

Legend Cabinet and Verts (DC) A/B Cabinet with Regenerator and Verts (DC) A/B Copper Joint (C-J) Fibre Joint (F-J) Screening Conductor Joint with/without Earth (S-J) Trough Duct Cable Tray (SB) Signal Box (SB) Electrical Control Room (ECR) Manhole Mid Length Sheath Gap Fibre Sheath Gap Copper FTN Core Node Core Node with GSM-R Colocated FTN Access Node FTN Access Node with GSM-R Colocated Screen Joint Routeworks Copper Joint Routeworks Cabinet Routeworks Fibre Joint Routeworks Manhole details: Cross-To be used Filled-In use Clear-Empty Tunnel Overbridge Underbridge Earth Farm Buffer Stop Telephone (T) Signal (MLNT) Engineer's Line Reference Mile Post Platform Crossing Gantry Cable Pull Gas Line (GAS) HV Cable (HV) LV Cable (LV) Sewer (SEW) Telecoms (TEL) Water (V) Copper Blue Fibre Red Screen Green AC Stanchion		Notes Contractor(s) Unit 4 Apex Park, Wainwright Road, Worcester, Worcestershire, WR4 9FN. Tel: 01905 756000 Status: Design Scale(s): ELR & Mileage BML1 NTS		Designed: NDC Consultants Drawn: Adam Bourne Checked: Joe Winter Approved: Chris Tappenden Date: 09/12/10 Date: 09/12/10 Date: 09/12/10 Date: 09/12/10 Drawing Title: FTN / GSM-R Project Stage 2 Design Hook (2415) to Winchfield Station (WIFA)		 FTN/GSM-R Project Tournament House Paddington London W2 1HA Alternative Reference: See Layout Tab A3 Sheets 1 and 2 Drawing Number: NTPO\SLD\2415\WIFA\001 Sheet: 1 of 2 Revision: B	
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Legend

	Cabinet and Verts		Copper Joint		Trough Duct Cable Tray		Signal Box		FTN Core Node		Screen Joint Routeworks		Manhole		Overbridge		Signal		Engineer's Line Reference		Crossing		Gantry		Gas Line		HV Cable		LV Cable		Sewer		Telecoms		Water		
	Cabinet with Regenerator and Verts		Fibre Joint		Cable - Type Identified by FTN Code		Electrical Control Room		Core Node with GSM-R Colocated		Copper Joint Routeworks		Manhole details: Cross-To be used Filled-In use Clear-Empty		Underbridge		VAP Access Point		Mile Post		Cable Pull		AC Stanchion		Earth Farm		Buffer Stop		Telephone								
KEY	Proposed Fibre & Civils Elements are shown in RED				All Existing Elements are shown in BLACK																																
	Proposed Copper Elements are shown in BLUE				Existing Fibre Cable																																
	Proposed Screening Elements are shown in MAGENTA				Existing Copper Cable																																
	All Recoveries are shown in GREEN				Existing Screen Cable																																

Notes

Rev	Date	Description of Revisions	Drawn	Chkd	Appr
B	24/05/11	Amended As Per NWR Design Review	DA	JW	CT
A	09/12/10	Redrafted from Copper SLD EOKA-BSKC.pdf & Fibre SLD EOKA-BSKA.pdf	Dm	Chk	App

Contractor(s)

ndc consultants

Unit 4 Apex Park, Wainwright Road, Worcester, Worcestershire, WR4 9FN. Tel: 01905 756000

Status: **Design**

Scale(s): ELR & Mileage

NTS

Designed	NDC Consultants	Sign.		Date	09/12/10
Drawn	Adam Bourne	Sign.		Date	09/12/10
Checked	Joe Winter	Sign.		Date	09/12/10
Approved	Chris Tappenden	Sign.		Date	09/12/10

Project: FTN / GSM-R Project Stage 2 Design

Drawing Title: Hook (2415) to Winchfield Station (WIFA)

