

Document to Discharge Planning Conditions 9 & 10

Northwood & Pinner
Health Centre

Logan Construction

January 2025

New Zealand House
Abbey Foregate, Shrewsbury
Shropshire, SY2 6FD

01743 290 779
studio@camlins.com
www.camlins.com

Camlins


KEY

Site Boundary

Extent of Section 278 Works To be done by others

Root Protection Area All works within RPA to be referred to Arboricultural Consultant and subject to AMS

P1 Bitumen Macadam Surface With Coloured Wearing Course Refer to Drg. No. SY752-400-0201

P1A Permeable Bitumen Macadam Surface With Coloured Wearing Course Refer to Drg. No. SY752-400-0201

P2 Sandstone Flags Refer to Drg. No. SY752-400-0202

P2A Sandstone Flags Refer to Drg. No. SY752-400-0202

P3 Bitumen Macadam Surface With Standard Black-top Wearing Course Refer to Drg. No. SY752-400-0201

K1 Concrete Kerb Refer to Drg. No. SY752-400-0206

E1 Aluminium Edge Refer to Drg. No. SY752-400-0206

GM Gravel Margin Refer to Drg. No. SY752-400-0206

Existing Wall To Be Retained

W1 Brick Wall To Architects Details

W2 Proposed Brick Wall Refer to Drg. No. SY752-400-0291

W3 King Post Temporary Retaining Wall System Refer to Drg. No. SY752-400-0293

BP Brick Pillar Refer to Drg. No. SY752-400-0290

F1 Timber Fence Refer to Drg. No. SY752-400-0292

F2 Timber Bench Refer to Drg. No. SY752-400-0296

F3 Timber Picnic Bench Refer to Drg. No. SY752-400-0296

P4 Play Equipment Refer to Drg. No. SY752-400-0297

S1 Visitor Cycle Stands Refer to Drg. No. SY752-400-0294

DB Demountable Bollards Refer to Drg. No. SY752-400-0295

G1 Pedestrian Gates To Architects & Engineers Details

G2 Vehicle Gates To Architects & Engineers Details

E1 Existing Tree To Be Retained Refer to Arboricultural Survey by Tamias Tree Consultants for AMS

E2 Existing Tree To Be Felled Refer to BS5837 Arboricultural Impact Assessment (March 2021) by Tamia Trees

E3 Proposed Specimen Tree Refer to Drg. No. SY752-400-0081 & SY752-400-0271

E4 Large Shrub Refer to Drg. No. SY752-400-0071

E5 Proposed Hedge Refer to Drg. No. SY752-400-0071

E6 Mixed Shrub And Herbaceous Planting Refer to Drg. No. SY752-400-0071

E7 Proposed Tree Grill and Tree Guard Refer to Drg. No. SY752-400-0271

E8 EVC Electrical Vehicle Charger To Engineers Details

1. All dimensions in millimetres unless otherwise shown.

2. All levels in metres above Ordnance Datum (mOD) unless otherwise shown.

3. All dimensions to be checked on site and any discrepancies reported to Employer before pricing / work starts.

4. Any ambiguities or discrepancies within this drawing and any other information given elsewhere must be reported to Camlin and the Employer for clarification before pricing work proceeds.

5. All dimensions to be checked in conjunction with other Camlin drawings and specification information as appropriate.

6. Refer to relevant Engineer's and Architect's information as appropriate for confirmation of all engineering and architectural details.

7. All works to be carried out in accordance with the latest British Standards and appropriate codes of practice as a minimum.

 B 2024-03-17 Basement stairs changed, EVC added.
 A 2024-03-03 Client changes to car park site boundary

Rev. Date Description

AMB MSS K3 MSS

 Revised by Checked by
 New Zealand House, Abbey Foregate, Shrewsbury, Shropshire, SY2 8FD
 01743 299 779
 www.camlin.co.uk

Camlin

 Northwood Cottage Hospital
 Logan Construction

General Arrangement - Ground Floor Landscape Plan

Status Stage 4

Drawing Number

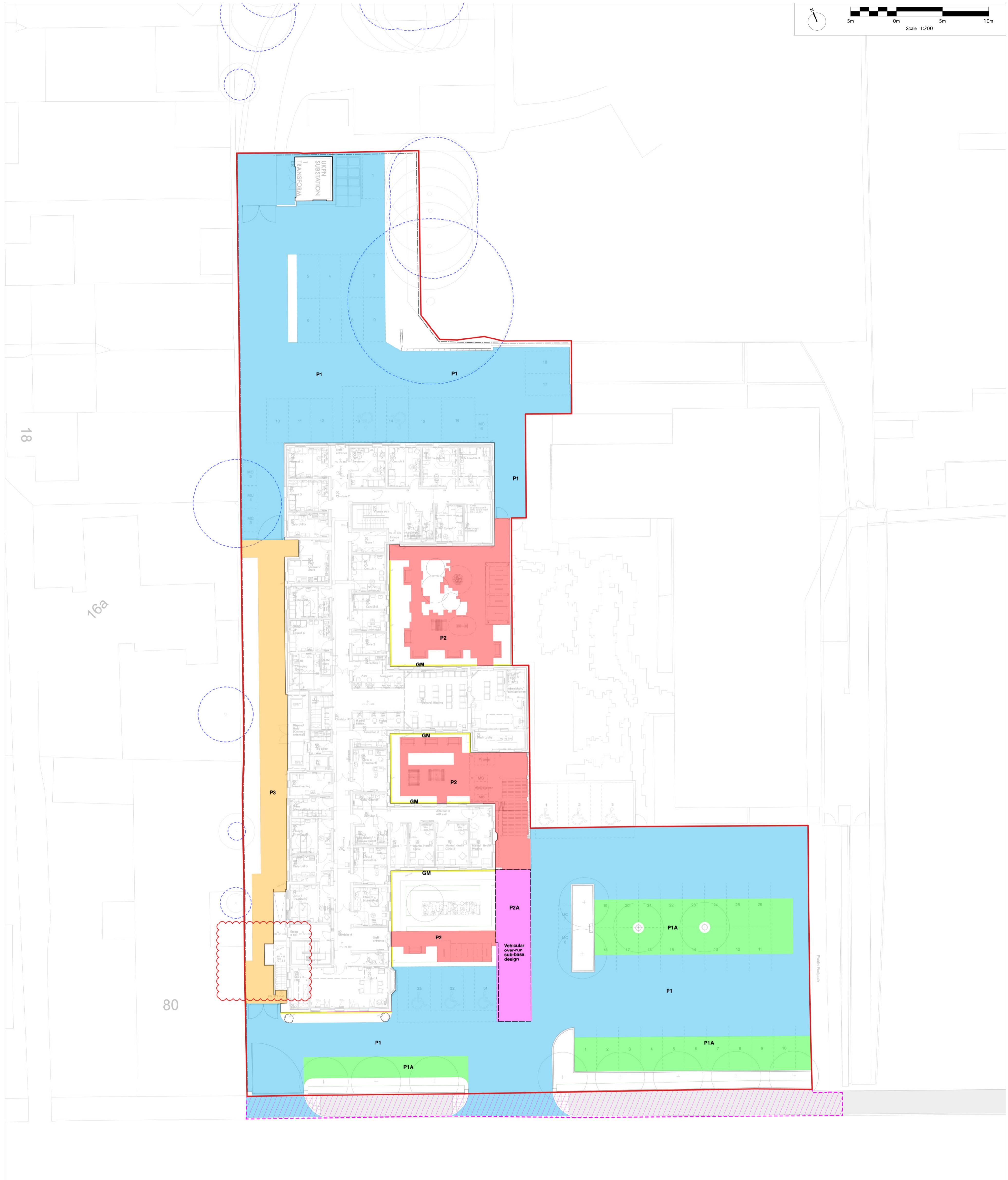
SY752-400-0001 B

Revision 1:200

Drawn by AMB

Checked by MSS

Date 05.06.2024



KEY

- Site Boundary
- Extent of Section 278 Works To be done by others
- Root Protection Area All works within RPA to be referred to Arboricultural Consultant and subject to AMS

