

Legend

Cabinet and Verts	Copper Joint	Trough Duct Cable Tray	Signal Box	FTN Core Node	Screen Joint Routeworks	Manhole details: Cross - To be used Filled-in use Clear - Empty	Overbridge	Signal	MLN1	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	Underbridge	VAP	Mile Post	Cable Pull	Gantry	hv — hv — HV Cable
KEY	Screening Conductor Joint with/without Earth	Status - as per Key Below	Manhole	FTN Access Node	Cabinet Routeworks	Mid Length Sheath Gap Fibre	Platform	PAP	Telephone	Copper Blue Fibre Red Screen Green	SEW — SEW — Sewer	LV — LV — LV Cable
Proposed Fibre & Civils Elements are shown in RED	2034m F-DIC-RGAC-A	All Existing Elements are shown in BLACK	Manhole	FTN Access Node with GSM-R Colocated	Fibre Joint Routeworks	Sheath Gap Copper	Earth Farm	Buffer Stop	Mast	v — v — Water	TEL — TEL — Telecoms	v — v — Water

KEY

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

Notes

B	15/11/12	As Built	RM	JH	IA
A	27/06/12	Redrafted from As Built 2102-RAYS FTN001_01430_DRAB_0001 Rev C.dwg	OW	JW	CT
Rev	Date	Description of Revisions	Drawn	Chkd	Appt

Contractor(s)

Status: **As Built**

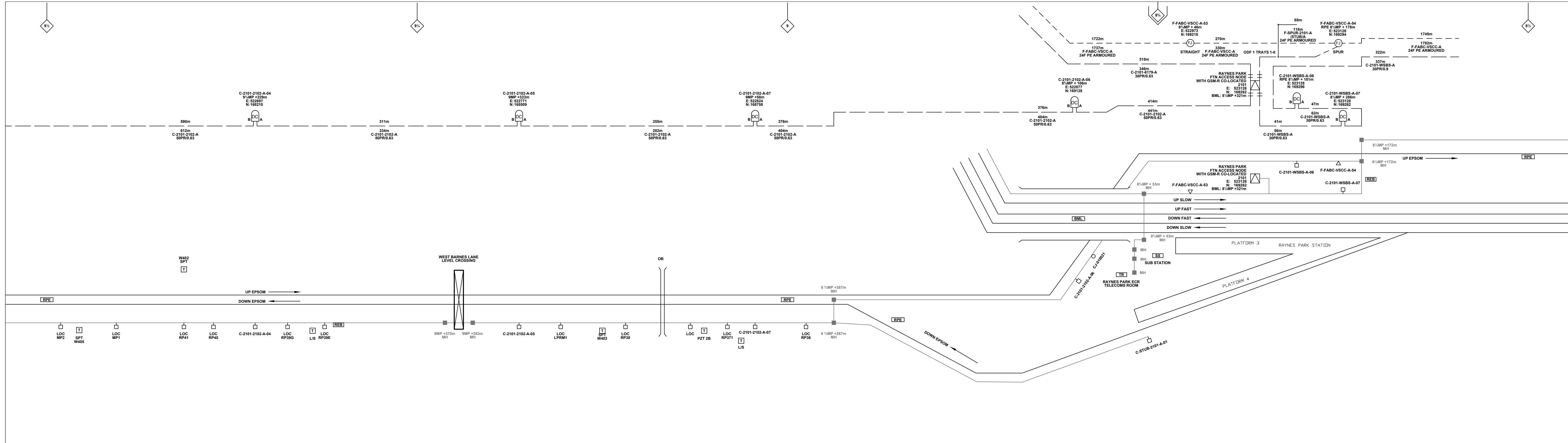
Scale(s): ELR & Mileage
 BML1 / MPC / RPE

Designed	Sign.	Date
Drawn: Oliver Wright	Sign.	Date: 27/06/2012
Checked: Joe Winter	Sign.	Date: 27/06/2012
Approved: Chris Tappenden	Sign.	Date: 27/06/2012
Project	FTN/GSM-R Project Stage 2	
Drawing Title	Raynes Park (2101) to Motspur Park (2102)	