Network Rail

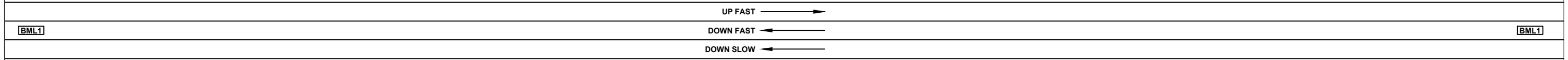
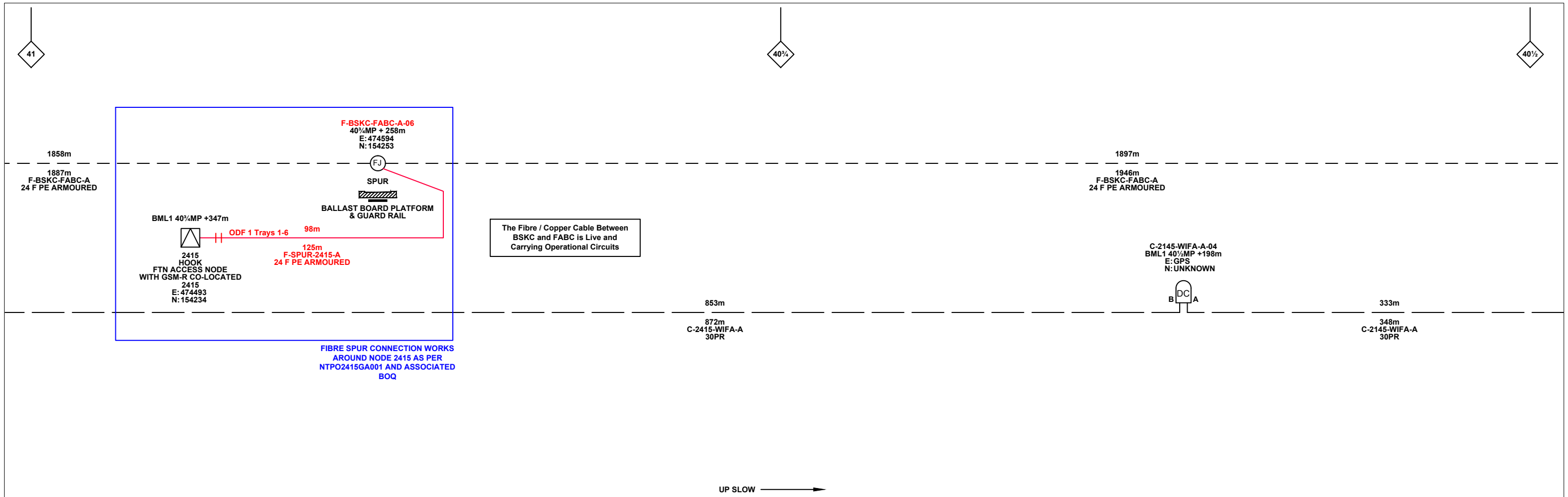
FTN/GSM-R Project
Tournament House
Paxford
London
W2 1HA

