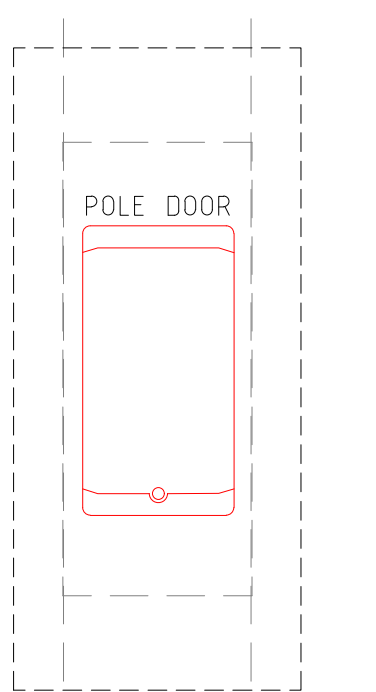
POLE & HEADFRAME ILLUSTRATION
(1:25 @ A1)



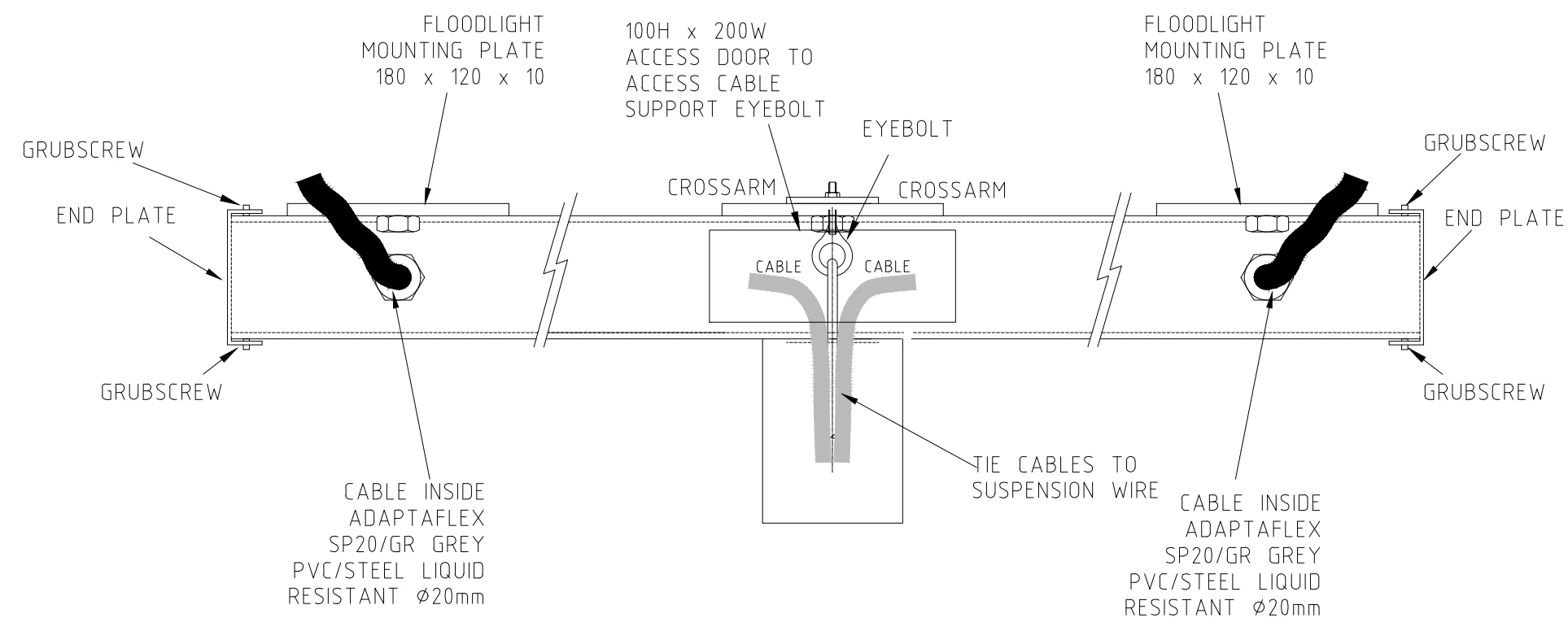
VIEW IN DIRECTION OF ARROW 'A'
SCALE 1:5 @ A1



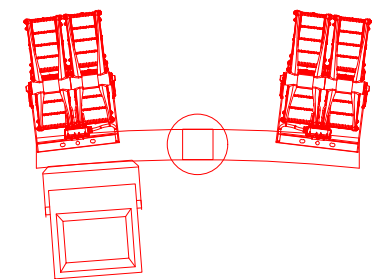
DOOR 1 - SECTION
SCALE 1:10 @ A1



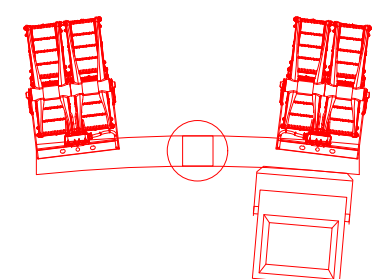
DOOR 1 FRONT VIEW
SCALE 1:10 @ A1



FRONT ELEVATION (TYPICAL)
SCALE 1:5 @ A1



CROSSARM (POLE 1) - TOP VIEW
(1:25 @ A1)



CROSSARM (POLE 8) - TOP VIEW
(1:25 @ A1)

A1	A	ISSUED FOR TENDER	27.05.2025	A.P.	ISSUE	REVISION	DATE	CHECKED
		REVISION						



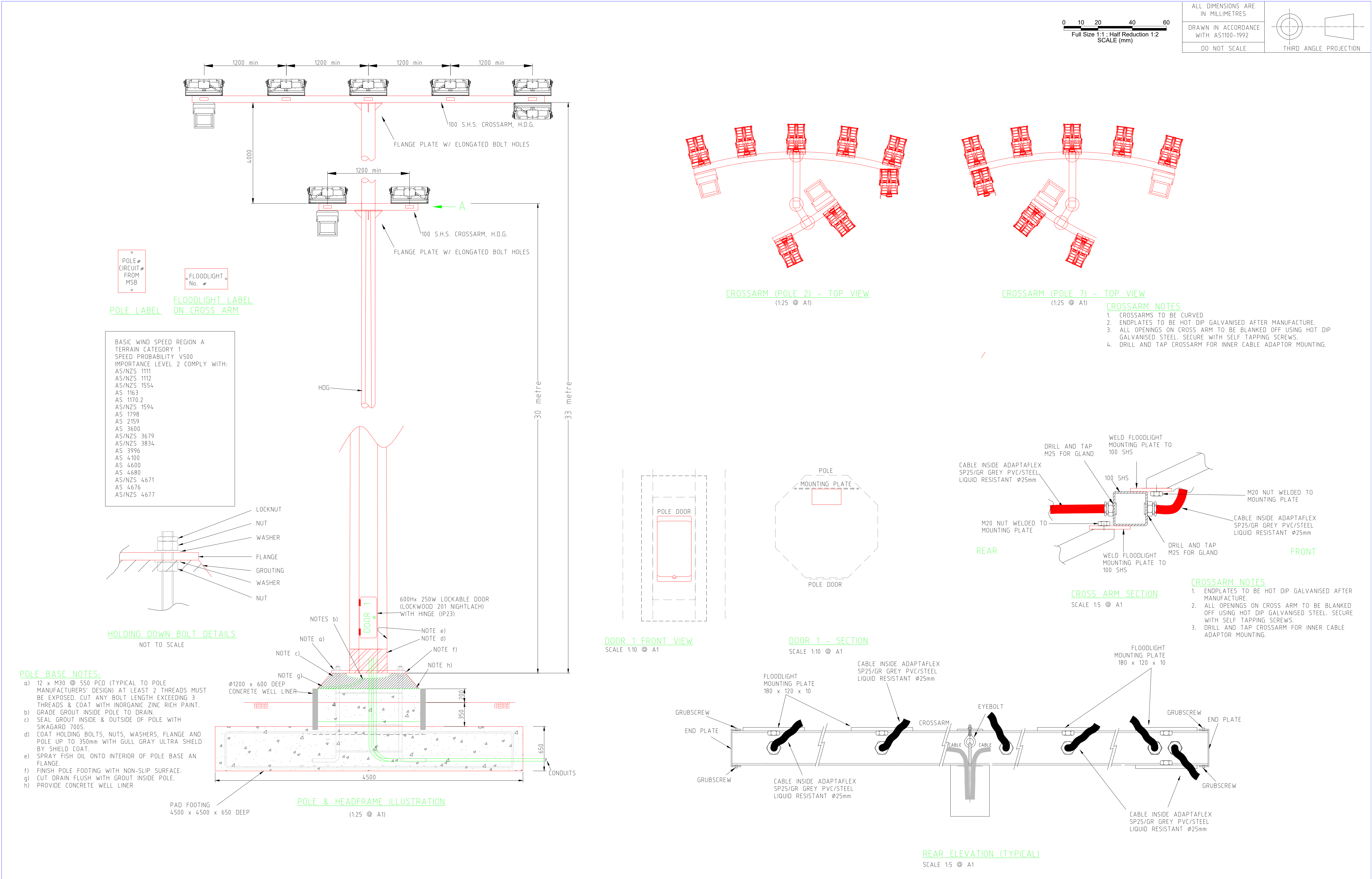
UNIT 1, 17 FOLEY STREET
BALCATTA
WESTERN AUSTRALIA 6021
TEL: (08) 9388 9745
FAX: (08) 9388 9256
Email: msage@inet.net.au
A.C.N. 644 065 529

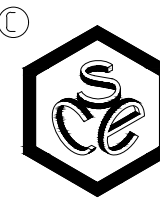
Copyright of this drawing is vested in:
SAGE CONSULTING ENGINEERS
and the contents are solely for the
use of the client and Project Identified
on this drawing.



ELECTRICAL SERVICES
CITY OF NEDLANDS
CHARLES COURT RESERVE
POLE 1 & 8 POLE & HEADFRAME ILLUSTRATION

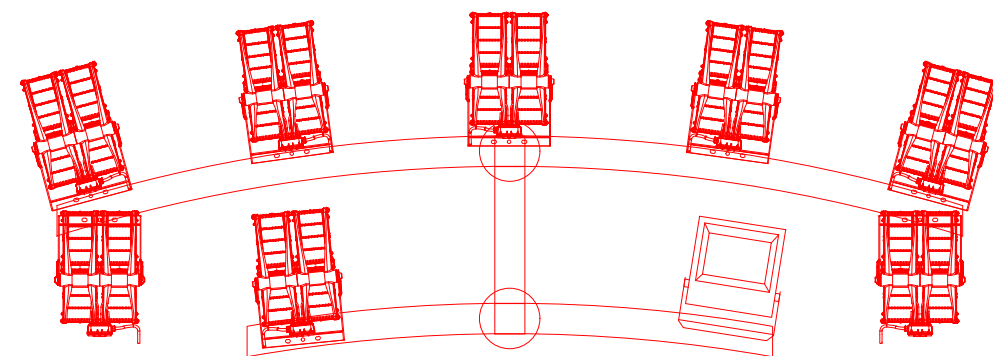
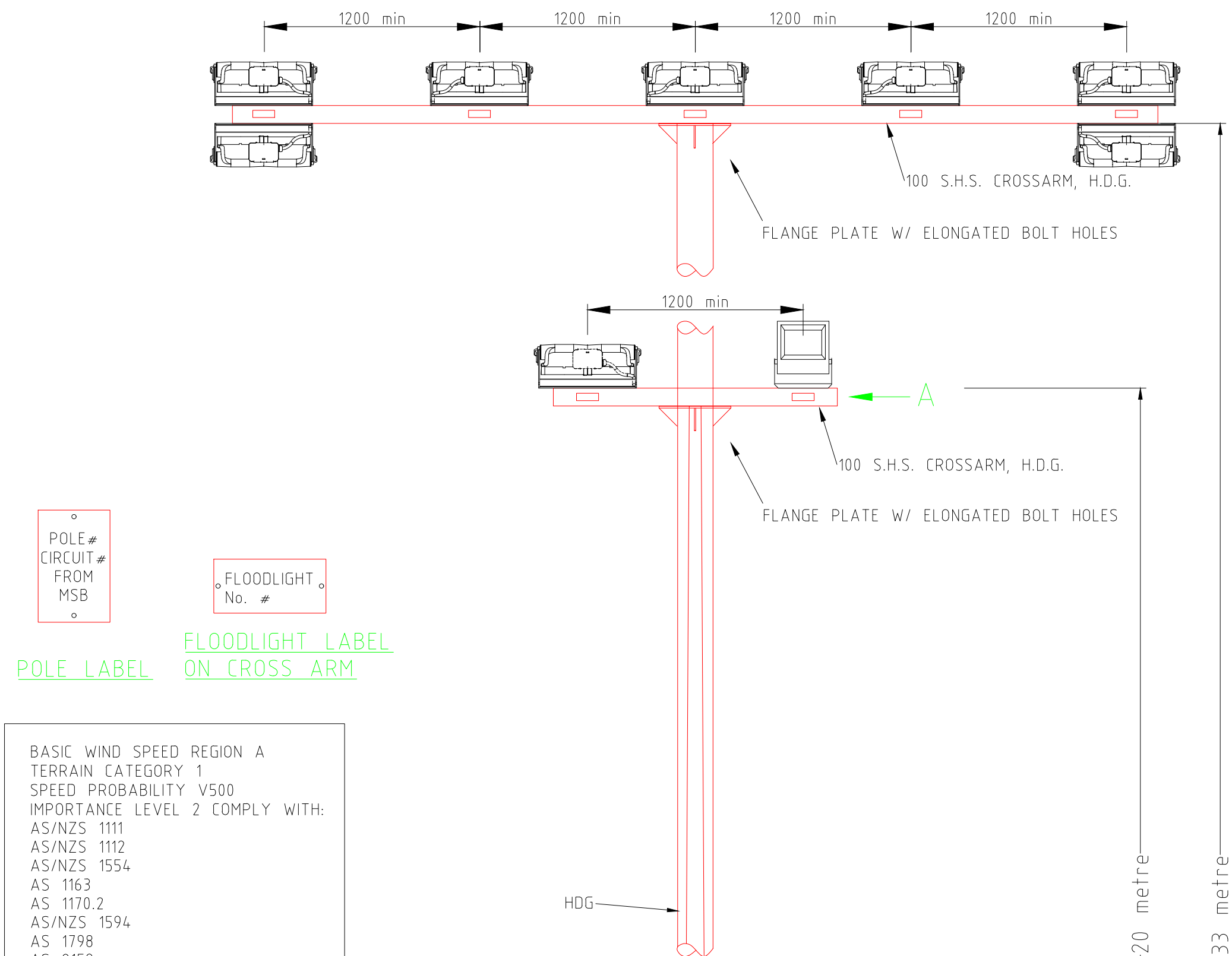
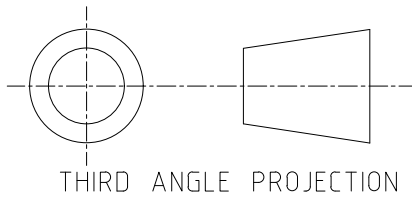
DESIGNED C.L.	DRAWN J.H.	CHECKED C.L.
DATE 09/05/2025	SCALE AS SHOWN @A1	PROJECT No. 3171
		DRAWING No. E5A