Surfacing	
P1	Bitumen Macadam Surface With Coloured Wearing Course Refer to Drg. No. SY752-400-0201
P1A	Permeable Bitumen Macadam Surface With Coloured Wearing Course Refer to Drg. No. SY752-400-0201
P2	Sandstone Flags Refer to Drg. No. SY752-400-0202
P2A	Sandstone Flags Refer to Drg. No. SY752-400-0202
P3	Bitumen Macadam Surface With Standard Black-top Wearing Course Refer to Drg. No. SY752-400-0201
GM	Gravel Margin Refer to Drg. No. SY752-400-0206

1. All dimensions in millimetres unless otherwise shown.
2. All levels in metres above Ordnance Datum (mOD) unless otherwise shown.
3. All dimensions to be checked on site and any discrepancies reported to Employer before pricing / work starts.
4. Any ambiguities or discrepancies within this drawing and any other information given elsewhere must be reported to Camlin and the Employer for clarification before pricing work proceeds.
5. All dimensions to be checked in conjunction with other Camlin drawings and specification information as appropriate.
6. Refer to relevant Engineer's and Architect's information as appropriate for confirmation of all engineering and architectural details.
7. All works to be carried out in accordance with the latest British Standards and appropriate codes of practice as a minimum.

C 2024-09-17 Basement stairs changed.
B 2024-09-04 Client changes to car park site boundary and extents of P1 reduced
A 2024-07-16 No pavement finishes shown in S278 works area.

AMB MSS
KS MSS
MB MSS

Reviewed by Checked by
New Zealand House, Abbey Foregate, Shrewsbury, Shropshire, SY2 8FD
01743 290 779
www.camlin.com

Rev. Date Description

Camlin

Northwood Cottage Hospital
Logan Construction

General Arrangement - Areas Of Hard Surfaces

Status
Stage 4

Drawn by
AMB

Checked by
MSS

Drawing Number

SY752-400-0031 C

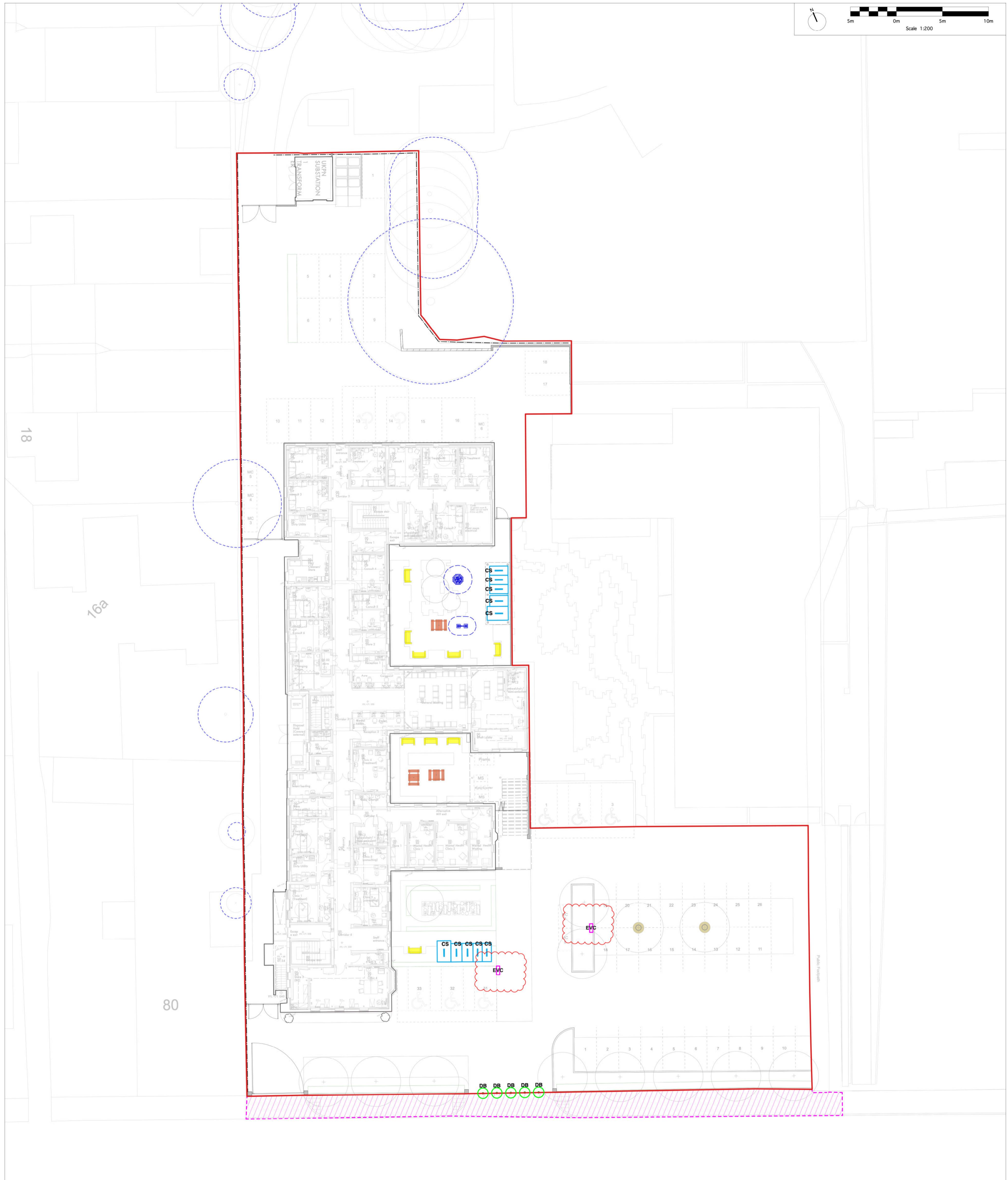
Revision

Scale

1:200

Date

05.06.2024



KEY

- Site Boundary
- Extent of Section 278 Works
- Root Protection Area
All works within RPA to be referred to Arboricultural Consultant and subject to AMS

Furniture & Fixtures

- Timber Bench
Refer to Drg. No. SY752-400-0296
- Timber Picnic Bench
Refer to Drg. No. SY752-400-0296
- Visitor Cycle Stands
Refer to Drg. No. SY752-400-0294
- Demountable Bollards
Refer to Drg. No. SY752-400-0295
- Play Equipment
Refer to Drg. No. SY752-400-0297
- Proposed Tree Grill and Tree Guard
Refer to Drg. No. SY752-400-0271
- Electrical Vehicle Charger
To Engineers Details