Alternative Reference: See Layout Tab A3 Sheets 3 and 4

Drawing Number: NTPO\SLD\2415\WIFA\001

Sheet: 2 of 2

Revision: B



Legend

Cabinet and Verts	Copper Joint	Trough Duct Cable Tray	Signal Box	FTN Core Node	Screen Joint Routeworks	Overbridge	Signal	Engineer's Line Reference	Crossing	GAS — GAS — Gas Line
Cabinet with Regenerator and Verts	Fibre Joint	Cable - Type Identified by FTN Code	Electrical Control Room	Core Node with GSM-R Colocated	Copper Joint Routeworks	Manhole	Vehicle Access Point	Mile Post	HV — HV — HV Cable	LV — LV — LV Cable
KEY	Screening Conductor Joint with/without Earth	Status - as per Key Below	Mid Length Sheath Gap Fibre	FTN Access Node	Cabinet Routeworks	Sheath Gap Copper	Pedestrian Access Point	Platform	SEW — SEW — Sewer	TEL — TEL — Telecoms
Proposed Fibre & Civils Elements are shown in RED		All Existing Elements are shown in BLACK	Tunnel	FTN Access Node with GSM-R Colocated	Fibre Joint Routeworks		Earth Farm	Buffer Stop	W — W — Water	AC Stanchion
Proposed Copper Elements are shown in BLUE		— — — Existing Fibre Cable	Manhole details: Cross-To be used, Filled-In use, Clear-Empty				Telephone		Copper Blue	
Proposed Screening Elements are shown in MAGENTA		— — — Existing Copper Cable							Fibre Red	
All Recoveries are shown in GREEN		— — — Existing Screen Cable							Screen Green	

Notes

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B	24/05/11	Amended As Per NWR Design Review	DA	JW	CT
A	09/12/10	Redrafted from Copper SLD EOKA-BSKC.pdf & Fibre SLD EOKA-BSKA.pdf	Drm	Chk	App

Contractor(s)

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Status: **Design**

Scale(s): NTS, BML1

Designed	NDC Consultants	Sign.	Date	09/12/10
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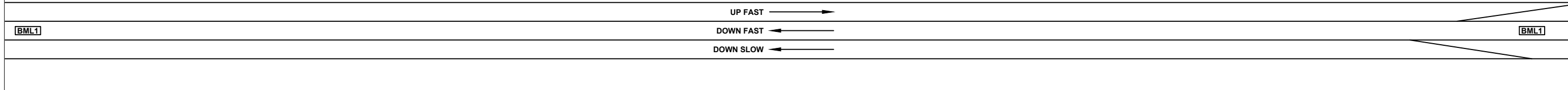
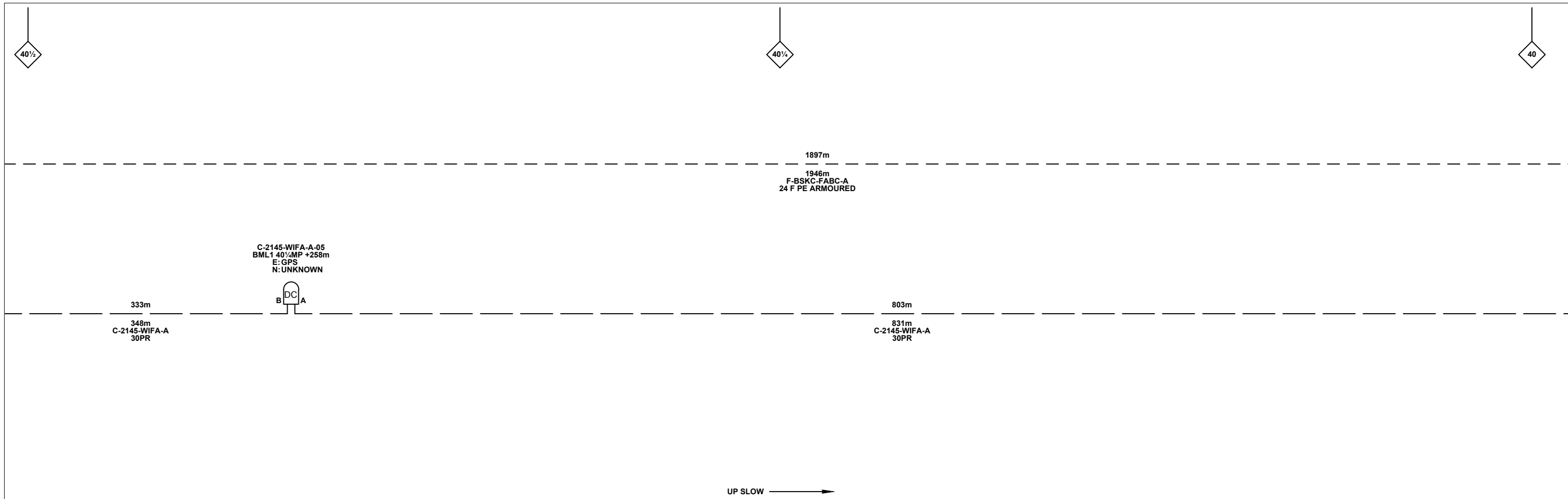
FTN/GSM-R Project
Tournament House
Paddington
London
W2 1HA