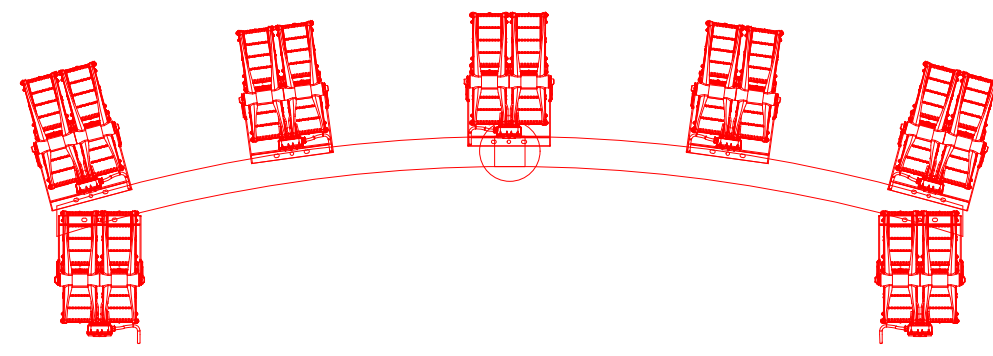
A1									 SAGE CONSULTING ENGINEERS Pty. Ltd. UNIT 1, 17 FOLEY STREET BALCATTA WESTERN AUSTRALIA 6021 TEL: (08) 9388 9745 FAX: (08) 9388 9256 Email: msage@inet.net.au A.C.N. 644 065 529	Copyright of this drawing is vested in: SAGE CONSULTING ENGINEERS and the contents are solely for the use of the client and Project identified on this drawing.	 City of Nedlands	ELECTRICAL SERVICES CITY OF NEDLANDS CHARLES COURT RESERVE POLE 2 & 7 POLE & HEADFRAME ILLUSTRATION				DESIGNED	C.L.	DRAWN	J.H.	CHECKED	C.L.
					DATE	09/05/2025	SCALE	AS SHOWN @A1													
												PROJECT No.				DRAWING No.					
												3171				E6A					
												SHEET 6 OF 9									

0 10 20 40 60
Full Size 1:1 : Half Reduction 1:2
SCALE (mm)

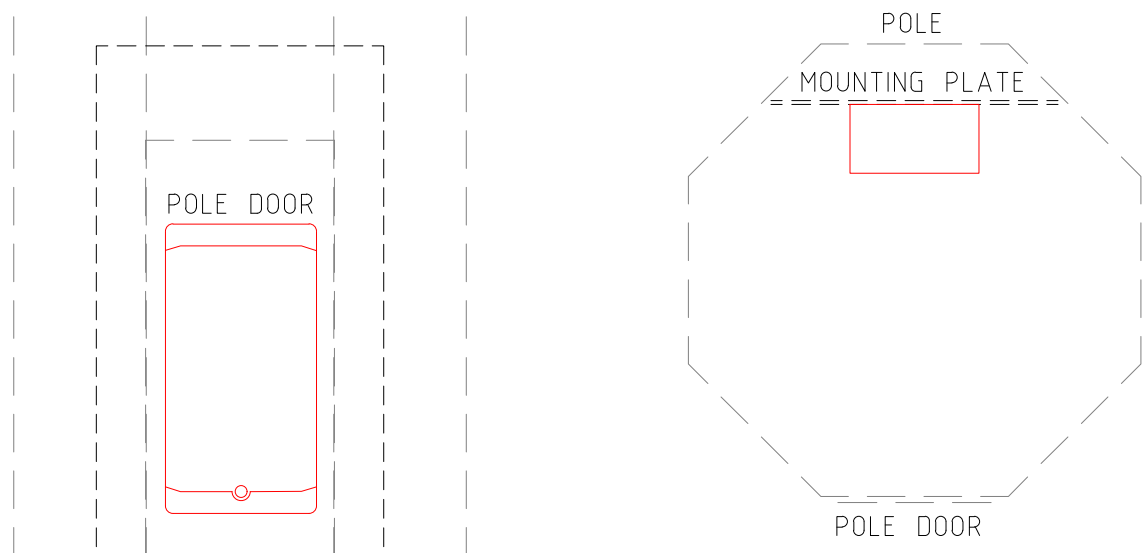
ALL DIMENSIONS ARE
IN MILLIMETRES
DRAWN IN ACCORDANCE
WITH AS1100-1992
DO NOT SCALE



CROSSARM (POLE 4) - TOP VIEW
(1:25 @ A1)

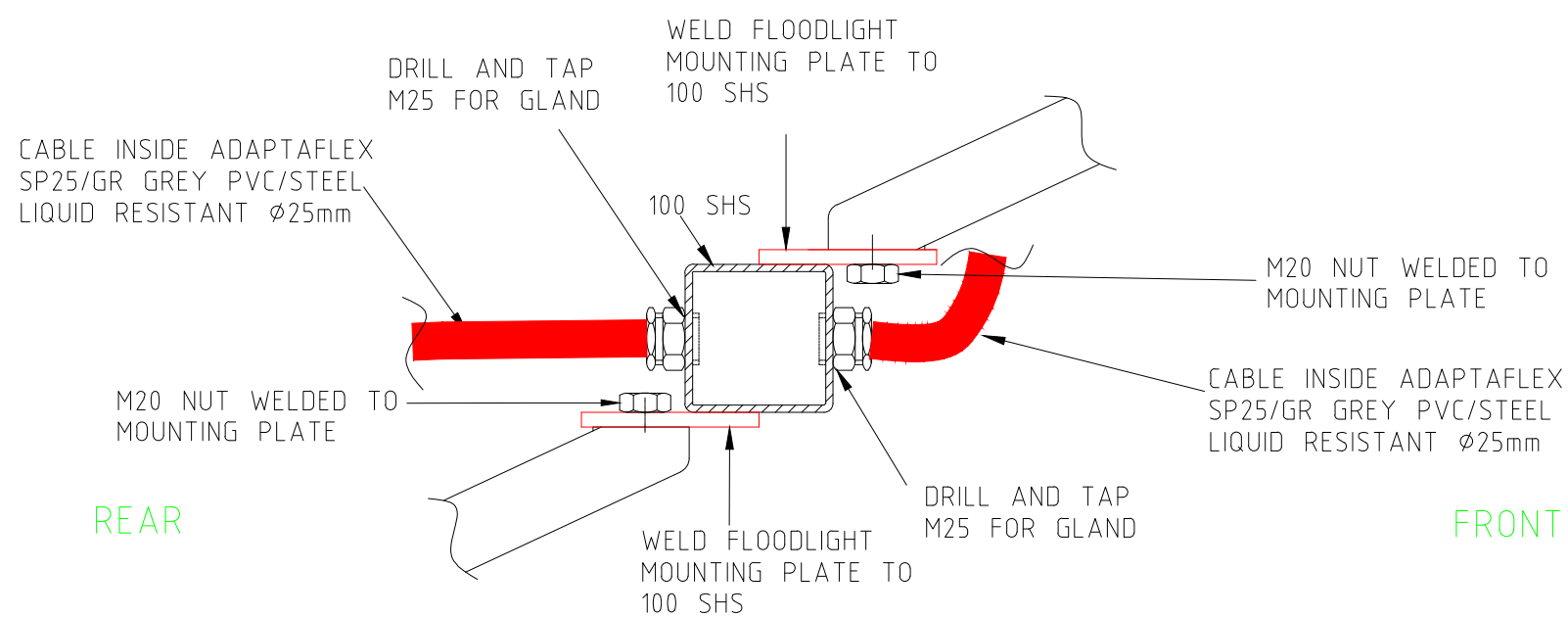


CROSSARM (POLE 5) - TOP VIEW
(1:25 @ A1)



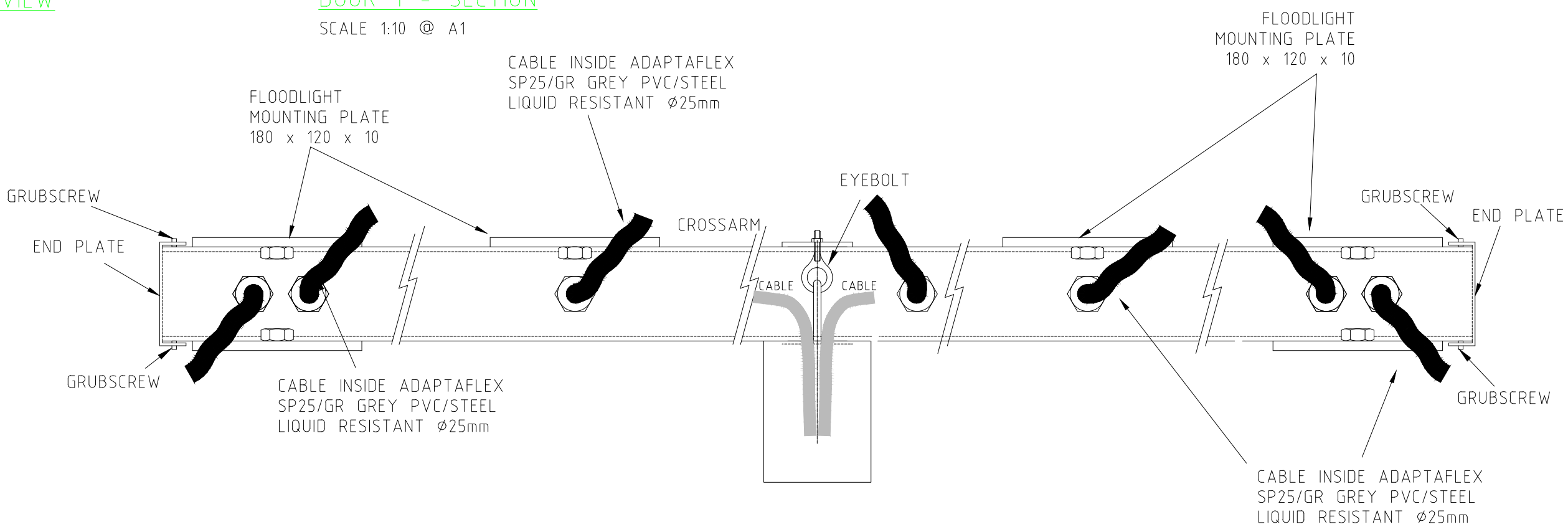
DOOR 1 FRONT VIEW
SCALE 1:10 @ A1

DOOR 1 - SECTION
SCALE 1:10 @ A1



CROSS ARM SECTION
SCALE 1:5 @ A1

- CROSSARM NOTES
1. ENDPLATES TO BE HOT DIP GALVANISED AFTER MANUFACTURE.
 2. ALL OPENINGS ON CROSS ARM TO BE BLANKED OFF USING HOT DIP GALVANISED STEEL. SECURE WITH SELF TAPPING SCREWS.
 3. DRILL AND TAP CROSSARM FOR INNER CABLE ADAPTOR MOUNTING.



REAR ELEVATION (TYPICAL)
SCALE 1:5 @ A1

POLE BASE NOTES:

- a) 12 x M30 @ 550 PCD (TYPICAL TO POLE MANUFACTURERS' DESIGN) AT LEAST 2 THREADS MUST BE EXPOSED. CUT ANY BOLT LENGTH EXCEEDING 3 THREADS & COAT WITH INORGANIC ZINC RICH PAINT.
- b) GRADE GROUT INSIDE POLE TO DRAIN.
- c) SEAL GROUT INSIDE & OUTSIDE OF POLE WITH SIKAGARD 700S.
- d) COAT HOLDING BOLTS, NUTS, WASHERS, FLANGE AND POLE UP TO 350mm WITH GULL GRAY ULTRA SHIELD BY SHIELD COAT.
- e) SPRAY FISH OIL ONTO INTERIOR OF POLE BASE AN FLANGE.
- f) FINISH POLE FOOTING WITH NON-SLIP SURFACE.
- g) CUT DRAIN FLUSH WITH GROUT INSIDE POLE.
- h) PROVIDE CONCRETE WELL LINER

A1	A	ISSUED FOR TENDER	27.05.2025	A.P.	ISSUE	REVISION	DATE	CHECKED
		REVISION						

SAGE CONSULTING ENGINEERS
Pty. Ltd.

UNIT 1, 17 FOLEY STREET
BALCATTA
WESTERN AUSTRALIA 6021
TEL: (08) 9388 9745
FAX: (08) 9388 9256
Email: msage@inet.net.au
A.C.N. 644 065 529

Copyright of this drawing is vested in:
SAGE CONSULTING ENGINEERS
and the contents are solely for the
use of the client and Project Identified
on this drawing.

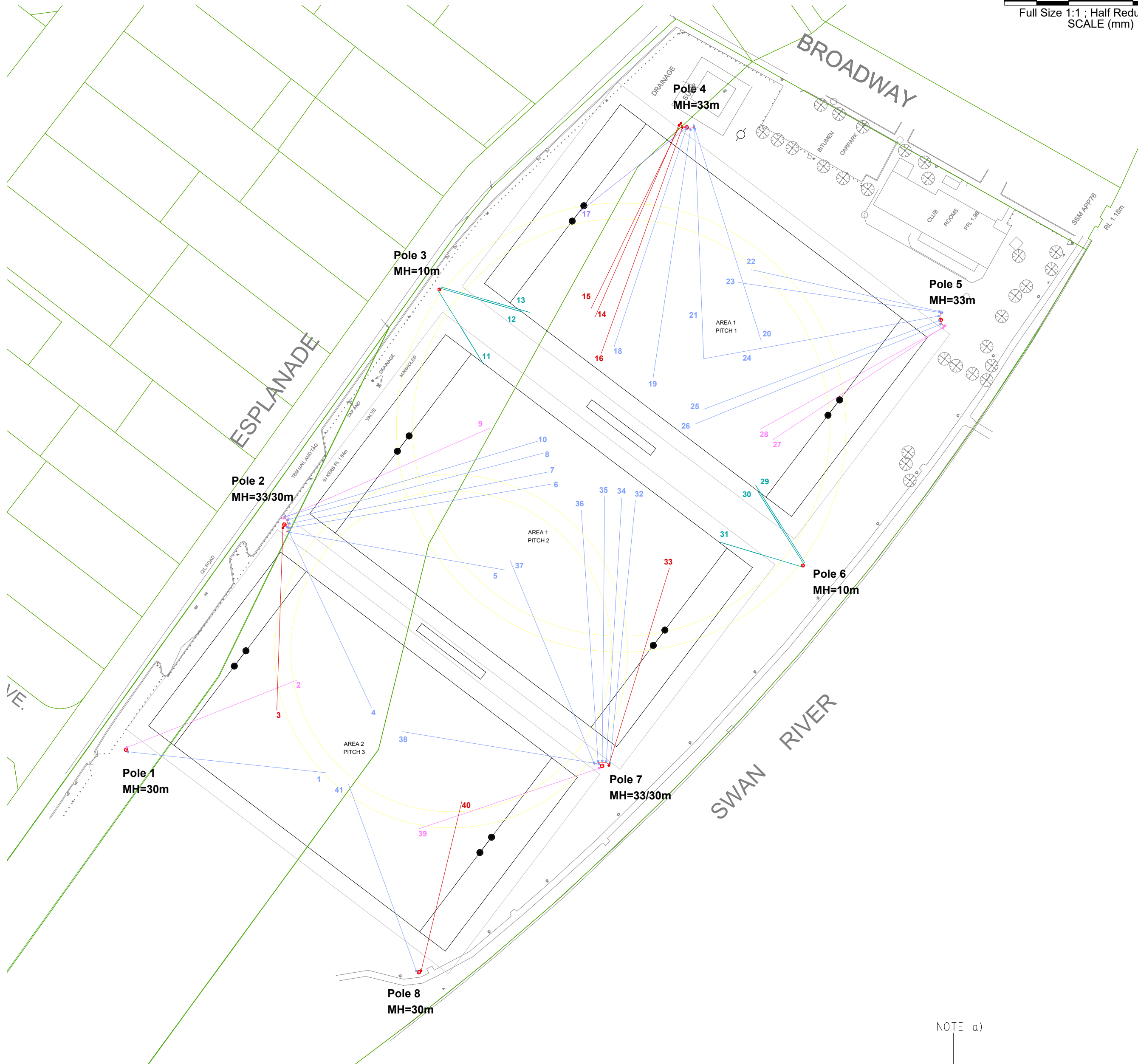


ELECTRICAL SERVICES
CITY OF NEDLANDS
CHARLES COURT RESERVE
POLE 4 & 5 POLE & HEADFRAME ILLUSTRATION

DESIGNED	C.L.	DRAWN	J.H.	CHECKED	C.L.
DATE	09/05/2025	SCALE	AS SHOWN @A1		
		PROJECT No.	3171	DRAWING No.	E8A
					SHEET 8 OF 9