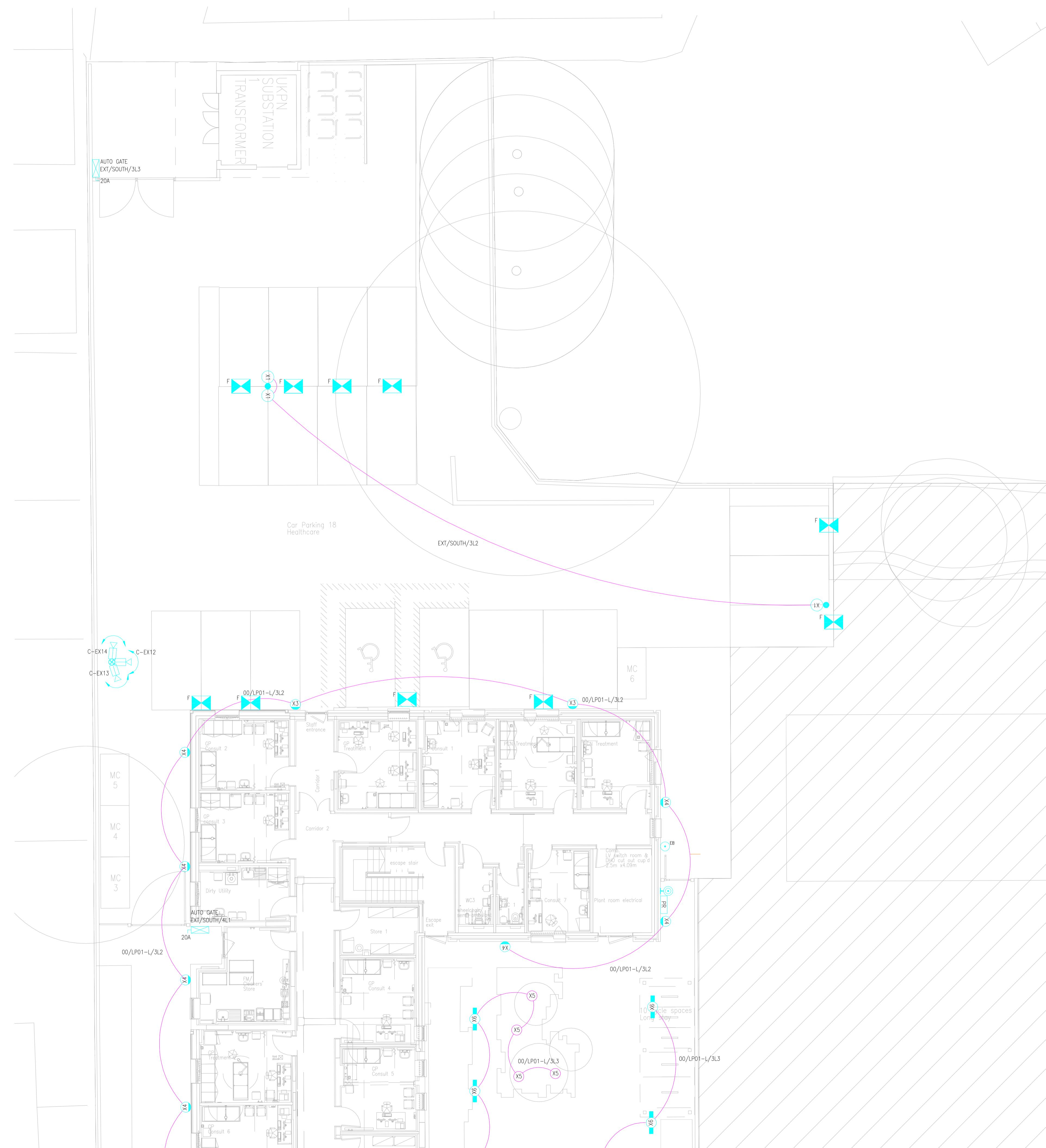
1. All dimensions in millimetres unless otherwise shown.
2. All levels in metres above Ordnance Datum (mOD) unless otherwise shown.
3. All dimensions to be checked on site and any discrepancies reported to Employer before pricing / work starts.
4. Any ambiguities or discrepancies within this drawing and any other information given elsewhere must be reported to Camlin and the Employer for clarification before pricing work proceeds.
5. All dimensions to be checked in conjunction with other Camlin drawings and specification information as appropriate.
6. Refer to relevant Engineer's and Architect's information as appropriate for confirmation of all engineering and architectural details.
7. All works to be carried out in accordance with the latest British Standards and appropriate codes of practice as a minimum.

B 2024-09-17 EVC added
A 2024-09-04 Client changes to car park site boundary and 1no. tree grill and tree guard omitted
Rev. Date Description
AMB MSS
KS MSS
Revised by Checked by

Camlin

Northwood Cottage Hospital
Logan Construction
General Arrangement - Furniture & Fixtures

Status Stage 4
Drawing Number SY752-400-0091 B
Drawn by AMB
Checked by MSS
Revision 1:200
Scale Date
05.06.2024



	4M COLUMN MOUNTED LED LUMINAIRE
	IP65 RATED WALL MOUNTED ARCHITECTURAL FLOODLIGHT
	IP64 RATED WALL MOUNTED BULKHEAD
	IP65 IN-GROUND UPLIGHTER
	LIGHTING BOLLARD
	IP65 MAINTAINED LED EMERGENCY LIGHTING BULKHEAD
	EXTERNAL FEEDER PILLER
	ELECTRIC VEHICLE CHARGE POINT. 'X' DENOTES TYPE: FC - FAST CHARGE POINT RC - RAPID CHARGE POINT F - FUTURE
	BRACKET MOUNTED EXTERNAL CCTV CAMERA
	COLUMN MOUNTED EXTERNAL CCTV CAMERA (ANPR DENOTES SEPARATE CAMERA SUPPLIED AS PART OF ANPR SYSTEM)
	CABLE ACCESS BOXES AND OR CABLE PITS TO BE DESIGN / SELECTED BY CONTRACTOR COVER PLATES TO BE PROVIDED TO MATCH LOCATION
	125MM DIA DUCTING FOR HV INCOMER
	125MM DIA DUCTING FOR LV INCOMER
	150MM DIA LV RIDGECOIL DUCTING - FEEDER PILLAR SUB-MAINS
	150MM DIA LV RIDGECOIL DUCTING - ELECTRIC VEHICLE CHARGING
	110MM DIA / 94MM DIA ID LV RIDGECOIL DUCTING FOR LIGHTING AND POWER
	63MM DIA / 50MM DIA ID EXTERNAL CCTV / SECURITY LV RIDGECOIL DUCTING

NOTES:

1. CONTRACTOR SHALL PROVIDE PASSIVE DUCTS AND CHAMBERS FOR EVC NETWORK REQUIRED TO SERVE REMAINING PARKING BAYS FROM CURRENT 2 NO. EVCS BEING PROVIDED:
1 NO. 50KW TWIN RAPID CHARGER
1 NO. 22KW TWIN FAST CHARGER
2. ALL EVC UNITS TO BE PROVIDED WITH PROTECTIVE HOOPS/BARRIERS.
3. FINAL SETTING OUT OF EVC UNITS TO BE AS PER THE LANDSCAPE ARCHITECTS REQUIREMENTS.