Alternative Reference: See Layout Tab A3 Sheets 1 and 2

Drawing Number: NTPO\SLD\2101\2102\001

Sheet: 1 of 2
 Revision: B



Legend

Cabinet and Verts	Copper Joint	Trough Duct Cable Tray	Signal Box	FTN Core Node	Screen Joint Routeworks	Manhole details: Cross-To be used Filled-in use Clear-Empty	Overbridge	Signal	Engineer's Line Reference	Crossing	GAS — GAS — Gas Line	hv — hv — HV Cable	LV — LV — LV Cable	SEW — SEW — Sewer	TEL — TEL — Telecoms	v — v — 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	Underbridge	VAP	Mile Post	Gantry	Copper Blue Fibre	Fibre Red	Screen Green	Mast		
Screening Conductor Joint with/without Earth	Manhole	Status - as per Key Below	Mid Length Sheath Gap Fibre	FTN Access Node	Cabinet Routeworks	Tunnel	Earth Farm	PAP	Platform	Cable Pull						
Sheath Gap Copper	FTN Access Node with GSM-R Colocated	Fibre Joint Routeworks														

KEY

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

Notes

B	15/11/12	As Built	RM	JH	IA
A	27/06/12	Redrafted from As Built 2102-RAYS FTN001_01430_DRAB_0001 Rev C.dwg	OW	JW	CT
Rev	Date	Description of Revisions	Drawn	Chkd	Appt

Contractor(s)

Status: **As Built**

ELR & Mileage: BML1 / MPC / RPE

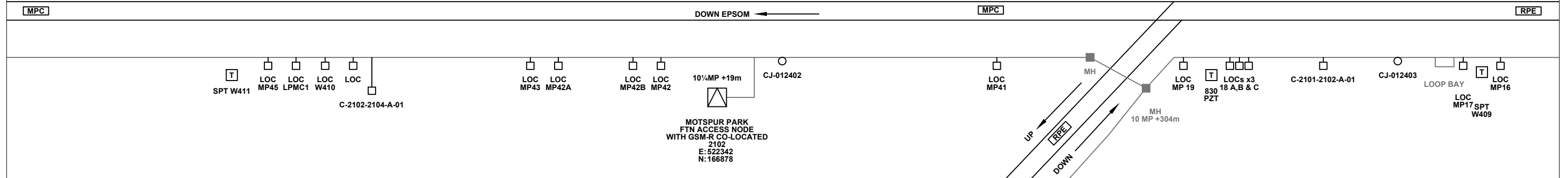
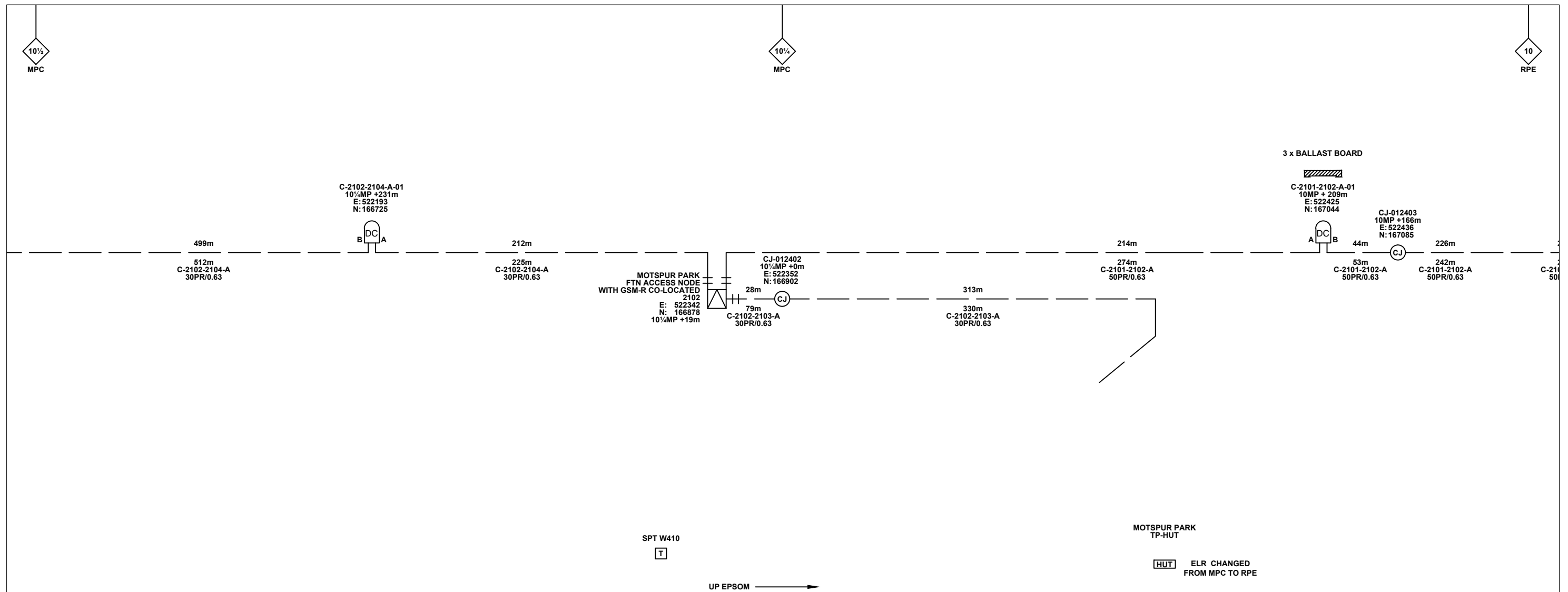
Designed	Sign.	Date
Drawn	Sign.	Date
Checked	Sign.	Date
Approved	Sign.	Date
Project	FTN/GSM-R Project Stage 2	
Drawing Title	Raynes Park (2101) to Motspur Park (2102)	