AIMING SCHEDULE

FLOODLIGHT AIMING SCHEDULE - PCG94							
No	TYPE	MOUNTING HEIGHT	EASTING	NORTHING	DESIGN TILT	AIMING TILT	Project Name
1	SR2A0_BS	30.25	49834.593	259069.439	64	1	Area 2 - 100Lux
2	SR2A0_BS_LS	30.25	49825.416	259098.236	62	-1	Area 2 - 100Lux
3	SR2A0_BS_RS	30.25	49819.219	259088.862	62	-1	Area 2 - 100Lux
4	SR2A0_BS	30.25	49848.658	259089.755	64	1	Area 2 - 100Lux
5	SR2A0_BS	33.25	49890.11	259132.614	64	1	Area 1 - 100Lux
6	SR2A0_BS	33.25	49904.4	259159.286	68	5	Area 1 - 200Lux
7	SR2A0_BS	33.25	49903.835	259163.115	68	5	Area 1 - 100Lux
8	SR2A0_BS	33.25	49902.285	259168.991	68	5	Area 1 - 200Lux
9	SR2A0_BS_LS	32.75	49885.666	259176.798	65	2	Area 1 - 100Lux
10	SR2A0_BS	33.25	49900.711	259172.787	68	5	Area 1 - 100Lux
11	RIVAL_AFC02-LR	10	49877.77	259206.153	57.5	7.5	Area 1 - 100Lux
12	RIVAL_AFC02-LR	10	49885.211	259215.944	57.5	7.5	Area 1 - 100Lux
13	RIVAL_AFC02-LR	10	49884.156	259216.771	55	5	Area 1 - 200Lux
14	SR2A0_BS_RS	33.25	49918.321	259211.343	63	0	Area 1 - 100Lux
15	SR2A0_BS_RS	32.75	49917.053	259213.902	63	0	Area 1 - 100Lux
16	SR2A0_BS_RS	33.25	49920.246	259200.045	66	3	Area 1 - 100Lux
17	SR1A0_BS_RS	20	49913.141	259243.855	65	0	Area 1 - 100Lux
18	SR2A0_BS	33.25	49924.251	259202.2	65	2	Area 1 - 200Lux
19	SR2A0_BS	33.25	49936.381	259192.273	67	4	Area 1 - 100Lux
20	SR2A0_BS	32.75	49970.07	259203.808	65	2	Area 1 - 100Lux
21	SR2A0_BS	33.25	49952.102	259198.749	65	2	Area 1 - 200Lux
22	SR2A0_BS	33.25	49967	259226.107	61	-2	Area 1 - 200Lux
23	SR2A0_BS	32.75	49962.786	259222.131	63	0	Area 1 - 100Lux
24	SR2A0_BS	33.25	49951.805	259198.288	66	3	Area 1 - 100Lux
25	SR2A0_BS	33.25	49952.159	259182.627	67	4	Area 1 - 200Lux
26	SR2A0_BS	33.25	49949.644	259178.122	68	5	Area 1 - 100Lux
27	SR2A0_BS_LS	32.75	49973.735	259173.185	63	0	Area 1 - 100Lux
28	SR2A0_BS_LS	33.25	49969.665	259176.362	63	0	Area 1 - 200Lux
29	RIVAL_AFC02-LR	10	49975.998	259146.836	55	5	Area 1 - 200Lux
30	RIVAL_AFC02-LR	10	49974.944	259147.622	57.5	7.5	Area 1 - 100Lux
31	RIVAL_AFC02-LR	10	49967.705	259138.074	57.5	7.5	Area 1 - 100Lux
32	SR2A0_BS	33.25	49930.879	259154.278	68	5	Area 1 - 100Lux
33	SR2A0_BS_RS	32.75	49941.453	259133.14	63	0	Area 1 - 100Lux
34	SR2A0_BS	33.25	49926.62	259155.097	68	5	Area 1 - 200Lux
35	SR2A0_BS	33.25	49921.312	259155.463	68	5	Area 1 - 200Lux
36	SR2A0_BS	33.25	49914.014	259151.179	67	4	Area 1 - 100Lux
37	SR2A0_BS	33.25	49891.869	259135.463	64	1	Area 1 - 100Lux
38	SR2A0_BS	30.25	49858.39	259082.247	64	1	Area 2 - 100Lux
39	SR2A0_BS_LS	30.25	49863.37	259051.967	63	0	Area 2 - 100Lux
40	SR2A0_BS_RS	30.25	49876.925	259060.839	61	-2	Area 2 - 100Lux
41	SR2A0_BS	30.25	49841.517	259065.992	64	1	Area 2 - 100Lux



AIMING DIAGRAM

AIMING NOTES:

- a) X AND Y COORDINATES ARE FOR AIMING PURPOSES ONLY.
b) FLOODLIGHTS TILT ANGLE MUST BE SET AFTER AIMING IS COMPLETE (AS SHOWN IN THE TABLE) OR AS PER SUPPLIER'S RECOMMENDATIONS.
c) HEADFRAME ORIENTATION TO BE AS PER SITE PLAN DRAWING.

SCHEDULE OF LUMINAIRES

Symbol	Qty	Label	Description	Luminaire Lumens	Luminaire Watts	Supplier
	6	RIVAL_AFC02-LR	EWO_Rival_AFC02-LR-FCO-320LED_70CRI-4000K-500mA_PM357247	65859	466.6	LIGHT APPLICATION
	1	SR1A0_BS_RS	SYLVANIA RAPTOR 4 600W - SR1A0G4-740 A0 OPTIC CRI70 CCT4000K REAR + RIGHT SHIELD	77444	601.756	SYLVANIA-SCHREDER
	23	SR2A0_BS	SYLVANIA RAPTOR 4 1200W - SR2A0G4-740 A0 OPTIC CRI70 CCT4000K REAR SHIELD	175057	1233.42	SYLVANIA-SCHREDER
	5	SR2A0_BS_LS	SYLVANIA RAPTOR 4 1200W - SR2A0G4-740 A0 OPTIC CRI70 CCT4000K REAR + LEFT SHIELD	169424	1231.86	SYLVANIA-SCHREDER
	6	SR2A0_BS_RS	SYLVANIA RAPTOR 4 1200W - SR2A0G4-740 A0 OPTIC CRI70 CCT4000K REAR + RIGHT SHIELD	169814	1232.04	SYLVANIA-SCHREDER

SCHEDULE OF SYMBOLS

	CONTACTOR - NO		FUSE		kWh METER		CABLE/CONDUIT
	MAKE CONTACT		ON LOAD ISOLATOR		POLE		FLOODLIGHT
	BREAK CONTACT		LINK		AMMETER		CABLE PIT
	TIME SWITCH		R.C.D CIRCUIT BREAKER		VOLTMETER		FLOODLIGHTING DISTRIBUTION BOARD
	CIRCUIT BREAKER		ANTI CONDENSATION HEATER		EARTH		WESTERN POWER PILLAR
	10A SOCKET OUTLET		SURGE DIVERTERS		FRAME CONNECTION		10A SOCKET OUTLET
	CONTACTOR OR RELAY COIL		LAMP CONTROL GEAR		1 PHASE		
	THERMOSTAT		CURRENT TRANSFORMER		2 PHASE		
			TERMINAL		3 PHASE		
					TRANSFORMER		

City of Nedlands

Sports Flood lighting usage at Charles Court Reserve





Charles Court Reserve Nedlands

Charles Court Reserve located at 181 Broadway in the City of Nedlands is used all year round by several formal and non formal groups and community users. The primary user is Nedlands Rugby Club.



It is also used for junior and school sporting carnivals as well as coaching and development clinics. Perth's Western Force team use the Club's facilities when their own training venue is not available. Other visiting Super Rugby teams have used the grounds to train including Moana Pasifika, the Highlanders, Fiji Drua, and Queensland Reds. In 2024 & 2025 it was used as an official training venue for teams competing in the HSBC International SVNS competition.





City of Nedlands sports floodlighting

Sports flood lighting in the City of Nedlands is managed by the Parks team. This includes implementing timers, and in our newer lighting systems, having absolute control over lux levels. While there is a blanket curfew of 10pm, there are no city sporting clubs that use floodlighting for training past 8.30 pm in the wintertime. Lighting is not available for use during the summer.

Current use patterns

Charles Court Reserve is predominately used by the Nedlands Rugby Union Football Club (Amateur to semi professional level) to train 7 teams (U15s to Premier Grade), with weekend daytime games over the weekend starting from 8am and finishing with the premier grade final whistle at 5.30. The junior arm of the club (Cubs-U14s) train on reserves in the Northern suburbs of Perth, this is historically due to Charles Court reserve being unable to meet club growth. As the junior club is well established in the north, this is unlikely to change.

Current lighting is provided by six poles located from Bessell Ave across to the clubhouse. The levels across the reserve range from 10 lux to 0.

The reserve is currently configured as 2 full rugby fields and 5 smaller soccer pitches. The club train predominantly on pitch 1, utilising pitch 2 earlier in the evening.

This is for several reasons, the lighting available (including the lighting from the clubhouse spot lights), and the proximity to the clubhouse and storage area for the large equipment used (including scrum machines, tackle pads etc). There is no alternative storage located on the reserve, training on the furthest field would require the transport of equipment around 300m.

Teams training occurs on Tuesdays and Thursdays, this is a typical pattern for club rugby. As Women's Rugby grows, it is expected that this may extend to use on Mon & Wed, however only one field would be required.

Junior teams begin around 4.30, with seniors finishing at 8pm. As with many other rugby clubs in Perth, many players travel to training from as far north as Alkimos, and Mandurah in the South. This means that training needs to finish at this time to allow for players to travel home safely.

Due to the poor visibility, teams currently train one after other and close to club house, or directly under the existing lighting towers.



Current sports lighting towers



Current use patterns

The reserve configuration will be changing in line with the Foreshore Management Plan that was endorsed by Council in 2025, and in line with the draft Strategic Active Sports Facilities Plan that is currently under review. This will see the following changes.

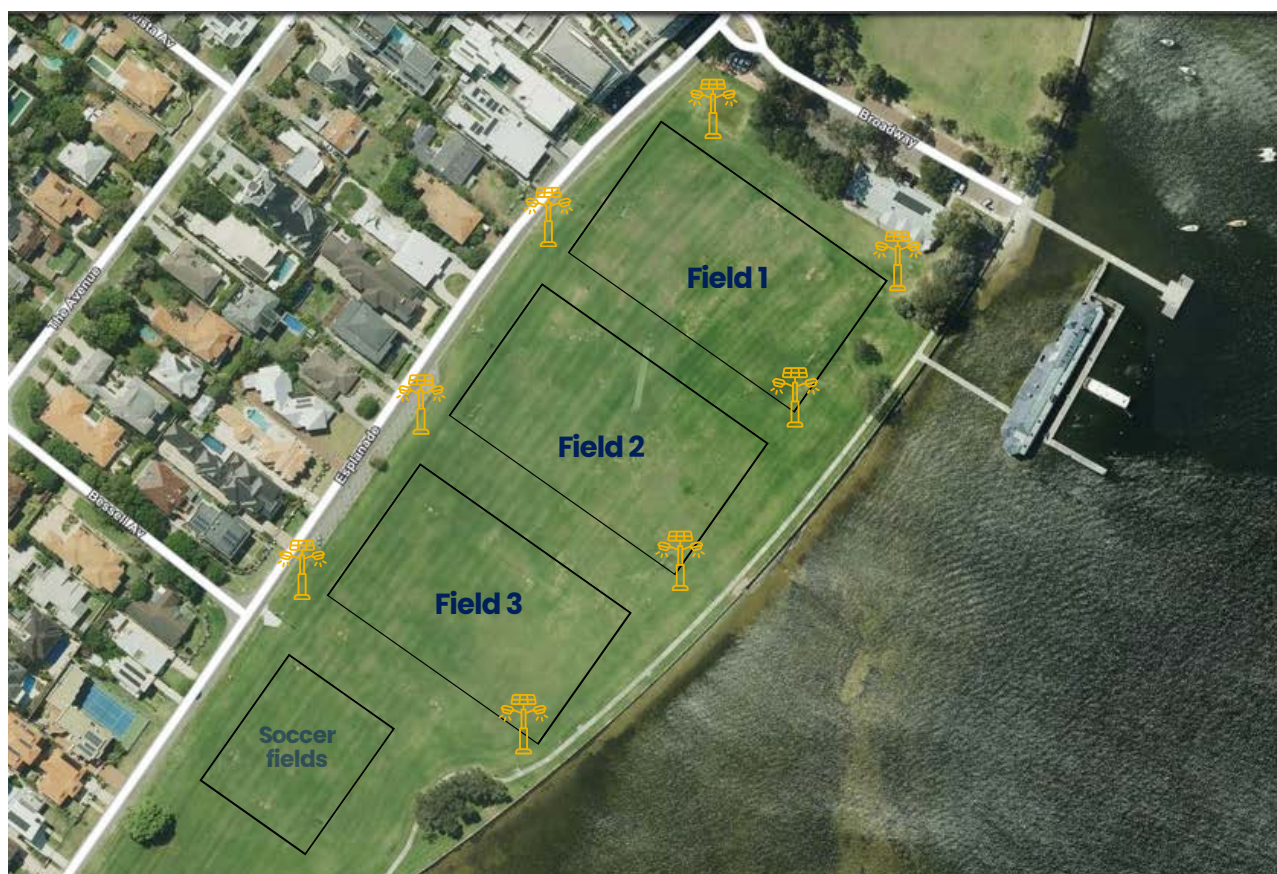
Field relocation and cricket wicket realignment

The relocation of pitches closer to the club house to accommodate a third smaller field. The requirement for 3 marked fields allows for the club to host Junior Carnivals, and for the club to be eligible to host Finals, as well as the ability to use the 3rd field if weather conditions prevent the use of Fields' 1 & 2.

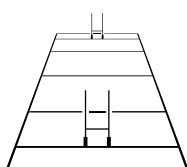
The new lighting design will see an increase from 6 existing lights to 8, however the area to be illuminated will be the same as the existing sports reserve, with the 2 poles at the southern end of the reserve to be replaced in the same location. This will mean the footprint of the playing surface remains the same.

The existing cricket wicket will be realigned to fit parallel and in between Field 1 & 2, and an additional wicket to be added between 2 & 3.

The area south of Bessell Ave currently used as junior soccer pitches will be reverted to bush (see Foreshore management plan)

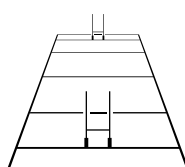


Field 3



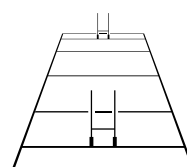
96 x 68m
In goal 10m
Capable of 100 lux
floodlighting

Field 2



100 x 70m
In goal 10m
Capable of 100 lux
floodlighting

Field 1



100 x 70m
In goal 10m
Capable of 200 lux
floodlighting



Proposed sports
lighting towers



Lighting use

Due to the established training patterns, the lighting use is unlikely to change. The new lighting design provides for the current usage but will improve the usability of the reserve by the following:

- **Efficient training times**

The lighting will allow for teams to train simultaneously across both fields reducing the need for increased or additional lighting hours. The club are likely to use the 3rd field for junior training (U15-U18s) who typically don't require the larger more technical equipment and train during daylight hours due to their age group.

- **Safety – Player and community**

Currently the low lux levels and inconsistent lighting present a safety issue for those training, as well as other users such as dog walkers. There are several areas of the field with 0 lux levels. This can mean that the other users are at risk of being unseen and colliding with people training, or an airborne ball.

- **Turf condition and reduction in wear and tear**

Currently the use of the fields for training is limited to the areas that have light, this causes significant wear to the turf, including holes that require ongoing repair. The new lighting will allow the teams to train evenly across the two fields, resulting in more uniformed distribution of use, and less intensive repair that requires additional water and nutrients to reestablish turf.





- **More efficient capacity and future proofing assets**

While the hours of operation are unlikely to increase, the City is future proofing assets for capability and capacity in the long term.

- **Eligibility to host the 2027 Rugby World Cup teams as an outdoor training facility**

The City of Nedlands and Nedlands Rugby Union Football Club were successful in their bid to act as an outdoor training venue for international teams

Supported through the Department of Creative Industries, Tourism and Sports, WA Tourism, and RugbyWA, there are several planned upgrades for Charles Court Reserve. One of the requirements to host teams is the capacity for 200 lux lighting.

As stipulated in the RugbyWA letter, 200 lux levels would only be used for additional training required throughout the period where the Rugby World Cup games are taking place in Perth (21 September 2027 – 25 October 2027).