03/09/24	PRELIMINARY ISSUE	P1	PC
Date	Description	Rev	By
Revision Description			



...Making Buildings Work

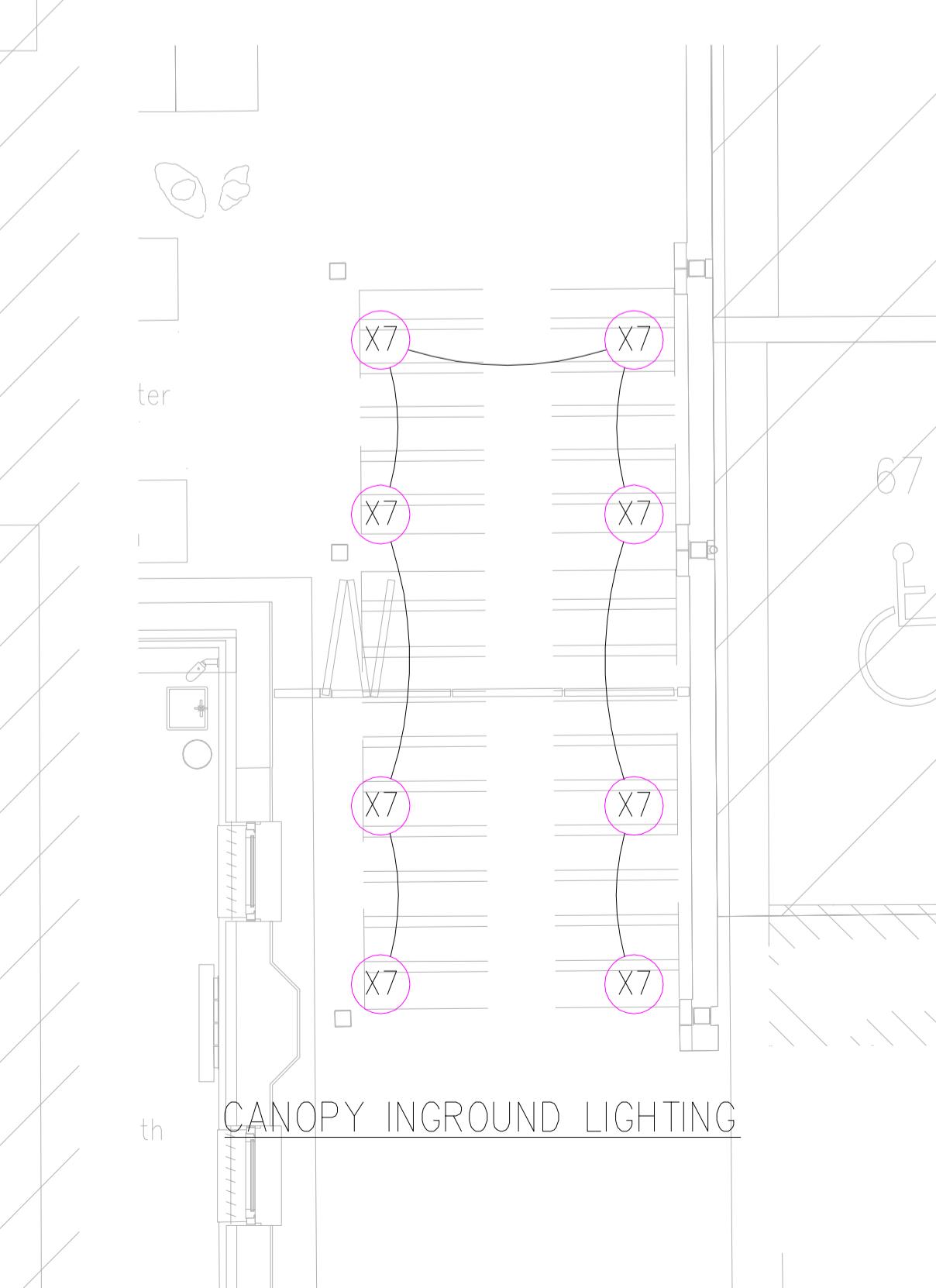
Project:
NORTHWOOD & PINNER HEALTH CENTRE P23

Drawing Title:
EXTERNAL SERVICES LAYOUT
SHEET 1 OF 3
NORTH

Drawing Number:
41935(60)902

Revision: P1
Date: 03/07/2024
Scale: 1:100
Drawn By: PC
CAD Dwg File: 41935(60)902.dwg
Arch. Base Dwg:

Issue Status:
PRELIMINARY





LEGEND

- X1 4M COLUMN MOUNTED LED LUMINAIRE
- X3 IP65 RATED WALL MOUNTED ARCHITECTURAL FLOODLIGHT
- X4 IP64 RATED WALL MOUNTED BULKHEAD
- X5 IP65 IN-GROUND UPLIGHTER
- X6 LIGHTING BOLLARD
- X7 IP65 MAINTAINED LED EMERGENCY LIGHTING BULKHEAD
- PR EX EGRESS BUTTON
- EB EMERGENCY EXIT BREAK GLASS
- X ELECTRIC VEHICLE CHARGE POINT. "X" DENOTES TYPE:
 - FC - FAST CHARGE POINT
 - RC - RAPID CHARGE POINT
 - F - FUTURE
- YK BRACKET MOUNTED EXTERNAL CCTV CAMERA
- ANPR COLUMN MOUNTED EXTERNAL CCTV CAMERA (ANPR DENOTES SEPARATE CAMERA SUPPLIED AS PART OF ANPR SYSTEM)
- CB CABLE ACCESS BOXES AND OR CABLE PITS TO BE DESIGN / SELECTED BY CONTRACTOR COVER PLATES TO BE PROVIDED TO MATCH LOCATION
- HV HV 125MM DIA DUCTING FOR HV INCOMER
- LV LV 125MM DIA DUCTING FOR LV INCOMER
- SUB SUB 150MM DIA LV RIDGCOIL DUCTING - FEEDER PILLAR SUB-MAINS
- EVC EVC 150MM DIA LV RIDGCOIL DUCTING - ELECTRIC VEHICLE CHARGING
- LAP LAP 110MM DIA / 94MM DIA ID LV RIDGCOIL DUCTING FOR LIGHTING AND POWER
- 63MM DIA / 50MM DIA ID EXTERNAL CCTV / SECURITY LV RIDGCOIL DUCTING

NOTES:

1. CONTRACTOR SHALL PROVIDE PASSIVE DUCTS AND CHAMBERS FOR EVC NETWORK REQUIRED TO SERVE REMAINING PARKING BAYS FROM CURRENT 2 NO. EVCS BEING PROVIDED:
 - 1 NO. 50KW TWIN RAPID CHARGER
 - 1 NO. 22KW TWIN FAST CHARGER
2. ALL EVC UNITS TO BE PROVIDED WITH PROTECTIVE HOOPS/BARRIERS.
3. FINAL SETTING OUT OF EVC UNITS TO BE AS PER THE LANDSCAPE ARCHITECTS REQUIREMENTS.