Alternative Reference: See Layout Tab A3 Sheets 3 and 4

Drawing Number: NTPO\SLD\2101\2102\001

Sheet: 2 of 2

Revision: B



Legend

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

KEY
 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

Notes

Rev	Date	Description of Revisions	Drawn	Chkd	Appr
B	15/11/12	As Built	RM	JH	IA
A	27/06/12	Redrafted from As Built: 2102-RAYS FTN001_01430_DRAB_0001 Rev C.dwg	OW	JW	CT

Contractor(s)

Status: **As Built**

Scale(s): NTS

ELR & Mileage: BML1 / MPC /RPE

Designed	Sign.	Date
Drawn	Sign. <i>[Signature]</i>	Date 27/06/2012
Checked	Sign. <i>[Signature]</i>	Date 27/06/2012
Approved	Sign. <i>[Signature]</i>	Date 27/06/2012
Project: FTN/GSM-R Project Stage 2		
Drawing Title: Raynes Park (2101) to Motspur Park (2102)		

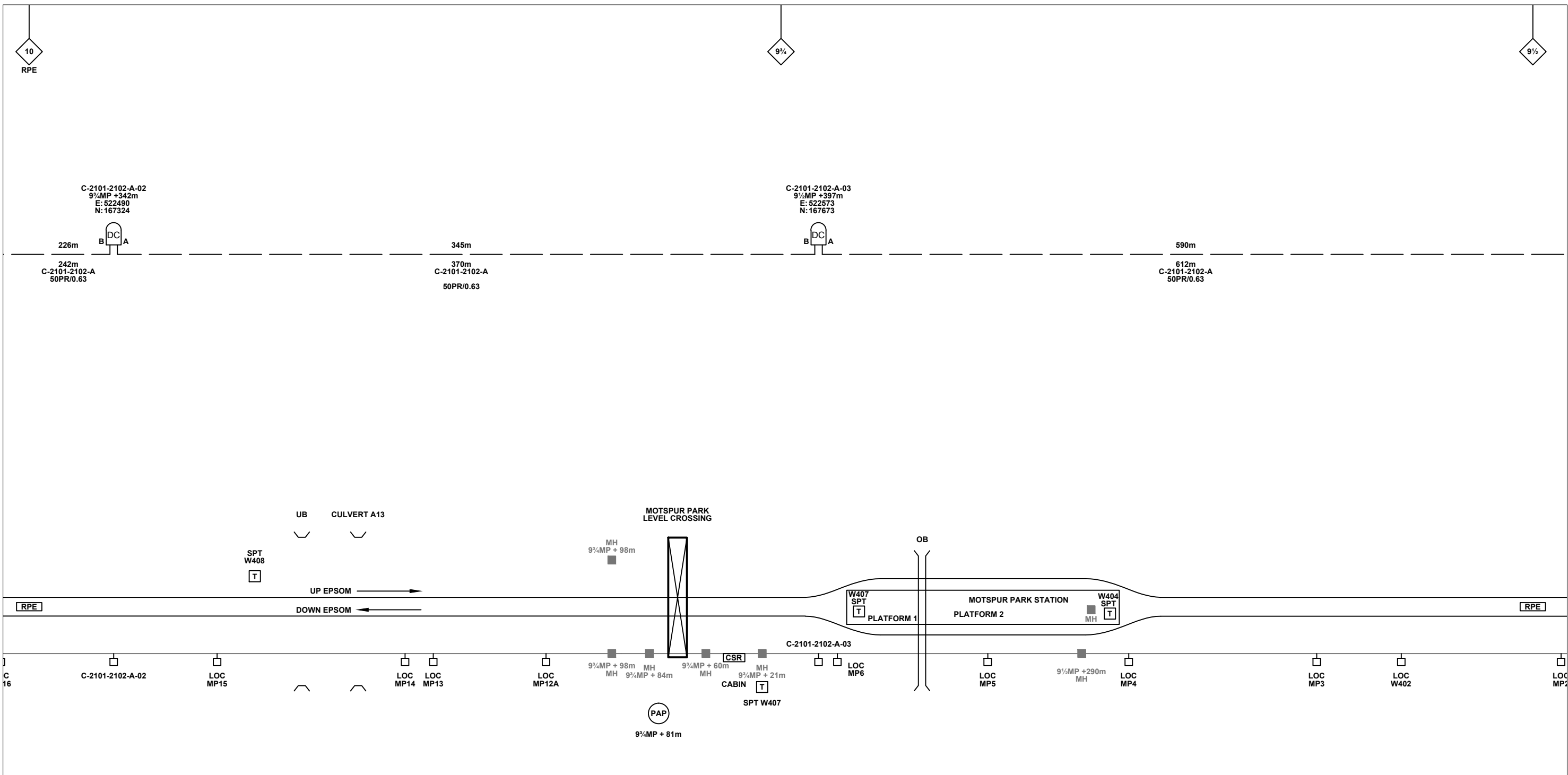
FTN/GSM-R Project
 Tournament House
 Paddington
 London
 W2 1HA