Rugby World Cup have indicated that almost all of the training will occur during the day during the knockout phase (which is the phase being hosted in Perth). At most, it is likely a team may use the lights 1 time during the week they are in Perth for training, so the lights may be turned to 200 Lux 2 or 3 times during the entire event period. However, as this is a prerequisite for professional teams to train, the lighting needs to be capable of this.

200 lux use

Aside from the Rugby World Cup period in 2027, the only other time a club would use the lights at 200 Lux level is if they hosted a Premier grade game on a Friday or Saturday night. This is unlikely as scheduling is typically restricted to a 3.30pm kick off to accommodate attendance and viewing times for State games (Western Force) that are played in the early evening. Charles Court Reserve and the Nedlands Rugby club do not currently hold the necessary outdoor infrastructure (grandstands, embankments) to comfortably and safely facilitate evening games. There is no intention or plan to develop this infrastructure.

100 lux use

Under the Australian Standards for Sports lighting, 100 lux level is required for Semi-professional club competition and match practice and Amateur Level competition. Like the use of 200 lux, club competitions are rarely scheduled in the evenings, and 100 lux on fields 1 and 2 would likely be used during the finals period (4 weeks during August) and dependent on whether teams make finals.

50 lux use

Under the Australian Standards for Sports lighting this level is required for both Amateur and Semi-professional ball and physical training. It is anticipated that this level will be used the most.



Lighting use

There are 4 scenarios that accurately reflect the use of the proposed lighting based of current use and scheduling. An increase in use is expected as the game continues to grow, however the vision of the overarching sporting bodies, and clubs see the development and growth in the areas of junior and Women's Rugby

Scenario 1 – Regular Training Activity

Field 1 – 50 lux

Field 2 – 50 lux

Field 3 - off

Twice a week on March to September (25 weeks).

March 6.30-8.30 (2 hours)

July 1700-2030 (3.5 hours)

August 1800-2030 (1.5 hrs)

Total of approximately **130 hours** each year



Scenario 2 – Finals training- full club training nights (finals season)

Field 1 – 50 lux

Field 2 – 50 lux

Field 3 - 50 Lux

Training 2 times a week on Tuesday and Thursday for 3 weeks in (August)

August 1800-2030 (1.5 hrs)

Total of **9 hours** each year



Scenario 3 - Club rugby evening matches (Amateur Level)

Field 1 – 100 lux

Field 2 – 100 lux

Field 3 - off

Once per year if at all, for **5 hours** (1600-2100) each year





Scenario 4 - RWC Training in October 2027

Field 1 – 200 lux
Field 2 – 100 lux
Field 3 - off

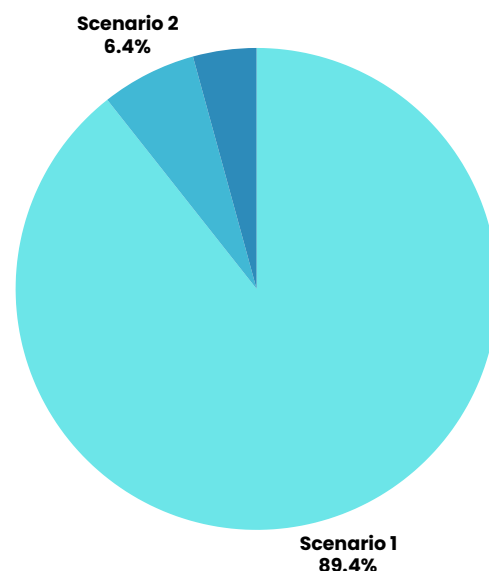
This is estimated to occur up to 3 times during the knockout phase in Perth (21 September 2027 – 25 October 2027) once a week for approximately **9 hours** in total.

If Nedlands Rugby Club premier team had a scheduled evening match the usage would typically look like this as well, however as described above, this is unlikely.



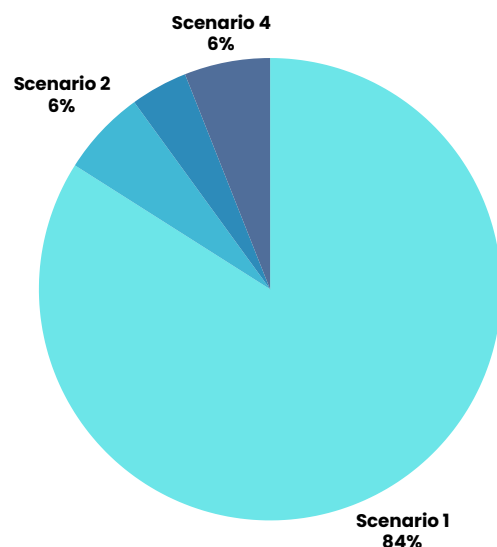
Expected lighting use (in an ordinary year)

Scenario 1	130 hours
Scenario 2	9 hours
Scenario 3	5 hours



Expected lighting use (in 2027)

Scenario 1	130 hours
Scenario 2	9 hours
Scenario 3	5 hours
Scenario 4	9 hours



The current and projected use, and the improvement in technology and ability to isolate fields for illumination, indicates that the lighting will be used the majority of the time (89%) in the first scenario



Charles Court Reserve Surrounding area

There are 10 houses located on the stretch of the Esplanade between Bessell ave and Broadway that directly face the reserve where the proposed lighting will be. Recently at a council meeting to award the lighting contract, 2 of the residents from 39 and 41 the Esplanade spoke in favour for project. The community consultation that took place in October 2024 returned the following results, 70% supported the project, 30% strongly supported the project. Of the responses, 60% were residents. There there are also apartments located across the road at 35 Esplanade with 4 & 5 storied height, providing a partially obstructed view of the field. Additionally there is a residential apartment at 168 Broadway scheduled to be completed in 2026. The lighting design and calculations show that the glare ratings are meeting the standards for this.





Charles Court Reserve

Future planned works

There will be a synthetic cricket wicket located between Fields 1 & 2. This can be covered over with an artificial pitch cover specifically designed to provide an impact attenuated surface, suitable for winter contact sports while meeting the guidelines for player safety.

Irrigation and drainage upgrade **April 2026**

The irrigation system at Charles Court Reserve to be upgraded for correct Distribution Uniformity (DU) for hydro-zoning including sand insertion to improve drainage.

Turf Surface Rejuvenation – Fraize mowing **October 2026**

- Removal and disposal of approx. 700m² (100mm deep) of Paramatta grass infested areas disposal & returf the 700m² with Kikuyu
- Field Top Maker x 2 passes in different directions over 3 fields (2.54 Ha)
- Coring, Gypsum application, 20mm topdress with 80% turf sand /20% compost mix.
- Organic fertiliser application at half rate, followed up with other ½ applied 2 weeks later
- Intensive aftercare with additional fertiliser applications





Charles Court Reserve



Carpark adjacent to Clubhouse, 24 marked bays (approx 660sqm)



Fields 1 & 2 (facing South West)



Fields 1 & 2 (South facing)



Area near Clubhouse for temporary gym, analyst tower, pitchside shelter



Field 1 (from the edge of the clubhouse facing West)