03/09/24	PRELIMINARY ISSUE	P1	PC
Date	Description	Rev	By
Revision Description			

London Office
 Castle House Horizon Centre
 28-38 Upper High Street
 Epsom
 Surrey
 KT17 4RS
 Tel No: 01372 747 047
 E: hk.london@hulley.co.uk

...Making Buildings Work

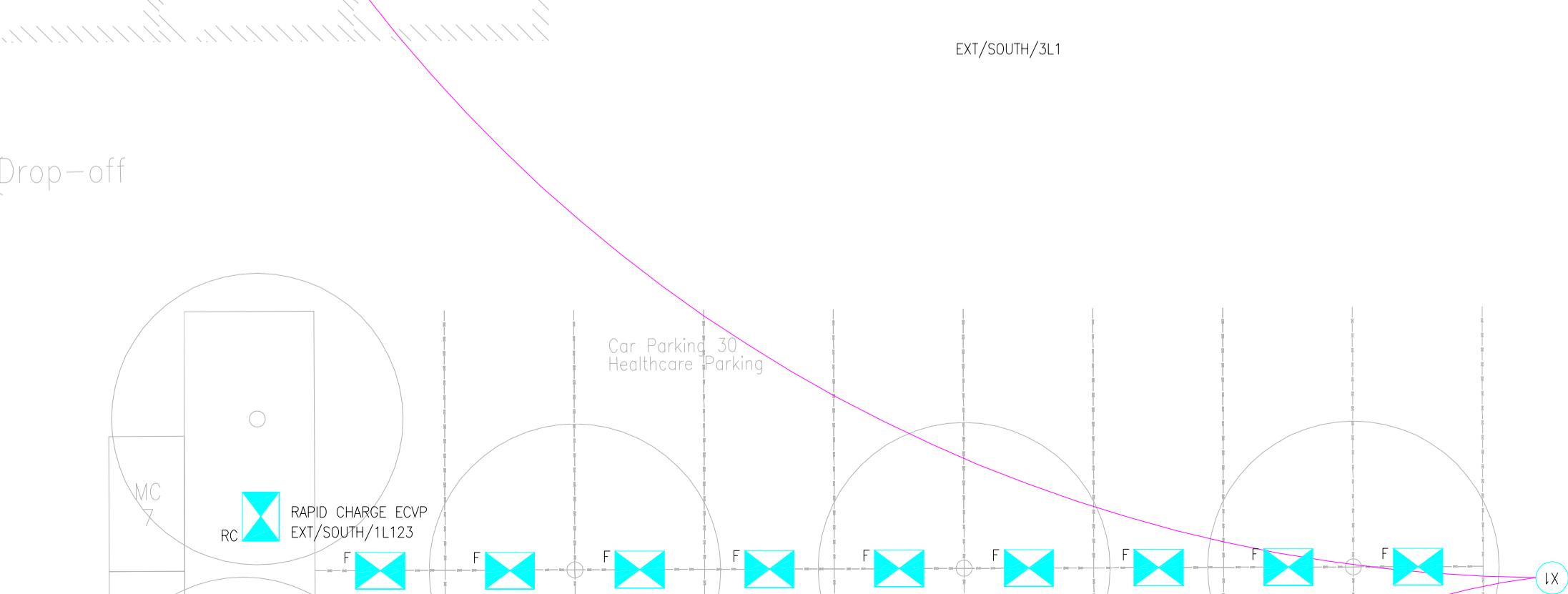
Project:
NORTHWOOD & PINNER HEALTH CENTRE P23

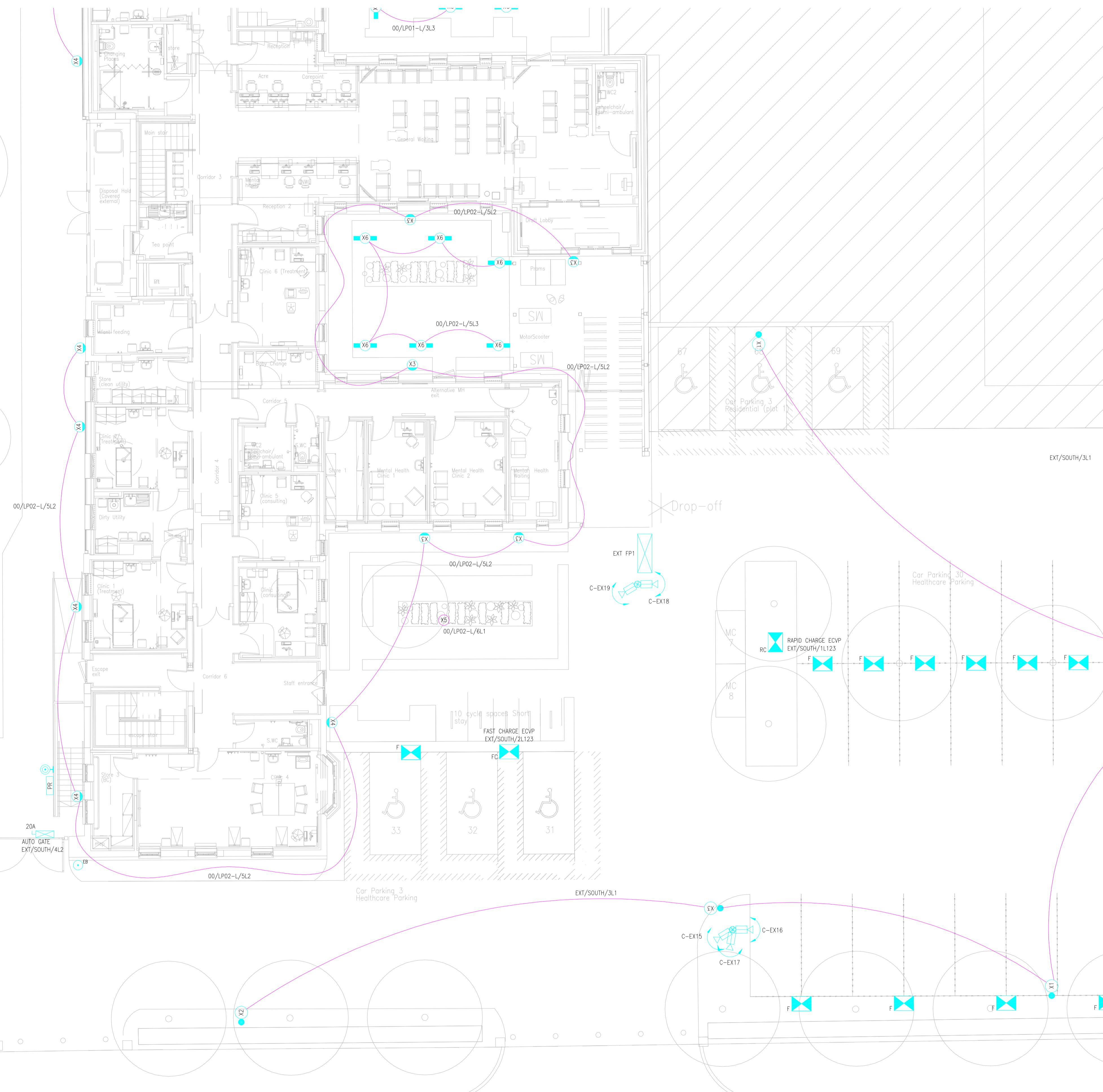
Drawing Title:
EXTERNAL SERVICES LAYOUT
SHEET 2 OF 3
CENTRAL

