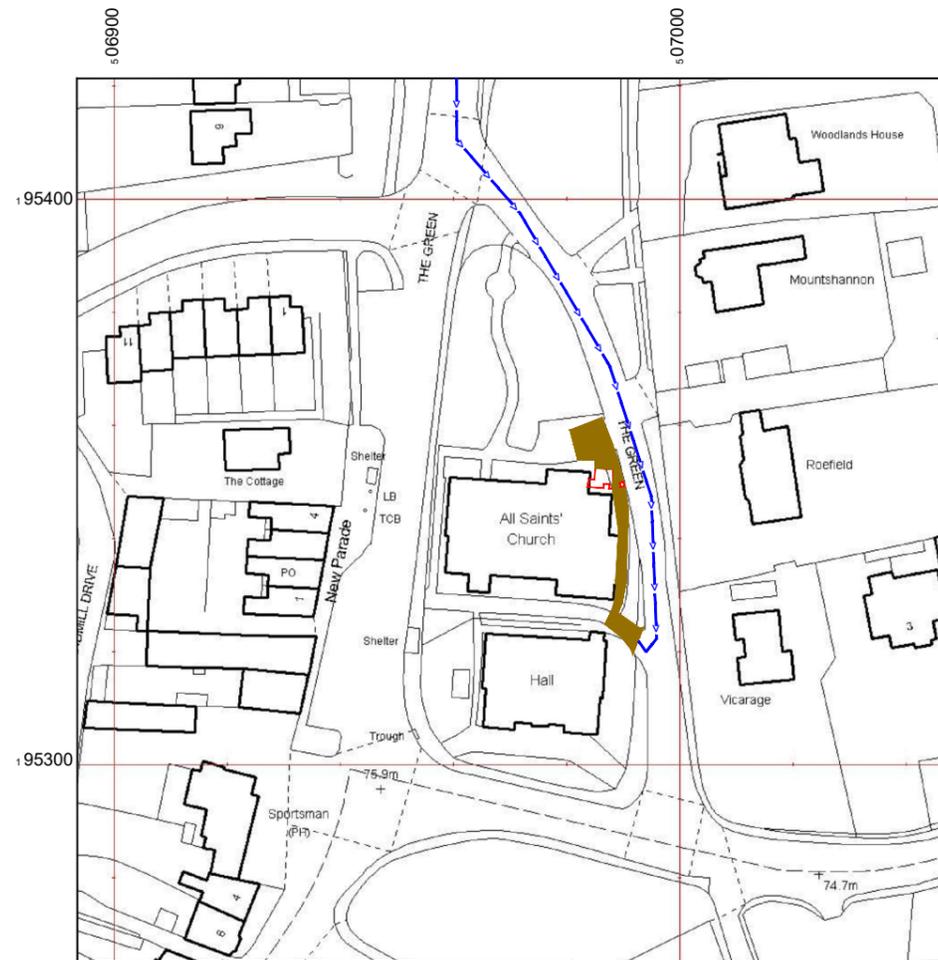


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NGR E: 506975 N: 195331

NOTES:

1. ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.

DIRECTIONS TO SITE:

HEADING CLOCKWISE ON M25. AT JUNCTION 18 TAKE A404 EXIT TOWARDS AMERSHAM/ CHORLEYWOOD. TURN RIGHT ONTO A404 (RICKMANSWORTH ROAD). AFTER 1.5 MILES TAKE FIRST EXIT AT ROUNDABOUT ONTO A412. AFTER 0.9 MILE GOING THROUGH 1 ROUNDABOUT TAKE THIRD EXIT ONTO A412 (WATFORD ROAD). TURN LEFT ONTO THE GREEN. CHURCH IS LOCATED ON RIGHT HAND SIDE

Demise:



Access Route To Site:



Access Route:



Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description: Antenna bearings changed from 0° to 15° and 240° to 265°		
Drawn:	N.Price			
Checked:	G.Duke			
Approved:	G.Duke			
M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description: Detail Design Issue		
Drawn:	N.Price			
Checked:	G.Duke			
Approved:	G.Duke			
M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description: Proposed BBU type Amended ON ALS		
Drawn:	N.Price			
Checked:	G.Duke			
Approved:	G.Duke			
M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description: Cell IDs and Site ID corrected. Proposed BBU type Amended		
Drawn:	N.Price			
Checked:	G.Duke			
Approved:	G.Duke			
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description: First Issue		
Drawn:	N.Price			
Checked:	G.Duke			
Approved:	G.Duke			



Hatfield Business Park
Hatfield
Hertfordshire
AL10 9BW

Tel: 01707 315000
Fax: 01707 319001

Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ

Title: 002 SITE LOCATION PLAN

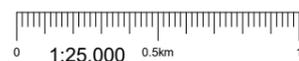
Project: EE VENDOR SWAP

Purpose of Issue: DETAIL DESIGN

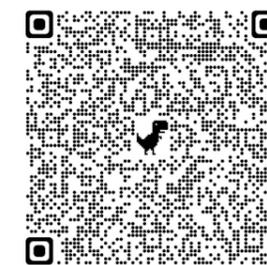
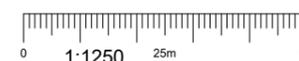
EE Cell ID: 50524	MBNL Cell ID: TRI001	3UK Cell ID: WD0107
-----------------------------	--------------------------------	-------------------------------

Master Drawing No: 982386_TRI001_50524_WD0107_M005	Issue: C2
---	---------------------

SITE AREA PLAN



SITE LOCATION PLAN



GOOGLE MAPS QR CODE

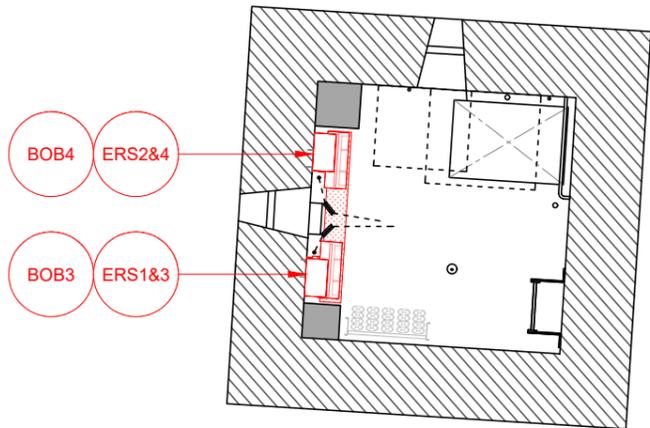
GOOGLE MAPS - [Hyperlink to map of the site](#)

GOOGLE STREETVIEW - [Hyperlink to streetview of the site](#)

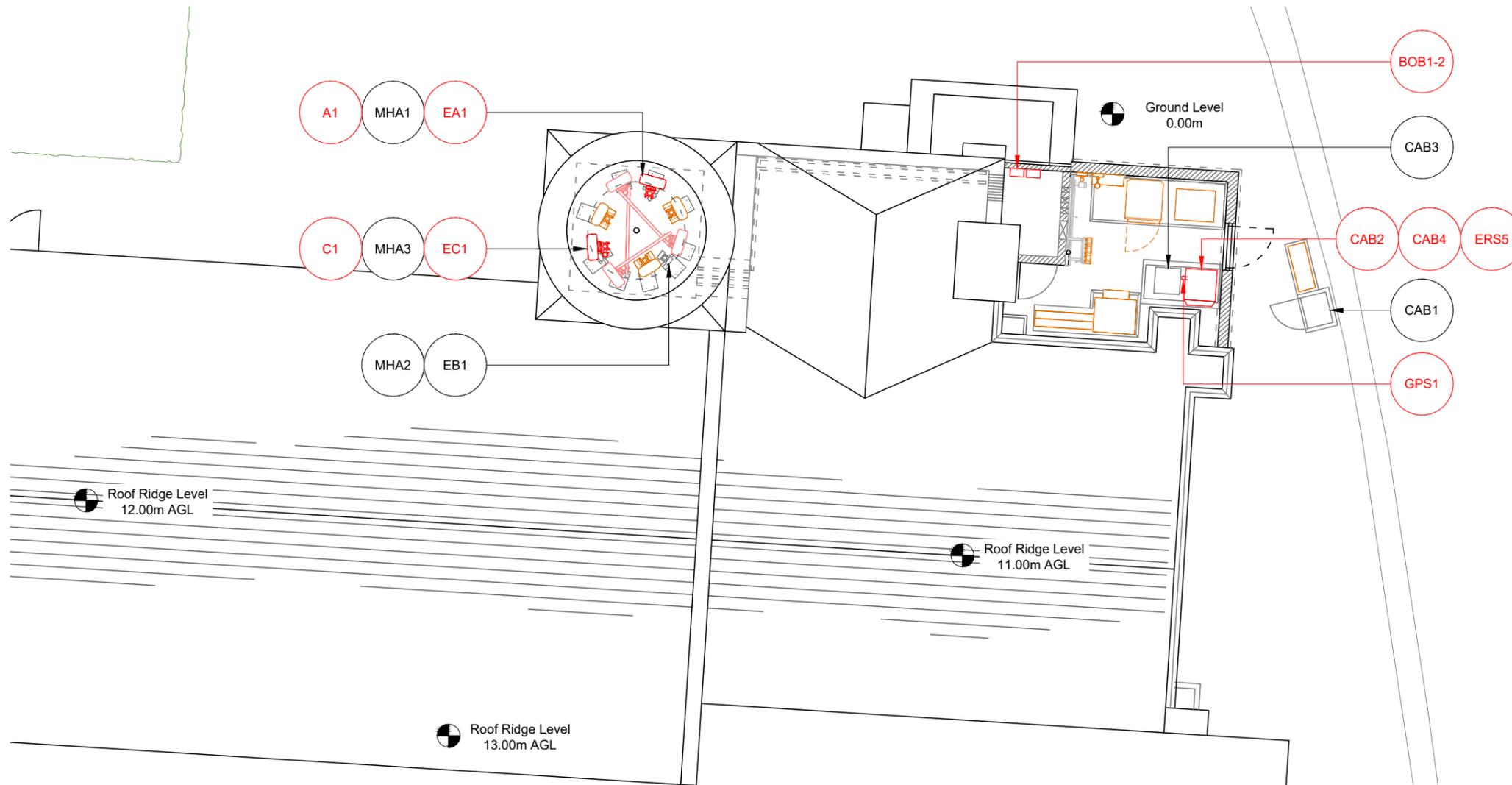
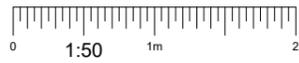


SITE PHOTOGRAPH

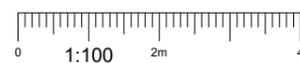
100mm
50mm
10mm



ACCESS PLAN - ERS LOCATION



ACCESS PLAN



Asset Reference	Asset Description:	Asset Status:	Antenna / Dish / MHA / RRU / Equipment Access Description:	Asset Reference	Asset Description:	Asset Status:	Antenna / Dish / MHA / RRU / Equipment Access Description:
EA1 & EC1	Antenna	Remove	Rigger Access Only	CAB1 & 3	Cabinet	Installed	Unrestricted Access
EB1	Antenna	Installed	Rigger Access Only	CAB2	Cabinet	Remove	Unrestricted Access
A1 & C1	Antenna	Proposed	Rigger Access Only	CAB4	Cabinet	Proposed	Unrestricted Access
MHA1-3	MHA	Installed	Rigger Access Only	BOB1-2	BOB	Proposed	Unrestricted Access
ERS1-4	ERS	Proposed	Unrestricted Access	GPS 1	GPS Node	Relocated	Unrestricted Access
ERS5	ERS	Proposed	Unrestricted Access				
BOB3-4	BOB	Proposed	Unrestricted Access				

NOTES:
 1. ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.
 DEFINED ACCESS ROUTE DESCRIPTION FROM SITE ENTRANCE TO THE EQUIPMENT:

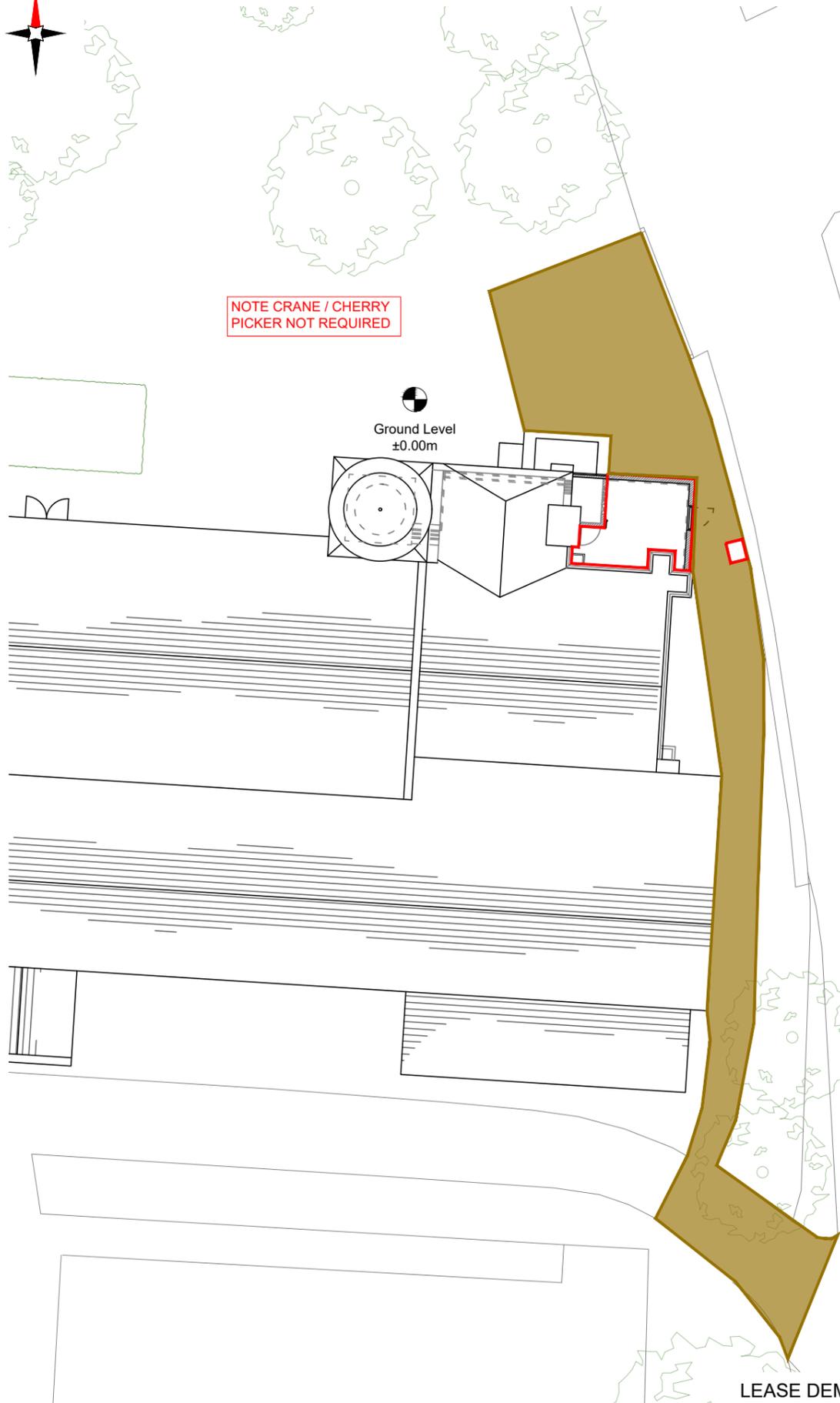
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description:		
Drawn:	N.Price	Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description:		
Drawn:	N.Price	Detail Design Issue		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Proposed BBU type Amended ON ALS		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Cell IDs and Site ID corrected, Proposed BBU type Amended		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	First Issue		
Checked:	G.Duke			
Approved:	G.Duke			

Hatfield Business Park
 Hatfield
 Hertfordshire
 AL10 9BW
 Tel: 01707 315000
 Fax: 01707 319001

Design Consultant & Principal Contractor:

Site Name:	ALL SAINTS CHURCH				
Site ID:	982386				
Address:	ALL SAINTS CHURCH THE GREEN CROXLEY GREEN HERTFORDSHIRE WD3 3HJ				
Title:	003 ACCESS PLAN				
Project:	EE VENDOR SWAP				
Purpose of Issue:	DETAIL DESIGN				
EE Cell ID:	50524	MBNL Cell ID:	TRI001	3UK Cell ID:	WD0107
Master Drawing No:	982386_TRI001_50524_WD0107_M005			Issue:	C2

100mm
50mm
10mm



NOTE CRANE / CHERRY PICKER NOT REQUIRED

Ground Level
±0.00m

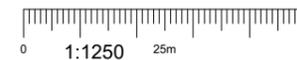
LEASE DEMISE PLAN



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NGR E: 427105
N: 432367

SITE LOCATION PLAN



NEW CODE:

Demise:	Outlined in Red	
Access Route:	Solid Brown	
Set Down Area:	Outlined in Blue	
Crane Area:	Dashed in Blue	

Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description:		
Drawn:	N.Price	Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description:		
Drawn:	N.Price	Detail Design Issue		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Proposed BBU type Amended ON ALS		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	First Issue		
Checked:	G.Duke			
Approved:	G.Duke			



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Hertfordshire
AL10 9BW

Tel: 01707 315000
Fax: 01707 319001

Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ

Title: 004 LEASE DEMISE & LOCATION PLAN

Project: EE VENDOR SWAP

Purpose of Issue: DETAIL DESIGN

EE Cell ID:	MBNL Cell ID:	3UK Cell ID:
50524	TRI001	WD0107

Master Drawing No: 982386_TRI001_50524_WD0107_M005 Issue: C2

100mm
50mm
10mm



NOTE:
ROOFTOP SITE. NO SERVICES SHOWN. LL SUPPLIED AC

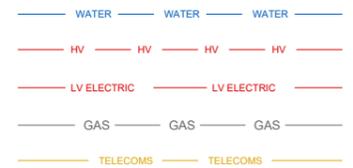
SERVICES PLAN



NOTES:

1. ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.

SERVICES:



Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description:		
Drawn:	N.Price	Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description:		
Drawn:	N.Price	Detail Design Issue		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Proposed BBU type Amended ON ALS		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	First Issue		
Checked:	G.Duke			
Approved:	G.Duke			



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Tel: 01707 315000
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Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ

Title: 005 SERVICES PLAN

Project: EE VENDOR SWAP

Purpose of Issue: DETAIL DESIGN

EE Cell ID:	MBNL Cell ID:	3UK Cell ID:
50524	TRI001	WD0107

Master Drawing No:	Issue:
982386_TRI001_50524_WD0107_M005	C2

Proposed Technologies
SECOTORS 1 & 3 18/18/21 4T4R 70/80 2T2R

Proposed Technologies
SECOTOR 2 18/18/21 2T2R

FIXITS			
FIXIT TYPE	STATUS	FIXIT NUMBER	COMMENTS
RF Compliance	Approved	102116	Site compliant with proposed techs

DEPENDENCY	STATUS	COMMENTS
Asbestos	YES	Survey carried out 14.11.2018
Building Regulations Approval	N/A	-
Planning Conditions	N/A	-
RF Compliance TD54000 v11.0	Pass / Fail:	Sector A ProX5 Actual
	Pass	Sector B ProX5 Actual
		Sector C ProX5 Actual
Global Design Check	N/A	-
Geotech Report	N/A	-
Structural Calculations	Yes	Completed on 16.11.23
Intrusive Building Survey	N/A	-
Rigging Survey	N/A	-
Power	Upgrade Required: OK	Existing 1 phase 100A REC.
Line of Sight Survey	N/A	-
Cooling Solution	Indoor/outdoor: Outdoor	kW: - Status: - System: - Upgrade Required: -
Services Search	NO	-
Trial Hole	N/A	-
Temporary Site	N/A	-

NOTES:

- ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.

Master: M005	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Detail Design	Issue: C2
Date: 26.01.24	Drawn: N.Price	Revision / Upgrade Description: Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked: G.Duke	Approved: G.Duke			
Master: M004	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Detail Design	Issue: C1
Date: 02.11.23	Drawn: N.Price	Revision / Upgrade Description: Detail Design Issue		
Checked: G.Duke	Approved: G.Duke			
Master: M003	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Planning	Issue: C
Date: 29.09.23	Drawn: N.Price	Revision / Upgrade Description: Proposed BBU type Amended ON ALS		
Checked: G.Duke	Approved: G.Duke			
Master: M002	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Planning	Issue: B
Date: 25.09.23	Drawn: N.Price	Revision / Upgrade Description: Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked: G.Duke	Approved: G.Duke			
Master: M001	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Planning	Issue: A
Date: 15.09.23	Drawn: N.Price	Revision / Upgrade Description: First Issue		
Checked: G.Duke	Approved: G.Duke			



Hatfield Business Park
 Hatfield
 Hertfordshire
 AL10 9BW

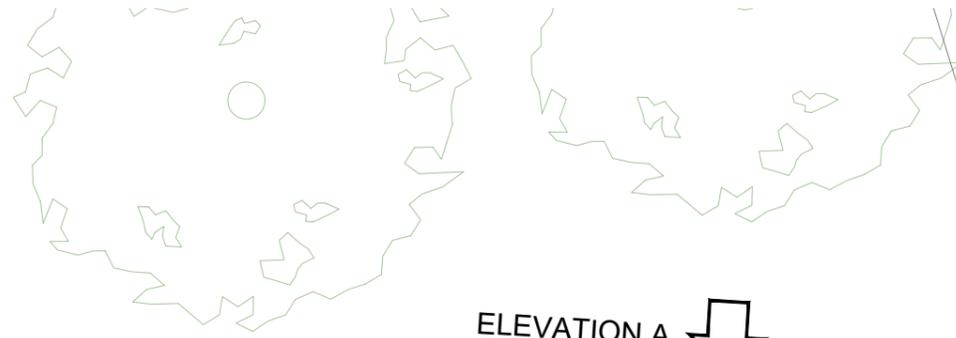
 Tel: 01707 315000
 Fax: 01707 319001

Design Consultant & Principal Contractor:

Site Name:	ALL SAINTS CHURCH
Site ID:	982386
Address:	ALL SAINTS CHURCH THE GREEN CROXLEY GREEN HERTFORDSHIRE WD3 3HJ
Title:	006 FIXITs & DEPENDENCIES
Project:	EE VENDOR SWAP
Purpose of Issue:	DETAIL DESIGN
EE Cell ID:	50524
MBNL Cell ID:	TRI001
3UK Cell ID:	WD0107
Master Drawing No:	982386_TRI001_50524_WD0107_M005
Issue:	C2

Note:
Page is for Internal Distribution Only

100mm
50mm
10mm



ELEVATION A ↓

Ground Level ±0.00m AGL

Existing 3No. EE/H3G Kathrein 742215 antenna mounted on support pole mounted internally within church spire with 1No. per antenna Radio Design RD0448 1800/2100 MHA mounted on support pole behind antenna

Inflight 3No. VF antennas mounted on support pole mounted internally within church spire

Existing 3No. VM02 antennas mounted on support pole mounted internally within church spire with combiners mounted to rear of antennas

Existing Roxtec glands within wall
Existing core drilled holes
Existing 450mm cable tray run internally to base of tower

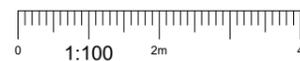
Existing VM02 combiners on cable ladder mounted to wall
Existing VM02 and VF GPS modules mounted to wall
Existing VM02 ACDB within IP rate enclosure mounted to wall
Existing VM02 Eltek PSU on concrete base

Existing VM02 FPF on concrete base
Existing meter cabinet on concrete base
Existing EE/H3G Link AC Mk3 Cabinet on concrete base
Existing EE BTS3900A cabinet (stacked) on steel plinth sat on concrete base
Existing EE/H3G Flexi stack on steel plinth sat on concrete base
Existing VF CSC cabinet on concrete base

Roof Ridge Level 12.00m AGL

Roof Ridge Level 11.00m AGL

EXISTING SITE PLAN



NOTES:

- ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.

Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description:		
Drawn:	N.Price	Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description:		
Drawn:	N.Price	Detail Design Issue		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Proposed BBU type Amended ON ALS		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	First Issue		
Checked:	G.Duke			
Approved:	G.Duke			



Hatfield Business Park
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Tel: 01707 315000
Fax: 01707 319001

Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ

Title: 100 EXISTING SITE PLAN

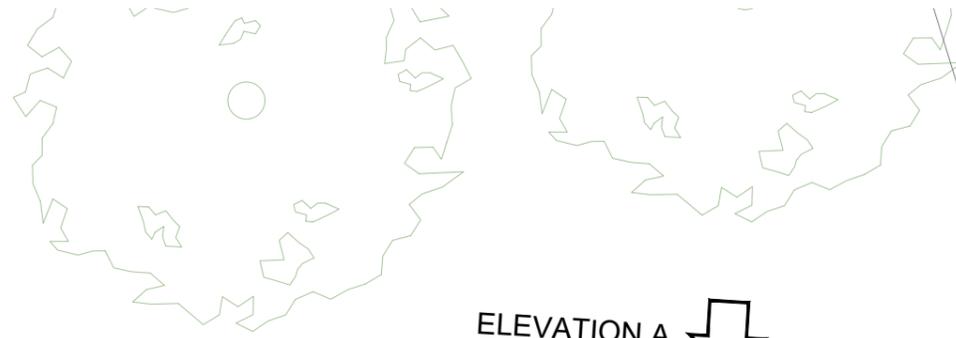
Project: EE VENDOR SWAP

Purpose of Issue: DETAIL DESIGN

EE Cell ID:	MBNL Cell ID:	3UK Cell ID:
50524	TRI001	WD0107

Master Drawing No: 982386_TRI001_50524_WD0107_M005 Issue: C2

100mm
50mm
10mm



ELEVATION A

NOTE: Proposed 2No. EE 2460 ERS (700/800) and 2No. EE 4480 ERS (1800/2100) mounted to wall in first floor chamber of tower 2No. Commscope BOB MK2 to be mounted to wall next to ERS

Existing 3No. EE/H3G Kathrein 742215 antennas mounted on support pole internally within church spire with 1No. per antenna Radio Design RD0448 1800/2100 MHA mounted on support pole behind antenna. Existing 2No. antennas to be replaced with proposed 2No. Commscope RRZZHHTT-65A-R6H4 antennas

Inflight 3No. VF antennas mounted on support pole mounted internally within church spire

Existing 3No. VM02 antennas mounted on support pole mounted internally within church spire with combiners mounted to rear of antennas

Existing Roxtec glands within wall

Proposed 2No. Commscope BOB MK2 to be installed internally within basement access

Existing core drilled holes

Existing 450mm cable tray run internally to base of tower

Ground Level ±0.00m AGL

Existing VM02 combiners on cable ladder mounted to wall

Existing VM02 and VF GPS modules mounted to wall

Existing VM02 ACDB within IP rate enclosure mounted to wall

Existing VM02 Eltek PSU on concrete base

Existing VM02 FPF on concrete base

Existing meter cabinet on concrete base

Existing EE/H3G Link AC Mk3 Cabinet on concrete base

Existing EE BTS3900A cabinet (stacked) on steel plinth sat on concrete base to be replaced with proposed 1No. EE S-Airo cabinet. Proposed 1No. Rosenberger GPS module to be mounted to top side of cabinet

Existing EE/H3G Flexi stack on steel plinth sat on concrete base

Existing VF CSC cabinet on concrete base

Roof Ridge Level 12.00m AGL

Roof Ridge Level 11.00m AGL

PROPOSED SITE PLAN



NOTES:

- ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.

Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description:		
Drawn:	N.Price	Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description:		
Drawn:	N.Price	Detail Design Issue		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Proposed BBU type Amended ON ALS		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	First Issue		
Checked:	G.Duke			
Approved:	G.Duke			



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Tel: 01707 315000
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Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ

Title: 150 PROPOSED SITE PLAN

Project: EE VENDOR SWAP

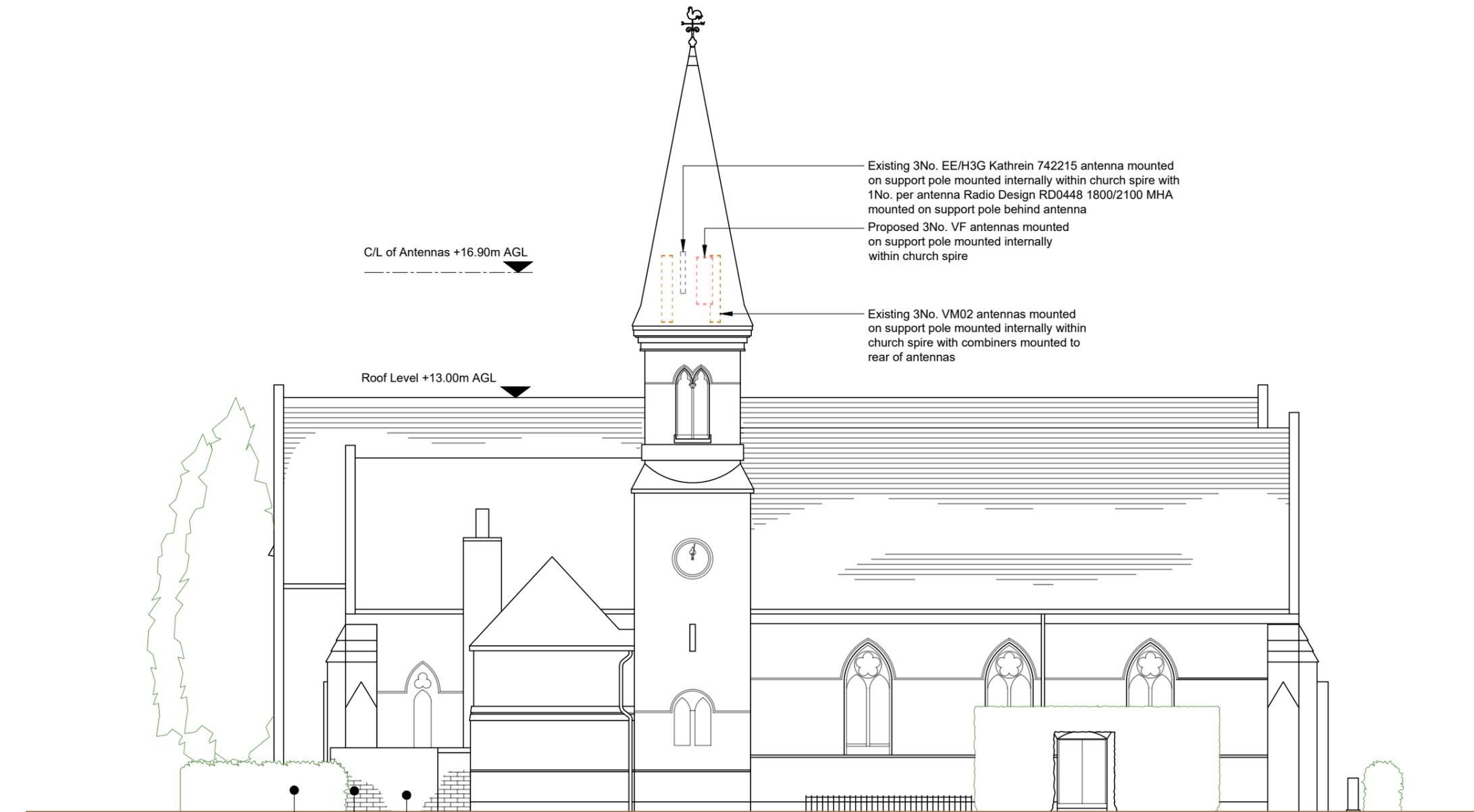
Purpose of Issue: DETAIL DESIGN

EE Cell ID:	MBNL Cell ID:	3UK Cell ID:
50524	TRI001	WD0107

Master Drawing No: 982386_TRI001_50524_WD0107_M005 Issue: C2

100mm
50mm
10mm

100mm
50mm
10mm



Existing meter cabinet on concrete base and Existing EE/H3G Link AC Mk3 Cabinet on concrete base

Existing VF and VM02 cabinets on concrete base within brick compound

Existing EE BTS3900A cabinet (stacked) and EE/H3G Flexi stack on steel plinth sat on concrete base within brick compound



NOTES:
1. ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.

Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description:		
Drawn:	N.Price	Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description:		
Drawn:	N.Price	Detail Design Issue		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Proposed BBU type Amended ON ALS		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Cell IDs and Site ID corrected, Proposed BBU type Amended		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	First Issue		
Checked:	G.Duke			
Approved:	G.Duke			



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Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ

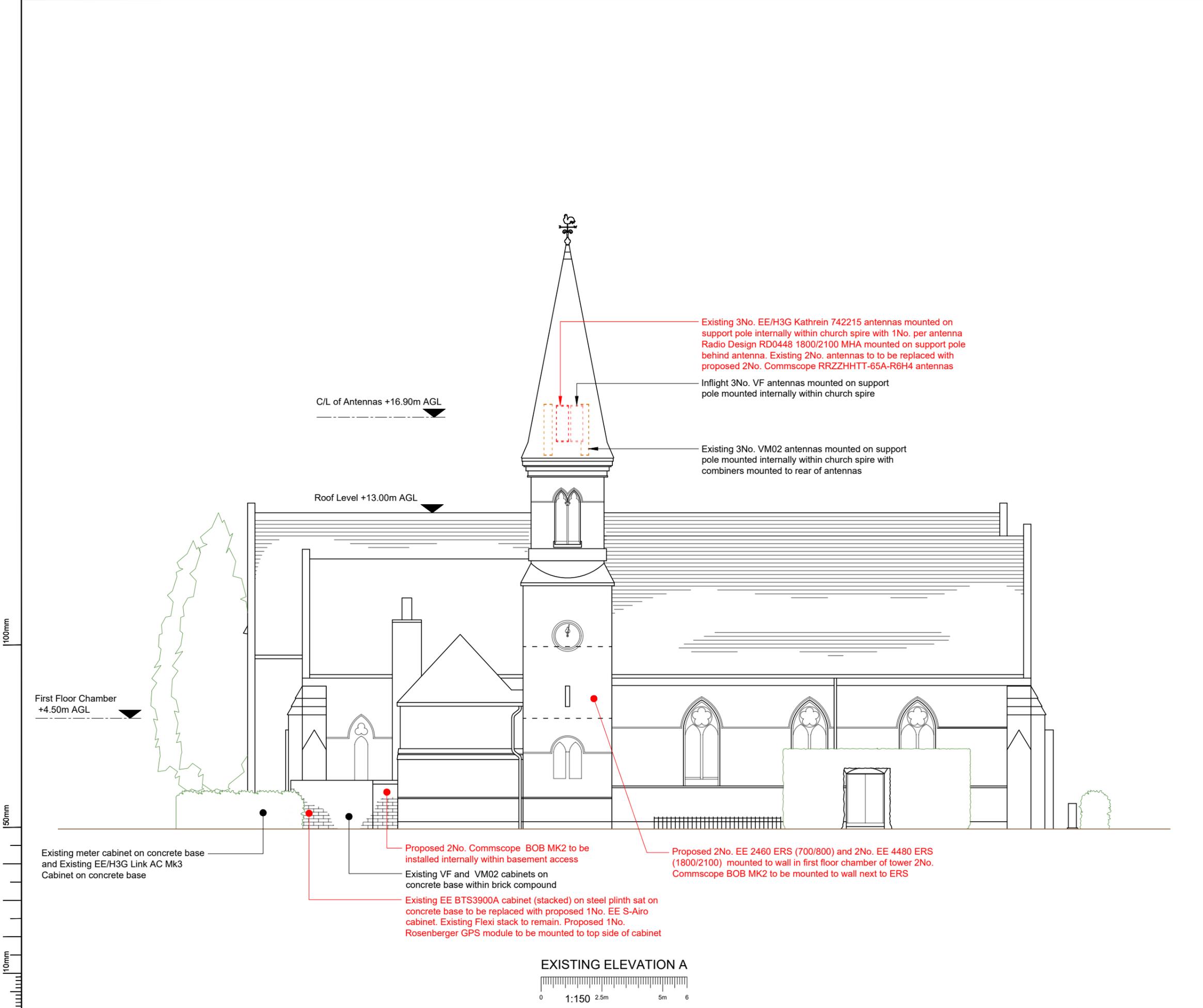
Title: 200 EXISTING ELEVATION A

Project: EE VENDOR SWAP

Purpose of Issue: DETAIL DESIGN

EE Cell ID:	MBNL Cell ID:	3UK Cell ID:
50524	TRI001	WD0107

Master Drawing No: 982386_TRI001_50524_WD0107_M005 Issue: C2



NOTES:
 1. ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.

Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description:		
Drawn:	N.Price	Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description:		
Drawn:	N.Price	Detail Design Issue		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Proposed BBU type Amended ON ALS		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	First Issue		
Checked:	G.Duke			
Approved:	G.Duke			



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Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
 THE GREEN
 CROXLEY GREEN
 HERTFORDSHIRE
 WD3 3HJ

Title: 250 PROPOSED ELEVATION A

Project: EE VENDOR SWAP

Purpose of Issue: DETAIL DESIGN

EE Cell ID: 50524	MBNL Cell ID: TRI001	3UK Cell ID: WD0107
-----------------------------	--------------------------------	-------------------------------

Master Drawing No: 982386_TRI001_50524_WD0107_M005 Issue: C2



Existing core drilled holes
Existing 450mm cable tray run internally to base of tower

Existing VM02 and VF GPS modules mounted to wall
Existing VM02 ACDB within IP rate enclosure mounted to wall

Existing brick compound with access door

Existing VM02 Eltek PSU on concrete base

Existing VM02 FPF on concrete base

Existing Roxtec glands within wall

Existing VM02 combiners on cable ladder mounted to wall

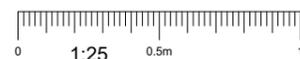
Existing meter cabinet on concrete base

Existing EE/H3G Link AC Mk3 Cabinet on concrete base

Existing VF CSC cabinet on concrete base
Existing EE/H3G Flexi stack on steel plinth sat on concrete base
Existing EE BTS3900A cabinet (stacked) on steel plinth sat on concrete base

Ground Level ±0.00m AGL

EXISTING EQUIPMENT LAYOUT PLAN



NOTES:

- ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.

Master: M005	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Detail Design	Issue: C2
Date: 26.01.24	Drawn: N.Price	Revision / Upgrade Description: Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked: G.Duke	Approved: G.Duke			
Master: M004	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Detail Design	Issue: C1
Date: 02.11.23	Drawn: N.Price	Revision / Upgrade Description: Detail Design Issue		
Checked: G.Duke	Approved: G.Duke			
Master: M003	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Planning	Issue: C
Date: 29.09.23	Drawn: N.Price	Revision / Upgrade Description: Proposed BBU type Amended ON ALS		
Checked: G.Duke	Approved: G.Duke			
Master: M002	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Planning	Issue: B
Date: 25.09.23	Drawn: N.Price	Revision / Upgrade Description: Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked: G.Duke	Approved: G.Duke			
Master: M001	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Planning	Issue: A
Date: 15.09.23	Drawn: N.Price	Revision / Upgrade Description: First Issue		
Checked: G.Duke	Approved: G.Duke			



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Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ

Title: 300 EXISTING EQUIPMENT LAYOUT PLAN

Project: EE VENDOR SWAP

Purpose of Issue: DETAIL DESIGN

EE Cell ID: 50524	MBNL Cell ID: TRI001	3UK Cell ID: WD0107
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Master Drawing No: 982386_TRI001_50524_WD0107_M005	Issue: C2
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100mm
50mm
10mm



Existing core drilled holes
Existing 450mm cable tray run internally to base of tower

Proposed 2No. Commscope BOB MK2 to be installed internally within basement access

Existing VM02 and VF GPS modules mounted to wall
Existing VM02 ACDB within IP rate enclosure mounted to wall

Existing brick compound with access door

Existing VM02 Eltek PSU on concrete base

Existing VM02 FPF on concrete base

Existing Roxtec glands within wall

Existing VM02 combiners on cable ladder mounted to wall

Existing meter cabinet on concrete base

Existing EE/H3G Link AC Mk3 Cabinet on concrete base

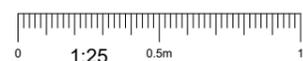
Existing VF CSC cabinet on concrete base

Existing EE/H3G Flexi stack on steel plinth sat on concrete base

Existing EE BTS3900A cabinet (stacked) on steel plinth sat on concrete base to be replaced with proposed 1No. EE S-Airo cabinet. Proposed 1No. Rosenberger GPS module to be mounted to top side of cabinet

Ground Level ±0.00m AGL

PROPOSED EQUIPMENT LAYOUT PLAN



NOTES:

- ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.

Master: M005	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Detail Design	Issue: C2
Date: 26.01.24	Drawn: N.Price	Revision / Upgrade Description: Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked: G.Duke	Approved: G.Duke			
Master: M004	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Detail Design	Issue: C1
Date: 02.11.23	Drawn: N.Price	Revision / Upgrade Description: Detail Design Issue		
Checked: G.Duke	Approved: G.Duke			
Master: M003	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Planning	Issue: C
Date: 29.09.23	Drawn: N.Price	Revision / Upgrade Description: Proposed BBU type Amended ON ALS		
Checked: G.Duke	Approved: G.Duke			
Master: M002	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Planning	Issue: B
Date: 25.09.23	Drawn: N.Price	Revision / Upgrade Description: Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked: G.Duke	Approved: G.Duke			
Master: M001	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Planning	Issue: A
Date: 15.09.23	Drawn: N.Price	Revision / Upgrade Description: First Issue		
Checked: G.Duke	Approved: G.Duke			



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Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ

Title: 301 PROPOSED EQUIPMENT LAYOUT PLAN

Project: EE VENDOR SWAP

Purpose of Issue: DETAIL DESIGN

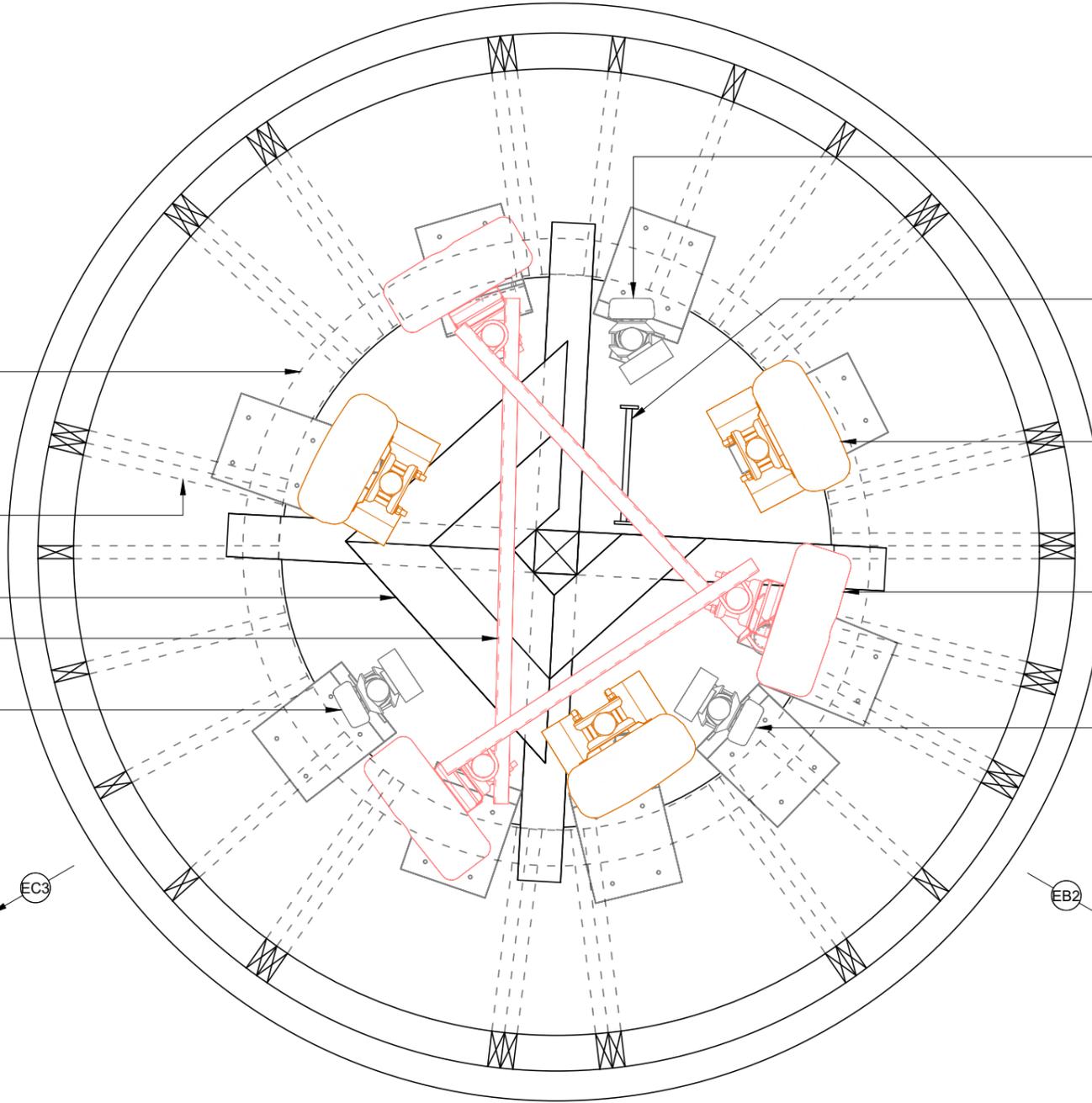
EE Cell ID: 50524	MBNL Cell ID: TRI001	3UK Cell ID: WD0107
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Master Drawing No: 982386_TRI001_50524_WD0107_M005	Issue: C2
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100mm
50mm
10mm



NOTE: SPACE WITHIN SPIRE IS VERY LIMITED AND PLAN IS NOT A TRUE REPRESENTATION OF ACTUAL SPACE



Existing timber ring beam above antennas shown dashed

Existing spire timbers shown dashed

Existing timber boards

Inflight additional steel bracing at top of antennas

Existing 1No. EE/H3G Kathrein 742215 antenna mounted within church spire with 1No. per Radio Design RD0448 1800/2100 MHA mounted on support pole behind antenna

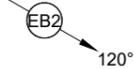
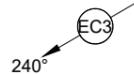
Existing 1No. EE/H3G Kathrein 742215 antenna mounted on support pole mounted within church spire with 1No. per Radio Design RD0448 1800/2100 MHA mounted on support pole behind antenna

Existing steel ladder from bell chamber to antenna level. very restricted access

Existing 3No. VM02 antennas mounted on support pole mounted within church spire with combiners mounted to rear of antennas

Inflight 3No. VF antennas mounted on support pole mounted within church spire

Existing 1No. EE/H3G Kathrein 742215 antenna mounted within church spire with 1No. per Radio Design RD0448 1800/2100 MHA mounted on support pole behind antenna



EXISTING ANTENNA PLAN



NOTES:

- ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.

Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description:		
Drawn:	N.Price	Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description:		
Drawn:	N.Price	Detail Design Issue		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Proposed BBU type Amended ON ALS		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	First Issue		
Checked:	G.Duke			
Approved:	G.Duke			



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Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ

Title: 310 EXISTING ANTENNA PLAN

Project: EE VENDOR SWAP

Purpose of Issue: DETAIL DESIGN

EE Cell ID:	MBNL Cell ID:	3UK Cell ID:
50524	TRI001	WD0107

Master Drawing No: 982386_TRI001_50524_WD0107_M005 Issue: C2



NOTE: SPACE WITHIN SPIRE IS VERY LIMITED AND PLAN IS NOT A TRUE REPRESENTATION OF ACTUAL SPACE

NOTES:

- ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.
Note: Design is based on VF upgrade works being complete. If at time of EE upgrade, VF works are not complete the additional bracing will be required to be installed as part of EE's upgrade. Space within spire is limited. VF and VM02 outages maybe required to complete works

Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description:		
Drawn:	N.Price	Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description:		
Drawn:	N.Price	Detail Design Issue		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Proposed BBU type Amended ON ALS		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	First Issue		
Checked:	G.Duke			
Approved:	G.Duke			



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Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
 THE GREEN
 CROXLEY GREEN
 HERTFORDSHIRE
 WD3 3HJ

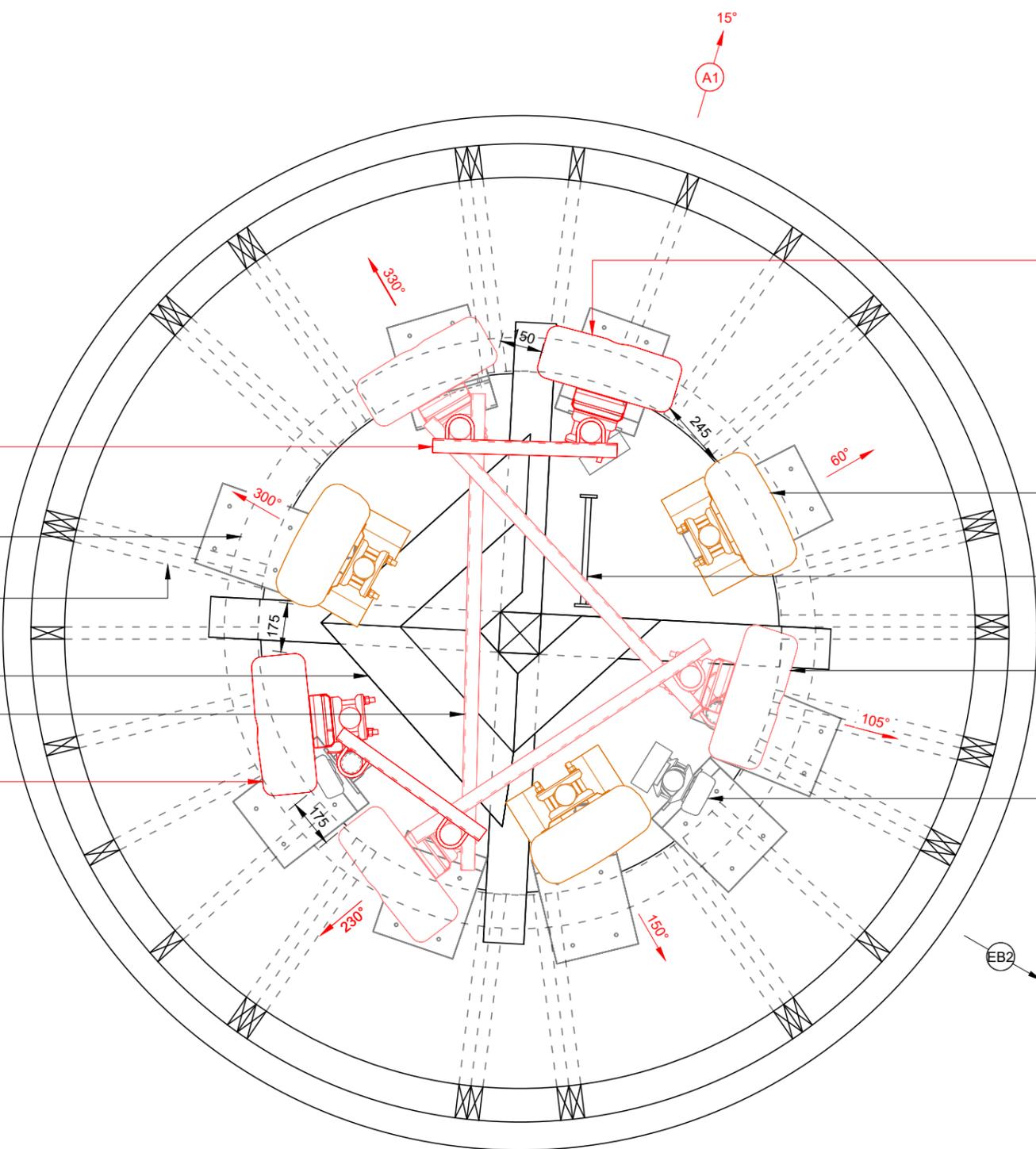
Title: 311 PROPOSED ANTENNA PLAN

Project: EE VENDOR SWAP

Purpose of Issue: DETAIL DESIGN

EE Cell ID: 50524	MBNL Cell ID: TRI001	3UK Cell ID: WD0107
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Master Drawing No: 982386_TRI001_50524_WD0107_M005 Issue: C2



Proposed additional steel bracing at top of antennas poles on both sectors

Existing timber ring beam above antennas shown dashed

Existing spire timbers shown dashed

Existing timber boards

Inflight additional steel bracing at top of antennas

Existing 1No. EE/H3G Kathrein 742215 antenna mounted on support pole within church spire with existing 1No. Radio Design RD0448 1800/2100 MHA mounted on support pole behind antenna. Existing 1No. antenna to be replaced with proposed 1No. Commscope RRZZHHTT-65A-R6H4 antenna. Additional off set bracket and pole to be installed