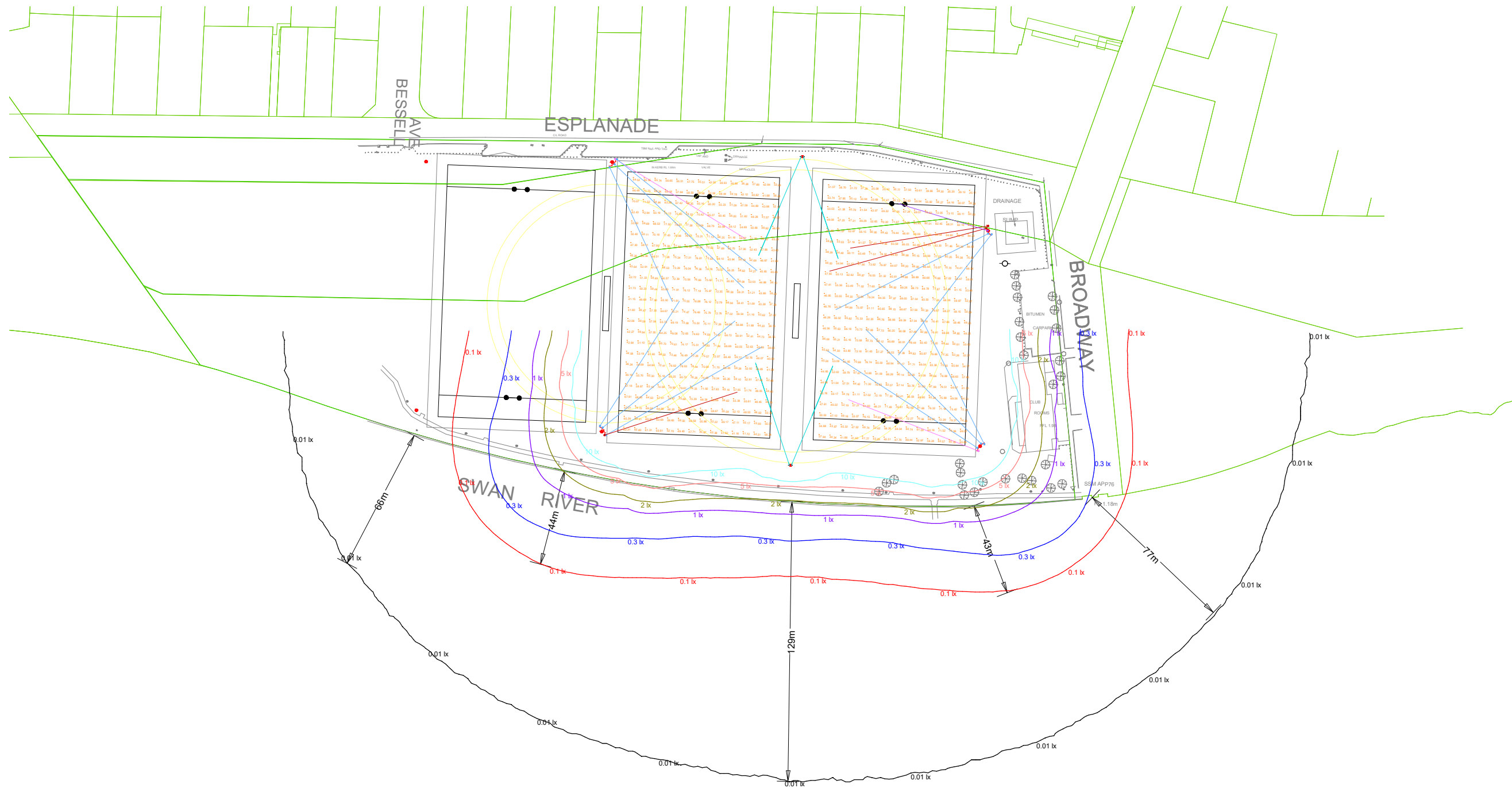


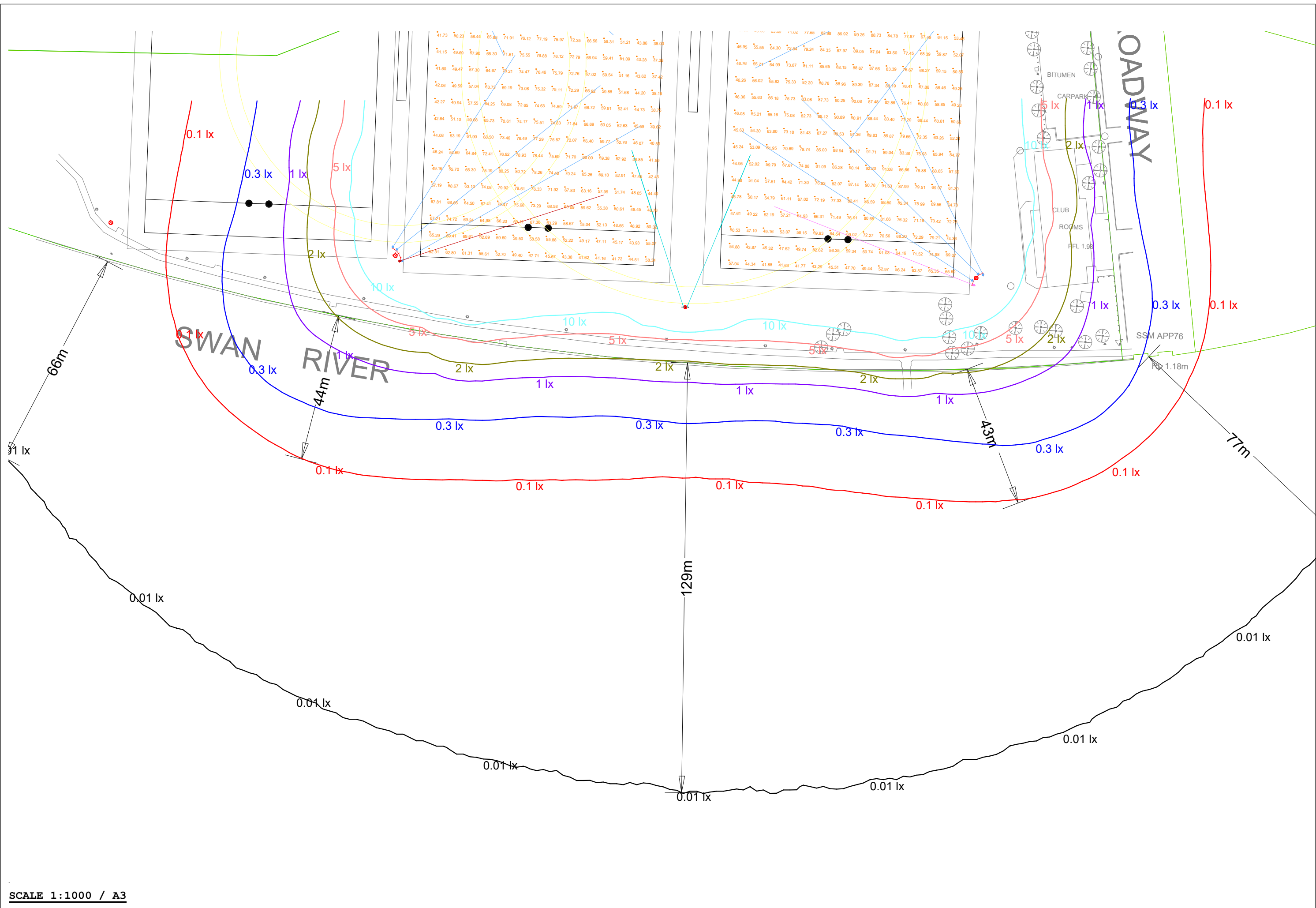
Clubhouse

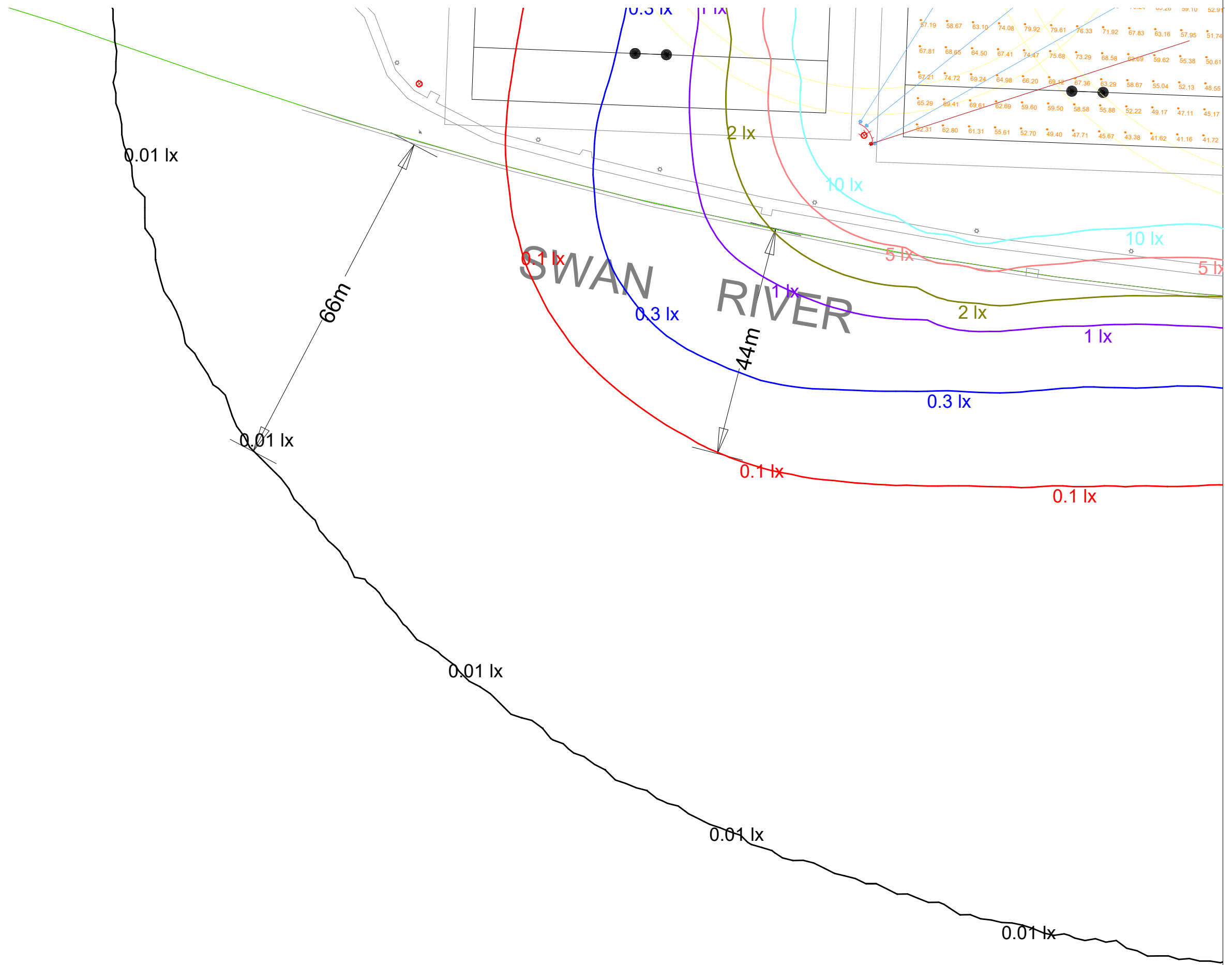


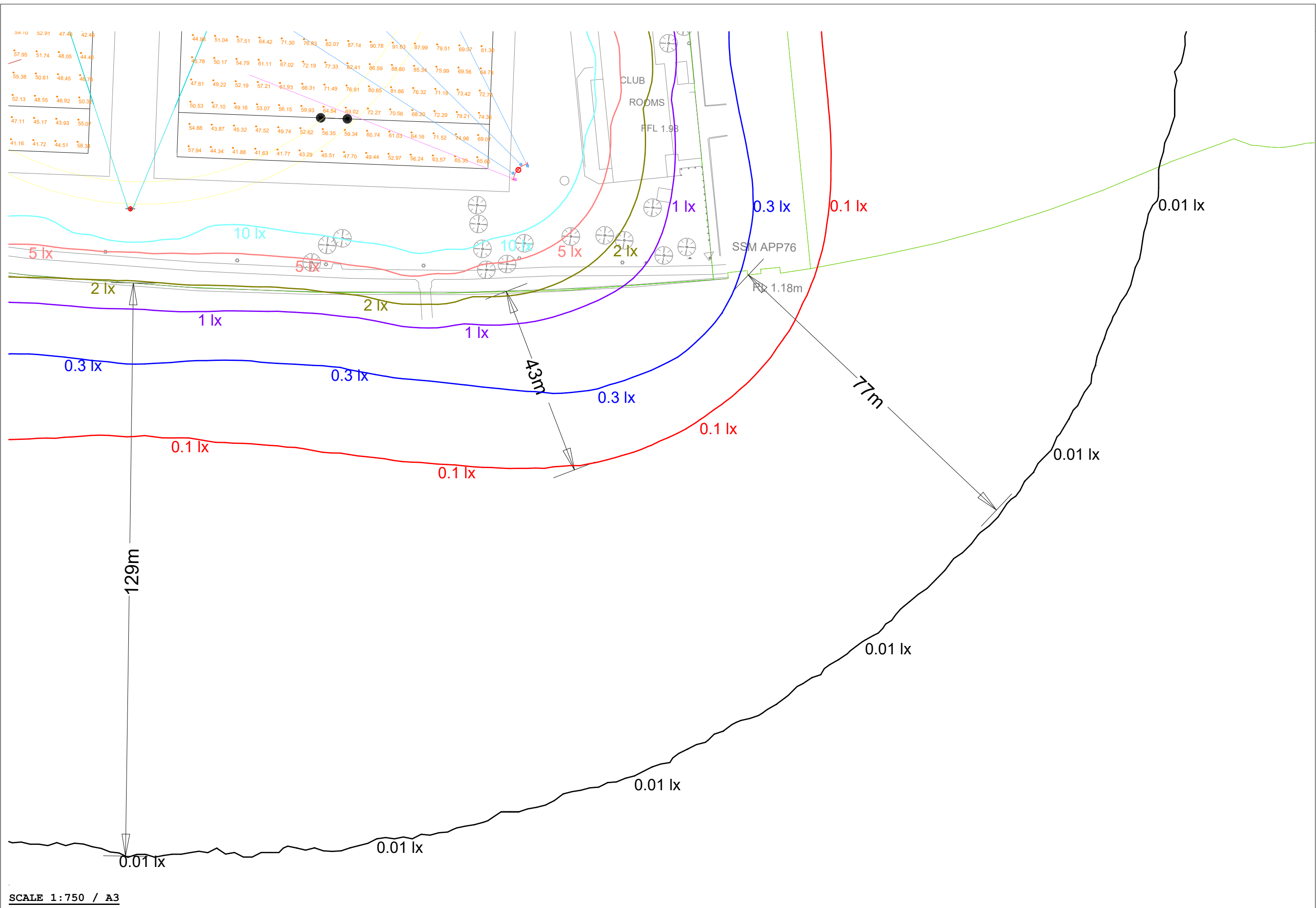
Clubhouse Main entrance

3171 Charles Court Reserve (Scenario 4 - 50lux, 50lux, off)





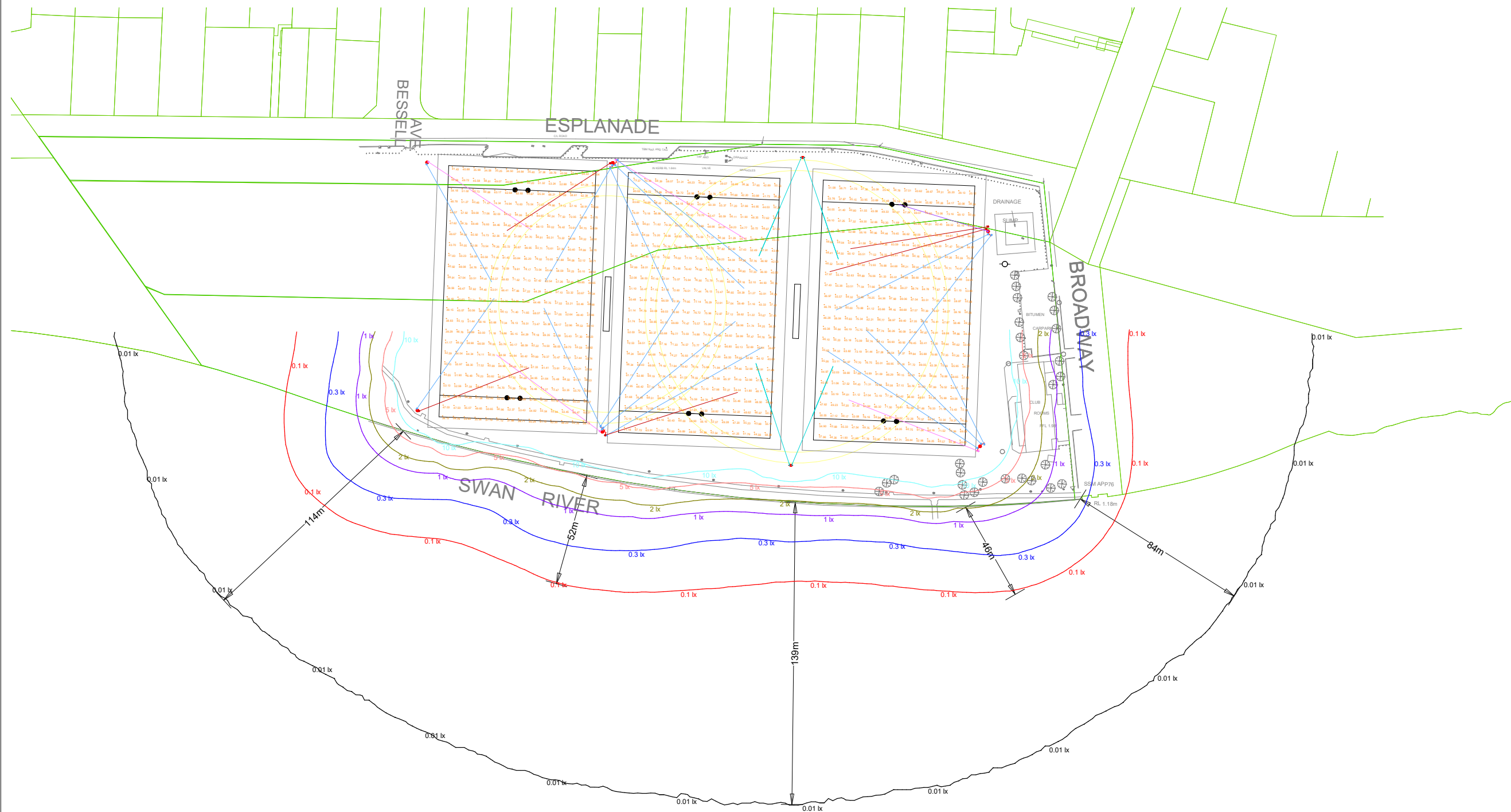


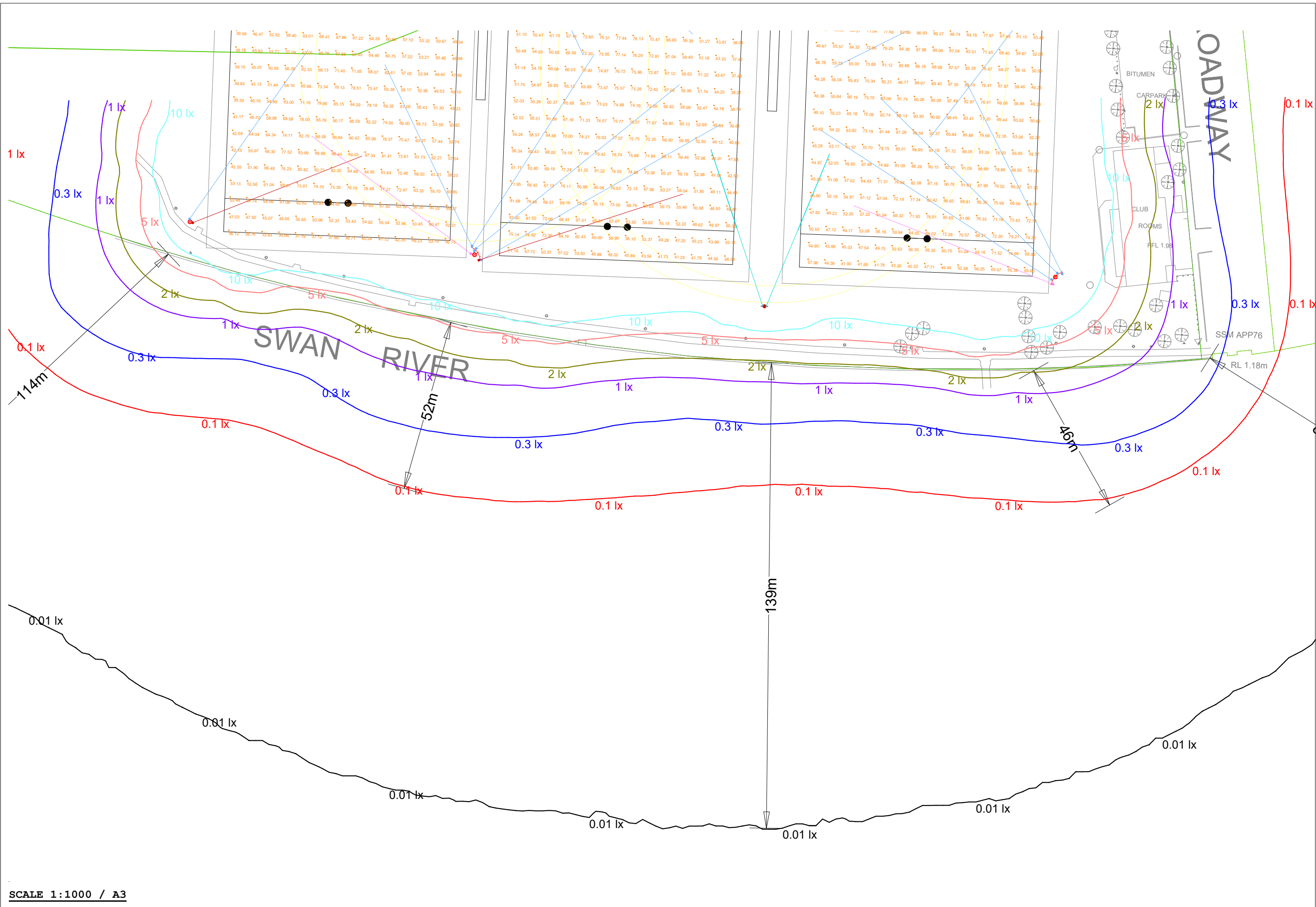


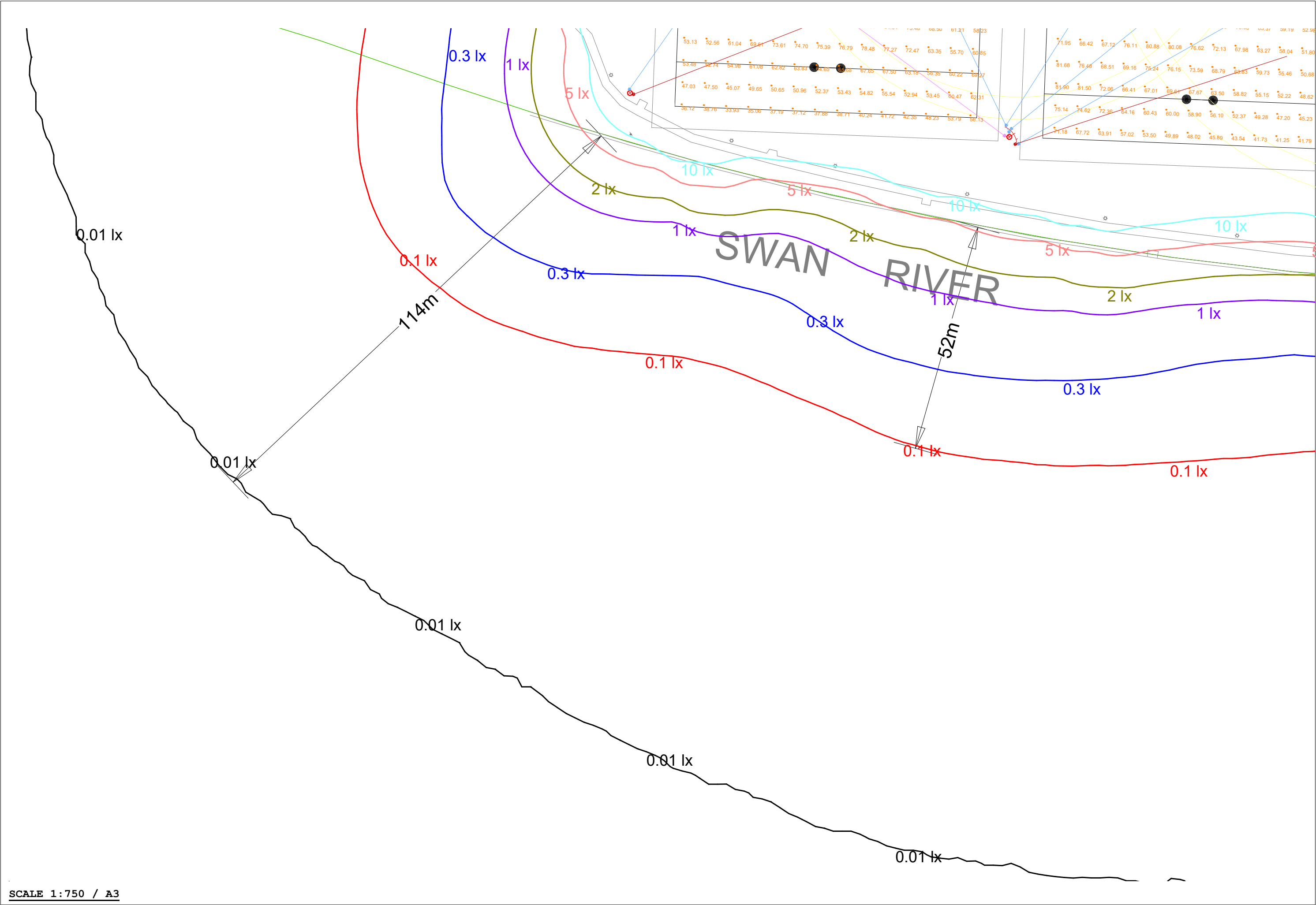
Luminaire Schedule							
Symbol	Qty	Label	Description	LLF	Luminaire Lumens	Luminaire Watts	Total Watts
	11	A0G4-740_BS_63	SR2A0G4-740 RAPTOR 4 1200W A0 OPTIC CRI70 CCT4000K REAR SHIELD - lmax occurs at	0.500	175057	1233.42	13567.62
	3	A0G4-740_BS_RS_63	SR2A0G4-740 RAPTOR 4 1200W A0 OPTIC CRI70 CCT4000K REAR + RIGHT SHIELD - lmax oc	0.500	169814	1232.04	3696.12
	2	A0G4-740_BS_LS_63	SR2A0G4-740 RAPTOR 4 1200W A0 OPTIC CRI70 CCT4000K REAR + LEFT SHIELD - lmax occ	0.500	169424	1231.86	2463.72
	4	Rival 467W_AFC02-LR	ewo_Rival_AFC02-LR-FCO-320led	0.500	65859	466.6	1866.4
	1	A0G4-740_600W_BS_RS_65	SR1A0G4-740 RAPTOR 4 600W A0 OPTIC CRI70 CCT4000K REAR + RIGHT SHIELD - lmax occ	0.500	77444	601.756	601.756