Alternative Reference: See Layout Tab 841 x 297 Sheet 1

Drawing Number: NTPO\SLD\2415\WIFA\001

Sheet: 1 of 3

Revision: B



Legend

Cabinet and Verts	Copper Joint	Trough Duct Cable Tray	Signal Box	FTN Core Node	Screen Joint Routeworks	Overbridge	Signal	MLN1 Engineer's Line Reference	Crossing	GAS Gas Line
Cabinet with Regenerator and Verts	Fibre Joint	Cable - Type Identified by FTN Code	Electrical Control Room	Core Node with GSM-R Colocated	Copper Joint Routeworks	Underbridge	VAP Vehicle Access Point	Mile Post	HV HV Cable	LV LV Cable
KEY	Screening Conductor Joint with/without Earth	Manhole	Mid Length Sheath Gap Fibre	FTN Access Node	Cabinet Routeworks	Manhole details: Cross-To be used Filled-In use Clear-Empty	PAP Pedestrian Access Point	Platform	SEW Sewer	TEL Telecoms
Proposed Fibre & Civils Elements are shown in RED						Tunnel	Earth Farm	Buffer Stop	Water	AC Stanchion
Proposed Copper Elements are shown in BLUE										
Proposed Screening Elements are shown in MAGENTA										
All Recoveries are shown in GREEN										
All Existing Elements are shown in BLACK										
Existing Fibre Cable										
Existing Copper Cable										
Existing Screen Cable										