Existing 1No. EE/H3G Kathrein 742215 antenna mounted on support pole within church spire with existing 1No. Radio Design RD0448 1800/2100 MHA mounted on support pole behind antenna. Existing 1No. antenna to be replaced with proposed 1No. Commscope RRZZHHTT-65A-R6H4 antenna

Existing 3No. VM02 antennas mounted on support pole mounted within church spire with combiners mounted to rear of antennas

Existing steel ladder from bell chamber to antenna level. very restricted access

Inflight 3No. VF antennas mounted on support pole mounted within church spire

Existing 1No. EE/H3G Kathrein 742215 antenna mounted on support pole mounted within church spire with 1No. per Radio Design RD0448 1800/2100 MHA mounted on support pole behind antenna to remain

PROPOSED ANTENNA PLAN



100mm
50mm
10mm

NOTE: SPACE WITHIN SPIRE IS VERY LIMITED AND PLAN IS NOT A TRUE REPRESENTATION OF ACTUAL SPACE

Proposed additional steel bracing at top of antennas poles on both sectors

Inflight additional steel bracing at top of antennas

Exiting timber ring beam above antennas shown dashed

Inflight 3No. VF antennas mounted on support pole mounted within church spire

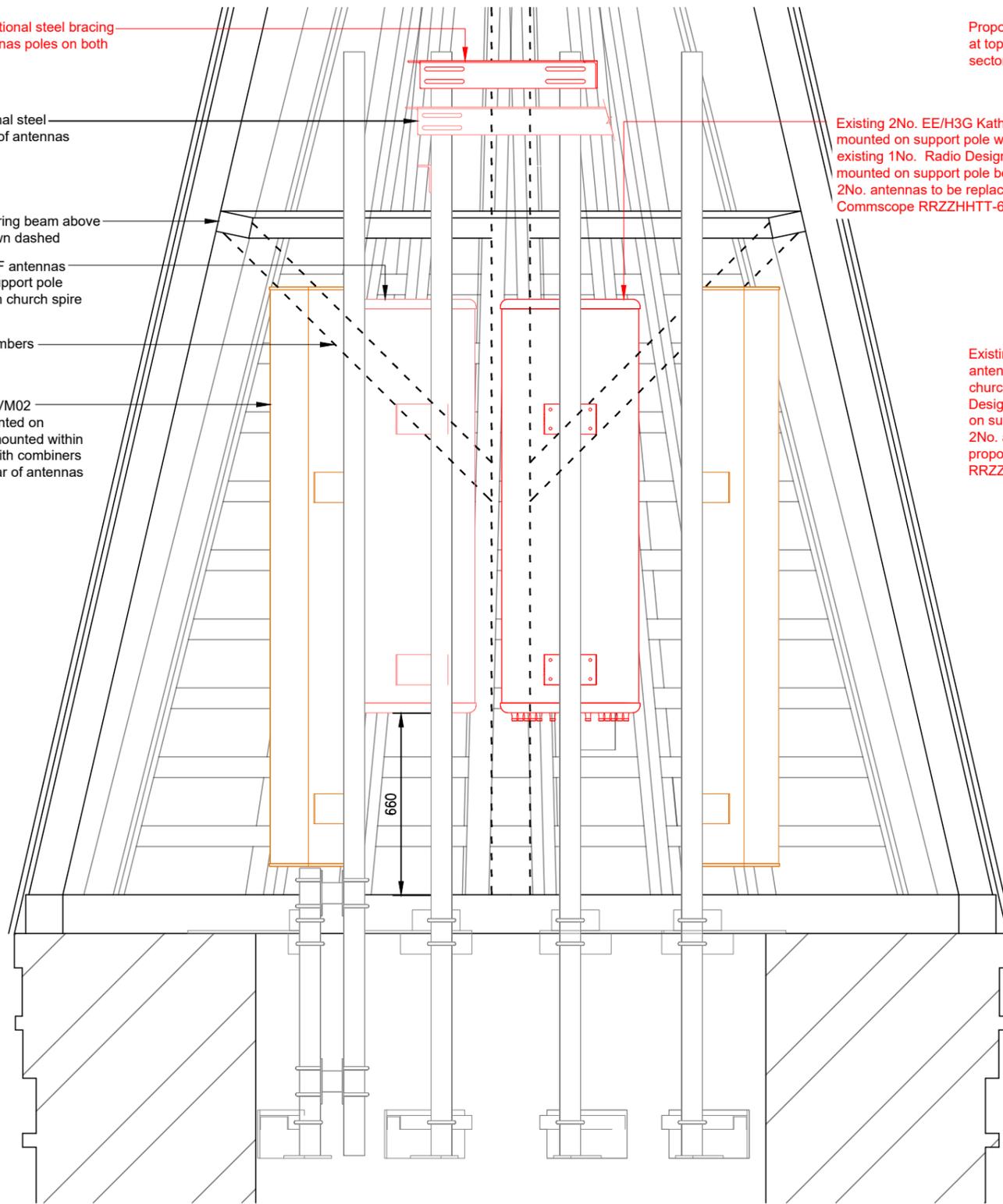
Exiting spire timbers shown dashed

Existing 3No. VM02 antennas mounted on support pole mounted within church spire with combiners mounted to rear of antennas

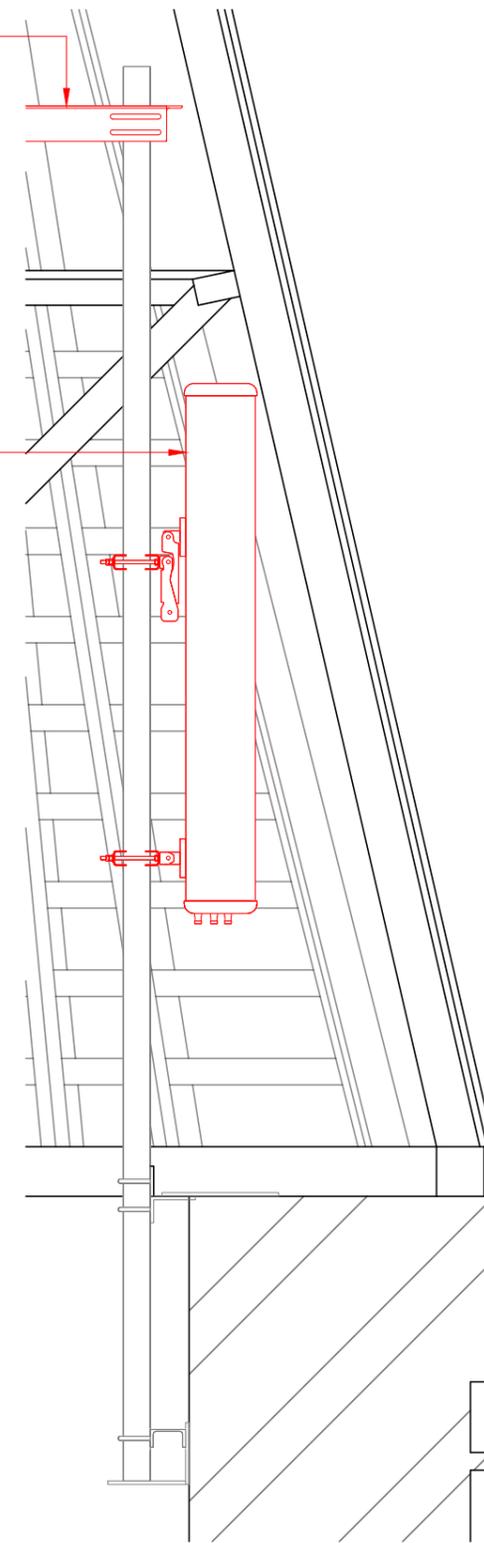
Proposed additional steel bracing at top of antennas poles on both sectors

Existing 2No. EE/H3G Kathrein 742215 antennas mounted on support pole within church spire with existing 1No. Radio Design RD0448 1800/2100 MHA mounted on support pole behind antenna. Existing 2No. antennas to be replaced with proposed 2No. Commscope RRZZHHTT-65A-R6H4 antennas

Existing 2No. EE/H3G Kathrein 742215 antennas mounted on support pole within church spire with existing 1No. Radio Design RD0448 1800/2100 MHA mounted on support pole behind antenna. Existing 2No. antennas to be replaced with proposed 2No. Commscope RRZZHHTT-65A-R6H4 antennas

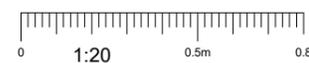


SECTION A-A



SIDE ELEVATION OF EE ANTENNA

PROPOSED ANTENNA SECTIONAL ELEVATION



NOTES:

1. ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.

Note: Design is based on VF upgrade works being complete. If at time of EE upgrade, VF works are not complete the additional bracing will be required to be installed as part of EE's upgrade. Space within spire is limited. VF and VM02 outages maybe required to complete works

Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description:		
Drawn:	N.Price	Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked:	G.Duke	Detail Design Issue		
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description:		
Drawn:	N.Price	Proposed BBU type Amended ON ALS		
Checked:	G.Duke	Detail Design Issue		
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Proposed BBU type Amended ON ALS		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	First Issue		
Checked:	G.Duke			
Approved:	G.Duke			



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Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ

Title: 312 PROPOSED ANTENNA SECTIONAL ELEVATION

Project: EE VENDOR SWAP

Purpose of Issue: DETAIL DESIGN

EE Cell ID:	MBNL Cell ID:	3UK Cell ID:
50524	TRI001	WD0107

Master Drawing No:	Issue:
982386_TRI001_50524_WD0107_M005	C2

100mm
50mm
10mm



B

Existing clock weight shaft

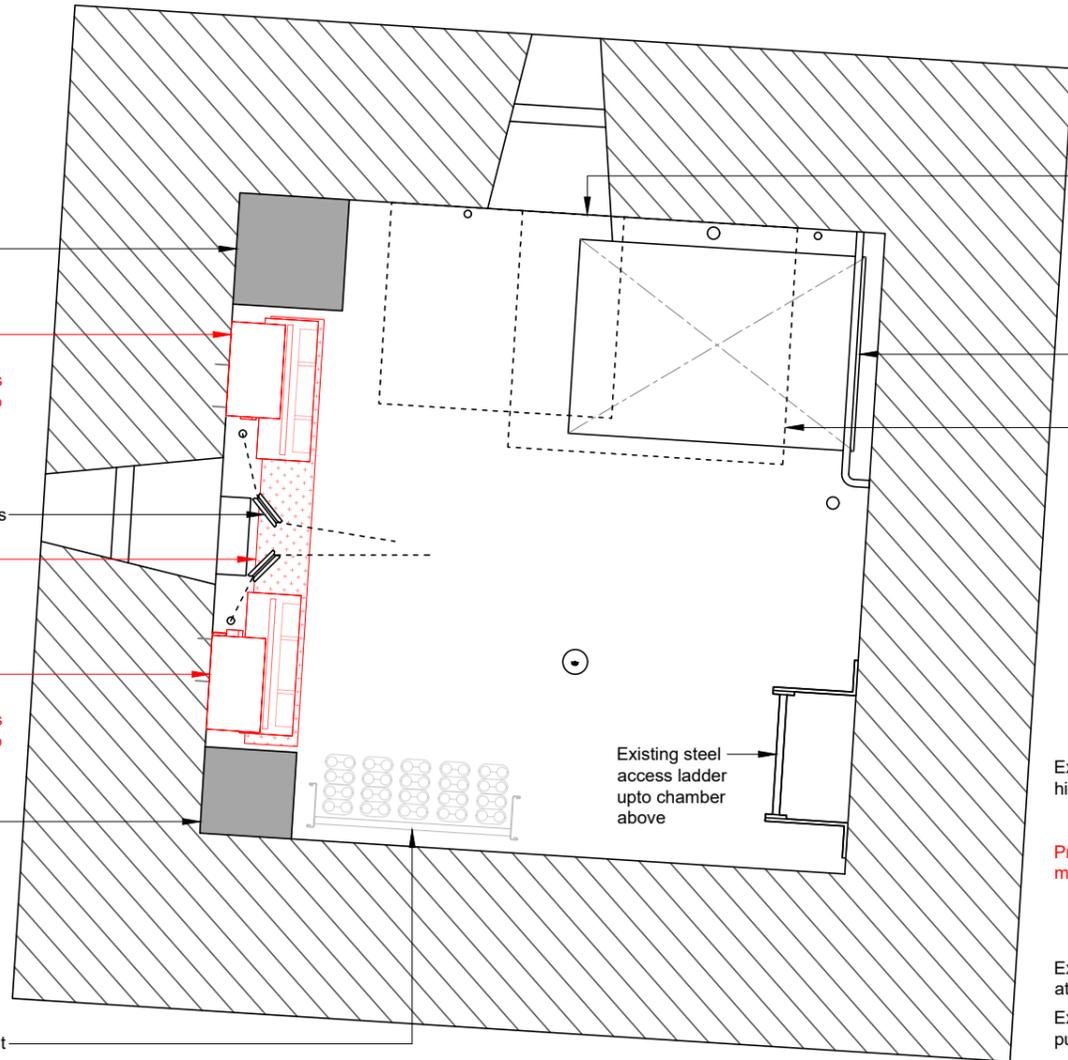
Proposed 1No. 2460 ERS and 1No. 4480 ERS on 2No. 180mm long ERS rails mounted on unistrut fixed to wall with 1No. Bob Mk2 mounted above

Existing clock weight pulleys mounted to timber
Proposed 150mm wide cable tray run along floor below ERS

Proposed 1No. 2460 ERS and 1No. 4480 ERS on 2No. 180mm long ERS rails mounted on unistrut fixed to wall with 1No. Bob Mk2 mounted above

Existing clock weight shaft

Existing cable management



PROPOSED ERS PLAN

B

Existing water tank at high level shown dashed

Existing access hatch in floor with grab rails

Existing clock mechanism at high level shown dashed

Existing steel access ladder upto chamber above

Existing clock mechanism at high level shown dashed

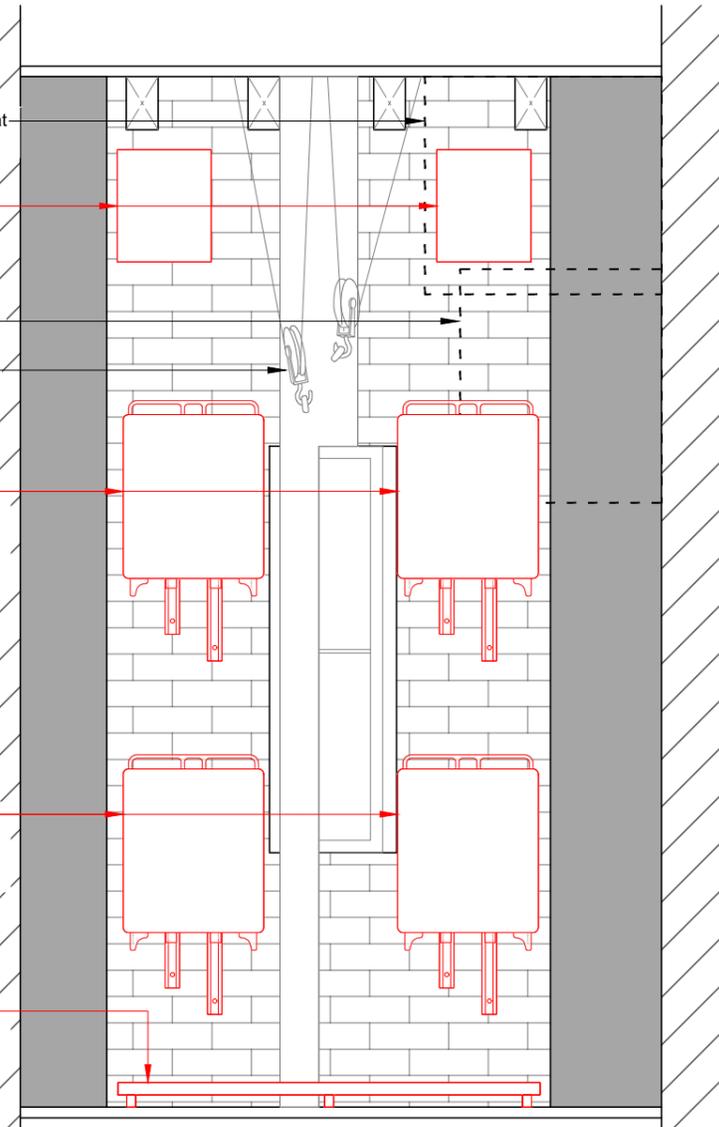
Proposed 2No. Bob Mk2 mounted above ERS

Existing clock mechanism at high level shown dashed
Existing clock weight pulleys mounted to timber

Proposed 2No. 4480 ERS on 2No. 180mm long ERS rails mounted on unistrut fixed to wall

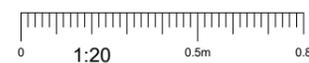
Proposed 2No. 2460 ERS on 2No. 180mm long ERS rails mounted on unistrut fixed to wall

Proposed 150mm wide cable tray run along floor below ERS



SECTION B-B

PROPOSED 1st FLOOR CHAMBER



NOTES:

- ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.

Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description:		
Drawn:	N.Price	Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description:		
Drawn:	N.Price	Detail Design Issue		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Proposed BBU type Amended ON ALS		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	First Issue		
Checked:	G.Duke			
Approved:	G.Duke			



Hatfield Business Park
Hatfield
Hertfordshire
AL10 9BW

Tel: 01707 315000
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Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ

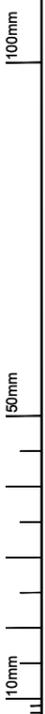
Title: 313 PROPOSED 1st FLOOR CHAMBER

Project: EE VENDOR SWAP

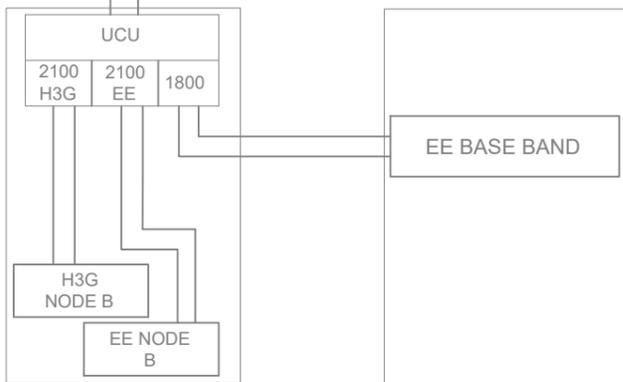
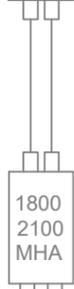
Purpose of Issue: DETAIL DESIGN

EE Cell ID:	MBNL Cell ID:	3UK Cell ID:
50524	TRI001	WD0107

Master Drawing No:	Issue:
982386_TRI001_50524_WD0107_M005	C2



EXISTING KATHREIN 742215
2-PORT ANTENNA



EE/H3G FLEXI STACK

BTS 3900A

ANTENNA END
CABINET END

STATUS KEY:

Installed: Existing
Retain: Existing and to remain
Relocate: Existing and to be relocated
Remove: Existing to be removed from site
Proposed: New on site

Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description:		
Drawn:	N.Price	Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description:		
Drawn:	N.Price	Detail Design Issue		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Proposed BBU type Amended ON ALS		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	First Issue		
Checked:	G.Duke			
Approved:	G.Duke			



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Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
 THE GREEN
 CROXLEY GREEN
 HERTFORDSHIRE
 WD3 3HJ

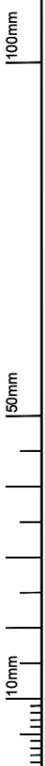
Title: 325 EXISTING ANTENNA LINE SCHEMATIC

Project: EE VENDOR SWAP

Purpose of Issue: DETAIL DESIGN

EE Cell ID:	MBNL Cell ID:	3UK Cell ID:
50524	TRI001	WD0107

Master Drawing No:	Issue:
982386_TRI001_50524_WD0107_M005	C2



PROPOSED ANTENNA SCHEDULE (Proposed / Existing-Remain)

ANTENNAS							FEEDER/FIBRE					BOBS / MHA's / RRU's / JUMPERS / ROUTERS										Antenna Status / Additional comments					
Antenna ID	Antenna Manufacturer & Type	Antenna AGL (m) TOP C/L U/S	Antenna Bearing (°)	Operator	Spectrum Port number	Tech Deployed	Type & Length(m)				Main Feeder Type (COAX or Fibre)	Main Feeders QTY Existing / Proposed	Fibre Trunk Length	BOB Low Level QTY / TYPE	BBU to BOB length (m)	BOB High Level QTY / Type	BOB to RRU / AAU Length (m)	RFU / RRU / AAU (RRU Type to be called off)	RRU to Antenna Length (m)	MHA Type	Passive Router (Low Level)	Active Router (High Level)	COAX Feeder Loss (db)				
							Low level Jumper	Main Feeder	High Level Jumper 1 (MHA)	High Level Jumper 2 (router/combiner)														Total			
EA1	Commscope RRZZHHTT-65A-R6H4	17.65 16.90 16.15	15°	EE	1 - 2	700/800	-	-	-	-	1No. MM Fibre	1No. Proposed	25m	BOB Mk2	6m	BOB Mk2	2m	ERS 2460	10m	-	-	-	TBC				
				EE	3 - 4		-	-	-	-																	
				EE	11 - 12	1800/2100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TBC	
				EE	13 - 14		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TBC	
				EE	5 - 6	2100	4m SF1/2"	31m LCF78-50 4m SF1/2"	2m SF1/2"	-	39/36m	COAX	2No. Existing	-	-	-	-	-	-	EE1800 RFU U2100 RFU	-	RD0446 1800/2100 MHA	UCU MK2	-	-3.24	Proposed To have 15° bearing change	
				H3G	7 - 8	2100	1m SF3/8"	4m SF1/2" 1m SF3/8"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-3.58		
				-	9 - 10	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
				-	15 - 16		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
EB1	KATHREIN 742215	17.55 16.90 16.24	120°	EE	1 - 2	1800	4m SF1/2"	29m LCF78-50 4m SF1/2"	2m SF1/2"	-	37/34m	COAX	2No. Existing	-	-	-	-	-	EE1800 RFU U2100 RFU	-	RD0446 1800/2100 MHA	UCU MK2	-	-3.13	Remain		
				EE/H3G	3 - 4	2100	1m SF3/8"	4m SF1/2" 1m SF3/8"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-3.46				
C1	Commscope RRZZHHTT-65A-R6H4	17.65 16.90 16.15	265°	EE	1 - 2	700/800	-	-	-	-	1No. MM Fibre	1No. Proposed	25m	BOB Mk2	6m	BOB Mk2	2m	ERS 2460	10m	-	-	-	TBC				
				EE	3 - 4		-	-	-	-																	
				EE	11 - 12	1800/2100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TBC
				EE	13 - 14		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TBC
				EE	5 - 6	2100	4m SF1/2"	31m LCF78-50 4m SF1/2"	2m SF1/2"	-	39/36m	COAX	2No. Existing	-	-	-	-	-	-	EE1800 RFU U2100 RFU	-	RD0446 1800/2100 MHA	UCU MK2	-	-3.24	Proposed To have 25° bearing change	
				H3G	7 - 8	2100	1m SF3/8"	4m SF1/2" 1m SF3/8"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-3.58
				-	9 - 10	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
				-	15 - 16		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-

STATUS KEY:
Installed: Existing
Retain: Existing and to remain
Relocate: Existing and to be relocated
Remove: Existing to be removed from site
Proposed: New on site

Master: M005	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Detail Design	Issue: C2
Date: 26.01.24	Drawn: N.Price	Revision / Upgrade Description: Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked: G.Duke	Approved: G.Duke			
Master: M004	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Detail Design	Issue: C1
Date: 02.11.23	Drawn: N.Price	Revision / Upgrade Description: Detail Design Issue		
Checked: G.Duke	Approved: G.Duke			
Master: M003	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Planning	Issue: C
Date: 29.09.23	Drawn: N.Price	Revision / Upgrade Description: Proposed BBU type Amended ON ALS		
Checked: G.Duke	Approved: G.Duke			
Master: M002	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Planning	Issue: B
Date: 25.09.23	Drawn: N.Price	Revision / Upgrade Description: Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked: G.Duke	Approved: G.Duke			
Master: M001	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Planning	Issue: A
Date: 15.09.23	Drawn: N.Price	Revision / Upgrade Description: First Issue		
Checked: G.Duke	Approved: G.Duke			