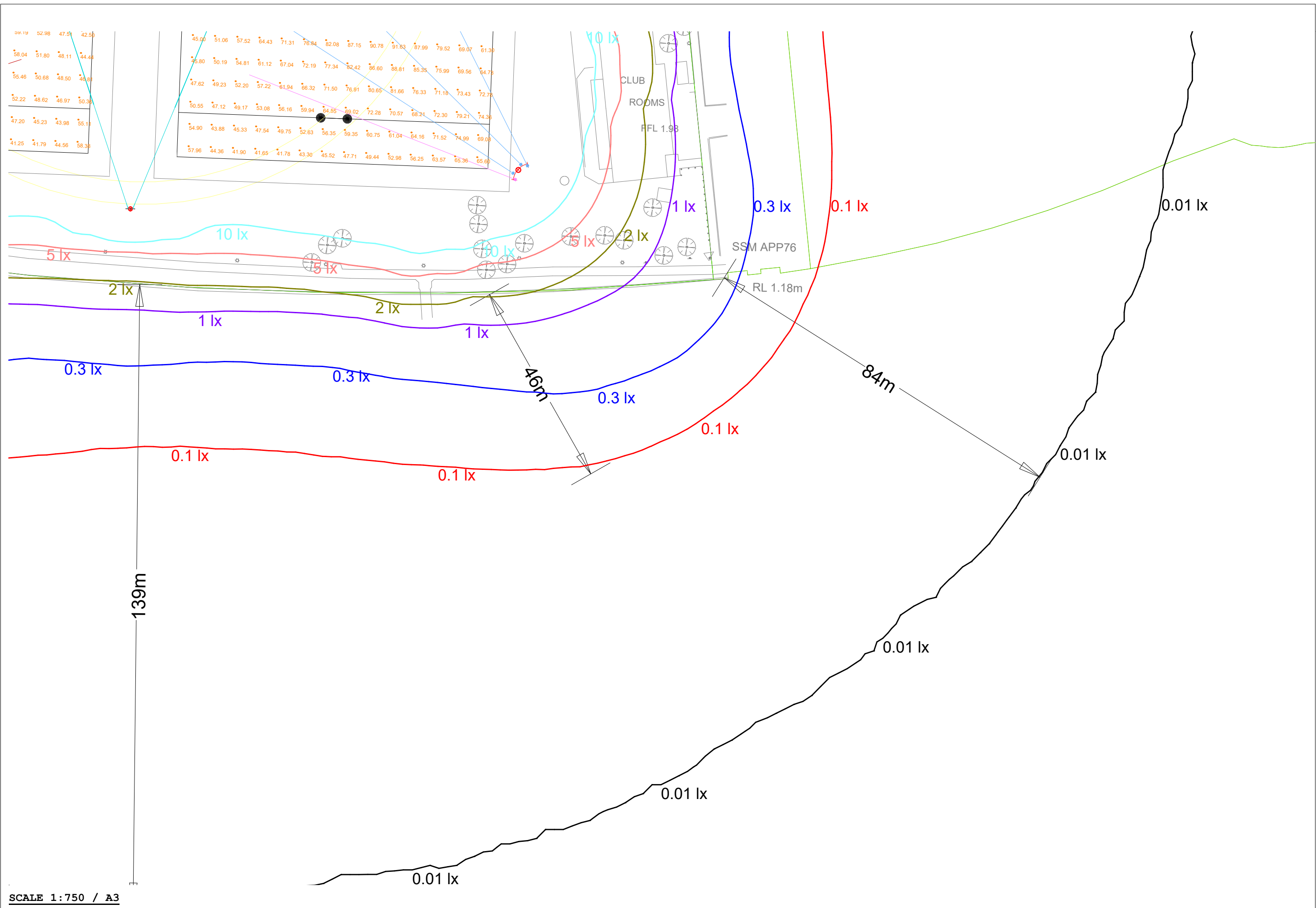
Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Min/Avg	Min/Max
Rugby pitch 1 - Eh	Illuminance	Lux	67.25	94.80	20.11	0.30	0.21
Rugby pitch 1 - Eh_reduced	Illuminance	Lux	69.76	94.80	40.79	0.58	0.43
Rugby pitch 2 - Eh	Illuminance	Lux	60.21	80.72	36.28	0.60	0.45