Alternative Reference: See Layout Tab 841 x 297 Sheet 1

Drawing Number: NTPO\SLD\2101\2102\001

Sheet: 1 of 4

Revision: B



Legend

	Cabinet and Verts		Copper Joint		Trough Duct Cable Tray		Signal Box		FTN Core Node		Screen Joint Routeworks		Manhole details: Cross-To be used Filled-In use Clear-Empty		Overbridge		Signal		Engineer's Line Reference		Crossing		GAS	Gas Line	
	Cabinet with Regenerator and Verts		Fibre Joint		Electrical Control Room		Core Node with GSM-R Colocated		Copper Joint Routeworks		Underbridge		Vehicle Access Point		HV	HV Cable		Mile Post		LV	LV Cable		SEW	Sewer	
	Screening Conductor Joint with/without Earth		Manhole		Mid Length Sheath Gap Fibre		FTN Access Node		Cabinet Routeworks		Platform		Pedestrian Access Point		TEL	Telecoms		v	Water		Gantry		Cable Pull		Mast

KEY
 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

Line Reference
 1988m
 2034m
 F-DIDC-RGAC-A

Other Symbols:
 All Existing Elements are shown in BLACK
 Existing Fibre Cable
 Existing Copper Cable
 Existing Screen Cable

Notes

Rev	Date	Description of Revisions	Drawn	Chkd	Appr
B	15/11/12	As Built	RM	JH	IA
A	27/06/12	Redrafted from As Built: 2102-RAYS FTN001_01430_DRAB_0001 Rev C.dwg	OW	JW	CT

Contractor(s)

Status: **As Built**

Scale(s): NTS

ELR & Mileage: BML1 / MPC /RPE

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Drawn	Sign. <i>[Signature]</i>	Date 27/06/2012
Checked	Sign. <i>[Signature]</i>	Date 27/06/2012
Approved	Sign. <i>[Signature]</i>	Date 27/06/2012
Project: FTN/GSM-R Project Stage 2		
Drawing Title: Raynes Park (2101) to Motspur Park (2102)		