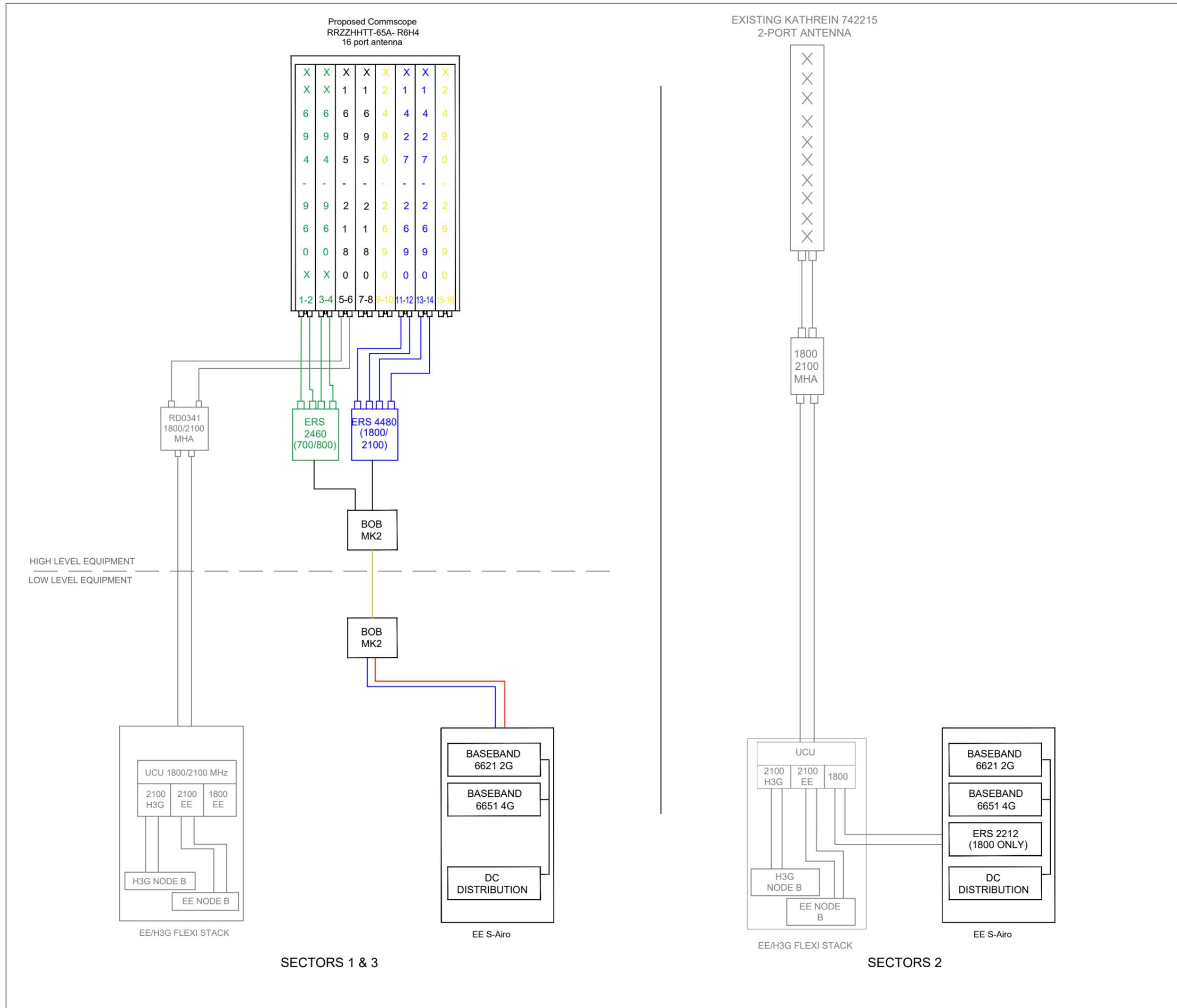
Hatfield Business Park
 Hatfield
 Hertfordshire
 AL10 9BW
 Tel: 01707 315000
 Fax: 01707 319001

Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH
 Site ID: 982386
 Address: ALL SAINTS CHURCH
 THE GREEN
 CROXLEY GREEN
 HERTFORDSHIRE
 WD3 3HJ
 Title: 330 PROPOSED ANTENNA SCHEDULE
 Project: EE VENDOR SWAP
 Purpose of Issue: DETAIL DESIGN
 EE Cell ID: 50524
 MBNL Cell ID: TRI001
 3UK Cell ID: WD0107
 Master Drawing No: 982386_TRI001_50524_WD0107_M005
 Issue: C2

100mm
50mm
10mm



Key

Description	Line Style
Proposed 700/800	Green line
Proposed 3G 1800/2100	Black line
Proposed LTE 1800/2100	Blue line
Proposed 2600	Yellow line
Proposed 3400-3600	Purple line
Existing Feeders, Jumpers, Equipment	Grey line
Proposed Feeders & Equipment	Black line
Proposed Power Cables	Red line
Proposed Single Mode Fibre	Yellow line
Proposed Multimode Fibre / Hybrid Trunking	Black line
RET Cables	Orange line

Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description:		
Drawn:	N.Price	Antenna bearings changed from 0° to 15° and 240° to 265°		
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M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description:		
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M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description:		
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M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description:		
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Checked:	G.Duke			
Approved:	G.Duke			
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	First Issue		
Checked:	G.Duke			
Approved:	G.Duke			



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Hatfield
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Design Consultant & Principal Contractor:



Site Name: **ALL SAINTS CHURCH**

Site ID: **982386**

Address: **ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ**

Title: **335 PROPOSED ANTENNA
LINE SCHEMATIC**

Project: **EE VENDOR SWAP**

Purpose of Issue: **DETAIL DESIGN**

EE Cell ID: 50524	MBNL Cell ID: TRI001	3UK Cell ID: WD0107
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Master Drawing No: **982386_TRI001_50524_WD0107_M005** Issue: **C2**



Support Structure Schedule

Structure ID	Status	Height / Length AGL (m)	Structure Manufacturer	Description / Type	Colour / Finishing (RAL Colour)	Size (mm)	Foundation / Support Grillage / Host Structure Details	Comments
ST1	Existing	15m	Bespoke	Wall mounted support poles	Galvanised	4m Long 76Ø poles	Wall Mounted	-
ST2	Proposed	15m	Bespoke	Off-Set Bracket	Galvanised	-	-	Pole mounted to existing support pole

STATUS KEY:

Installed: Existing
Retain: Existing and to remain
Relocate: Existing and to be relocated
Remove: Existing to be removed from site
Proposed: New on site

LOCATION KEY:

Outdoor: Located outside
Indoor: Located within an equipment cabin or equipment room
Internal: located inside a cabinet or item of equipment

Equipment Schedule

Equipment ID	Operator	Quantity	Status	Equipment Manufacturer	Equipment Description / Type	Dimensions (H x W x D)	Weight (kg)	Colour (RAL Colour)	Location	Comments
CAB1	EE/H3G	1	Existing	Alifabs	Link AC	1260x500x600	105kg	RAL7035	Ground Level	-
CAB2	EE	1	Remove	Huawei	BTS3900A STK	600x480x1650	-	RAL7035	Ground Level	To be Removed
CAB3	EE/H3G	1	Existing	Nokia	Flexi Stack	-	-	-	Ground Level	U2100 RFM,1800 RFM
CAB4	EE	1	Proposed	Ericsson	S-Airo	2100x600x700	70kg	RAL7035	Ground Level	C/w Proposed BBU6620 2G, BBU6648 4G and GPS RU
MHA1-3	EE/H3G	3	Existing	Radio Design	RD0448 MHA	352x175x87	7.5kg	-	Structure High Level	EE/H3G 1800/2100 Tech
COM1-3	EE/H3G	3	Existing	Radio Design	RD0313-01	448x43x237	7kg	-	Ground Level	EE/H3G 1800/2100 Tech
ERS1-2	EE	2	Proposed	Ericsson	2460 ERS	553x398x190	37.5kg	-	Internal Room	700/800
ERS3-4	EE	2	Proposed	Ericsson	4480 ERS	553x398x151	32kg	-	Internal Room	1800/2100
ERS5	EE	1	Proposed	Ericsson	2212 ERS	420x342x131	16.5kg	-	Within Cabinet	1800
BOB1-2	EE	2	Proposed	Commscope	Mk2 BOB	317.5x266x152.4	2.3kg	-	Ground Level	-
BOB3-4	EE	2	Proposed	Commscope	Mk2 BOB	317.5x266x152.4	2.3kg	-	Internal Room	-
BBU1	EE	2	Proposed	Ericsson	BBU6621	482.6x350x44.45	6.5kg	-	Within Cabinet	2G Tech
BBU1	EE	2	Proposed	Ericsson	BBU6651	482.6x350x44.45	6.5kg	-	Within Cabinet	4G Tech
GPS1	EE	1	Proposed	Rosenberger	GPS Module	98x78x78	-	-	Ground Level	Mounted to side of S-Airo
GNSSRU1	EE	1	Proposed	Ericsson	GRU 0401	32x37x103	1kg	-	Within Cabinet	-

Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description:		
Drawn:	N.Price	Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked:	G.Duke			
Approved:	G.Duke			
M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description:		
Drawn:	N.Price	Detail Design Issue		
Checked:	G.Duke			
Approved:	G.Duke			
M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Proposed BBU type Amended ON ALS		
Checked:	G.Duke			
Approved:	G.Duke			
M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked:	G.Duke			
Approved:	G.Duke			
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description:		
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GPS NODE Schedule

Equipment ID	Supply Status	Operator	Height (C/L) AGL	Cable Length	Cable type	Location	Comments
GPS1	Proposed	EE	2.1m	2m	RG8-U / 4-50	Cabinet Mount	To be mounted to side of S-Airo cabinet

Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
 THE GREEN
 CROXLEY GREEN
 HERTFORDSHIRE
 WD3 3HJ

Title: 400 EQUIPMENT SCHEDULE & SUPPORT STRUCTURE DETAILS

Project: EE VENDOR SWAP

Purpose of Issue: DETAIL DESIGN

EE Cell ID: 50524	MBNL Cell ID: TRI001	3UK Cell ID: WD0107
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Master Drawing No: 982386_TRI001_50524_WD0107_M005	Issue: C2
---	---------------------

100mm
50mm
10mm

AC Power Schedule

Equipment ID	Supply Status	Operator	Type	Incoming Supply Type	Meter / Service head / location	Distribution Board Manufacturer (cabins / internal rooms)	Upgrade Required (Y / N / TBC at DD)	Comments
AC1	Existing	EE/H3G	LL AC	Single Phase 100A	Meter Cabinet	-	N	-
ACDB1	Existing	EE/H3G	AC DB	Single Phase	MK3 Link AC	Hager	N	-

STATUS KEY:

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Remove: Existing to be removed from site
Proposed: New on site

LOCATION KEY:

Outdoor: Located outside
Indoor: Located within an equipment cabin or equipment room
Internal: located inside a cabinet or item of equipment

DC Power Schedule

Supply Status	Operator	Enclosure / Location	Model	Rectifier		Upgrade Required (Y / N / TBC at DD)	Comments
				QTY	Size (kw)		
Remove	EE/H3G	BTS3900A	EPU03A-08	3	2.9kw	N	-
Proposed	EE	S-Airo	Ericsson	3	3kw	N	-

Master: M005	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Detail Design	Issue: C2
Date: 26.01.24	Drawn: N.Price	Revision / Upgrade Description: Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked: G.Duke	Approved: G.Duke			

Master: M004	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Detail Design	Issue: C1
Date: 02.11.23	Drawn: N.Price	Revision / Upgrade Description: Detail Design Issue		
Checked: G.Duke	Approved: G.Duke			

Transmission Supply Schedule

Equipment ID	Supply Status	Operator	Enclosure	Type:	Supplier Name	U-Space Available	Comments
TX1	Existing	EE/H3G	Mk3 Link AC	Fibre Only	BT	1U	-

Master: M003	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Planning	Issue: C
Date: 29.09.23	Drawn: N.Price	Revision / Upgrade Description: Proposed BBU type Amended ON ALS		
Checked: G.Duke	Approved: G.Duke			

Master: M002	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Planning	Issue: B
Date: 25.09.23	Drawn: N.Price	Revision / Upgrade Description: Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked: G.Duke	Approved: G.Duke			

Master: M001	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Planning	Issue: A
Date: 15.09.23	Drawn: N.Price	Revision / Upgrade Description: First Issue		
Checked: G.Duke	Approved: G.Duke			



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Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
 THE GREEN
 CROXLEY GREEN
 HERTFORDSHIRE
 WD3 3HJ

Title: 401 POWER & TRANSMISSION SCHEDULE

Project: EE VENDOR SWAP

Purpose of Issue: DETAIL DESIGN

EE Cell ID: 50524	MBNL Cell ID: TRI001	3UK Cell ID: WD0107
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Master Drawing No: 982386_TRI001_50524_WD0107_M005	Issue: C2
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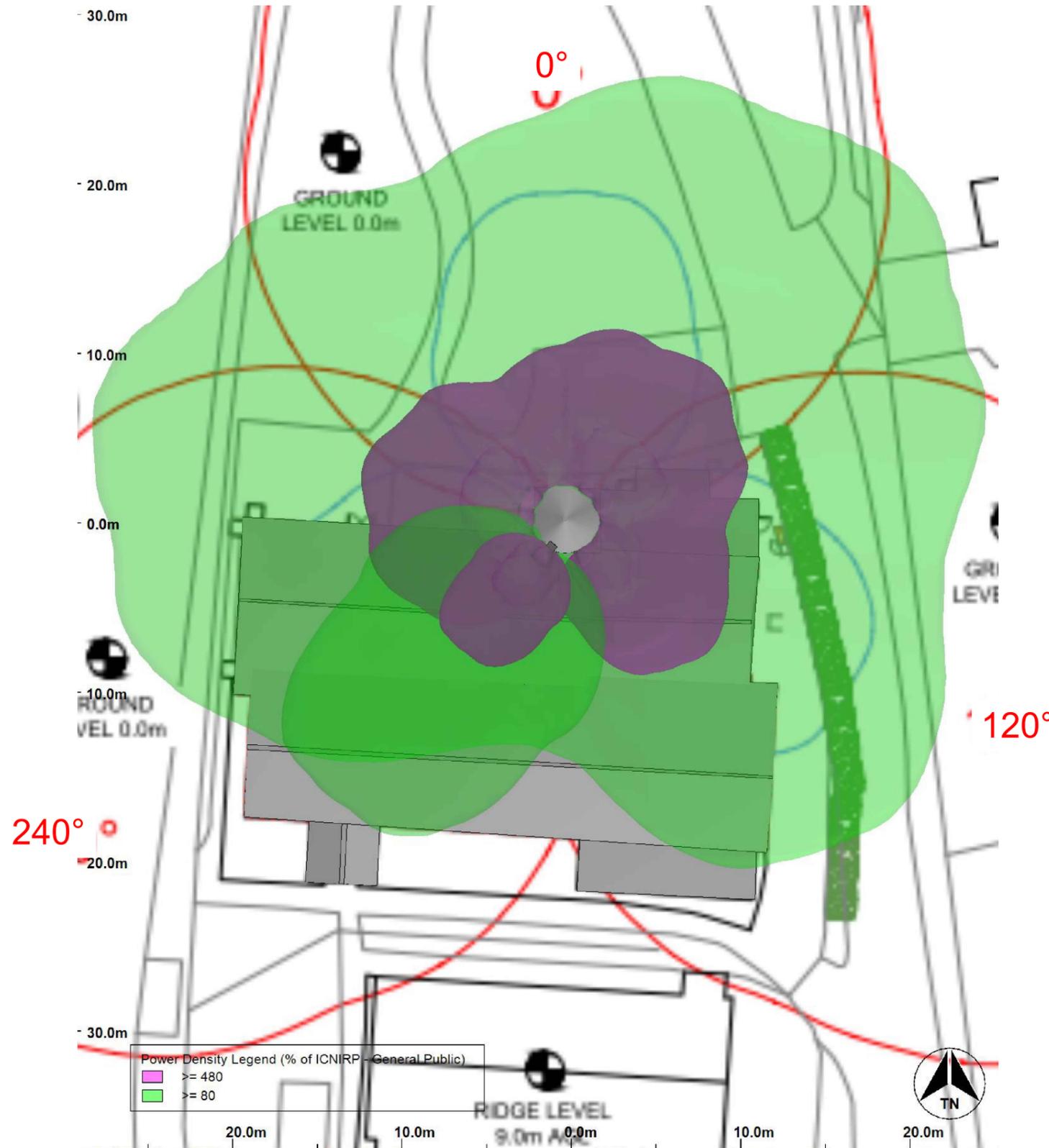
100mm
50mm
10mm

Sector A	ProX5 Actual
Sector B	ProX5 Actual
Sector C	ProX5 Actual

Operators on site (or within 100m)	
EE	Yes
H3G	Yes
CTIL	Yes
UKBB	-
Airwave	-
Broadcast	-
Other	-

NOTES:

1. ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.
2. REFER TO TD54000 v11.0 FOR MBNL RF COMPLIANCE GUIDANCE.



Power Density Legend (% of ICNIRP - General Public)	
Yellow	>= 480
Green	>= 80

RF COMPLIANCE PLAN



Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24			
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Revision / Upgrade Description:	Antenna bearings changed from 0° to 15° and 240° to 265°			
M004	EE	Vender Swap	Detail Design	C1
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Revision / Upgrade Description:	Detail Design Issue			
M003	EE	Vender Swap	Planning	C
Date:	29.09.23			
Drawn:	N.Price			
Checked:	G.Duke			
Approved:	G.Duke			
Revision / Upgrade Description:	Proposed BBU type Amended ON ALS			
M002	EE	Vender Swap	Planning	B
Date:	25.09.23			
Drawn:	N.Price			
Checked:	G.Duke			
Approved:	G.Duke			
Revision / Upgrade Description:	Cell IDs and Site ID corrected. Proposed BBU type Amended			
M001	EE	Vender Swap	Planning	A
Date:	15.09.23			
Drawn:	N.Price			
Checked:	G.Duke			
Approved:	G.Duke			
Revision / Upgrade Description:	First Issue			



Hatfield Business Park
Hatfield
Hertfordshire
AL10 9BW

Tel: 01707 315000
Fax: 01707 319001

Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ

Title: 500 RF COMPLIANCE PLAN

Project: EE VENDOR SWAP

Purpose of Issue: DETAIL DESIGN

EE Cell ID: 50524	MBNL Cell ID: TRI001	3UK Cell ID: WD0107
-----------------------------	--------------------------------	-------------------------------

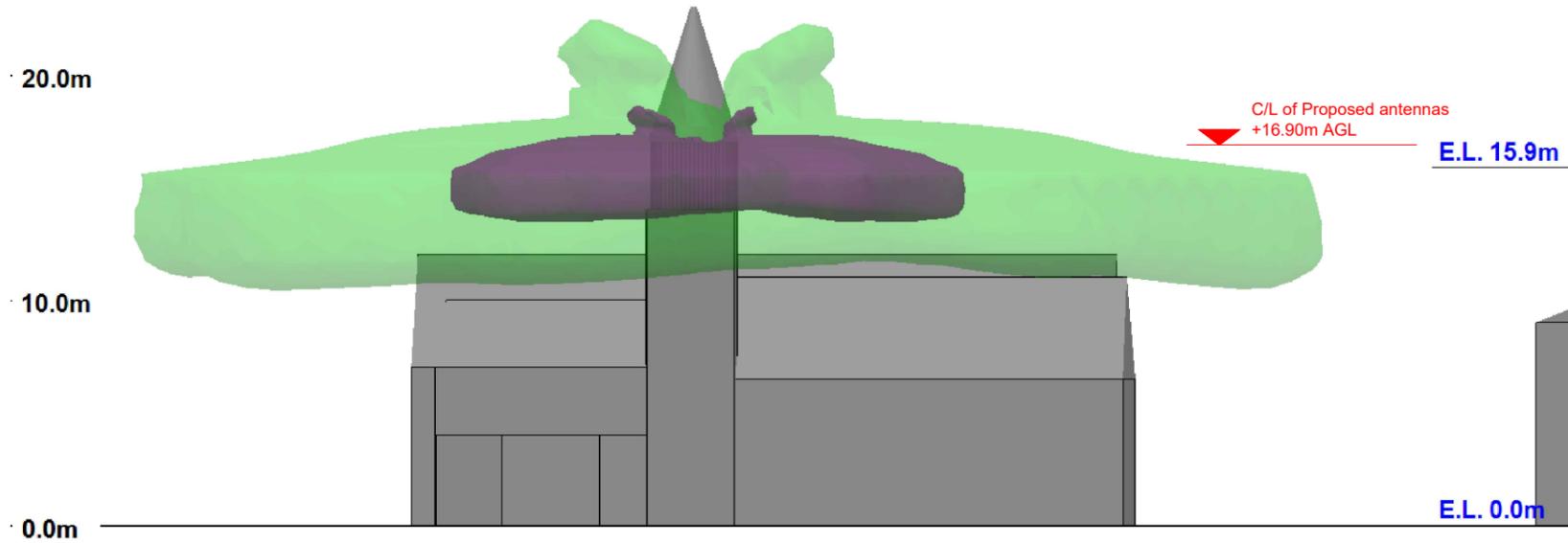
Master Drawing No: 982386_TRI001_50524_WD0107_M005	Issue: C2
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Sector A	ProX5 Actual
Sector B	ProX5 Actual
Sector C	ProX5 Actual

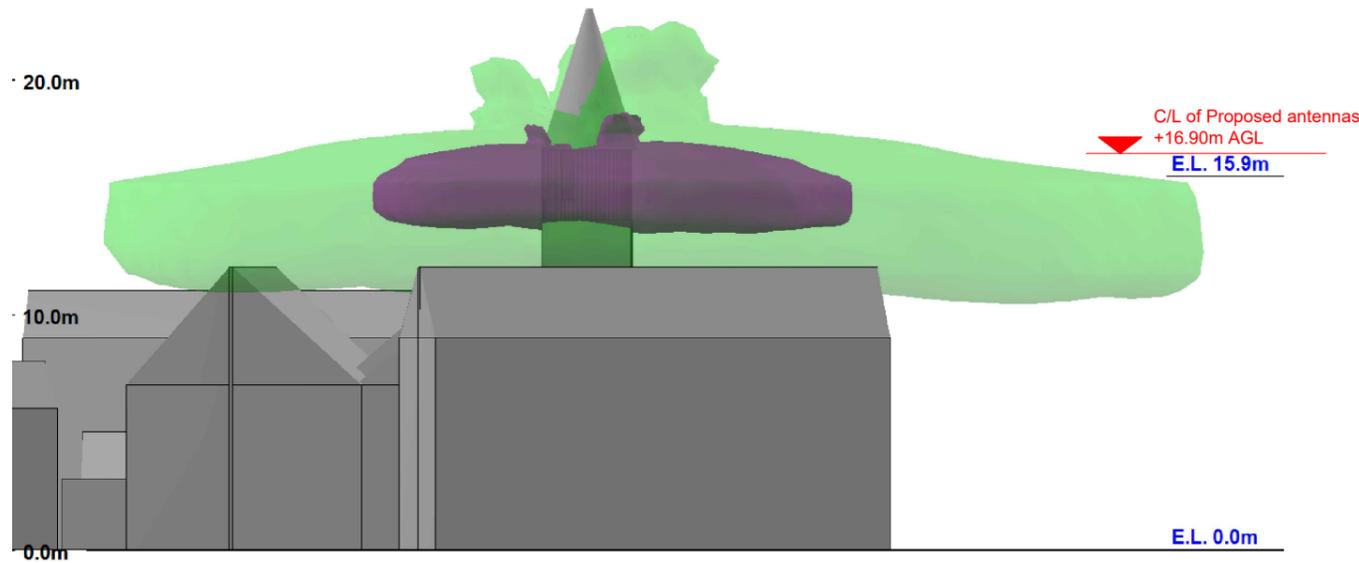
Operators on site (or within 100m)	
EE	Yes
H3G	Yes
CTIL	Yes
UKBB	-
Airwave	-
Broadcast	-
Other	-

NOTES:

1. ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.
2. REFER TO TD54000 v11.0 FOR MBNL RF COMPLIANCE GUIDANCE.



RF COMPLIANCE NORTH ELEVATION
Scale 1:300



RF COMPLIANCE EAST ELEVATION
Scale 1:300



Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description:		
Drawn:	N.Price	Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked:	G.Duke			
Approved:	G.Duke			
M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description:		
Drawn:	N.Price	Detail Design Issue		
Checked:	G.Duke			
Approved:	G.Duke			
M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Proposed BBU type Amended ON ALS		
Checked:	G.Duke			
Approved:	G.Duke			
M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked:	G.Duke			
Approved:	G.Duke			
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	First Issue		
Checked:	G.Duke			
Approved:	G.Duke			



Hatfield Business Park
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Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ

Title: 510 RF COMPLIANCE ELEVATIONS -
NORTH AND EAST

Project: EE VENDOR SWAP

Purpose of Issue: DETAIL DESIGN

EE Cell ID: 50524	MBNL Cell ID: TRI001	3UK Cell ID: WD0107
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Master Drawing No: 982386_TRI001_50524_WD0107_M005	Issue: C2
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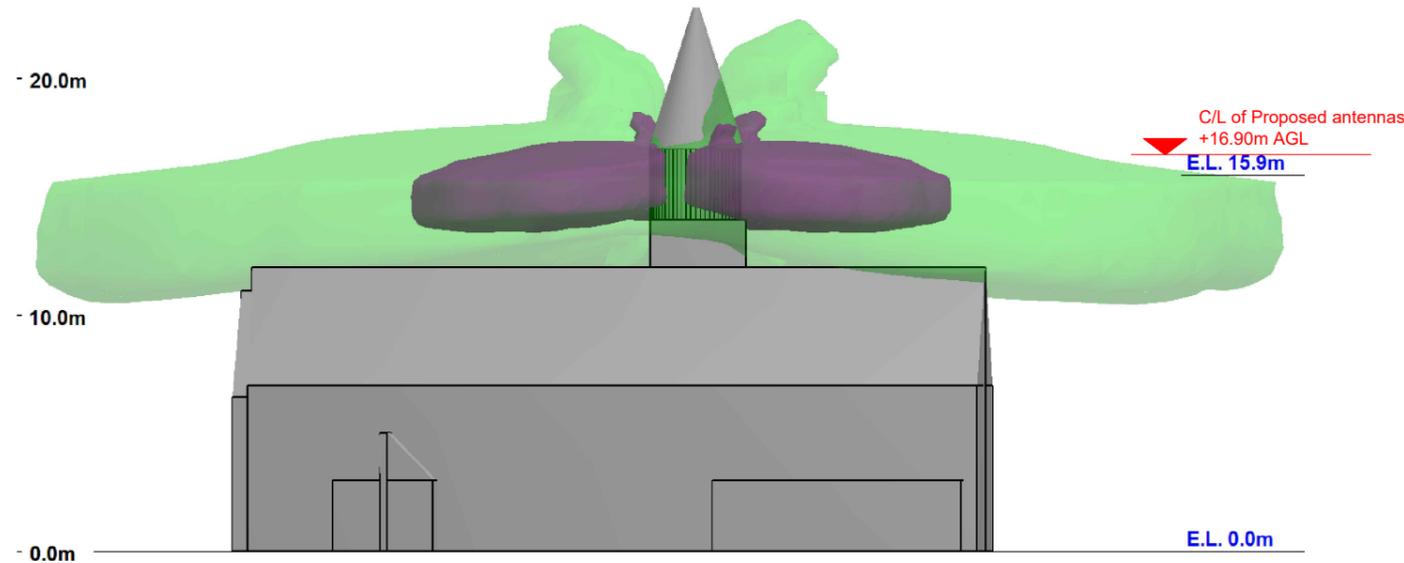
100mm
50mm
10mm

Sector A	ProX5 Actual
Sector B	ProX5 Actual
Sector C	ProX5 Actual

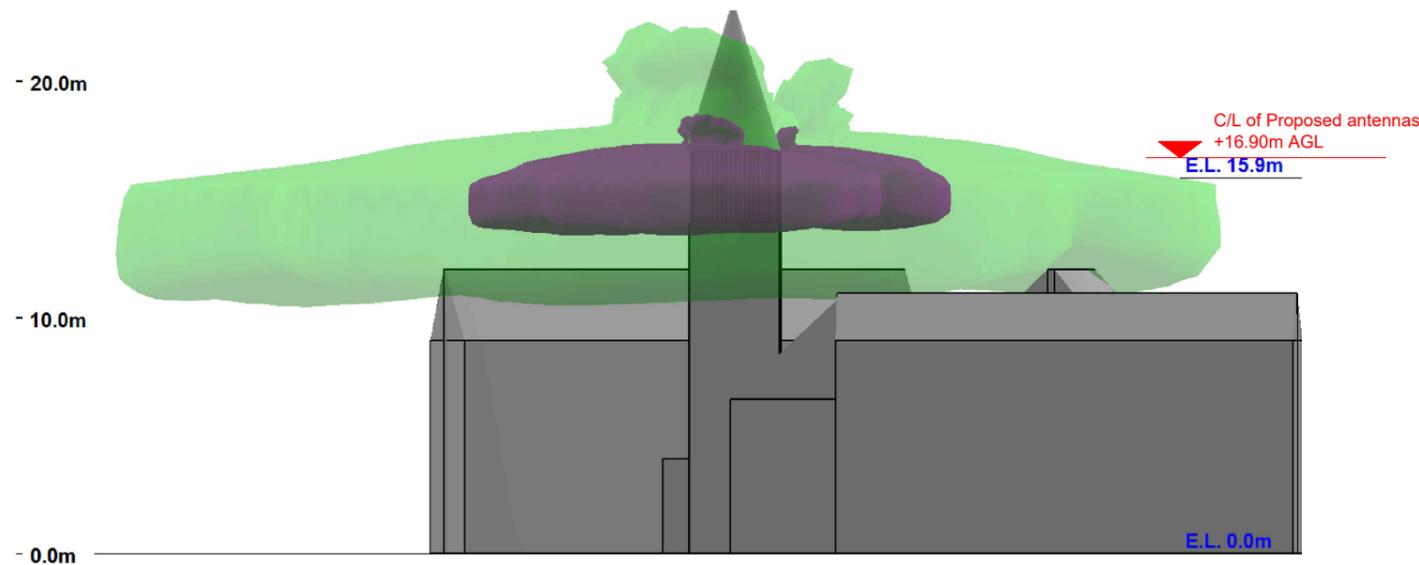
Operators on site (or within 100m)	
EE	Yes
H3G	Yes
CTIL	Yes
UKBB	-
Airwave	-
Broadcast	-
Other	-

NOTES:

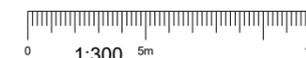
1. ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.
2. REFER TO TD54000 v11.0 FOR MBNL RF COMPLIANCE GUIDANCE.