Drawing Number:
41935(60)903

Revision: P1
Date: 03/07/2024
Scale: 1:100
Drawn By: PC
CAD Dwg File: 41935(60)903.dwg
Arch. Base Dwg:

Issue Status:
PRELIMINARY





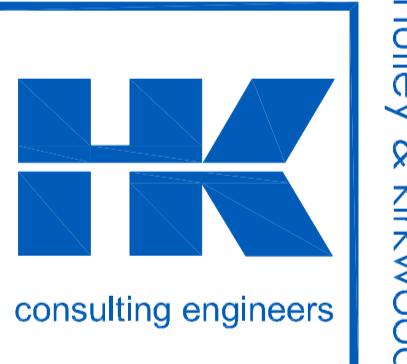
X1	4M COLUMN MOUNTED LED LUMINAIRE
X3	IP65 RATED WALL MOUNTED ARCHITECTURAL FLOODLIGHT
X4	IP64 RATED WALL MOUNTED BULKHEAD
X5	IP65 IN-GROUND UPLIGHTER
X6	LIGHTING BOLLARD
EM	IP65 MAINTAINED LED EMERGENCY LIGHTING BULKHEAD
EB	EXTERNAL FEEDER PILLER
X	ELECTRIC VEHICLE CHARGE POINT. 'X' DENOTES TYPE:
FC	FAST CHARGE POINT
RC	RAPID CHARGE POINT
F	FUTURE
BRACKET MOUNTED EXTERNAL CCTV CAMERA	
COLUMN MOUNTED EXTERNAL CCTV CAMERA (ANPR DENOTES SEPARATE CAMERA SUPPLIED AS PART OF ANPR SYSTEM)	
CABLE ACCESS BOXES AND OR CABLE PITS TO BE DESIGN / SELECTED BY CONTRACTOR COVER PLATES TO BE PROVIDED TO MATCH LOCATION	
HV	125MM DIA DUCTING FOR HV INCOMER
LV	125MM DIA DUCTING FOR LV INCOMER
SUB	150MM DIA LV RIDGICOL DUCTING - FEEDER PILLAR SUB-MAINS
EVC	150MM DIA LV RIDGICOL DUCTING - ELECTRIC VEHICLE CHARGING
LAP	110MM DIA / 94MM DIA ID LV RIDGICOL DUCTING FOR LIGHTING AND POWER
	63MM DIA / 50MM DIA ID EXTERNAL CCTV / SECURITY LV RIDGICOL DUCTING

NOTES:

1. CONTRACTOR SHALL PROVIDE PASSIVE DUCTS AND CHAMBERS FOR EVC NETWORK REQUIRED TO SERVE REMAINING PARKING BAYS FROM CURRENT 2 NO. EVC'S BEING PROVIDED:
1 NO. 50KW TWIN RAPID CHARGER
1 NO. 22KW TWIN FAST CHARGER
2. ALL EVC UNITS TO BE PROVIDED WITH PROTECTIVE HOOPS/BARRIERS.
3. FINAL SETTING OUT OF EVC UNITS TO BE AS PER THE LANDSCAPE ARCHITECTS REQUIREMENTS.

03/09/24	PRELIMINARY ISSUE	P1	PC
Date	Description	Rev	By

Revision Description



London Office
Castle House Horizon Centre
28-38 Upper High Street
Epsom
Surrey
KT17 4RS
Tel No: 01372 747 047
E: hk.london@hulley.co.uk

...Making Buildings Work

Project: NORTHWOOD & PINNER HEALTH CENTRE P23

Drawing Title: EXTERNAL SERVICES LAYOUT
SHEET 3 OF 3
SOUTH

Drawing Number:
41935(60)904

Revision: P1
Date: 03/07/2024
Scale: 1:100
Drawn By: PC
CAD Dwg File: 41935(60)904.dwg
Arch. Base Dwg:

Issue Status:
PRELIMINARY

EXTERNAL LUMINAIRE SCHEDULE		Rev. 02	Insignis CONSULTING ENGINEERS
PROJECT	Northwood and Pinner Health Centre	STAGE 4+	
SCHEDULE REF:	0212-INS-HC-XX-SH-E-6003		

REF	DESCRIPTION	MANUFACTURER / CAT No	IMAGE
X1	SINGLE-PIECE DIE-CAST ALUMINIUM HOUSING, THAT CONFORMS TO EN1706 AC-46500, WITH INTEGRAL HEAT SINK FINS TO OPTIMISE THERMAL MANAGEMENT THROUGH CONDUCTIVE COOLING. LED MODULES ARE IP65 WITH INDIVIDUAL LENSES, AND HIGH GRADE ALUMINIUM HOUSING TO TRANSFER HEAT AWAY FROM THE LEDS AND DISSIPATE THROUGH THE FINNED HOUSING FOR COOLING. THE LED DRIVER IS MOUNTED IN DIRECT CONTACT WITH THE FINNED HOUSING FOR COOLING TO PROMOTE LOW OPERATING TEMPERATURE AND LONG SYSTEM LIFE. HOUSING IS COMPLETELY SEALED AGAINST MOISTURE AND ENVIRONMENTAL CONTAMINANTS (IP65). INSTALLATION IS VIA THE INTEGRATED MOUNTING BLOCK AND INTEGRAL ARM THAT FACILITATE A QUICK AND EASY INSTALLATION.	HOLOPHANE D-SERIES DSX0.1.LA053.FW	
	To be supplied with DALI compatible driver and photocell options enabling dimming facility. Fully integrated into Holophane standard column range.		
	POWER (W) LUMEN OUTPUT (lm) OPTICS		NOTES
	37 4672 FORWARD THROW		COLUMN TO BE BLACK COLOUR
X2		HOLOPHANE D-SERIES DSX0.1.LA053.AY	
	To be supplied with DALI compatible driver and photocell options enabling dimming facility. Fully integrated into Holophane standard column range.		
	POWER (W) LUMEN OUTPUT (lm) OPTICS		NOTES
	37 4541 ASSYMETRIC		
X3		HOLOPHANE D-SERIES DSX0.1.LA053.SY	
	To be supplied with DALI compatible driver and photocell options enabling dimming facility. Fully integrated into Holophane standard column range.		
	POWER (W) LUMEN OUTPUT (lm) OPTICS		NOTES
	37 4765 FORWARD THROW		
X3	FLOODLIGHT 20 MICRO LED, FLOODLIGHT, PRIMARY LIGHT CONTROL WITH LENS, OF PLASTIC, PRIMARY OPTICAL COVER: PROTECTIVE DISC, OF TOUGHENED SAFETY GLASS, TRANSPARENT, LIGHT DISTRIBUTION: PL52, LIGHT EMISSION: DIRECT DISTRIBUTION, PRIMARY LIGHT CHARACTERISTIC: ASYMMETRIC, INSTALLATION TYPE: SURFACE-MOUNTED, LED HIGH POWER LED, RATED LUMINOUS FLUX: 2410 LM, LIGHT COLOUR: 830, COLOUR TEMPERATURE: 3000K, CONTROL GEAR: ECG PLUS, CONTROL: FLEXIBLE LUMINOUS FLUX PARAMETERISATION, TIME-DEPENDENT LUMINOUS FLUX CONTROL, DI 27W, LED UNIT, OF DIECAST ALUMINIUM, POWDER-COATED, SITECO® METALLIC GREY (DB 702S), LENGTH: 304 MM, WIDTH: 222 MM, HEIGHT: 55MM, HOUSING FRAME, OF DIECAST ALUMINIUM, POWDER-COATED, SITECO® METALLIC GREY (DB 702S), MOUNTING BRACKET, OF STEEL, POWDER-COATED, SITECO® METALLIC GREY (DB 702S), DALI PROTECTION RATING (COMPLETE): IP66, INSULATION CLASS (COMPLETE): INSULATION CLASS II (SAFETY INSULATION), CERTIFICATION: CE, ENEC, VDE, PROTECTION SYMBOL: D, PERMISSIBLE AMBIENT TEMPERATURE FOR INDOOR APPLICATIONS: -40..+40°C, PERMISSIBLE AMBIENT TEMPERATURE FOR OUTDOOR APPLICATIONS: -40..+50°C, STANDARD: DIN EN 12944, PACKAGING UNIT: 1 PIECE	SITECO FLOODLIGHT 20 MICRO LED 5XA7662A1D1AC	
	POWER (W) LUMEN OUTPUT (lm) OPTICS		NOTES
	27 2410 ASSYMETRIC		COLOUR TBC
X4	HOLOPHANE DENVER ID: WALL CONSISTS OF A 2-PART BODY AND A REMOVABLE LED MODULE MANUFACTURED FROM LM6 MARINE GRADE DIE-CAST ALUMINIUM WITH INTEGRATED THERMAL MANAGEMENT PROPERTIES. THE LED MODULE OPTICAL ARRANGEMENT CONSISTS OF LEDS WITH INDIVIDUAL PMMA OPTICAL LENSES SURROUNDED BY A PATENTED WHITE TRANSITION ZONE TO REDUCE PERCEIVED GLARE. THIS IS SEALED BEHIND HIGH-TRANSPARENCY 'HYDROPHILIC' GLASS. BOTH LUMINAIRE BODY AND LED MODULE ARE SEALED TO IP65 AND RATED IK10. DRIVERS AND LED ARE MOUNTED SEPARATELY FROM EACH OTHER TO PROMOTE LOW OPERATING TEMPERATURES AND LONG SYSTEM LIFE. MOUNTING OF THE LUMINAIRE IS FACILITATED BY MOUNTING THE BACK CASTING OF LUMINAIRE TO SUITABLE SURFACE. CABLE ENTRY AND TERMINATION TO THE LUMINAIRE IS VIA AN 2 X IP65 20MM CABLE GLAND. ACCESS TO THE LUMINAIRE IS VIA 2 X NUTS.	HOLOPHANE DENVER ID DBD.1.LA013.DO.NR.C4.CII.T SZ.TZ01.LRT76.B.V1	
	X4 fittings to be supplied with integral photocells + auto dimming facility. Extra backboxes to be supplied as required to contain controls as required		
	POWER (W) LUMEN OUTPUT (lm) OPTICS		NOTES
	10.3 1385 LONG AND NARROW		COLOUR TBC