3171 Charles Court Reserve (Scenario 3 - 50lux, 50lux, 50lux)





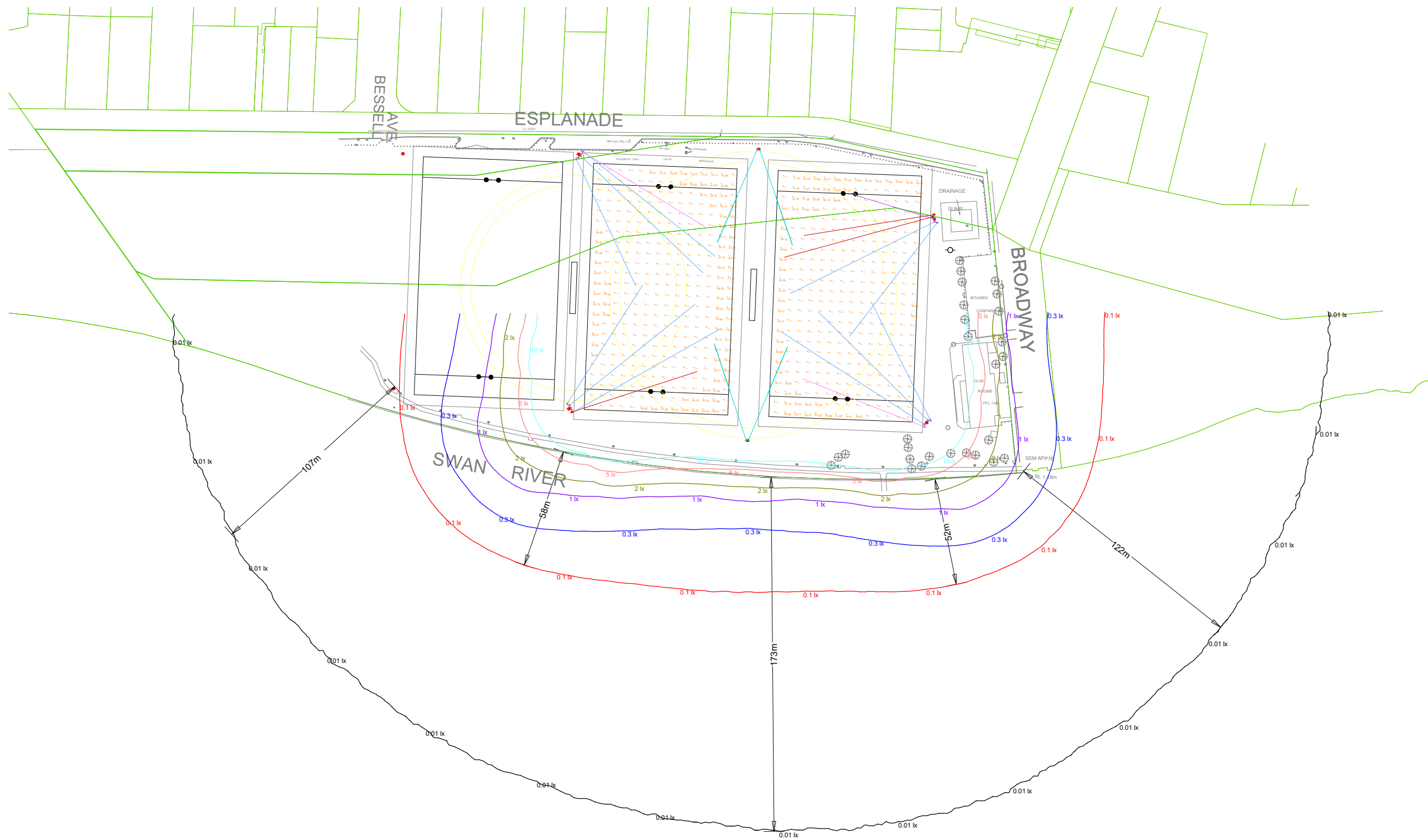


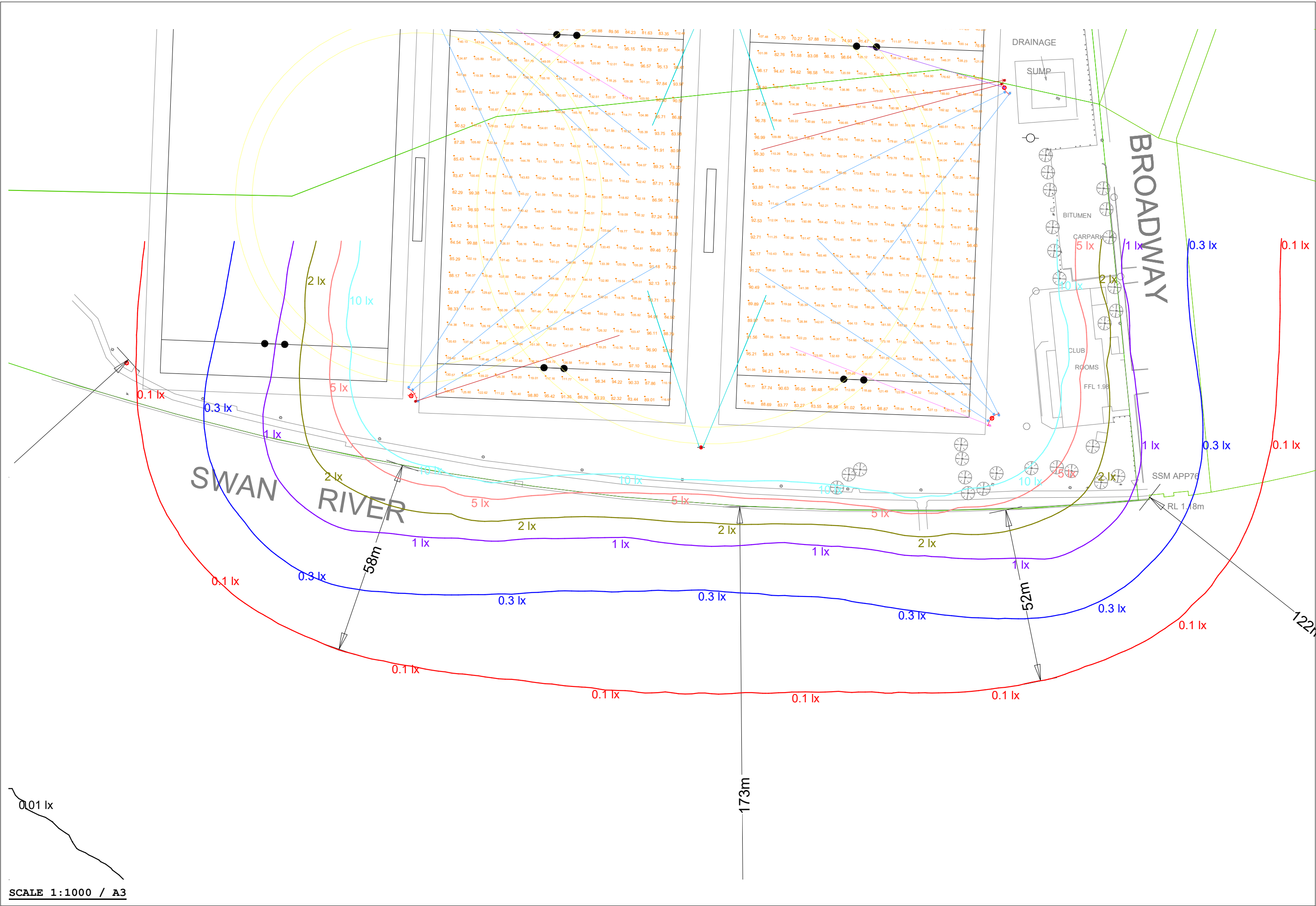


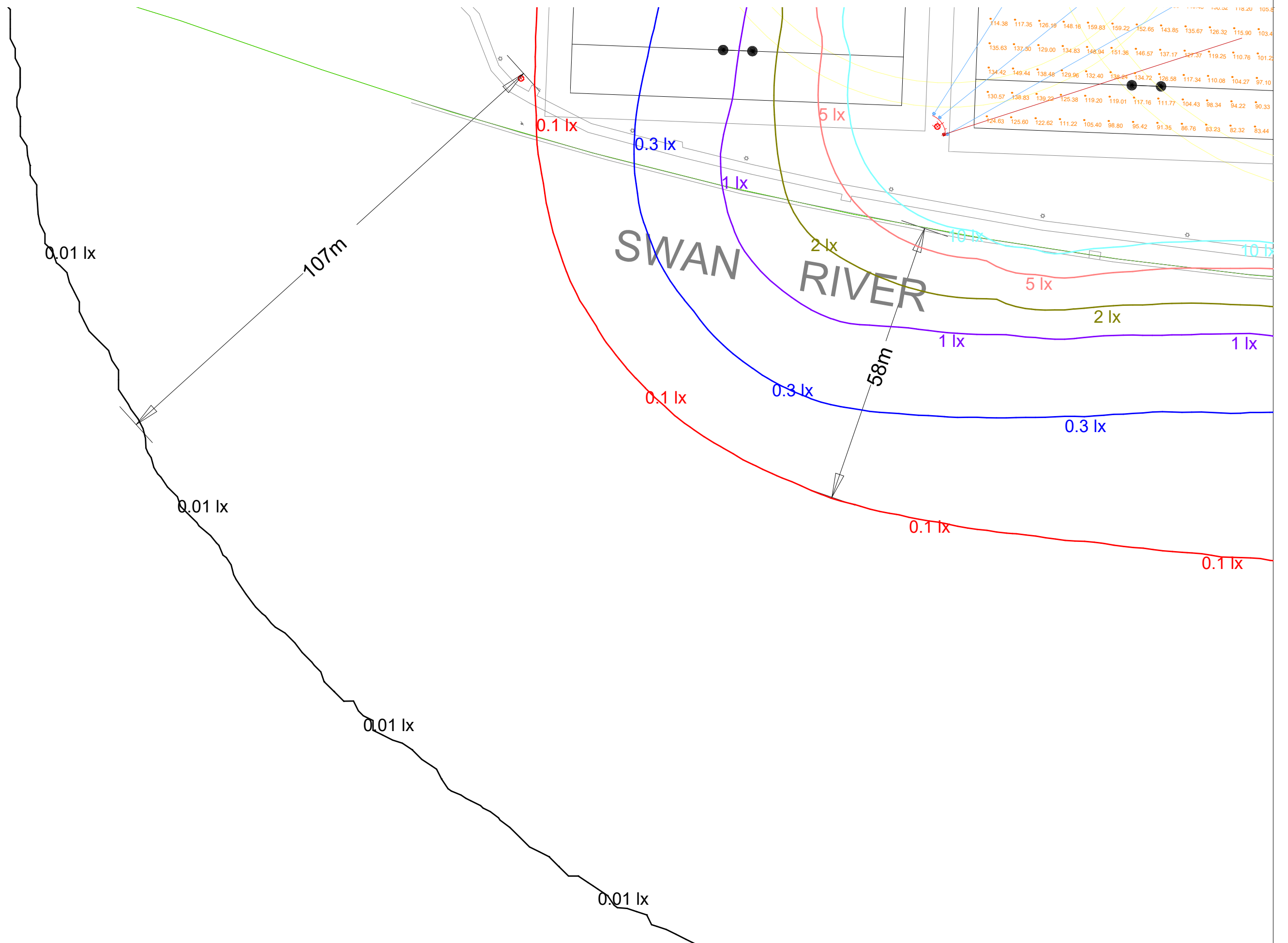
Luminaire Schedule							
Symbol	Qty	Label	Description	LLF	Luminaire Lumens	Luminaire Watts	Total Watts
	15	A0G4-740_BS_63	SR2A0G4-740 RAPTOR 4 1200W A0 OPTIC CRI70 CCT4000K REAR SHIELD - lmax occurs at	0.500	175057	1233.42	18501.301
	5	A0G4-740_BS_RS_63	SR2A0G4-740 RAPTOR 4 1200W A0 OPTIC CRI70 CCT4000K REAR + RIGHT SHIELD - lmax oc	0.500	169814	1232.04	6160.2
	4	A0G4-740_BS_LS_63	SR2A0G4-740 RAPTOR 4 1200W A0 OPTIC CRI70 CCT4000K REAR + LEFT SHIELD - lmax occ	0.500	169424	1231.86	4927.44
	4	Rival 467W_AFC02-LR	ewo_Rival_AFC02-LR-FCO-320led	0.500	65859	466.6	1866.4
	1	A0G4-740_600W_BS_RS_65	SR1A0G4-740 RAPTOR 4 600W A0 OPTIC CRI70 CCT4000K REAR + RIGHT SHIELD - lmax occ	0.500	77444	601.756	601.756

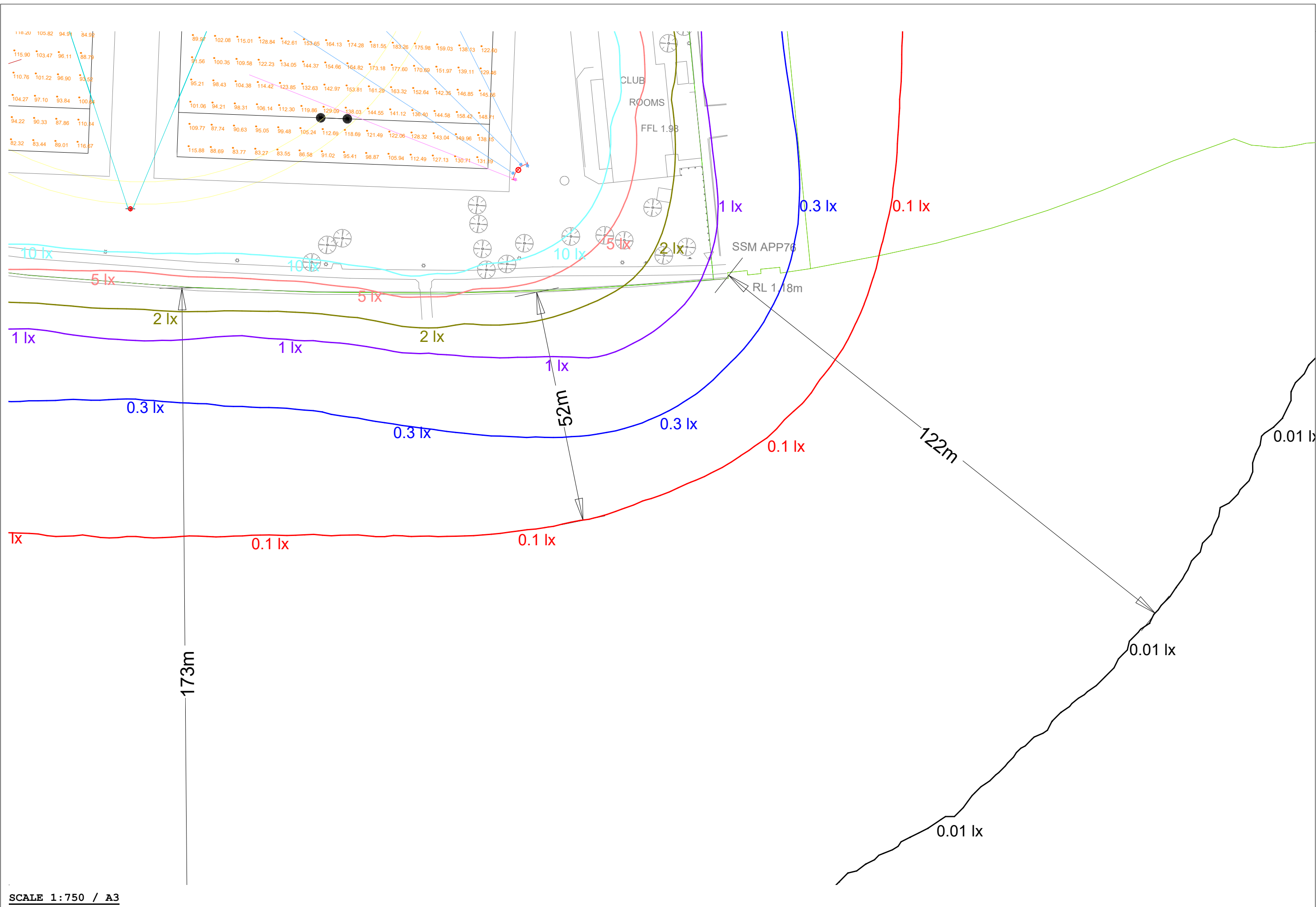
Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Min/Avg	Min/Max
Rugby pitch 1 - Eh	Illuminance	Lux	67.26	94.81	20.12	0.30	0.21
Rugby pitch 1 - Eh_reduced	Illuminance	Lux	69.76	94.81	40.80	0.58	0.43
Rugby pitch 2 - Eh	Illuminance	Lux	61.89	83.60	36.36	0.59	0.43
Rugby pitch 3 - Eh	Illuminance	Lux	62.40	91.98	33.93	0.54	0.37

3171 Charles Court Reserve (Scenario 2 - 100lux, 100lux, off)





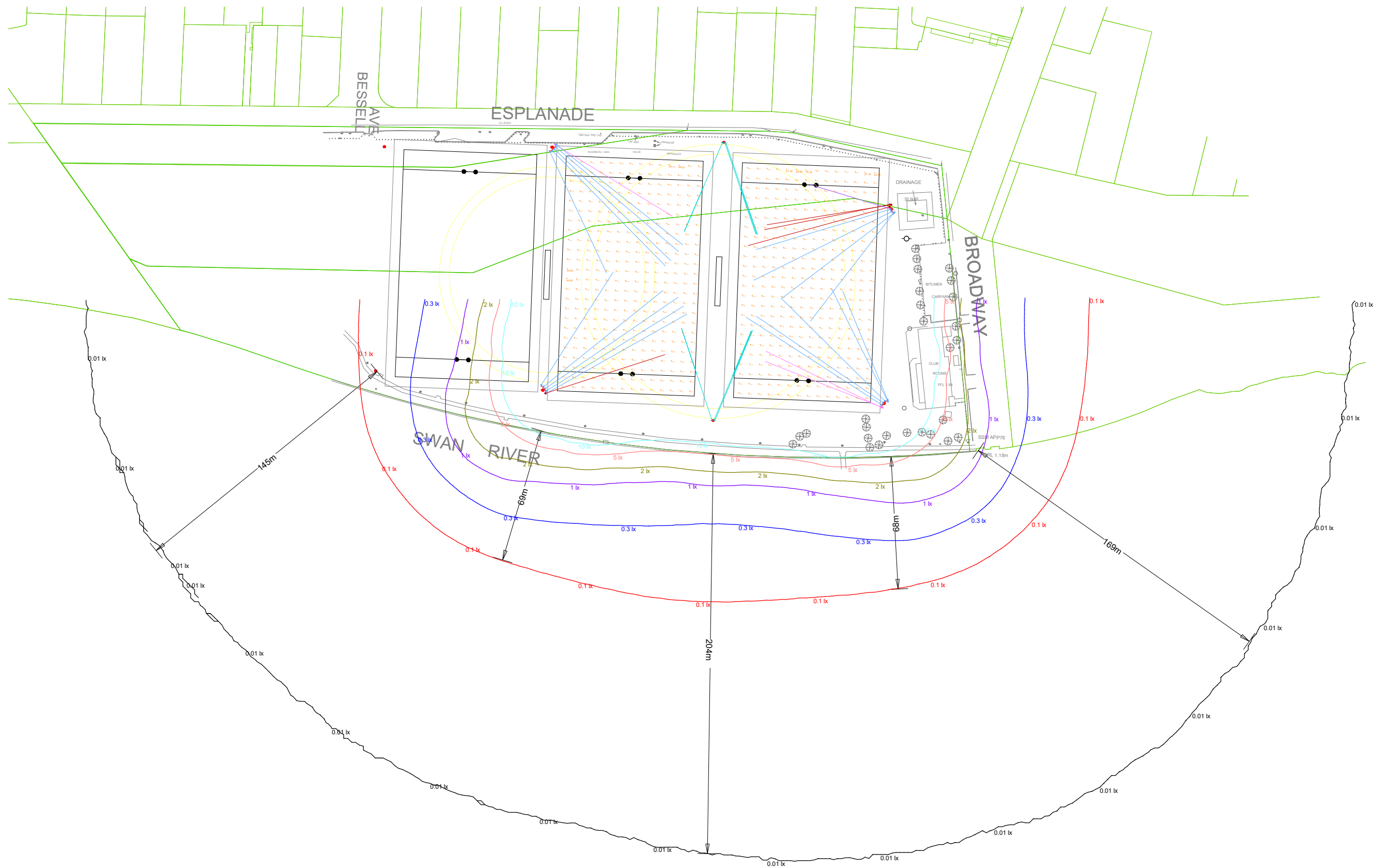


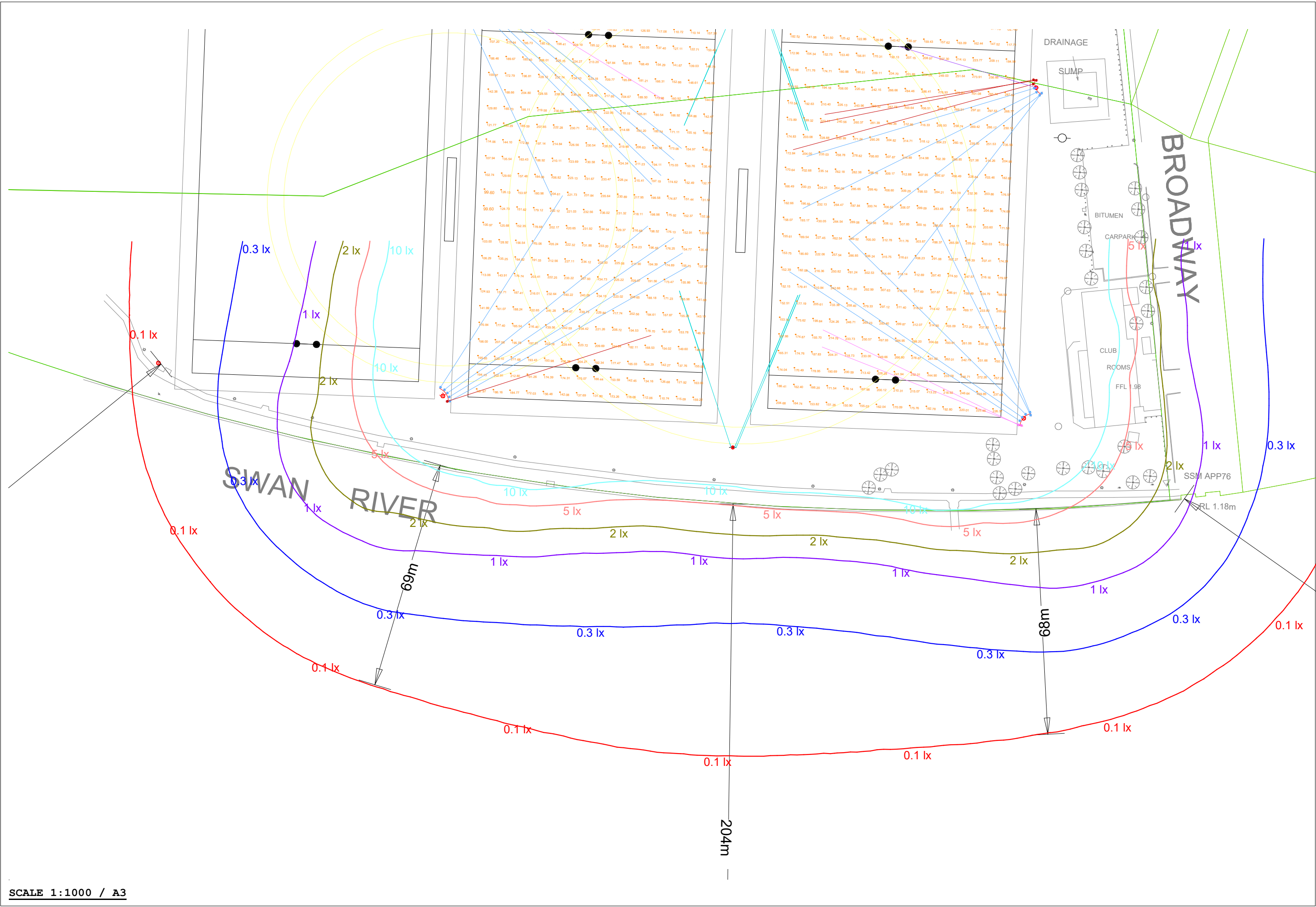


Luminaire Schedule							
Symbol	Qty	Label	Description	LLF	Luminaire Lumens	Luminaire Watts	Total Watts
	1	A0G4-740_600W_BS_RS_65	SR1A0G4-740 RAPTOR 4 600W A0 OPTIC CRI70 CCT4000K REAR + RIGHT SHIELD - lmax occ	1.000	77444	601.756	601.756
	11	A0G4-740_BS_63	SR2A0G4-740 RAPTOR 4 1200W A0 OPTIC CRI70 CCT4000K REAR SHIELD - lmax occurs at	1.000	175057	1233.42	13567.62
	2	A0G4-740_BS_LS_63	SR2A0G4-740 RAPTOR 4 1200W A0 OPTIC CRI70 CCT4000K REAR + LEFT SHIELD - lmax occ	1.000	169424	1231.86	2463.72
	3	A0G4-740_BS_RS_63	SR2A0G4-740 RAPTOR 4 1200W A0 OPTIC CRI70 CCT4000K REAR + RIGHT SHIELD - lmax oc	1.000	169814	1232.04	3696.12
	4	Rival 467W_AFC02-LR	ewo_Rival_AFC02-LR-FCO-320led	1.000	65859	466.6	1866.4