RF COMPLIANCE SOUTH ELEVATION
Scale 1:300



RF COMPLIANCE WEST ELEVATION
Scale 1:300



Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description:		
Drawn:	N.Price	Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked:	G.Duke			
Approved:	G.Duke			
M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description:		
Drawn:	N.Price	Detail Design Issue		
Checked:	G.Duke			
Approved:	G.Duke			
M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Proposed BBU type Amended ON ALS		
Checked:	G.Duke			
Approved:	G.Duke			
M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked:	G.Duke			
Approved:	G.Duke			
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	First Issue		
Checked:	G.Duke			
Approved:	G.Duke			



Hatfield Business Park
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Tel: 01707 315000
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Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ

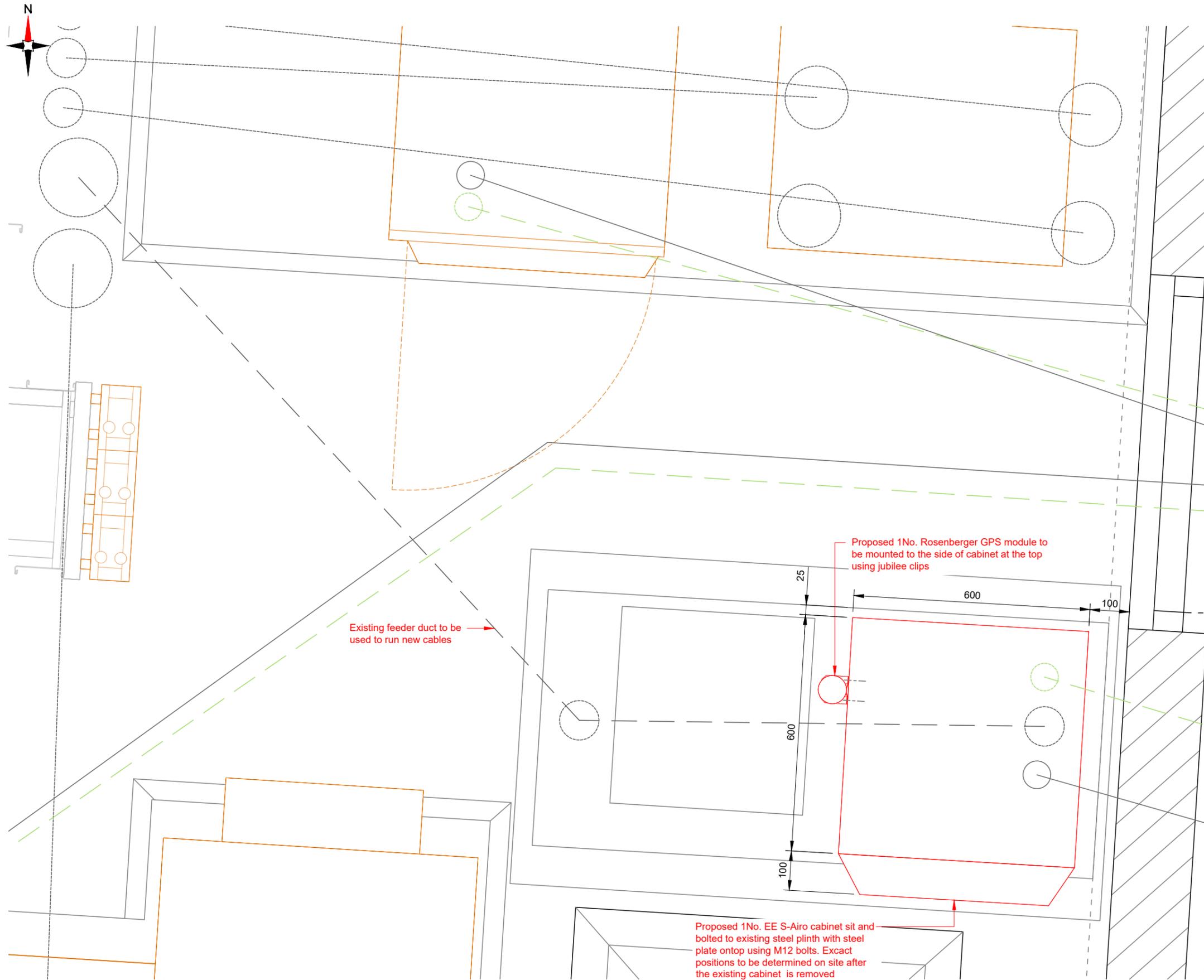
Title: 511 RF COMPLIANCE ELEVATIONS -
SOUTH AND WEST

Project: EE VENDOR SWAP

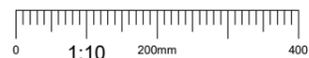
Purpose of Issue: DETAIL DESIGN

EE Cell ID: 50524	MBNL Cell ID: TRI001	3UK Cell ID: WD0107
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Master Drawing No: 982386_TRI001_50524_WD0107_M005	Issue: C2
---	---------------------



ENLARGED EQUIPMENT PLAN



NOTES:

- ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.

Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description:		
Drawn:	N.Price	Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description:		
Drawn:	N.Price	Detail Design Issue		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Proposed BBU type Amended ON ALS		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	First Issue		
Checked:	G.Duke			
Approved:	G.Duke			



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Tel: 01707 315000
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Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ

Title: 600 ENLARGED EQUIPMENT PLAN

Project: EE VENDOR SWAP

Purpose of Issue: DETAIL DESIGN

EE Cell ID:	MBNL Cell ID:	3UK Cell ID:
50524	TRI001	WD0107

Master Drawing No:	Issue:
982386_TRI001_50524_WD0107_M005	C2



Inflight 1No. VF Antenna to be mounted on existing pole

Proposed 1No. EE 650mm long 100x50x6 UA brace u-bolted to top of EE and VF antenna pole with 2No. M12 u-bolts each end

Inflight 1No. VF 600mm Long 100x50x6 UA Brace u-bolted to top of antenna pole with 2No. M12 u-bolts each end

Proposed 1No. EE 650mm long 100x50x6 UA brace u-bolted to top of EE and VF antenna pole with 2No. M12 u-bolts each end

Proposed 1No. EE antenna to be mounted on proposed 2000mm long 76.1mmØ chs 5.0 pole mounted proposed off-set brackets fixed to existing support pole

Inflight 1No. VF antenna to be mounted on proposed 3500mm long 76.1mmØ chs 5.0 pole mounted to existing wall bracket. Existing off-set brackets to be used on other sector

Proposed 1No. EE antenna to be mounted to existing 76.1mmØ chs 5.0 pole

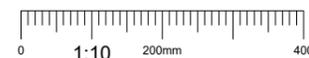
Inflight 1No. VF 1400mm long 100x50x6 UA brace u-bolted to top of antenna pole with 2No. M12 u-bolts each end

Inflight 1No. VF 1250mm long 100x50x6 UA brace u-bolted to top of antenna pole with 2No. M12 u-bolts each end

Inflight 1No. VF antenna to be mounted on proposed 2000mm long 60.3mmØ chs 5 support pole mounted to existing pole using existing off-set brackets

Existing antenna mounting. See details on dwg 603 & 604

ANTENNA SETTING OUT PLAN



NOTES:

1. ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.

Note: Design is based on VF upgrade works being complete. If at time of EE upgrade, VF works are not complete the additional bracing will be required to be installed as part of EE's upgrade. Space within spire is limited. VF and VM02 outages maybe required to complete works

ANTENNA_SUPPORT

ITEM	COMMENTS
EXISTING RESIN ANCHORS - TOP BRACKETS	EXISTING RESIN ANCHORS TO BE PROOF TESTED - FPROOF TEST = 1.00kN

Master: M005	MBNL / EE / H3G	Project: Vender Swap	Purpose of Issue: Detail Design	Issue: C2
Date:	26.01.24	Revision / Upgrade Description: Antenna bearings changed from 0° to 15° and 240° to 265°		
Drawn:	N.Price			
Checked:	G.Duke			
Approved:	G.Duke			
Master: M004	EE	Project: Vender Swap	Purpose of Issue: Detail Design	Issue: C1
Date:	02.11.23	Revision / Upgrade Description: Detail Design Issue		
Drawn:	N.Price			
Checked:	G.Duke			
Approved:	G.Duke			
Master: M003	EE	Project: Vender Swap	Purpose of Issue: Planning	Issue: C
Date:	29.09.23	Revision / Upgrade Description: Proposed BBU type Amended ON ALS		
Drawn:	N.Price			
Checked:	G.Duke			
Approved:	G.Duke			
Master: M002	EE	Project: Vender Swap	Purpose of Issue: Planning	Issue: B
Date:	25.09.23	Revision / Upgrade Description: Cell IDs and Site ID corrected. Proposed BBU type Amended		
Drawn:	N.Price			
Checked:	G.Duke			
Approved:	G.Duke			
Master: M001	EE	Project: Vender Swap	Purpose of Issue: Planning	Issue: A
Date:	15.09.23	Revision / Upgrade Description: First Issue		
Drawn:	N.Price			
Checked:	G.Duke			
Approved:	G.Duke			



Hatfield Business Park
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Hertfordshire
AL10 9BW

Tel: 01707 315000
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Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ

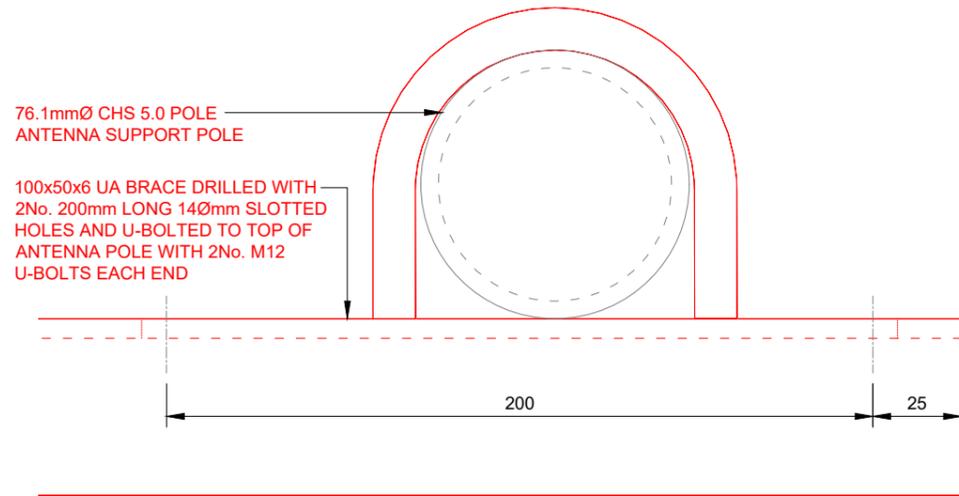
Title: 601 ANTENNA SETTING OUT PLAN

Project: EE VENDOR SWAP

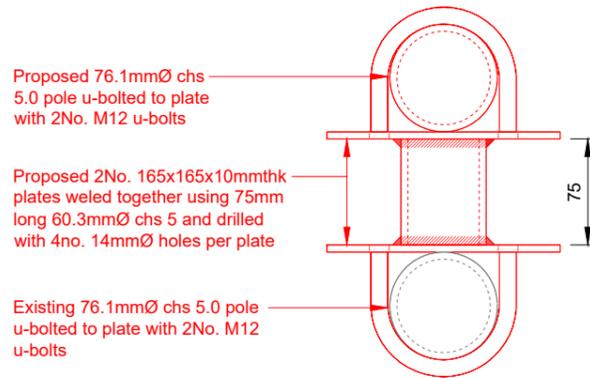
Purpose of Issue: DETAIL DESIGN

EE Cell ID: 50524	MBNL Cell ID: TRI001	3UK Cell ID: WD0107
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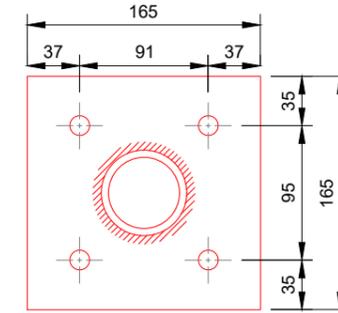
Master Drawing No: 982386_TRI001_50524_WD0107_M005	Issue: C2
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PLAN

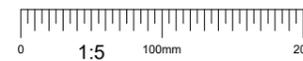


PLAN



SECTION ELEVATION

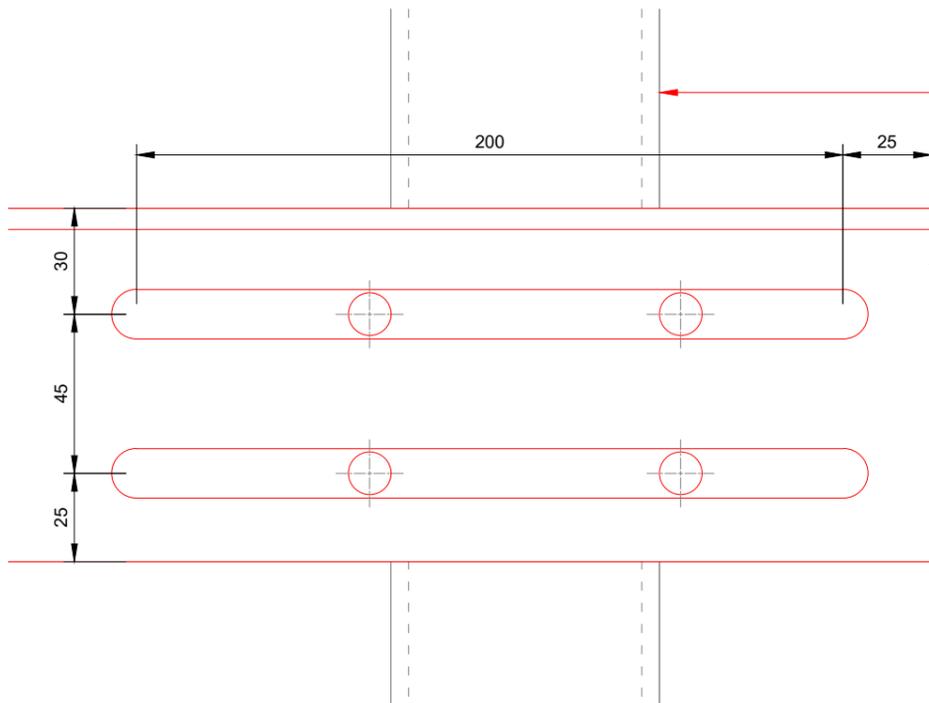
PROPOSED OFF-SET BRACKET DETAIL



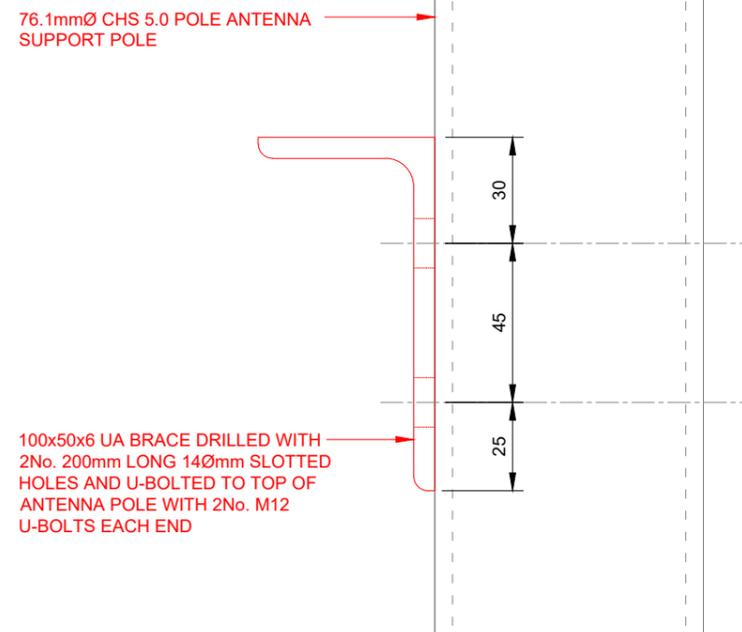
NOTES:

- ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.

Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description:		
Drawn:	N.Price	Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description:		
Drawn:	N.Price	Detail Design Issue		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Proposed BBU type Amended ON ALS		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	First Issue		
Checked:	G.Duke			
Approved:	G.Duke			

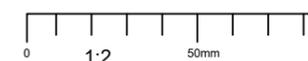


FRONT ELEVATION



SIDE ELEVATION

PROPOSED ANTENNA BRACE SUPPORT DETAIL



Hatfield Business Park
Hatfield
Hertfordshire
AL10 9BW

Tel: 01707 315000
Fax: 01707 319001

Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ

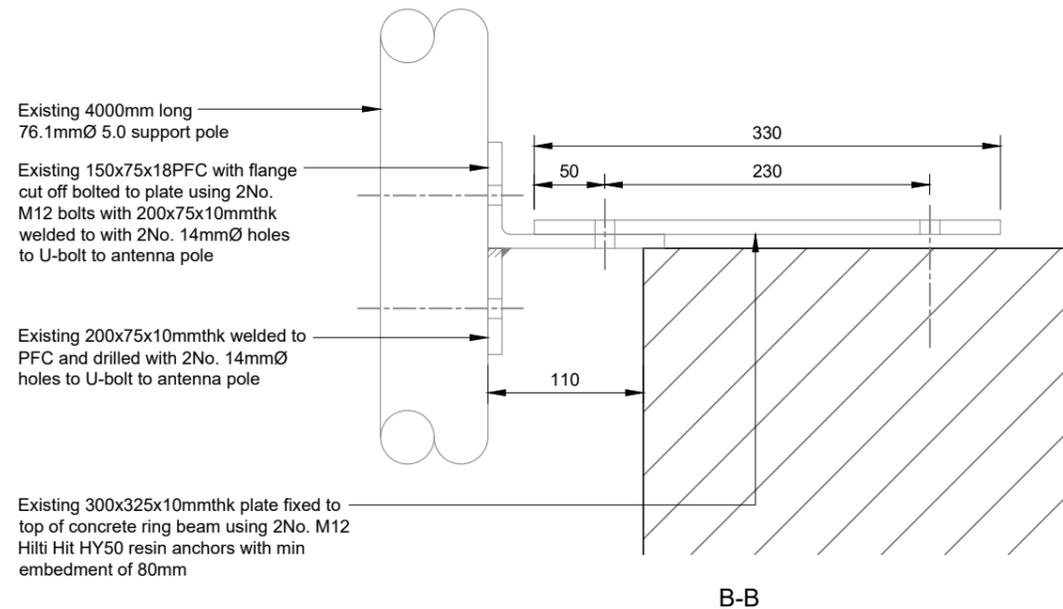
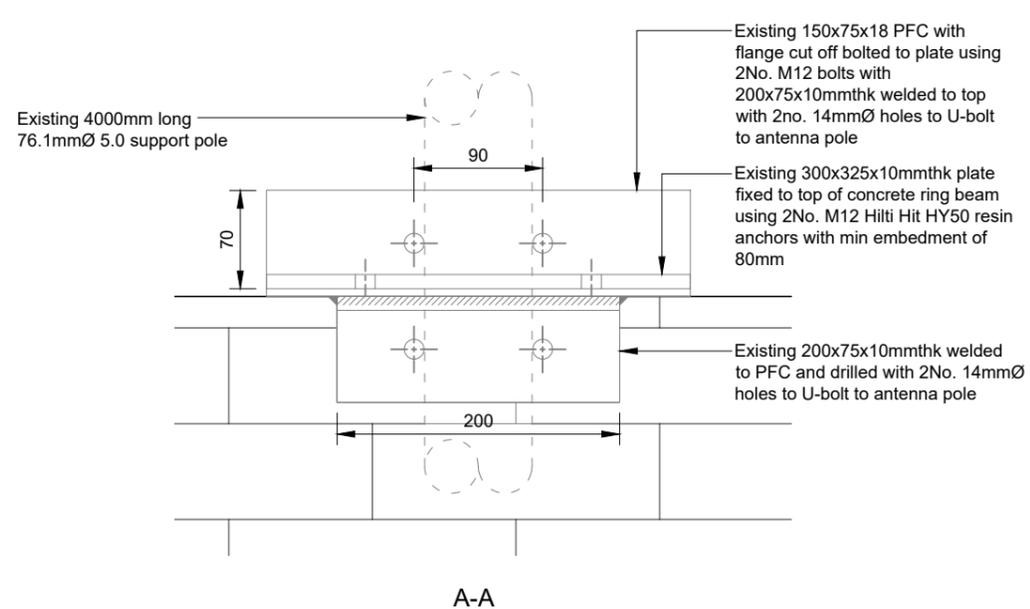
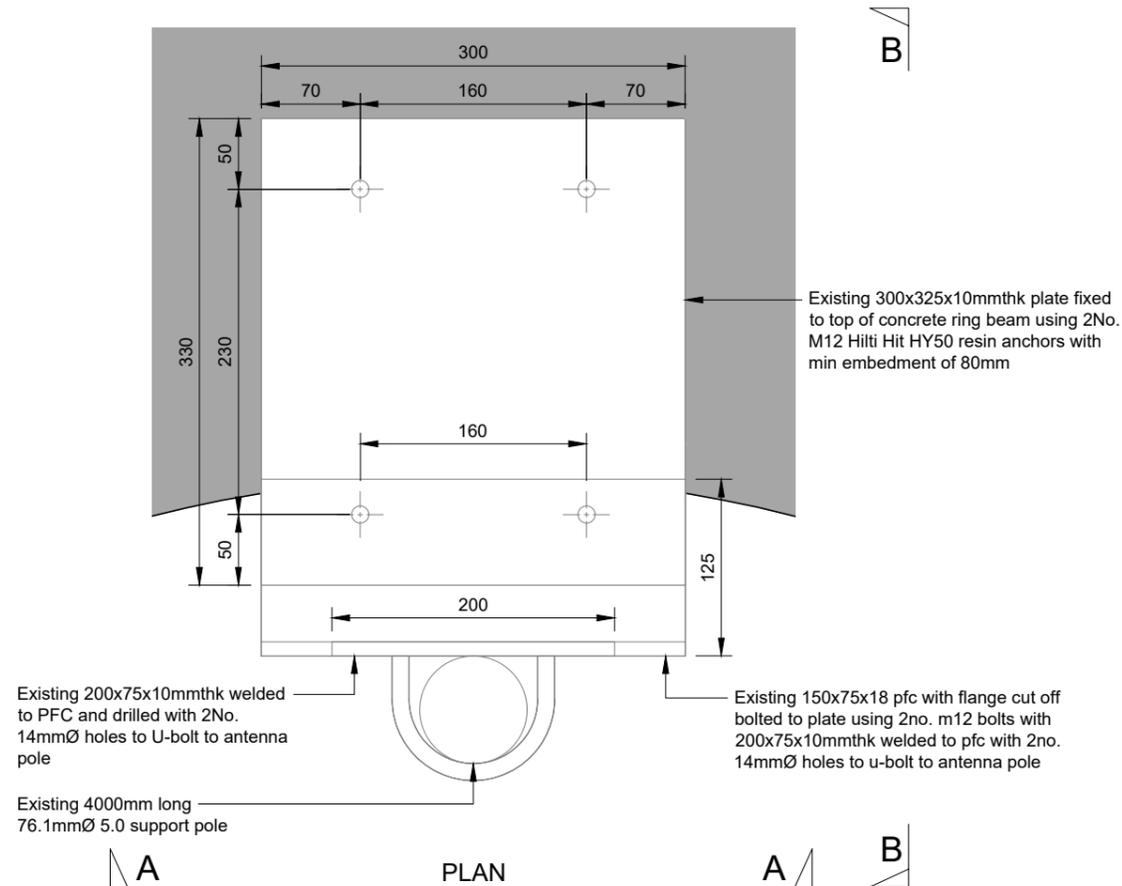
Title: 602 PROPOSED ANTENNA BRACE
SUPPORT DETAIL

Project: EE VENDOR SWAP

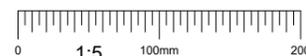
Purpose of Issue: DETAIL DESIGN

EE Cell ID: 50524	MBNL Cell ID: TRI001	3UK Cell ID: WD0107
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Master Drawing No: 100m 982386_TRI001_50524_WD0107_M005	Issue: C2
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EXISTING ANTENNA SUPPORT DETAILS - TOP FIXING



NOTES:
1. ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.