ADDITIONAL ITEMS	DESCRIPTION	MANUFACTURER / CAT No	
COLUMNS	4m DEMOUNTABLE COLUMNS TO BE PROVIDED FINISHED IN BLACK	FABRIKAT RAISE AND LOWER MID-HINGE COLUMNS	
CONTROLS	SOLAR DIAL TIMECLOCK AND PHOTOCELL CONTROLS	SANGAMO	

NOTES

1 SCHEDULE TO BE READ IN CONJUNCTION WITH DRAWINGS AND SPECIFICATION

ISSUE/REVISION	02	SIGNED	GR
DATE	02/06/2023	CHECKED	MH

EXTERNAL LUMINAIRE SCHEDULE		Rev. 02	INsignis CONSULTING ENGINEERS
PROJECT	Northwood and Pinner Health Centre	STAGE 4+	
SCHEDULE REF:	0212-INS-HC-XX-SH-E-6003		

REF	DESCRIPTION	MANUFACTURER / CAT No	IMAGE
	POWER (W) LUMEN OUTPUT (lm) OPTICS		NOTES
X5	IN-GROUND UPLIGHTERS TO HIGHLIGHT SPECIMEN TREES AND SHRUBS. SPECIFICATION TBC IN CONJUNCTION WITH LANDSCAPE ARCHITECT.		ALLOW £400 PER POINT
X6	HOLOPHANE DENVER ID: BOLLARD DENVER CONSISTS OF LM6- EXTRUDED ALUMINIUM BODY AND A REMOVABLE LED MODULE MANUFACTURED FROM LM6 MARINE GRADE DIE-CAST ALUMINIUM WITH INTEGRATED THERMAL MANAGEMENT PROPERTIES. THE LED MODULE OPTICAL ARRANGEMENT CONSISTS OF LEDS WITH INDIVIDUAL PMMA OPTICAL LENSES SURROUNDED BY A PATENTED WHITE TRANSITION ZONE TO REDUCE PERCEIVED GLARE AND UP LIGHT. THIS IS SEALED BEHIND HIGH-TRANSPARENCY CLEAR POLYCARBONATE EXTRUSION. BOTH LUMINAIRE BODY AND LED MODULE ARE SEALED TO IP65 AND RATED IK10. DRIVERS AND LED ARE MOUNTED SEPARATELY FROM EACH OTHER TO PROMOTE LOW OPERATING TEMPERATURES AND LONG SYSTEM LIFE. MOUNTING OF THE LUMINAIRE IS FACILITATED BY USING THE MOUNTING BASE OF THE BOLLARD THROUGH SPECIFICALLY DRILLED POINTS. CABLE ENTRY AND TERMINATION TO THE LUMINAIRE IS VIA AN IP65 CABLE GLAND. ACCESS TO THE LUMINAIRE IS VIA 2 X NUTS	HOLOPHANE DENVER ID DBD.1.LA013.DO.AY.W009	
X7	IN GROUND LED CIRCULAR UPLIGHT WITH DIFFUSER OPTIC ER56: FLOOR-RECESSED ORBIT LUMINAIRE D=23MM - FLUSH-MOUNTED STAINLESS STEEL FRAME - WARM WHITE LED - DIFFUSER OPTIC X489.13: OUTER CASING IN PLASTIC FOR THE GROUND, FLOOR WITH STAINLESS STEEL RING + CLOSURE CAP - STEEL	IGUZZINI LIGHT UP	
	POWER (W) LUMEN OUTPUT (lm) OPTICS		NOTES
	9 995 ASSYMETRICAL		
	3.8 470 MEDIUM 24DEGREE		
	EXTERNAL CANOPY LIGHTING ALLOW £3500 PROVISIONAL SUM		

ADDITIONAL ITEMS	DESCRIPTION	MANUFACTURER / CAT No
COLUMNS	4m DEMOUNTABLE COLUMNS TO BE PROVIDED FINISHED IN BLACK	FABRIKAT RAISE AND LOWER MID-HINGE COLUMNS
CONTROLS	SOLAR DIAL TIMECLOCK AND PHOTOCELL CONTROLS	SANGAMO

NOTES

1 SCHEDULE TO BE READ IN CONJUNCTION WITH DRAWINGS AND SPECIFICATION

ISSUE/REVISION	02	SIGNED	GR
DATE	02/06/2023	CHECKED	MH

EXTERNAL LUMINAIRE X1 & X2

D-SERIES



D-SERIES



HOLOPHANE[®]
An Acuity Brands Company

D-SERIES



The modern styling of the **D-Series** is striking yet unobtrusive - making a bold, progressive statement as it blends seamlessly with its environment. **D-Series** takes all the benefits of LED technology and moulds it into a high performance, high efficacy and long life area lighting luminaire.