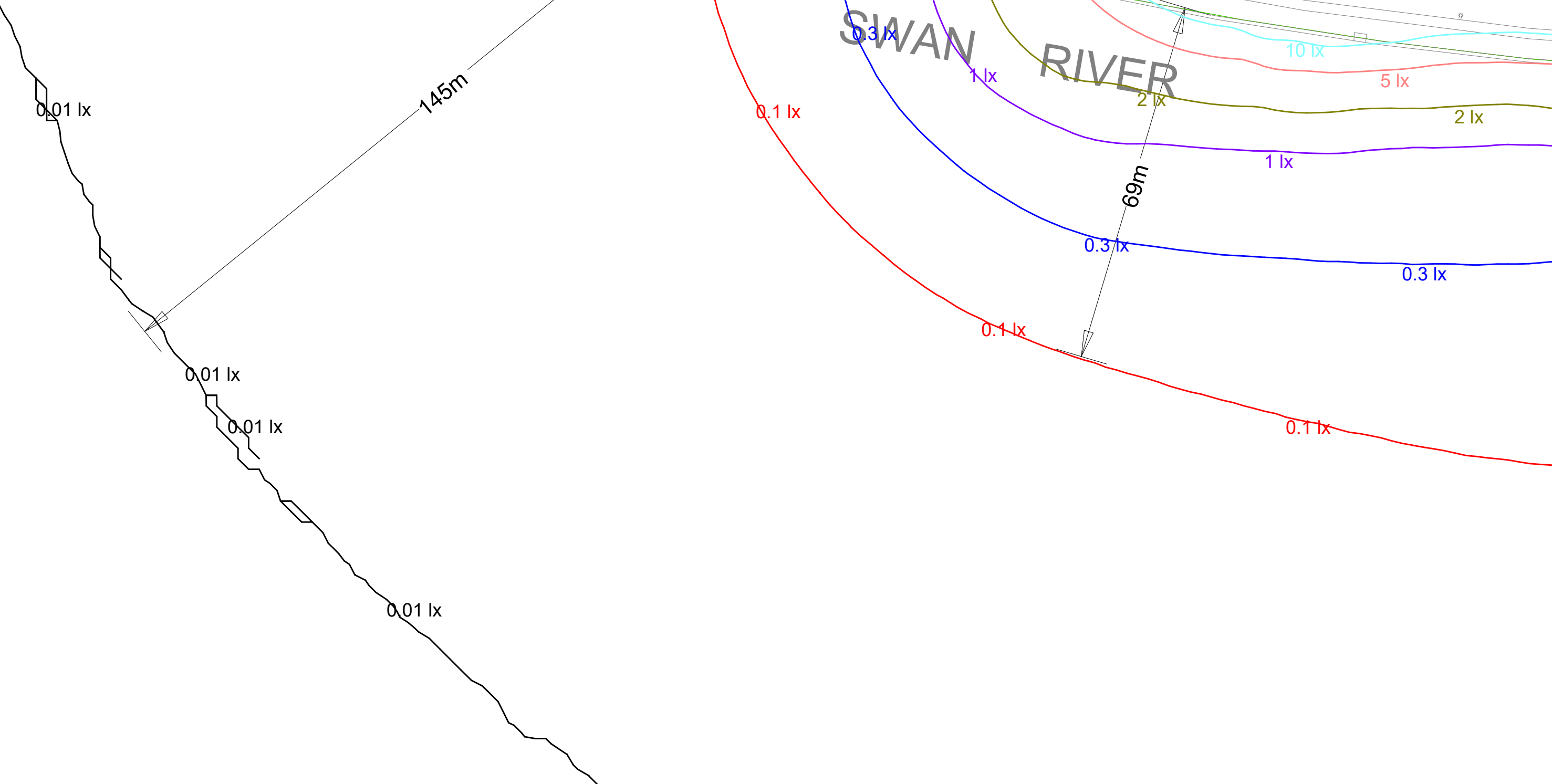
Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Min/Avg	Min/Max
Rugby pitch 1 - Eh	Illuminance	Lux	134.50	189.60	40.23	0.30	0.21
Rugby pitch 1 - Eh_reduced	Illuminance	Lux	139.51	189.60	81.58	0.58	0.43
Rugby pitch 2 - Eh	Illuminance	Lux	120.42	161.44	72.57	0.60	0.45

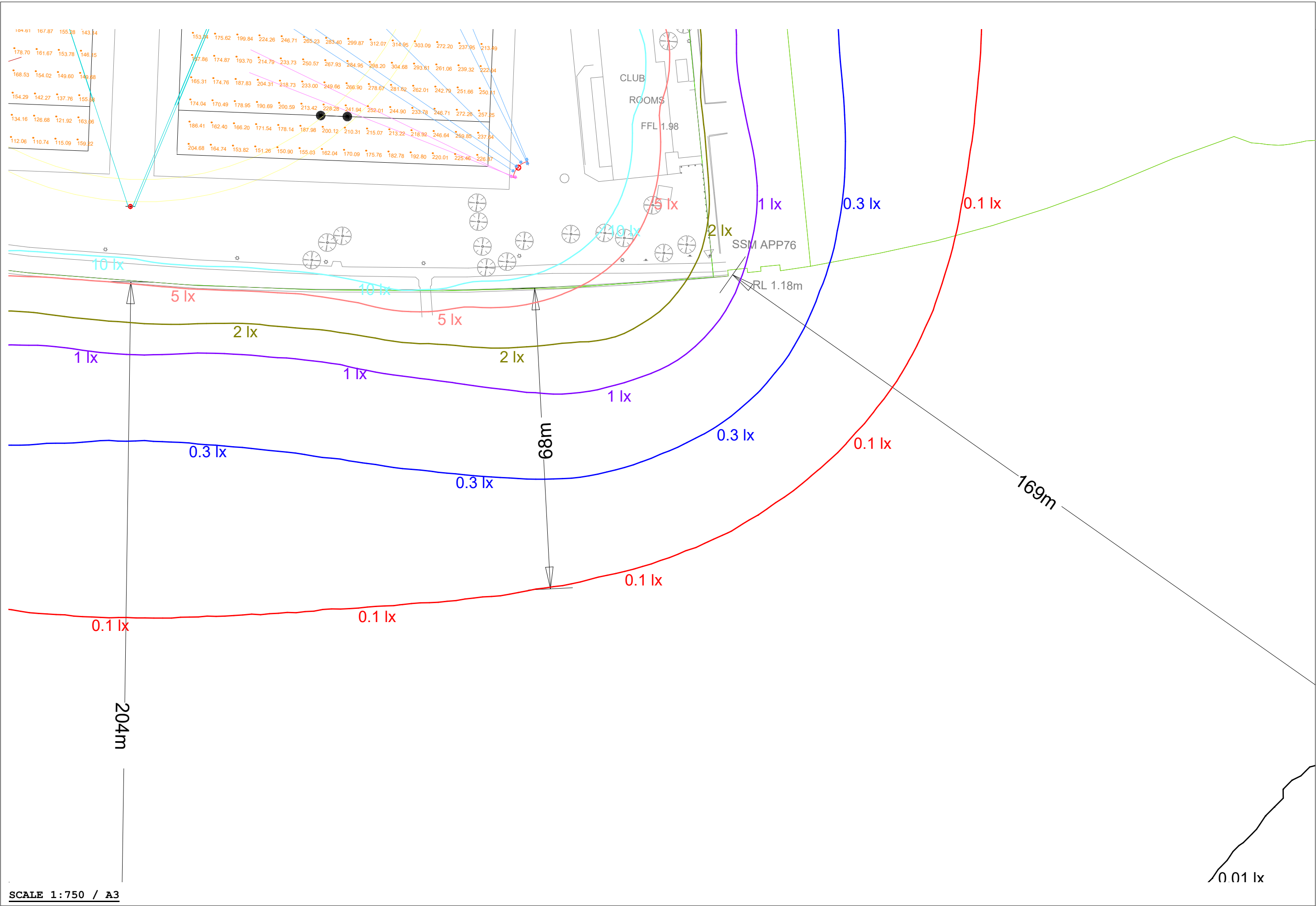
3171 Charles Court Reserve (Scenario 1 - 200lux, 100lux, off)





lx





Luminaire Schedule							
Symbol	Qty	Label	Description	LLF	Luminaire Lumens	Luminaire Watts	Total Watts
	1	A0G4-740_600W_BS_RS_65	SR1A0G4-740 RAPTOR 4 600W A0 OPTIC CRI70 CCT4000K REAR + RIGHT SHIELD - lmax occ	1.000	77444	601.756	601.756
	19	A0G4-740_BS_63	SR2A0G4-740 RAPTOR 4 1200W A0 OPTIC CRI70 CCT4000K REAR SHIELD - lmax occurs at	1.000	175057	1233.42	23434.981
	3	A0G4-740_BS_LS_63	SR2A0G4-740 RAPTOR 4 1200W A0 OPTIC CRI70 CCT4000K REAR + LEFT SHIELD - lmax occ	1.000	169424	1231.86	3695.58
	4	A0G4-740_BS_RS_63	SR2A0G4-740 RAPTOR 4 1200W A0 OPTIC CRI70 CCT4000K REAR + RIGHT SHIELD - lmax oc	1.000	169814	1232.04	4928.16
	6	Rival 467W_AFC02-LR	ewo_Rival_AFC02-LR-FCO-320led	1.000	65859	466.6	2799.6

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Min/Avg	Min/Max
Rugby pitch 1 - Eh	Illuminance	Lux	231.53	318.54	62.49	0.27	0.20
Rugby pitch 1 - Eh_reduced	Illuminance	Lux	241.01	318.54	150.90	0.63	0.47
Rugby pitch 2 - Eh	Illuminance	Lux	181.26	245.47	96.11	0.53	0.39

Obtrusive Light - Compliance Report

AS/NZS 4282:2023, A3 - Medium District Brightness, Non-Curfew L1
Filename: 3170 Charles Court Reserve - R2 - 200lux
20/05/2025 10:30:16 AM

Illuminance

Maximum Allowable Value: 10 Lux

Calculations Tested (16):

Calculation Label	Test Results	Max. Illum.
Spill - Esplanade zone 1_Ill_Seg1	PASS	1.37
Spill - Esplanade zone 1_Ill_Seg2	PASS	1.21
Spill - river bank_area 2_10m_Ill_Seg1	PASS	4.34
Spill - river bank_area 2_10m_Ill_Seg2	PASS	5.58
Spill - river bank_area 2_10m_Ill_Seg3	PASS	5.87
Spill - Esplanade zone 2_Ill_Seg1	PASS	0.01
Spill - Esplanade zone 2_Ill_Seg2	PASS	8.02
Spill - Esplanade zone 6_Ill_Seg1	PASS	2.71
Spill - Esplanade zone 5_Ill_Seg1	PASS	5.17
Spill - river bank_area 1_10m_Ill_Seg1	PASS	5.81
Spill - river bank_area 1_10m_Ill_Seg2	PASS	5.79
Spill - river bank_area 1_10m_Ill_Seg3	PASS	3.75
Spill - river bank_area 1_10m_Ill_Seg4	PASS	3.79
Spill - river bank_area 1_10m_Ill_Seg5	PASS	3.82
Spill - Esplanade zone 4_Ill_Seg1	PASS	5.22
Spill - Esplanade zone 3_Ill_Seg1	PASS	8.01

Luminous Intensity (Cd) At Vertical Planes

Maximum Allowable Value: 12500 Cd

Calculations Tested (16):

Calculation Label	Test Results
Spill - Esplanade zone 1_Cd_Seg1	PASS
Spill - Esplanade zone 1_Cd_Seg2	PASS
Spill - river bank_area 2_10m_Cd_Seg1	PASS
Spill - river bank_area 2_10m_Cd_Seg2	PASS
Spill - river bank_area 2_10m_Cd_Seg3	PASS
Spill - Esplanade zone 2_Cd_Seg1	PASS
Spill - Esplanade zone 2_Cd_Seg2	PASS
Spill - Esplanade zone 6_Cd_Seg1	PASS
Spill - Esplanade zone 5_Cd_Seg1	PASS
Spill - river bank_area 1_10m_Cd_Seg1	PASS
Spill - river bank_area 1_10m_Cd_Seg2	PASS
Spill - river bank_area 1_10m_Cd_Seg3	PASS
Spill - river bank_area 1_10m_Cd_Seg4	PASS
Spill - river bank_area 1_10m_Cd_Seg5	PASS
Spill - Esplanade zone 4_Cd_Seg1	PASS
Spill - Esplanade zone 3_Cd_Seg1	PASS

Threshold Increment (TI)

Maximum Allowable Value: 20 %

Calculations Tested (2):

Calculation Label	Adaptation Luminance	Test Results
TI - Esplanade N	1	PASS
TI - Esplanade S	1	PASS

Upward Waste Light Ratio (UWLR)

Maximum Allowable Value: 2.0 %

Calculated UWLR: 0.0 %

Test Results: **PASS**

Dr. Katrina Stratton

Member for Nedlands

13/8/2024

Support for Nedlands Rugby Union Football Club's application for Community Sport and Recreation Facilities Fund (CSRFF) Club Night Lights small grants July Round to upgrade floodlighting at Charles Court Reserve

I am writing to support a grant application on behalf of Nedlands Rugby Union Football Club, a prominent and long standing Rugby Union club now in its 90th year dedicated to fostering community engagement and promoting Rugby excellence in the City of Nedlands, and wider Perth Metro area.

The club is seeking funding from Department of Local Government, Sport and Cultural Industries (DLGSCI) for the Community Sport and Recreation Facilities Fund (CSRFF) Club Night Lights Round for a lighting upgrade project that will significantly enhance the safety, accessibility and overall experience for club members, other sports codes using the precinct, and the wider community.

This proposed project aims to replace outdated lighting systems with energy-efficient LED technology, improving visibility, reducing operational costs and enabling extended training hours. This upgrade is critical to improving girls' and women's participation in Rugby through the enhancement of safety and provision of quality training facilities, as well as providing the necessary infrastructure for an All Abilities Team that will begin in 2025.

This upgrade will benefit our diverse range of sports activities that take place on our foreshore including Rugby Union and Touch Rugby, Soccer, Gridiron and Cricket, benefiting both club members, local business and the broader community.

The lighting upgrade will have a lasting impact on the area by:

- Improving safety measures and reducing the risk of accidents during evening sports training.
- Promoting a healthy and active lifestyle by extending training hours, enabling more opportunities for sports engagement.
- Reducing carbon emissions and energy consumption through the implementation of energy-efficient LED technology.
- Enhancing community cohesion and pride by providing upgraded, well-planned lighting facilities for individuals of all ages and abilities.

Nedlands Rugby Union Football Club is committed to creating an inclusive and thriving sports community in the City of Nedlands. With the support and funding through the Club Night Lights Program, the Club can successfully complete the lighting upgrade project, improving safety and fostering a vibrant Rugby and sports culture. I sincerely request the Department of Local Government, Sport and Cultural Industries (DLGSCI) consideration for funding this.

Yours sincerely,

Dr. Katrina Stratton MLA Nedlands



Unit 1/160 Hampden Road Nedlands WA 6009
T: 9386 3064 E: Katrina.Stratton@mp.wa.gov.au
F: Dr Katrina Stratton MLA – Member for Nedlands





Ruth McIntyre
Community Development Project Manager
City of Nedlands

Email: rmacintyre@nedlands.wa.gov.au

Dear Ruth

Thank you for the work that the Shire has been doing with the Nedlands Rugby Union Football Club to allow the facility to be used as host training venue for the Rugby World Cup in 2027.

RugbyWA has requested Field 1 have the capacity of 200 Lux lights for the following purpose:

- To meet the standard for a Professional team to train.
- To meet the standard for a Semi-Professional team to play.

The major purpose of the lighting is for the use of Nedlands club to train given at present they have no real capacity to train after dark. It is likely during the season that the club would use the lights every Tuesday and Thursday evening but they would not need to be turned on greater than 50 Lux (possibly 100 Lux occasionally) for this purpose to enable club participants to train safely.

During the World Cup, the Rugby World Cup staff have indicated that most of the training will occur during the day during the knockout phase (which is the phase being hosted in Perth). At most, it is likely a team may use the lights 1 time during the week they are in Perth for training, so the lights may be turned to 200 Lux 2 or 3 times during the event.

The only other time the club would use the lights at 200 Lux is if they host a Premier Grade game on a Friday or Saturday night. It is unlikely that this will occur more than on 1 occasion per season.

Regards

A handwritten signature in black ink, appearing to be "ST" or "Simon Taylor".

Simon Taylor
CEO Rugby WA