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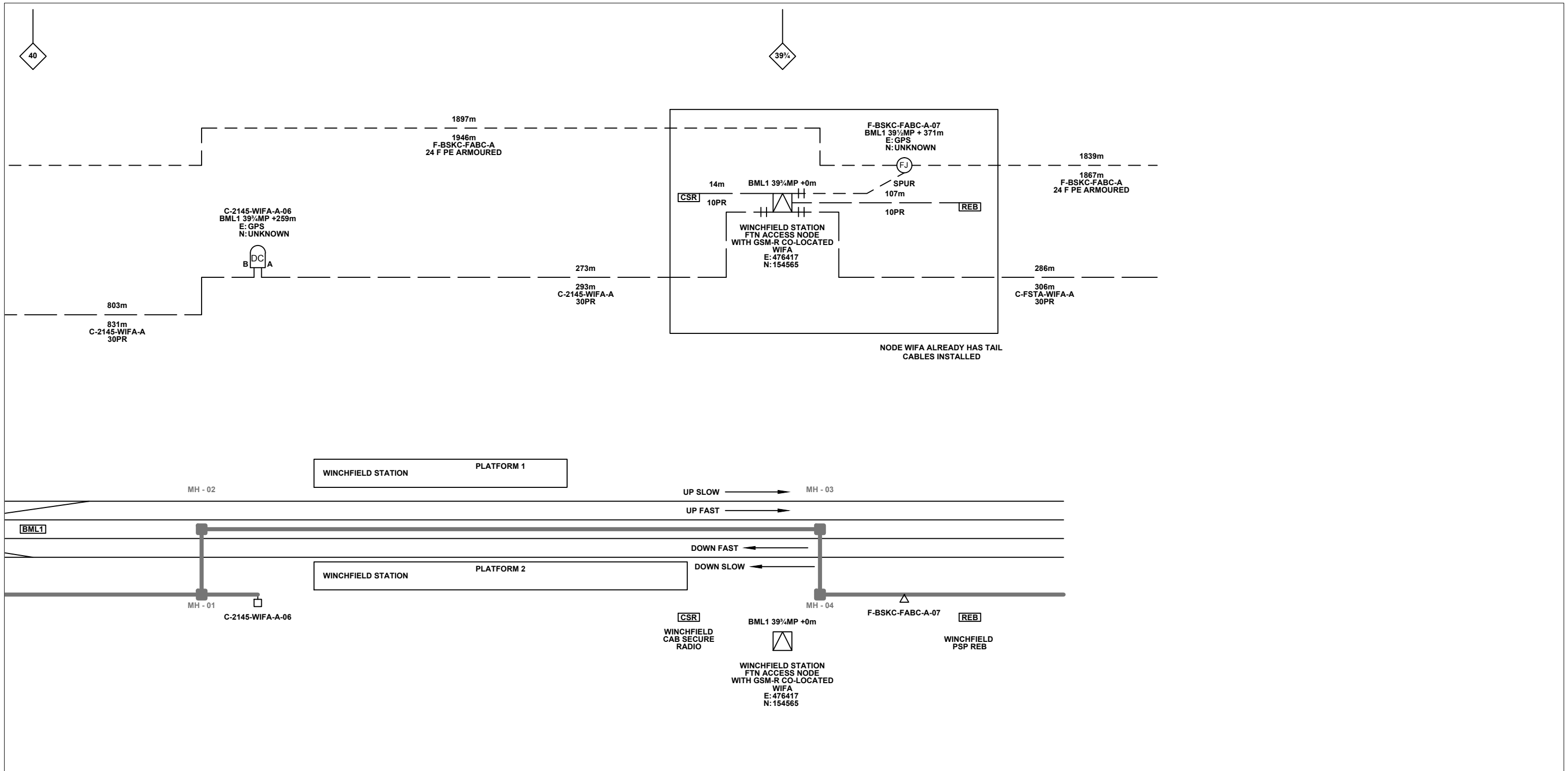
FTN/GSM-R Project
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Paddington
London
W2 1HA

Alternative Reference: See Layout Tab 841 x 297 Sheet 1

Drawing Number: NTPO\SLD\2415\WIFA\001

Sheet: 2 of 3

Revision: B



Legend

	Cabinet and Verts		Copper Joint		Trough Duct Cable Tray		Signal Box		FTN Core Node		Screen Joint Routeworks		Overbridge		Signal		Engineer's Line Reference		Crossing		Gas Line		HV Cable		LV Cable		Sewer		Telecoms		Water
	Cabinet with Regenerator and Verts		Fibre Joint		Cable - Type Identified by FTN Code		Electrical Control Room		Core Node with GSM-R Colocated		Copper Joint Routeworks		Underbridge		Vehicle Access Point		Mile Post		Gantry		Gas		HV		LV		SEW		TEL		Water
	KEY		Screening Conductor Joint with/without Earth		Manhole		Mid Length Sheath Gap Fibre		FTN Access Node		Cabinet Routeworks		Tunnel		Pedestrian Access Point		Platform		Earth Farm		Buffer Stop		Telephone		Cable Pull		AC Stanchion				

Proposed Fibre & Civils Elements are shown in RED
 Proposed Copper Elements are shown in BLUE
 Proposed Screening Elements are shown in MAGENTA
 All Recoveries are shown in GREEN

All Existing Elements are shown in BLACK
 Existing Fibre Cable
 Existing Copper Cable
 Existing Screen Cable

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FTN/GSM-R Project
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 Paddington
 London
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Alternative Reference: See Layout Tab 841 x 297 Sheet 2

Drawing Number: NTPO\SLD\2415\WIFA\001

Sheet: 3 of 3

Revision: B