With its exceptional 'finned' thermal management system, **D-Series** is capable of delivering over 100,000 hours LED module life. Offering a wide range of lumen packages and optical distributions, **D-Series** delivers optimised lighting application designs.

With the integrated ZD4i compatibility **D-Series** delivers a controllable luminaire that helps you realise energy consumption goals and demonstrate environmental responsibility. With its unique optics placed below each LED it ensures light is delivered where it needs to be, providing a uniform Nighttime Friendly environment with minimal light pollution.

Applications

- Amenity Areas
- Car Parks
- Retail Parks
- Truck Yards
- Warehousing
- Exterior Areas

Optics / Light Source

- Lumen packages ranging from 2,000 - 50,000 in 3 different luminaire variants
- Fully soak tested light engines ensuring LED reliability and eliminating early failures.
- 2700K/3000K/4000K colour temperature.
- RA 70.

TM66 CEAM-Make Rating

Rating: 2.6 Excellent Circularity.



TM66 Assured Score

Approvals

Complies with EN60598



IP IP65 luminaire and LED optic

Ta -40°C to +40°C



For further information please visit
the Holophane website www.holophane.co.uk

AN ENVIABLE REPUTATION THROUGHOUT THE WORLD



When Holophane was founded in 1896 in London, headed by Pelham Trotter, it marked the start of an incredible history that has now seen Holophane become a global business revered throughout the world for its expertise, quality, innovation and excellence in lighting.

Holophane's first product was the famous patented globe in 'white' or 'rose crystal' that sold for around 2 shilling (10p). Today, Holophane continues this proud tradition with our values deeply rooted in the dedication to creating luminaires, with exceptional lighting performance, innovative patented technologies, and delivering added customer value beyond illumination.

What does it mean for our customers?

A Trusted & Reliable UK Manufacturer

From Royalty all the way to small residential projects, Holophane has been a trusted manufacturer over the decades for all manner of projects. You can be sure you are in good hands and can rely on the collective knowledge and expertise we have gathered since our inception in 1896.

Development of Innovative Products

As part of our design philosophy, Holophane are always trying to push boundaries in the development of unique product innovations. As such many of our luminaires hold UK and International design patents.



Products That Deliver Added Value

In today's world, sustainability and added value are becoming increasingly important. As such our products and solutions go further than just lighting. Many of our innovations include integrated smart connected solutions to help customers achieve further energy savings and can also enable remote monitoring.

Delivering excellent customer service

Over our 125-year history we have always been committed to delivering the best service to our customers and supporting in a myriad of ways to ensure the best possible outcomes. This goes as far as offering a free lighting design service to one-off products/solutions to meet customers unique needs.

THE D-SERIES RANGE 3 LUMINAIRES, ONE COMPLETE PROJECT SOLUTION

The D-Series range has been designed not only for super optical quality and performance but also to have a cohesive family aesthetic.

Available in 3 luminaire sizes, the D-Series range offers a full outdoor lighting solution for any environment.



DSX2

30,000 - 50,000 lumens
8m mounting heights and above



DSX1

22,000 - 36,000 lumens
between 6m and 10m mounting heights



DSX0

2,000 to 22,000 lumens
up to 6m mounting heights

PRODUCT FEATURES

D-SERIES

Enhanced Performance

The **D-Series** range features the very latest LED technologies. In conjunction with silicone optics this delivers the best lighting performance coupled with low-energy consumption and high efficacy. This also means D-Series meets BREEAM compliance.



0%
ULOR



DSX1



DSX2

Class leading optics

The **D-Series** range has the flexibility of 4 optimised optical distributions. Through using individual bubble optics per LED D-Series controls the light exactly where it's needed. This results in a luminaire that provides best in class spacings and uniformity.

Easy maintenance

The **D-Series** range has an easily accessible gear compartment ensuring fast and simple component changes if required.



The **D-Series** range is ZD4i compatible when specified with the 4-pin Zhaga socket options (TZ01 or TZ02) enabling a future proof luminaire that can be used in conjunction with Controlux Air or a expanding ecosystem of third party devices and sensors.

Note: Post Top Bracket for The D-Series range is sold separately. Please enquire with your Holophane representative for the full range of mounting options.



Thermal Management

The reliability and performance of an LED luminaire is dependent on a combination of factors. Keeping the temperature of the drivers, LEDs and electronic components as low as possible is critical to maintaining the luminaire's efficiency.

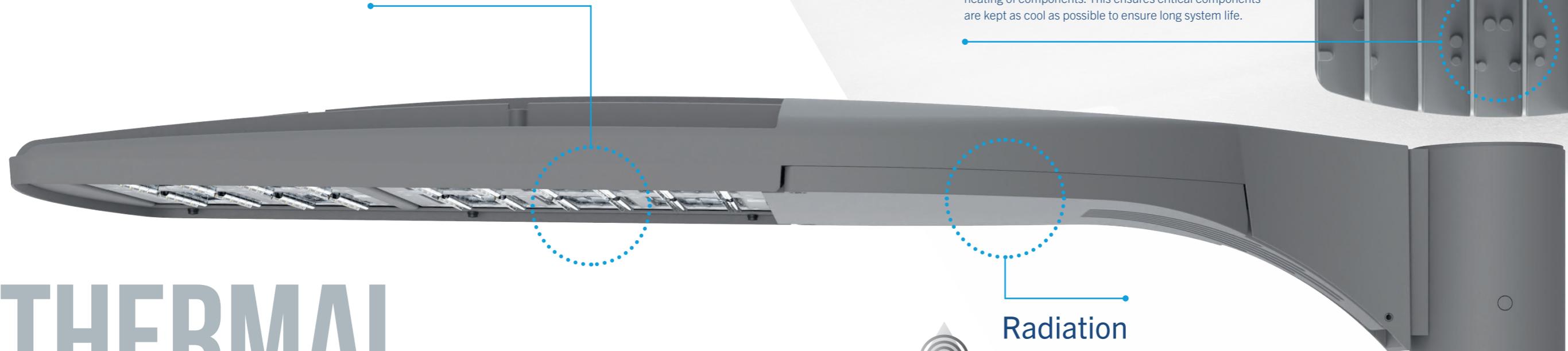
One of Holophane's key luminaire design principles ensures that the **D-Series** family utilises all three heat transfer principles of conduction, convection and radiation.



Conduction

Taking heat away from electronic components, LEDs and drivers.

The **D-Series** range has drivers and LEDs that are mounted directly to thermally efficient, LM6 Aluminium to promote efficient transfer of heat from these critical components.



Thermal Management



Convection

From luminaire heat sink chassis and LED module to ambient air.

The **D-Series** range is designed to have drivers and LEDs that are mounted separately to avoid compound heating of components. This ensures critical components are kept as cool as possible to ensure long system life.



Radiation

Surface finish and form designed to maximise heat radiation.

The **D-Series** range incorporates a large finned casting design which increases the total surface area of the luminaire and in turn helps to promote cooling through radiation.



DSX1