ANTENNA SUPPORT

ITEM	COMMENTS
EXISTING RESIN ANCHORS - TOP BRACKETS	EXISTING RESIN ANCHORS TO BE PROOF TESTED - FPROOF TEST = 1.00KN

Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description:		
Drawn:	N.Price	Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked:	G.Duke	Detail Design Issue		
Approved:	G.Duke			
M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description:		
Drawn:	N.Price	Detail Design Issue		
Checked:	G.Duke			
Approved:	G.Duke			
M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Proposed BBU type Amended ON ALS		
Checked:	G.Duke			
Approved:	G.Duke			
M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked:	G.Duke			
Approved:	G.Duke			
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	First Issue		
Checked:	G.Duke			
Approved:	G.Duke			



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Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ

Title: 603 EXISTING ANTENNA SUPPORT
DETAILS - TOP FIXING

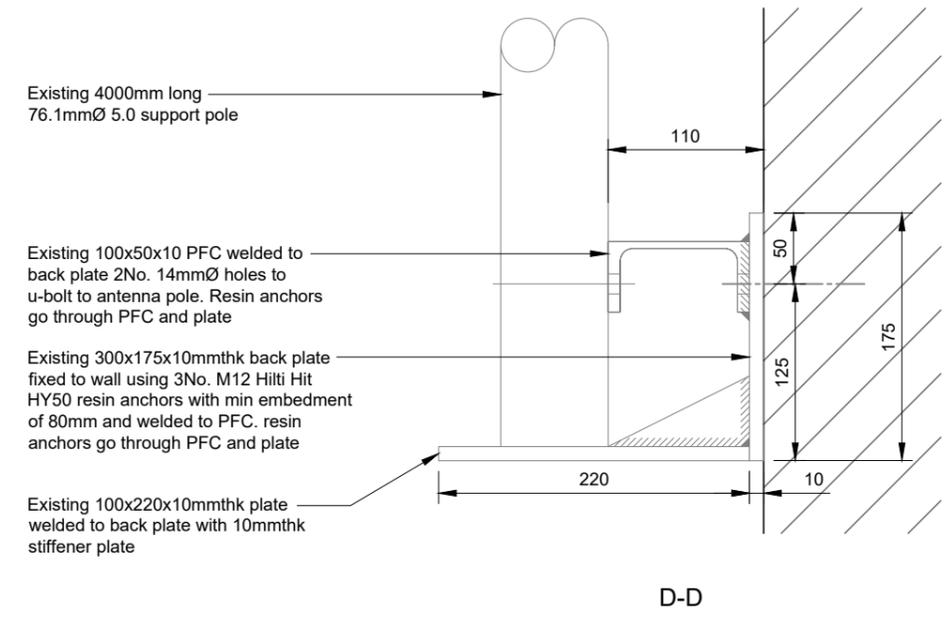
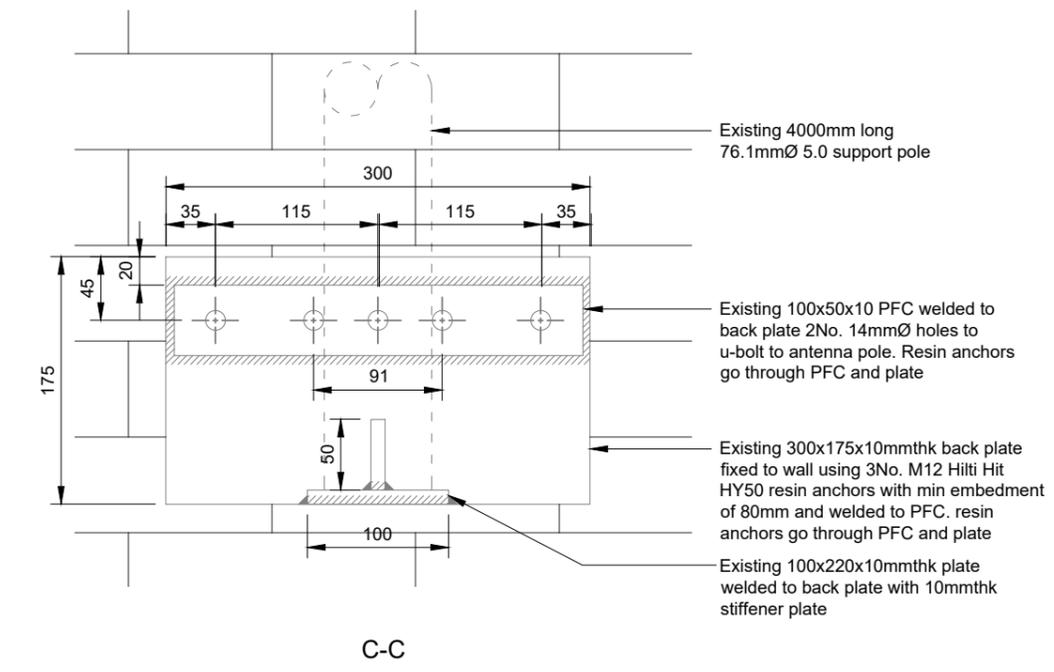
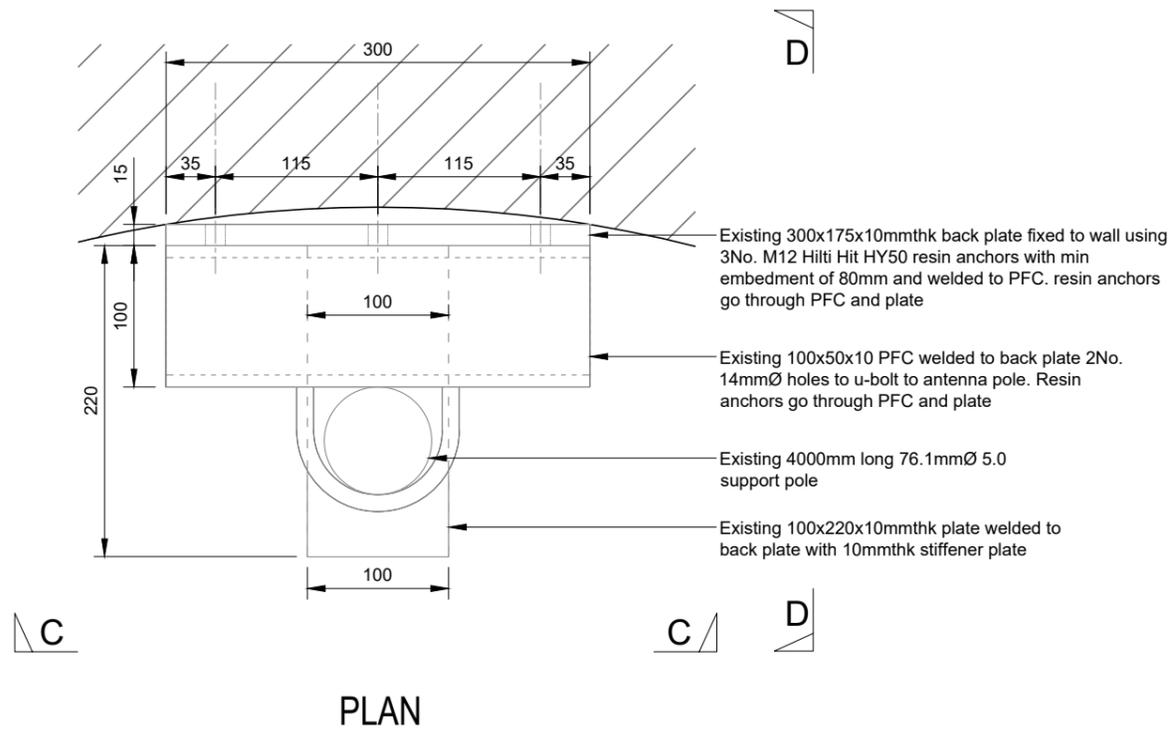
Project: EE VENDOR SWAP

Purpose of Issue: DETAIL DESIGN

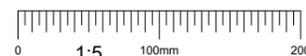
EE Cell ID: 50524	MBNL Cell ID: TRI001	3UK Cell ID: WD0107
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Master Drawing No: 982386_TRI001_50524_WD0107_M005	Issue: C2
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100mm
50mm
10mm



EXISTING ANTENNA SUPPORT DETAILS - BOTTOM FIXING



NOTES:

- ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.

Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description:		
Drawn:	N.Price	Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description:		
Drawn:	N.Price	Detail Design Issue		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Proposed BBU type Amended ON ALS		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	First Issue		
Checked:	G.Duke			
Approved:	G.Duke			



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Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ

Title: 604 EXISTING ANTENNA SUPPORT
DETAILS - BOTTOM FIXING

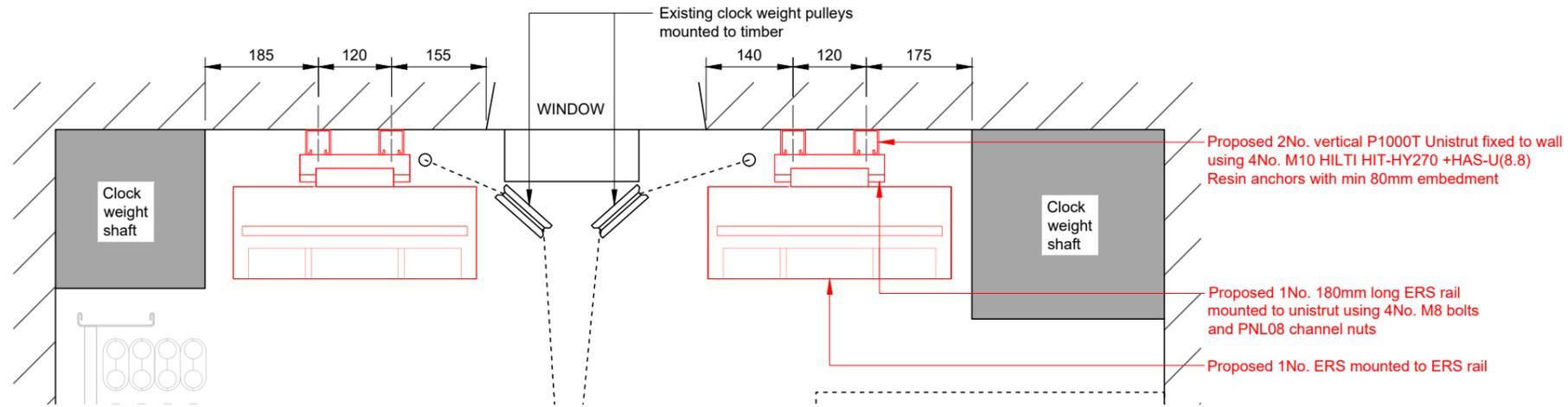
Project: EE VENDOR SWAP

Purpose of Issue: DETAIL DESIGN

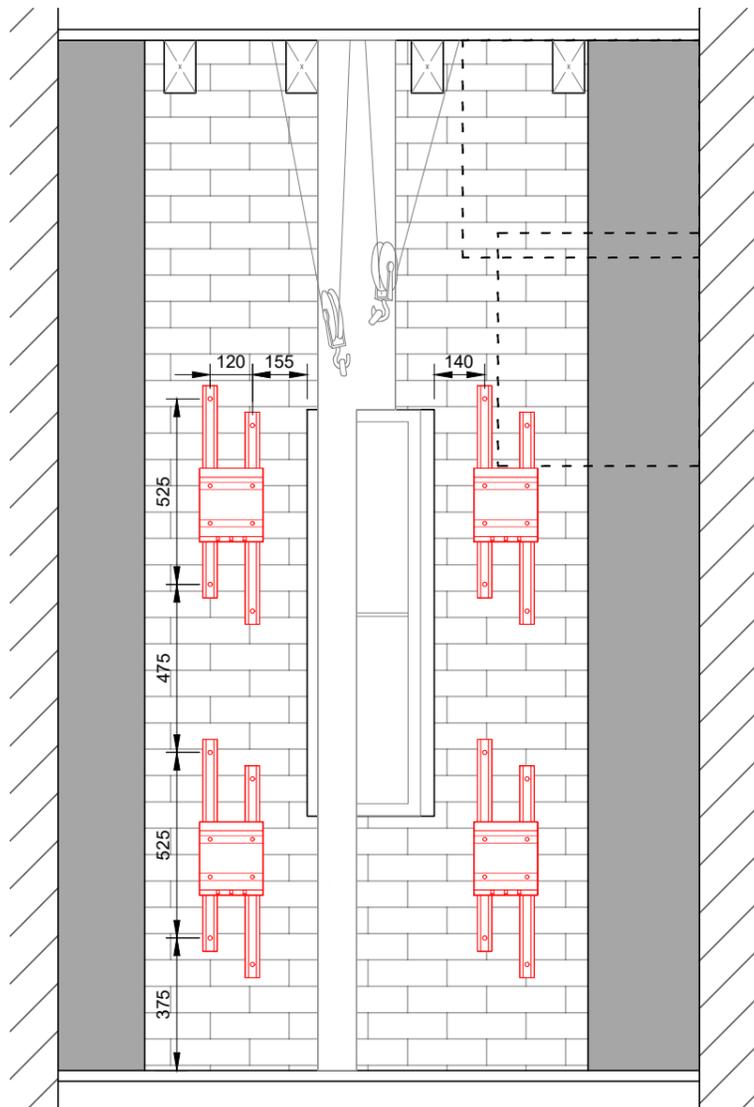
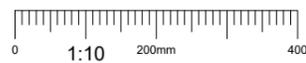
EE Cell ID:	MBNL Cell ID:	3UK Cell ID:
50524	TRI001	WD0107

Master Drawing No: 982386_TRI001_50524_WD0107_M005 Issue: C2

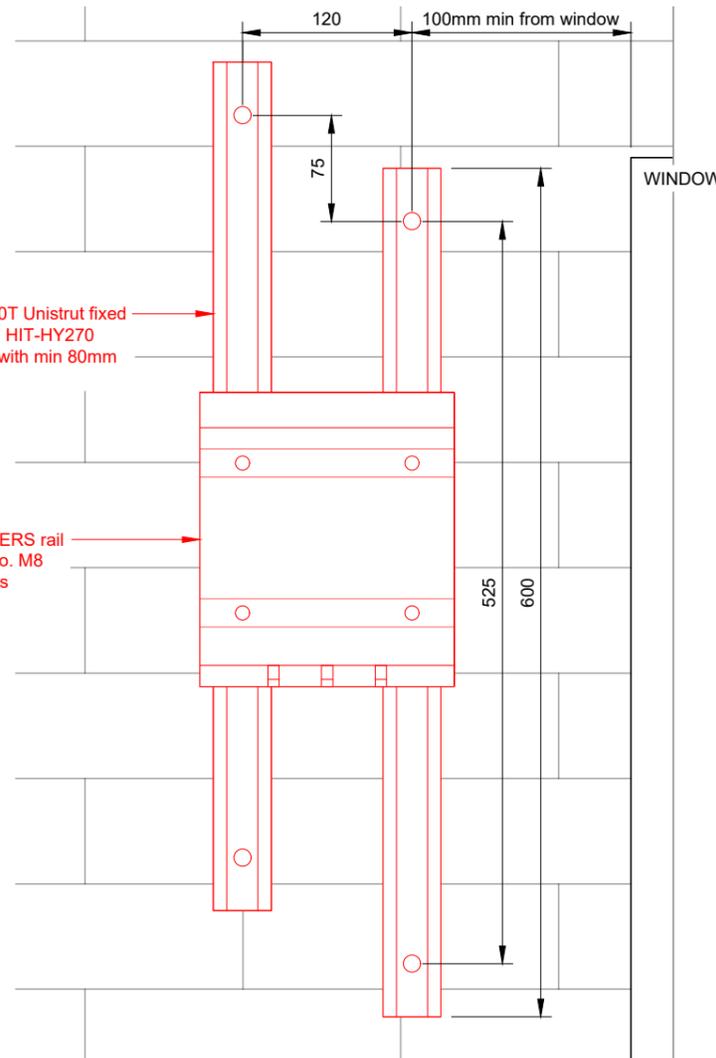
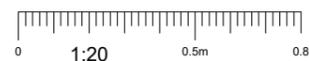
100mm
50mm
10mm



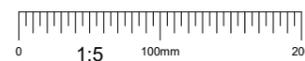
PLAN



ELEVATION



FIXING DETAIL



ERS MOUNTING DETAILS

NOTES:

- ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.

ERS_SUPPORT

ITEM	COMMENTS
PROPOSED RESIN ANCHORS	PROPOSED RESIN ANCHORS TO BE PROOF TESTED: FPROOF TEST = 1.00kN

Master: M005	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Detail Design	Issue: C2
Date: 26.01.24	Drawn: N.Price	Revision / Upgrade Description: Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked: G.Duke	Approved: G.Duke			
Master: M004	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Detail Design	Issue: C1
Date: 02.11.23	Drawn: N.Price	Revision / Upgrade Description: Detail Design Issue		
Checked: G.Duke	Approved: G.Duke			
Master: M003	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Planning	Issue: C
Date: 29.09.23	Drawn: N.Price	Revision / Upgrade Description: Proposed BBU type Amended ON ALS		
Checked: G.Duke	Approved: G.Duke			
Master: M002	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Planning	Issue: B
Date: 25.09.23	Drawn: N.Price	Revision / Upgrade Description: Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked: G.Duke	Approved: G.Duke			
Master: M001	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Planning	Issue: A
Date: 15.09.23	Drawn: N.Price	Revision / Upgrade Description: First Issue		
Checked: G.Duke	Approved: G.Duke			



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Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ

Title: 605 ERS MOUNTING DETAILS

Project: EE VENDOR SWAP

Purpose of Issue: DETAIL DESIGN

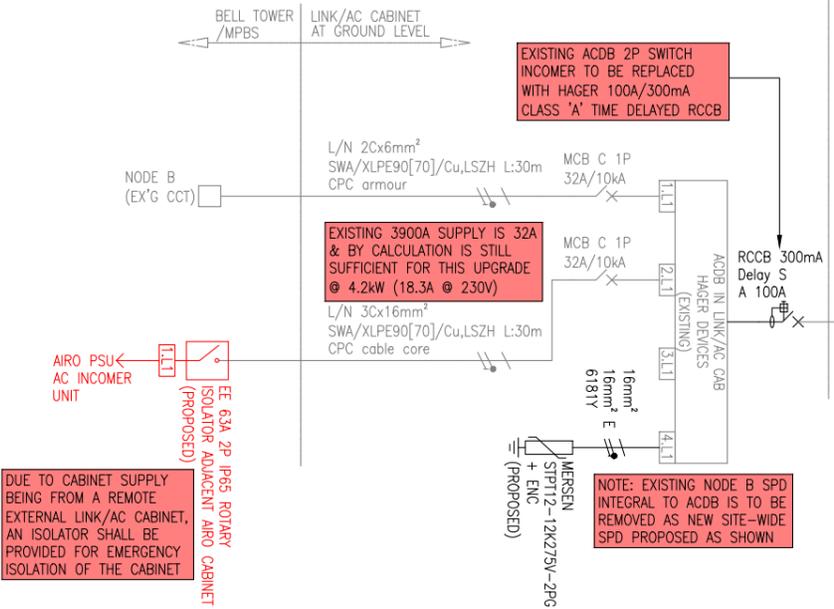
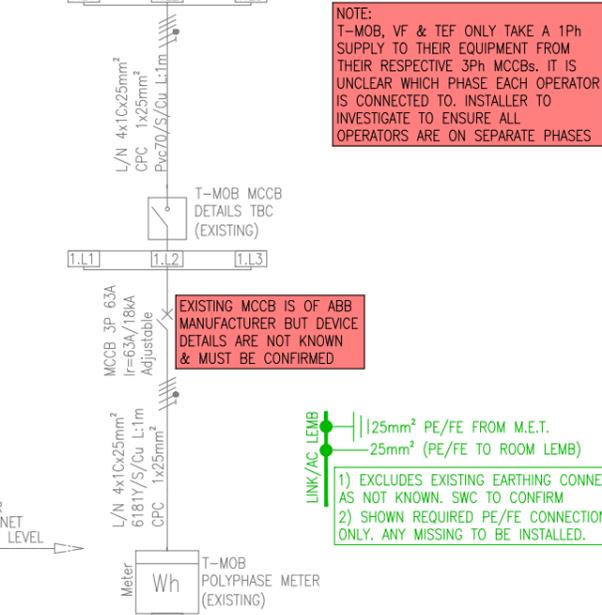
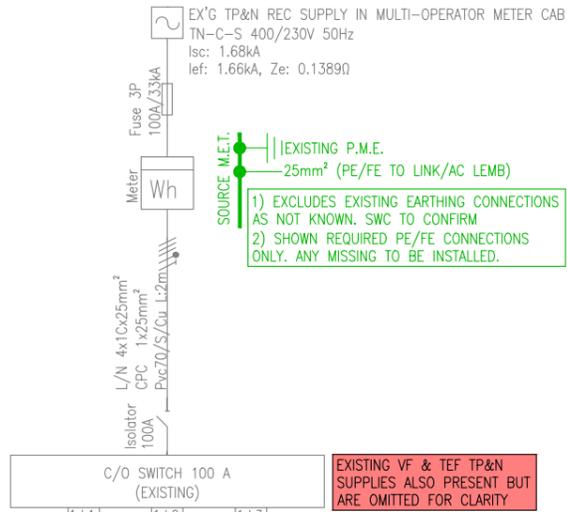
EE Cell ID: 50524	MBNL Cell ID: TRI001	3UK Cell ID: WD0107
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Master Drawing No: 982386_TRI001_50524_WD0107_M005	Issue: C2
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ELECTRICAL DESIGN DEPENDENCIES:
 (**THE BELOW ARE THE PARAMETERS USED FOR THE ELECTRICAL DESIGN & ARE ARE 'NOT' CONFIRMATION STATEMENTS UNLESS SPECIFICALLY STATED AS 'CONFIRMED'. THEREFORE, WHERE NOT CONFIRMED, THESE ELEMENTS MUST BE VERIFIED TO VALIDATE THIS DESIGN PRIOR TO WORKS COMMENCING AS IF FINDINGS DIFFER THEN THIS DESIGN MAY NEED TO BE AMENDED):

- 1) 100A REC FUSES AT SOURCE WITHIN MULTI-OPERATOR METER CABINET.
- 2) 63A MCCB SERVING T-MOBILE.
- 3) ALL 3No. OPERATORS' SUPPLIES ARE ON SEPARATE PHASES.
- 4) DETAILS OF EXISTING INSTALLATION PARTICULARLY CABLES & PROTECTIVE DEVICES, WHERE DETAILS ARE SHOWN, ARE TO BE VERIFIED & CONFIRMED. ANY DISCREPANCIES MUST BE ESCALATED TO THE DESIGNER FOR RE-ASSESSMENT & TO VALIDATE THIS DESIGN.
- 4) EXISTING INSTALLATION IS COMPLIANT WITH BS7671:2018:AMD2 TO COMPLY WITH REGULATION 132.16.
- 5) EXISTING DNO PROVIDED P.M.E. EARTHING SYSTEM.
- 6) THIS DESIGN EXCLUDES THE DESIGN OF LIGHTING, EMERGENCY LIGHTING, FIRE ALARM & LPS SYSTEMS. SUITABLE INDUSTRY SPECIFIC SPECIALISTS SHOULD BE EMPLOYED IF THESE SERVICES ARE DEEMED NECESSARY BY OTHERS.
- 7) WHERE NEW RCD/RCCB/RCOs ARE SHOWN, THESE MUST BE MINIMUM CLASS 'A' SO AS TO REDUCE ISSUES RELATING TO MASKING OF AC FAULTS DUE TO DC SATURATION OF THE DEVICE. THIS DESIGN ASSUMES THE TOTAL WORST CASE DC LEAKAGE CURRENT LEVELS PRESENT WITHIN THE PASSIVE SYSTEM WILL BE SUFFICIENTLY LOW ENOUGH NOT TO PREVENT NORMAL OPERATION OF THE DEVICE. DC LEAKAGE DATA TO BE SUBMITTED BY RADIO MANUFACTURER TO CONFIRM.
- 8) DUE TO THE PRESENCE OF POSSIBLE MULTIPLE DNO SUPPLIES & POTENTIALLY DIFFERING EARTHING SYSTEMS, IT IS RECOMMENDED THAT PERIODIC TESTING BE UNDERTAKEN BEFORE & AFTER WORKS & EVERY 6months TO ENSURE THAT NO STEP/TOUCH VOLTAGES >50v ARE PRESENT BETWEEN ALL MPBS & NON-MPBS OWNED EXPOSED & EXTRANEOUS CONDUCTIVE PARTS. THIS IS TO REMAIN ON THE SITE'S DYNAMIC RISK ASSESSMENT.

KEY	
	MBNL EQUIPMENT / NEW INSTALLATIONS
	H3G ONLY EQUIPMENT / NEW INSTALLATIONS
	EXISTING LL INSTALLATIONS
	EARTHING / L.P.
	IMPORTANT NOTIFICATIONS
	EE REQUIREMENTS POST IN-FLIGHT H3G INSTALL



TD53017 - Power and Cooling Site Summary Sheet

Cell ID: _____
 Site Name: _____
 Room type: _____
 Completed by: _____
 Date: _____

	Total Load (kW)	Total Heat (kW)	Comments
MBNL Shared & TX total	3.20	1.07	Data automatically populated
H3G Equipment Total	0.00	0.00	Data automatically populated
EE Equipment Total	3.57	3.62	Data automatically populated
Manually added adjustment	0.00	APPROX 4.2kW	see read me notes for guidance
SITE TOTALS	6.77	4.69	
single-phase AC Load	29.43	Amps	
three-phase AC Load	9.78	Amps per phase	

AC ELECTRICAL SCHEMATIC

NOTES:

1. ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.

Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description: Antenna bearings changed from 0° to 15° and 240° to 265°		
Drawn:	N.Price	Checked: G.Duke		
Approved:	G.Duke	Approved: G.Duke		
M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description: Detail Design Issue		
Drawn:	N.Price	Checked: G.Duke		
Approved:	G.Duke	Approved: G.Duke		
M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description: Proposed BBU type Amended ON ALS		
Drawn:	N.Price	Checked: G.Duke		
Approved:	G.Duke	Approved: G.Duke		
M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description: Cell IDs and Site ID corrected. Proposed BBU type Amended		
Drawn:	N.Price	Checked: G.Duke		
Approved:	G.Duke	Approved: G.Duke		
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description: First Issue		
Drawn:	N.Price	Checked: G.Duke		
Approved:	G.Duke	Approved: G.Duke		

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Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
 THE GREEN
 CROXLEY GREEN
 HERTFORDSHIRE
 WD3 3HJ

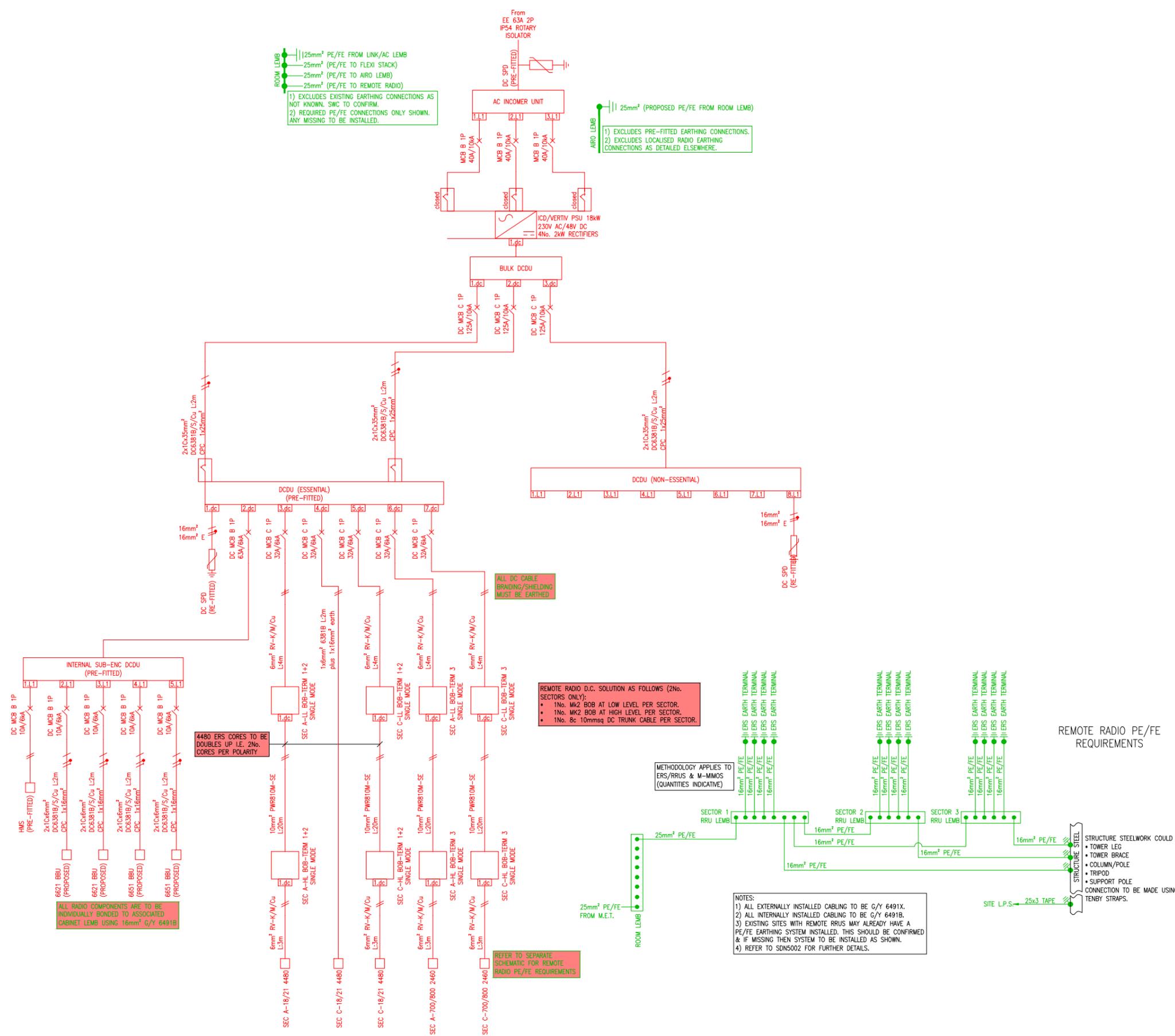
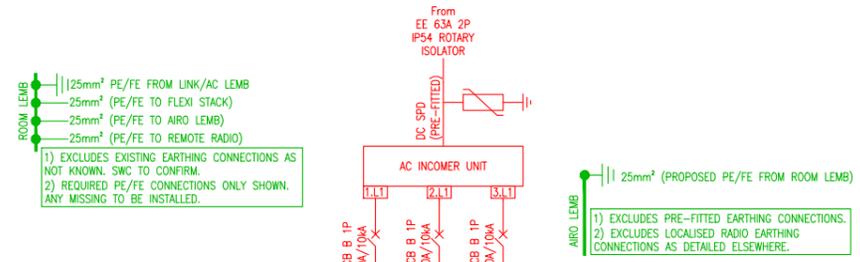
Title: 700 AC ELECTRICAL SCHEMATIC

Project: EE VENDOR SWAP

Purpose of Issue: DETAIL DESIGN

EE Cell ID:	MBNL Cell ID:	3UK Cell ID:
50524	TRI001	WD0107

Master Drawing No:	Issue:
982386_TRI001_50524_WD0107_M005	C2



DC ELECTRICAL SCHEMATIC

NOTES:
1. ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.

Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description:		
Drawn:	N.Price	Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description:		
Drawn:	N.Price	Detail Design Issue		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Proposed BBU type Amended ON ALS		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	First Issue		
Checked:	G.Duke			
Approved:	G.Duke			

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Design Consultant & Principal Contractor:

Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ

Title: 701 DC ELECTRICAL SCHEMATIC

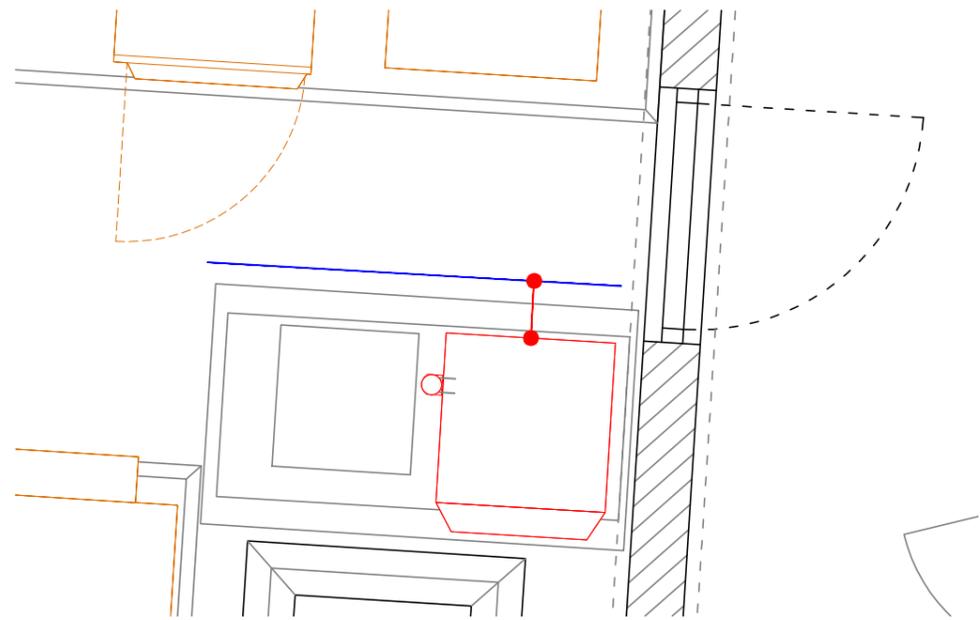
Project: EE VENDOR SWAP

Purpose of Issue: DETAIL DESIGN

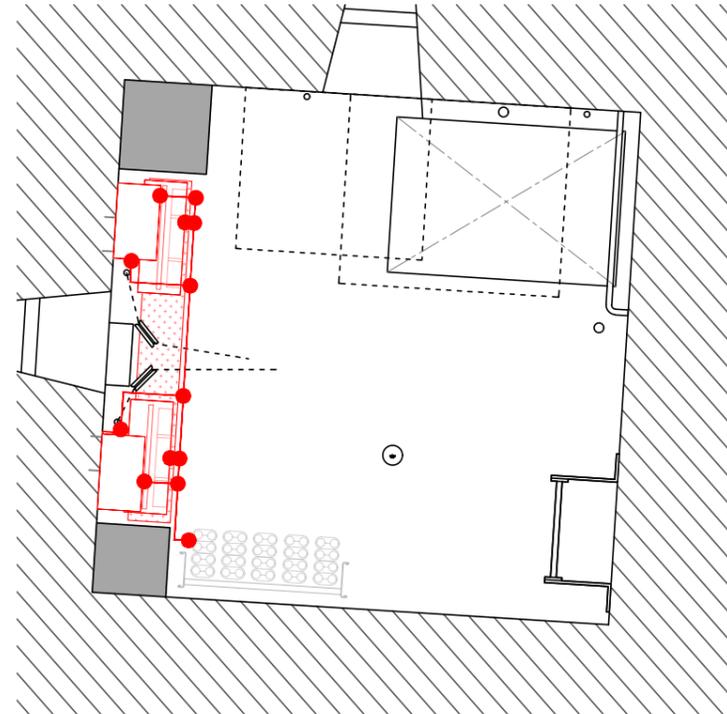
EE Cell ID:	MBNL Cell ID:	3UK Cell ID:
50524	TRI001	WD0107

Master Drawing No: 982386_TRI001_50524_WD0107_M005 Issue: C2

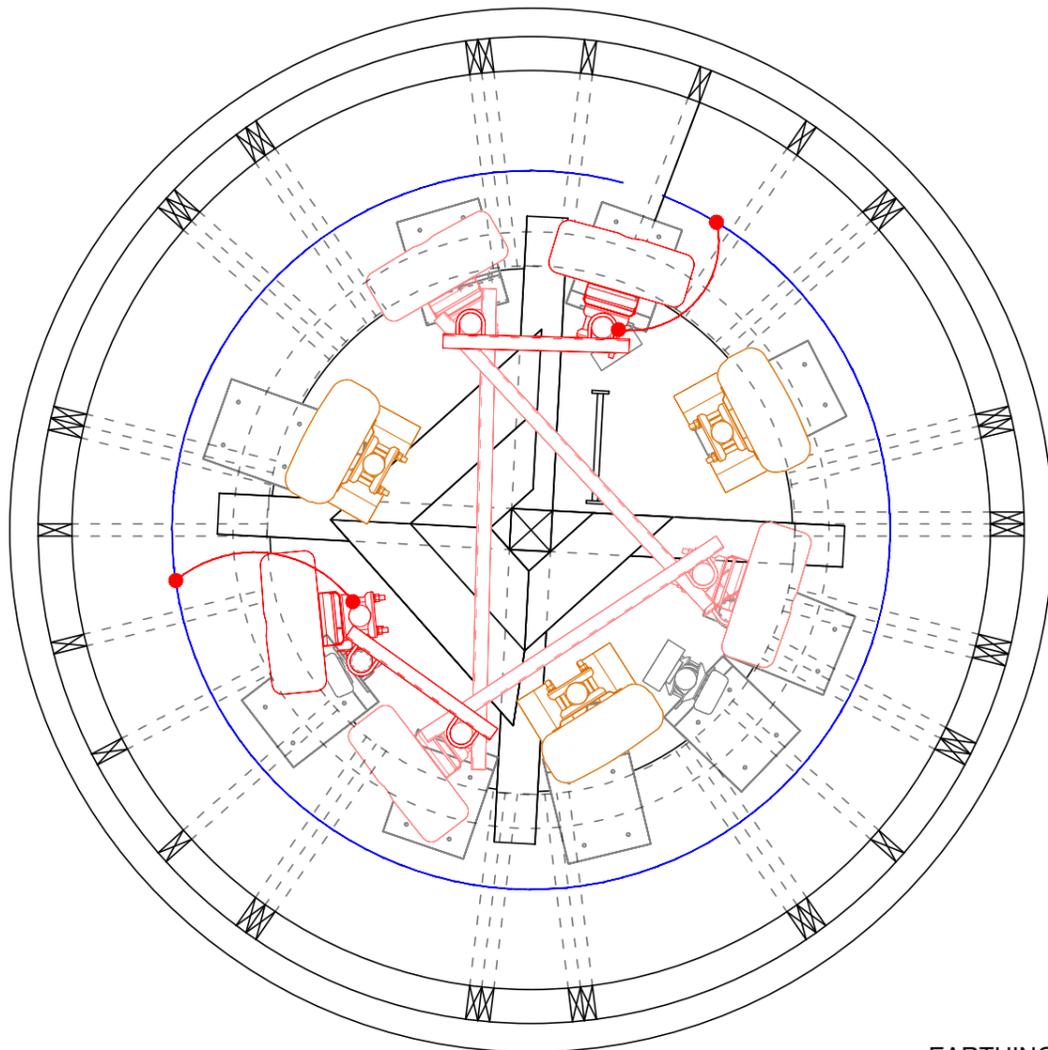




EXTERNAL EQUIPMENT

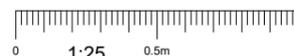


1st FLOOR CHAMBER



ANTENNA PLAN

EARTHING/LIGHTNING PROTECTION DETAILS



SYMBOL	DESCRIPTION
	Existing earth tape bond connection to equipment
	Existing lightning protection tape
	Existing Earth Pit
	Existing Earth Mats
	Proposed earth tape bond connection to equipment
	Proposed lightning protection tape
	Proposed Earth Pit
	Proposed Earth Mats

NOTES:

- ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.

Master: M005	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Detail Design	Issue: C2
Date: 26.01.24	Drawn: N.Price	Revision / Upgrade Description: Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked: G.Duke	Approved: G.Duke			
Master: M004	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Detail Design	Issue: C1
Date: 02.11.23	Drawn: N.Price	Revision / Upgrade Description: Detail Design Issue		
Checked: G.Duke	Approved: G.Duke			
Master: M003	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Planning	Issue: C
Date: 29.09.23	Drawn: N.Price	Revision / Upgrade Description: Proposed BBU type Amended ON ALS		
Checked: G.Duke	Approved: G.Duke			
Master: M002	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Planning	Issue: B
Date: 25.09.23	Drawn: N.Price	Revision / Upgrade Description: Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked: G.Duke	Approved: G.Duke			
Master: M001	MBNL / EE / H3G: EE	Project: Vender Swap	Purpose of Issue: Planning	Issue: A
Date: 15.09.23	Drawn: N.Price	Revision / Upgrade Description: First Issue		
Checked: G.Duke	Approved: G.Duke			



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Tel: 01707 315000
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Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ

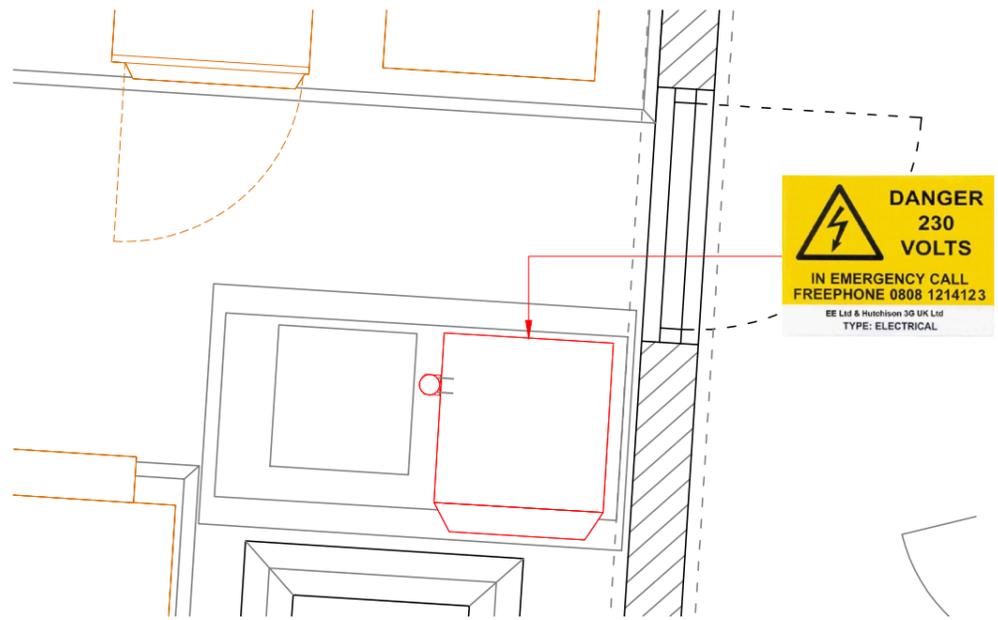
Title: 705 EARTHING/LIGHTNING PROTECTION DETAILS

Project: EE VENDOR SWAP

Purpose of Issue: DETAIL DESIGN

EE Cell ID: 50524	MBNL Cell ID: TRI001	3UK Cell ID: WD0107
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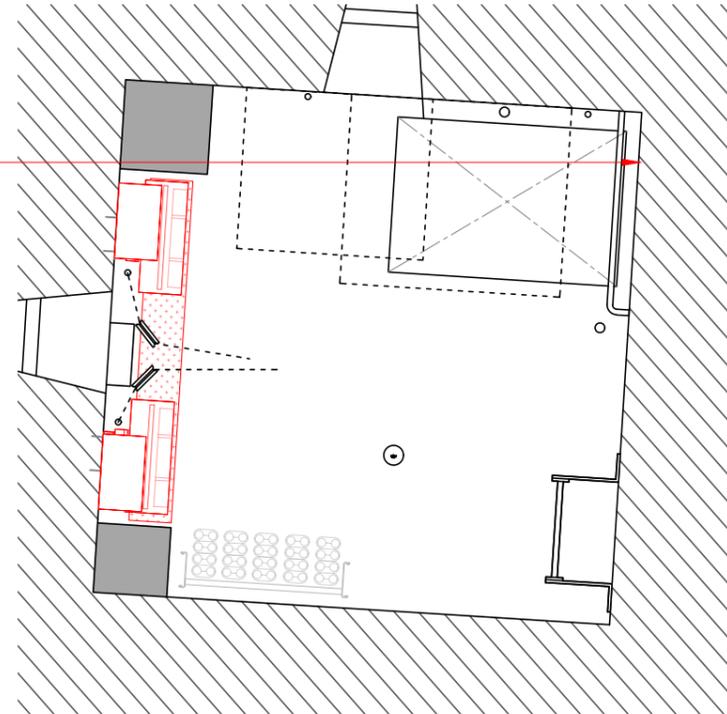
Master Drawing No: 982386_TRI001_50524_WD0107_M005 Issue: C2



EXTERNAL EQUIPMENT



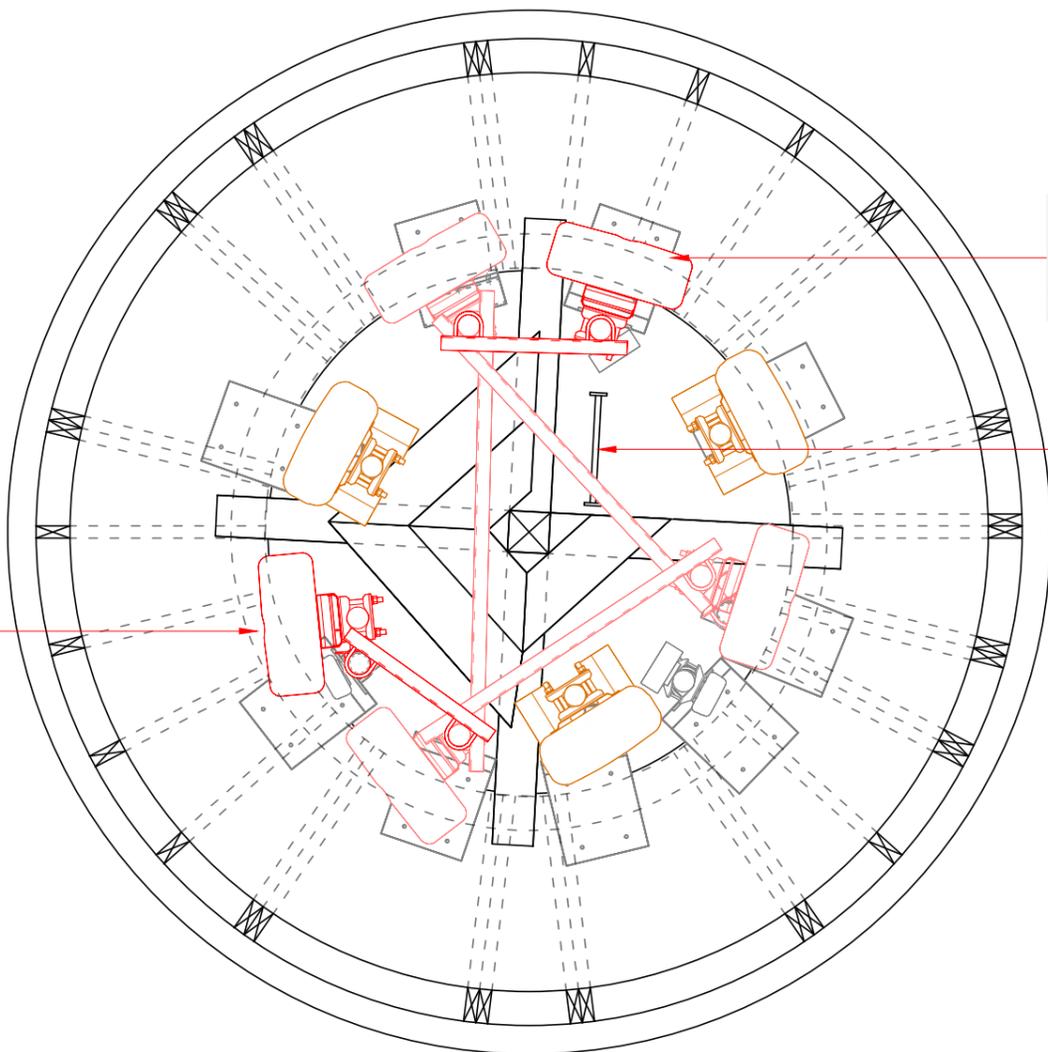
Fixed to wall above
hatch into chamber



1st FLOOR CHAMBER



Fixed to wall near
base of antennas



ANTENNA PLAN

NOTES:

- ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.

Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description:		
Drawn:	N.Price	Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description:		
Drawn:	N.Price	Detail Design Issue		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Proposed BBU type Amended ON ALS		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked:	G.Duke			
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Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	First Issue		
Checked:	G.Duke			
Approved:	G.Duke			



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Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ

Title: 800 SIGNAGE PLANS

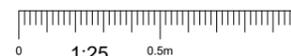
Project: EE VENDOR SWAP

Purpose of Issue: DETAIL DESIGN

EE Cell ID: 50524	MBNL Cell ID: TRI001	3UK Cell ID: WD0107
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Master Drawing No: 982386_TRI001_50524_WD0107_M005	Issue: C2
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SIGNAGE PLANS



100mm
50mm
10mm

1.0 GENERAL

- 1.1. DO NOT SCALE DRAWINGS.
- 1.2. ALL DIMENSIONS IN MM UNLESS NOTED OTHERWISE.
- 1.3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIRMING DIMENSIONS AND LEVELS ON SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION OR FABRICATION.
- 1.4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING OUT THE PROJECT ON SITE.
- 1.5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY AND INTEGRITY OF EXISTING STRUCTURES AND GROUND PROFILES WITHIN AND ADJACENT TO THE WORKS, FROM THE DATE OF TAKING POSSESSION OF THE SITE UNTIL PRACTICAL COMPLETION OF THE WORKS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, INSTALLATION AND MAINTENANCE OF ALL NECESSARY TEMPORARY WORKS TO COMPLY WITH THIS REQUIREMENT.
- 1.6. THE CONTRACTOR SHALL ENSURE THAT TOLERANCES ARE INTEGRATED AND CO-ORDINATED THROUGHOUT THE WORKS TO ENSURE THE EFFICIENT IMPLEMENTATION OF THE WORKS.
- 1.7. WHERE THE EXISTING WEATHERPROOF ENVELOPE IS PIERCED TO IMPLEMENT THE WORKS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT INGRESS OF WATER DOES NOT OCCUR DURING THE CONSTRUCTION PERIOD.
- 1.9 DEVIATIONS BETWEEN SITE DIMENSIONS, LEVELS OR EXISTING DETAILS TO THOSE SHOWN ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR COMMENT AND RESOLUTION.
- 1.10. PREPARATION, HANDLING AND APPLICATION OF THE PROPRIETARY PRODUCTS SHALL BE ALL IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PRODUCT MANUFACTURER, HEALTH AND SAFETY LEGISLATION AND THE SPECIFICATIONS AND DETAILS OF THE ENGINEER. WHERE CONTRADICTIONS OCCUR BETWEEN THESE REQUIREMENTS, REFERENCE SHOULD BE MADE TO THE ENGINEER FOR RESOLUTION.
- 1.11. WHERE SPECIFIC PROPRIETARY PRODUCTS ARE REFERENCED AN EQUAL PRODUCT APPROVED BY THE ENGINEER MAY BE SUBSTITUTED, UNLESS NOTED OTHERWISE.

2.0. FASTENERS AND CONNECTIONS – STEEL TO STEEL

- 2.1. ALL BOLTS SHALL BE M16 GRADE 8.8 TO BS 4190 UNLESS NOTED OTHERWISE.
- 2.2. ALL BOLTS SHALL BE SPUN GALVANISED FINISH IN ACCORDANCE WITH BS 7371.
- 2.3. ALL BOLTS SHALL BE SIZED IN LENGTH TO GIVE A MINIMUM EXTENSION BEYOND THE NUT OF THREE THREADS.
- 2.4. WHERE CONNECTIONS ARE MADE USING DISSIMILAR MATERIALS, ALL CONNECTIONS SHALL BE PROVIDED WITH NEOPRENE, 'TOP-HAT' WASHERS, SPRING WASHERS OR OTHER APPROVED BARRIER BETWEEN CONNECTOR AND MAIN MATERIAL, TO MINIMISE THE RISK OF BI-METALLIC (ELECTROLYTIC) CORROSION.
- 2.5. WHERE APPROPRIATE, TAPER WASHERS SHALL BE USED IN BOLTED CONNECTIONS.
- 2.6. WHERE A CONNECTION IS SUBJECT TO VIBRATION OR CYCLIC LOADING USE SHALL BE MADE OF LOCKNUTS, LOCKWASHERS OR SPRING WASHERS OR OTHER APPROVED METHODS AT LOCATIONS INDICATED ON THE DRAWING BY THE ENGINEER TO MINIMISE THE RISK OF LOOSENING OF THE CONNECTORS.

3.0. FASTENERS AND CONNECTIONS – STEEL TO CONCRETE OR MASONRY

- 3.1. THE PREFERRED METHOD OF FIXING STRUCTURAL FIXINGS INTO SOLID CONCRETE OR MASONRY WALLS SHALL BE THROUGH-BOLT FIXINGS UNLESS SPECIFIED OTHERWISE. WHERE THE THROUGH-BOLT FIXINGS CANNOT BE ACHIEVED RESIN ANCHOR FIXINGS SHOULD BE UTILISED UPON CONSULTATION WITH ENGINEER.
- 3.2. ALL RESIN ANCHORS INTO SOLID CONCRETE SHALL BE HILTI HIT-HY200 RESIN INJECTION SYSTEM WITH HAS-R STAINLESS STEEL ANCHOR COMPONENTS, OR SIMILAR APPROVED, UNLESS NOTED OTHERWISE.
- 3.3. ALL RESIN ANCHORS INTO SOLID BRICKWORK OR OTHER SOLID MASONRY SHALL BE HILTI HIT-HY270 RESIN INJECTION SYSTEM WITH HAS-R STAINLESS STEEL ANCHOR COMPONENTS, OR SIMILAR APPROVED, UNLESS NOTED OTHERWISE.

3.4. MINIMUM EMBEDMENT DEPTHS OF ANCHORS SHALL BE AS FOLLOWS: (UNO)

MATERIAL	ANCHOR DIAMETER	MINIMUM EMBEDMENT DEPTH (mm)
SOLID BRICK OR STONE	M10	90
SOLID BRICK OR STONE	M12	110
SOLID CONCRETE	M10	90
SOLID CONCRETE	M12	110
SOLID CONCRETE	M16	125
SOLID CONCRETE	M20	170

EMBEDMENT LENGTHS ARE STATED IN THE HILTI TECHNICAL LITERATURE

- 3.5. WHERE A CONNECTION IS MADE BETWEEN DISSIMILAR METALS, ALL CONNECTIONS SHALL BE PROVIDED WITH NEOPRENE, 'TOP-HAT' WASHERS/SPRING WASHERS OR OTHER APPROVED BARRIER BETWEEN CONNECTOR AND MAIN MATERIAL, TO MINIMISE THE RISK OF BI-METALLIC (ELECTROLYTIC) CORROSION.
- 3.6. WHERE APPROPRIATE, TAPER WASHERS SHALL BE USED IN BOLTED CONNECTIONS.
- 3.7. WHERE A CONNECTION IS SUBJECT TO VIBRATION OR CYCLIC LOADING USE SHALL BE MADE OF LOCKNUTS, LOCKWASHERS, SPRING WASHERS OR OTHER APPROVED METHODS, AS INDICATED ON THE DRAWING BY THE ENGINEER, TO MINIMISE THE RISK OF LOOSENING OF THE CONNECTORS.
- 3.8. ANCHORS SHALL BE TESTED IN ACCORDANCE WITH 'CONSTRUCTION FIXINGS ASSOCIATION GUIDANCE NOTE : PROCEDURE FOR TESTING CONSTRUCTION FIXINGS' AND 'BS 5080 : PART 1 – STRUCTURAL FIXINGS IN CONCRETE AND MASONRY' OR MANUFACTURERS RECOMMENDATIONS.
- 3.9. THE TESTING RATE OF ANCHORS SHALL BE 5 NO. FIXINGS OR 2.5% OF THE TOTAL NO. OF FIXINGS OF EACH SIZE AND TYPE, WHICHEVER GIVES THE GREATER NUMBER. FOR SITUATIONS WHERE THERE ARE LESS THAN 5 NO. ANCHORS OF ANY TYPE OR SIZE THEN ALL ANCHORS SHALL BE TESTED. WHERE THE PROJECT SPECIFICATIONS DEVIATE FROM THIS TESTING FREQUENCY, THE PROJECT SPECIFICATIONS SHALL TAKE PRIORITY.
- 3.10. THE ENGINEER SHALL BE ADVISED A MINIMUM OF 48 HOURS IN ADVANCE TO AFFORD THE OPPORTUNITY OF WITNESSING THE TEST.
- 3.11. ALL TESTS SHALL BE CARRIED OUT TO THE FOLLOWING TEST LOADS: (UNO)

MATERIAL	ANCHOR DIAMETER	TEST LOAD (kN)
SOLID BRICK OR STONE	M10	3.0
SOLID BRICK OR STONE	M12	3.5
SOLID CONCRETE	M10	6.3
SOLID CONCRETE	M12	9.5
SOLID CONCRETE	M16	12.1
SOLID CONCRETE	M20	20

TEST LOAD IS BASED ON $1.0 \times N_{rec} (f_{cc} = 33 \text{ Nmm}^2)$ FOR SOLID BRICKWORK AND $1.0 \times F_{REC} (f_{cc} = 30 \text{ Nmm}^2)$ OBTAINED FROM THE HILTI TECHNICAL LITERATURE

- 3.12. ALL TESTS SHALL BE DOCUMENTED WITH LOCATION SKETCHES AND UNIQUE REFERENCES FOR EACH BOLT TESTED, IN SUCH A MANNER THAT EACH TEST LOCATION CAN BE IDENTIFIED ON SITE FROM THE DOCUMENTATION.
- 3.13. ALL NUTS, BOLTS AND STUDDINGS USED IN CONNECTIONS TO POROUS MATERIALS SHALL BE STAINLESS STEEL.
- 4.0. STEELWORK**
- 4.1. STRUCTURAL STEEL TO BE GRADE S275 MILD STEEL TO BS 4360
- 4.2. ALL WELDS TO BE MINIMUM 6mm FILLET WELD UNLESS NOTED OTHERWISE. WELDS AT TUBE TO TUBE CONNECTIONS TO BE FULL PENETRATION BUTT WELDS.
- 4.3. BOLTS TO BE GRADE 8.8 TO BS 4190, MINIMUM SIZE 16mm DIA U.N.O. BEARING SURFACES TO BE CLEAN GALVANISED.
- 4.4. ALL STEELWORK TO BE GALVANISED.
- 4.5. MINOR SITE ERECTION DAMAGE TO BE MADE GOOD WITH BRUSH APPLIED GALVAFROID.

NOTES:

- 1. ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.

Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description:		
Drawn:	N.Price	Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked:	G.Duke			
Approved:	G.Duke			
M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description:		
Drawn:	N.Price	Detail Design Issue		
Checked:	G.Duke			
Approved:	G.Duke			
M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Proposed BBU type Amended ON ALS		
Checked:	G.Duke			
Approved:	G.Duke			
M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked:	G.Duke			
Approved:	G.Duke			
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	First Issue		
Checked:	G.Duke			
Approved:	G.Duke			



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Design Consultant & Principal Contractor:



Site Name: **ALL SAINTS CHURCH**

Site ID: **982386**

Address: **ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ**

Title: **900 STANDARD NOTES**

Project: **EE VENDOR SWAP**

Purpose of Issue: **DETAIL DESIGN**

EE Cell ID: 50524	MBNL Cell ID: TRI001	3UK Cell ID: WD0107
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Master Drawing No: 982386_TRI001_50524_WD0107_M005	Issue: C2
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100mm

50mm

10mm

ELECTRICAL, LIGHTNING PROTECTION AND EARTHING NOTES

1. ELECTRICAL WORKS SHALL BE CARRIED OUT IN KEEPING WITH BS 7671.
2. THE LIGHTNING PROTECTION INSTALLATION SHALL BE SUPPLIED, INSTALLED, TESTED, COMMISSIONED AND SET TO WORK IN KEEPING WITH BS EN 62305. WORKS SHALL ENCOMPASS BEST WORKING PRACTICES BY SUITABLY EXPERIENCED AND QUALIFIED PERSONNEL.
3. EARTHING AND BONDING WORKS SHALL COMPLY WITH BS 7430.
4. ALL MATERIAL'S SHALL BE THE PROPRIETARY TYPE AS DEFINED IN THE PROJECT SPECIFICATION AND/ OR CONSTRUCTION DRAWINGS.
5. CONNECTION OF EXISTING OR INSITU EQUIPMENT, NORMALLY NOT ASSOCIATED WITH THE INSTALLATION SHALL BE KEPT TO A MINIMUM. THIS DOES NOT INCLUDE EXISTING SERVICES THAT MAY AFFECT THE INTEGRITY OF THE EQUIPMENT UNDER FAULT CONDITIONS.
6. THE COMPOSITE LIGHTNING PROTECTION SYSTEM SHALL ACHIEVE A RESISTIVITY VALUE < 10 OHMS. THIS VALUE SHALL BE RECORDED IN ISOLATION TO ANY EXTERNAL INFLUENCES.
7. WHERE AN EXISTING OR PART EXISTING LIGHTNING PROTECTION SYSTEM IS ADOPTED FOR PURPOSES, THE SPECIALIST CONTRACTOR SHALL VERIFY IN ADVANCE IT'S SUITABILITY. VERIFICATION SHALL BE ACHIEVED BY A COMBINATION OF EXISTING TEST CERTIFICATION, VALID TO WITHIN 1 YEAR AND VISUAL INSPECTION. WHERE EXISTING TEST CERTIFICATION IS NOT AVAILABLE OR HAS EXCEEDED THE DUE EXPIRY DATE THEN THE SPECIALIST CONTRACTOR SHALL ARRANGE TO INSPECT AND RE-TEST THE SYSTEM IN LINE WITH BS EN 62305.
8. EXISTING LIGHTNING PROTECTION SYSTEMS SHALL ONLY BE UPGRADED ON FORMAL APPROVAL FROM THE NET CONSULTANT DESIGN ENGINEER. DISCONNECTION OR MODIFICATION OF ANY EXISTING LIGHTNING PROTECTION SYSTEM, INCLUDING DISCONNECTION FOR TEST PURPOSES, SHALL BE UNDERTAKEN WITH THE WRITTEN APPROVAL OF THE SITE PROVIDER AND THE DESIGN ENGINEER.
9. THE FOLLOWING SERVICES SHALL BE INTERCONNECTED DIRECTLY WITH THE LIGHTNING PROTECTION SYSTEM WHERE APPLICABLE.
 - *SUPPLY EARTH (POINT OF CLOSEST PROXIMITY).
 - *EXISTING FACILITY SUPPLY EARTH.
 - *EXISTING LIGHTNING PROTECTION SYSTEM.
 - *EXTRANEIOUS STEEL WORK INCLUDING ASSOCIATED CONTAINMENT AND GRILLAGES (ALSO SEE NOTE 5).
 - *OTHER FACILITY EARTH BARS.
 - *SERVICE PROVIDER EARTH BARS.
 - *CONDUCTIVE FENCES, GATES & HANDRAILS.
 - *ANTENNA SUPPORT'S
 - *FEEDER EARTH'S
 SURFACE FIXED LIGHTNING PROTECTION TAPES SHALL BE THE AL 25X3MM INSULATED TYPE UNLESS SPECIFIED DIFFERENTLY ON THE CONSTRUCTION DRAWINGS.
10. WHERE IN CONTACT WITH OTHER DISSIMILAR METALS SUCH AS CU ELECTRODES OR FERROUS SUPPORTS THEN BI-METALLIC CONNECTORS SHALL BE USED. WHERE THE USE OF BI-METALLIC CONNECTORS IS NOT POSSIBLE, AL TAPES WILL BE DULY TREATED TO NEGATE DETERIORATION. WHERE PASTE OR OTHER SIMILAR COMPOUNDS ARE USED THAT WILL REQUIRE ROUTINE MAINTENANCE THEN CONTRACTOR SHALL INDICATE THOSE AREA'S ON THE AS-BUILT DRAWINGS.
11. TAPES BELOW GROUND LEVEL SHALL BE THE BARE CU TYPE 25X3MM. WHERE BURIED WITHIN PEDESTRIAN AREA'S, CU SERVICES SHALL BE LOCATED A MINIMUM 1 METRE BELOW FINISHED GROUND LEVEL AND INSULATED UP TO FINISHED GROUND LEVEL. WITHIN OTHER AREA'S TAPE CONDUCTORS SHALL BE LOCATED 600MM BELOW FINISHED GROUND LEVEL.
12. ALL RING CONDUCTORS SHALL BE COMPLETE WITH A CONTINUOUS LINE OF MARKER TAPE LOCATED 300MM BELOW FINISHED GROUND LEVEL. WHERE INSTALLED ELECTRODES SHALL BE COMPLETE WITH A FLUSH FITTING CONCRETE INSPECTION CHAMBER AND BE READILY ACCESSIBLE FOR TESTING PURPOSES.
13. ALL INSPECTION CHAMBERS SHALL BE COMPLETE WITH TEST LINK FACILITY AND IDENTIFIED IN LINE WITH THE PROJECT SPECIFICATION/DRAWINGS.
14. LIGHTNING PROTECTION SYSTEMS SHALL BE IN PLACE AND FULLY FUNCTIONAL PRIOR TO THE ERECTION OF ANY MASTS, TOWERS, ANTENNAS OR OTHER SUCH EQUIPMENT THAT MAY INCREASE THE LIKELIHOOD OF A LIGHTNING STRIKE TO THE HOST OR ADJACENT STRUCTURES.
15. SOIL PREPARATION AGENTS SHALL NOT BE USED.
16. WHERE LIGHTNING PROTECTION TAPES CONNECT TO OTHER SERVICES, CONNECTION SHALL BE ACHIEVED VIA A PROPRIETARY BOLTED CONNECTION SUITABLE FOR THE PURPOSE INTENDED. THIS SHALL INCLUDE FLEXIBLE OR BRAIDED CONNECTIONS WHERE THE CONNECTION MAY BE SUBJECT TO MECHANICAL STRESS. LIGHTNING PROTECTION TAPES SHALL NOT BE DRILLED OUT OR PENETRATED TO ACHIEVE CONNECTION. ALL TERMINATION'S SHALL BE SUITABLY PROTECTED TO NEGATE DETERIORATION.
17. SURFACE FIXED TAPES SHALL BE SECURED AT 600MM CENTRES VIA PROPRIETARY PVC INSULATED CLIPS. CLIPS SHALL GENERALLY BE THE SELF-ADHESIVE TYPE SO AS TO AVOID PENETRATING THE BUILDING FABRIC. SCREW/CAVITY FIXINGS SHALL ONLY BE CONSIDERED WHERE THE SELF-ADHESIVE TYPE ARE UNSUITABLE AND THEIR USE WILL NOT DAMAGE THE BUILDING FABRIC.
18. ALL LIGHTNING PROTECTION EQUIPMENT SHALL BE DULY IDENTIFIED AND SIGNAGE POSTED IN KEEPING WITH BS EN 62305. DETAILED WORDING AS PER THE PROJECT SPECIFICATION.
19. WHERE THE SOURCE OF SUPPLY IS LOCATED EXTERNAL TO AN EXISTING BUILDING, A BONDING CONDUCTOR SHALL BE INSTALLED BETWEEN THE NEW AND EXISTING SUPPLY EARTH TERMINALS. THIS CONDUCTOR SHALL BE A MINIMUM A 16MM XLPE/PVC GREEN/YELLOW CU CABLE. PROTECTION AS REQUIRED. CLEARLY DESIGNATED "SUPPLEMENTARY EARTH DO NOT REMOVE" (WHERE THE NATURE OF THE SUPPLIES DIFFER, THE CONTRACTOR SHALL ADVISE THE NET CONSULTANTS DESIGN ENGINEER).
20. ALL CONDUCTIVE PARTS LOCATED WITHIN THE EQUIPOTENTIAL ZONE SHALL BE CROSS-BONDED AND TIED TO EARTH. THIS SHALL INCLUDE NON EQUIPMENT THAT MAY EFFECT THE EQUIPMENT OR PERSONNEL UNDER FAULT CONDITIONS,
21. CONTINUOUS CONTAINMENT SYSTEM RUNS SHALL BE BONDED DIRECTLY TO THE LIGHTNING PROTECTION SYSTEM AT A MAXIMUM 20 METRE INTERVAL. WHERE BONDED DIRECTLY TO THE LIGHTNING PROTECTION SYSTEM BOND'S SHALL BE 25X3MM CU. TAPE OR BRAID AS REQUIRED. PARALLEL OR DISSIMILAR TRAY RUNS SHALL BE CROSS-BONDED, AS SHOULD CONDUCTIVE FENCES AND GATES. 25X3MM CU. TAPE OR BRAID AS REQUIRED.
22. CABLES SHALL BE SUPPLIED IN ACCORDANCE WITH FOLLOWING :
 - A) EARTH CABLES SHALL BE SINGLE CORE REF. 6491X TO BS 6004.
 - B) SWA TYPE CABLES 3 OR 5 CORE REF. 6943X TO BS 5467.
 - C) MIC ALARM CABLE 2 PAIR 1/0.50MM CEL-PE/PJF/PE/SWA/PE BLACK TO CS1128/1198 (EG BATT CABLES P/N 42125).
 - D) PCM CABLES SHALL BE SWA RG59 FOR EXTERNAL USE, COMPLETE WITH IP66 GLAND CW205/16. INTERNAL USE BS20S.
23. CABLES SHALL BE IDENTIFIED IN KEEPING WITH THE PROJECT SPECIFICATION.
24. WHERE BURIED ELECTRICAL CABLES SHALL BE INSTALLED IN KEEPING WITH THE CONSTRUCTION DRAWINGS AND PROJECT SPECIFICATION. PRIOR TO THE OPENING OF ANY TRENCHES THE CONTRACTOR SHALL DEMONSTRATE THAT THE AREA TO BE EXCAVATED IS FREE FROM OTHER SERVICES AND ALL NECESSARY SAFEGUARDS HAVE BEEN PUT IN PLACE TO NEGATE RISK TO SITE PERSONNEL, BUILDING FABRIC, MEMBERS OF THE PUBLIC AND SITE PROVIDER EMPLOYEE'S.
25. EXCAVATION AND ELECTRICAL ISOLATIONS SHALL BE DONE WITH THE FULL CONSENT OF THE SITE PROVIDER AND UNDER COVER OF A PERMIT TO WORK SYSTEM. CONTAINMENT SYSTEMS SHALL BE THE PROPRIETARY TYPE AS DETAILED ON THE CONSTRUCTION DRAWINGS I.E. ROOFPRO OR APPROVED. CONTAINMENT SYSTEMS SHALL BE COMPLETE PRIOR TO CABLE INSTALLATION.
25. BENDS OFFSETS AND OTHER ACCESSORIES SHALL BE THE PROPRIETARY TYPE. SITE FABRICATED INSTALLATIONS IN LIEU OF MANUFACTURERS EQUIPMENT SHALL BE AVOIDED WHERE PRACTICALLY POSSIBLE.
26. CABLES INCLUDING COMMUNICATIONS, POWER AND FIRE ALARM SHALL BE SEGREGATED IN KEEPING WITH THE PROJECT SPECIFICATION.
27. WHERE THE HOST BUILDING IS COMPLETE WITH A FIRE ALARM SYSTEM, THAT SYSTEM SHALL BE EXTENDED AND/ OR MODIFIED TO PROVIDE AUDIBLE INDICATION OF FIRE ALARM ACTIVATION AND CALL POINT FACILITY. WHERE PRACTICAL DB LEVELS SHALL BE 65 OR 5 DB ABOVE PREVAILING BACKGROUND NOISE. ASSOCIATED CABLES SHALL BE THE MICC TYPE 1.5MM 2 CORE WITH RED XLPE OUTER SHEATH. CLIPS SHALL BE PROPRIETARY CU INSULATED TYPE FIXED DIRECTLY TO BUILDING FABRIC AND/ OR DEDICATED CONTAINMENT. FIRE ALARM WORKS SHALL BE RESTRICTED TO THE INSTALLATION BUT ARE DEEMED TO INCLUDE MODIFICATION AS REQUIRED TO THE EXISTING FIRE ALARMS SYSTEM E-PROM AND/ OR MIMIC DRIVER. FIRE ALARM WORKS SHALL ONLY BE UNDER TAKEN ON APPROVAL FROM THE BUILDING OFFICER OR HIS NOMINATED SPECIALIST CONTRACTOR.
28. EXTERNAL LIGHTING SHALL BE PROVIDED TO THE CABIN VIA THE AGREED ACCESS ROUTE ONLY. FITTINGS SHALL BE THE "MAINTAINED" DUAL FUNCTIONAL/EMERGENCY 28WATT TYPE WITH 3 HOUR STANDBY BATTERY CAPACITY. SWITCHING SHALL BE ACHIEVED VIA 2 WAY SWITCHES, POSITIONED IN SUCH A WAY AS TO FACILITATE SAFE OPERATION FROM THE CABIN AND THE NOMINATED ENTRY/EXIT POINT.
29. DISTRIBUTION BOARDS, FUSE SWITCHES AND SUNDRIES SHALL BE SUPPLIED IN ACCORDANCE WITH THE FOLLOWING (SEE SDN5001):
 - A) 100AMP SWITCH DISCONNECTOR SHALL BE TO BS EN 60947-3.
 - B) MCB'S TO BS EN 60898.
 - C) RCD'S TO BS EN 61009.
 - D) SPD'S THAT ARE INSTALLED IN TO DISTRIBUTION BOARDS OR OTHER EQUIPMENT CERTIFIED AGAINST BS EN 61439.
 - E) DISTRIBUTION BOARDS - CABIN & IN BUILDING BS EN 61439 & BS 7671. ANY NEW OR REPLACEMENT DB WILL BE SCHNEIDER ELECTRIC ACTI 9 SIZED TO SUIT THE REPLACEMENTS OF THE INSTALLATIONS. THE ACTI 9 IS SUITABLE OF AC AND DC USE. DISTRIBUTION BOARDS WILL BE SIZED APPROPRIATELY FOR THEIR REQUIREMENT. TYPICAL PART NUMBERS ARE :
 - SEA9AN14. TYPE A. SINGLE PHASE DIS BOARD. UNPOPULATED. 14 SP WAYS, 7DP WAYS.
 - SEA9BN8. TYPE B. THREE PHASE DIS BOARD. UNPOPULATED. 8 TP WAYS, 12 DP, 24SP WAYS
30. ACCESSORIES SHALL BE SUPPLIED IN ACCORDANCE WITH THE FOLLOWING:
 - A) WARNING LABELS SHALL BE SUPPLIED TO BS EN ISO 7010:2012 + A7 2017.
 - B) SINGLE PVC BACK BOX FOR ALARM CONNECTIONS SHALL BE SUPPLIED TO BS 5733.
 - C) SINGLE BLANK PLATE ENGRAVED ALARM CONTACTS FOR BACK BOX SHALL BE SUPPLIED TO BS 5733.
 - D) AMP CONNECTOR STRIP SHALL BE SUPPLIED TO BS 5733.

NOTES:

1. ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.

Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M005	EE	Vender Swap	Detail Design	C2
Date:	26.01.24	Revision / Upgrade Description:		
Drawn:	N.Price	Antenna bearings changed from 0° to 15° and 240° to 265°		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M004	EE	Vender Swap	Detail Design	C1
Date:	02.11.23	Revision / Upgrade Description:		
Drawn:	N.Price	Detail Design Issue		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M003	EE	Vender Swap	Planning	C
Date:	29.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Proposed BBU type Amended ON ALS		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M002	EE	Vender Swap	Planning	B
Date:	25.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	Cell IDs and Site ID corrected. Proposed BBU type Amended		
Checked:	G.Duke			
Approved:	G.Duke			
Master:	MBNL / EE / H3G:	Project:	Purpose of Issue:	Issue:
M001	EE	Vender Swap	Planning	A
Date:	15.09.23	Revision / Upgrade Description:		
Drawn:	N.Price	First Issue		
Checked:	G.Duke			
Approved:	G.Duke			



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Design Consultant & Principal Contractor:



Site Name: ALL SAINTS CHURCH

Site ID: 982386

Address: ALL SAINTS CHURCH
THE GREEN
CROXLEY GREEN
HERTFORDSHIRE
WD3 3HJ

Title: 901 STANDARD NOTES

Project: EE VENDOR SWAP

Purpose of Issue: DETAIL DESIGN

EE Cell ID:	MBNL Cell ID:	3UK Cell ID:
50524	TRI001	WD0107

Master Drawing No:	Issue:
982386_TRI001_50524_WD0107_M005	C2

100mm
50mm
10mm

Form 2
(Rule 4.9)

Diocesan Advisory Committee Notification of Advice

This notification constitutes advice only and does not give you permission to carry out the works or other proposals to which it relates. A faculty must be obtained from the court before the works or proposals may lawfully be carried out.

In the diocese of St Albans

Parish of Croxley Green, All Saints

Church of Croxley Green, All Saints

The church is listed under the Planning (Listed Buildings and Conservation Areas) Act 1990.

The listing is grade II

At a meeting of the Diocesan Advisory Committee held on 03/09/2024

The following works or other proposals were considered:

The works or proposals should be described in the petition for a faculty and in the public notice in the same way as they are described here.

Upgrade of the installed EE telecommunications infrastructure

The Committee RECOMMENDS the works or proposals for approval by the court:

The DAC commented:

The DAC notes that this is a relatively minor upgrade, which should not affect the mission of the church, its fabric or the (currently deemed unringable) bells.

This advice does not constitute authority for carrying out the works or proposals and a faculty is required.

In the opinion of the Committee the work or part of the work proposed is not likely to affect

the character of the church as a building of special architectural or historic interest
the archaeological importance of the building
archaeological remains existing within the church or its curtilage

In the opinion of the Committee rule 9.9 of the Faculty Jurisdiction Rules (publication of notice on diocesan or other publicly accessible website) does not apply to the works or proposals

This advice is valid for 24 months from the date given below

Signed: Mrs Emma Critchley Date: 06/09/2024
Secretary to the Diocesan Advisory Committee