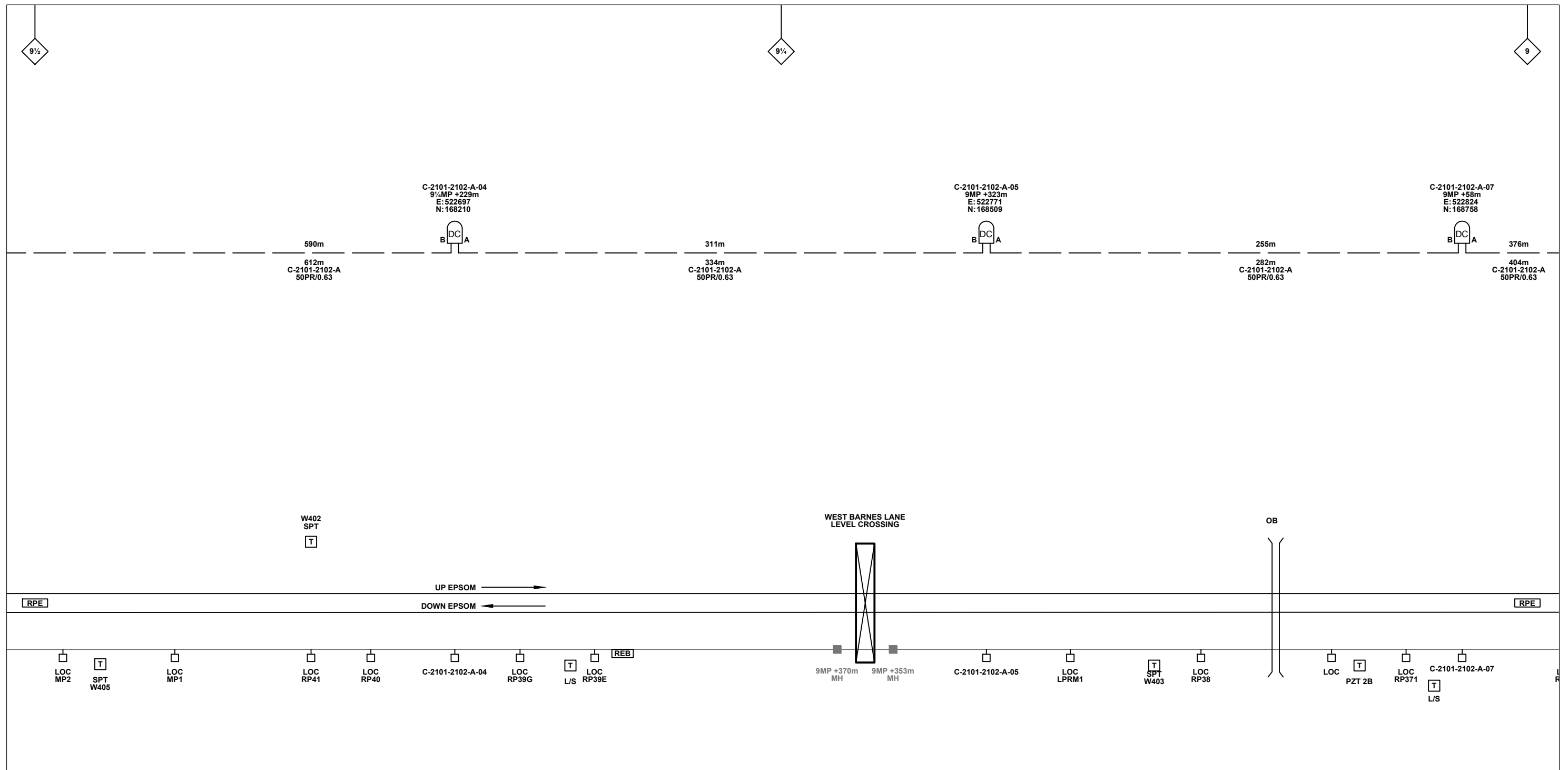
FTN/GSM-R Project
 Tournament House
 Paddington
 London
 W2 1HA

Alternative Reference: See Layout Tab 841 x 297 Sheet 1

Sheet: 2 of 4

Drawing Number: NTPO\SLD\2101\2102\001

Revision: B



Legend

Cabinet and Verts	Copper Joint	Trough Duct Cable Tray	Signal Box	FTN Core Node	Screen Joint Routeworks	Manhole details: Cross-To be used, Filled-In use, Clear-Empty	Overbridge	Signal	Engineer's Line Reference	Crossing	GAS — GAS — Gas Line
Cabinet with Regenerator and Verts	Fibre Joint	Electrical Control Room	Manhole	Core Node with GSM-R Colocated	Copper Joint Routeworks	Underbridge	Vehicle Access Point	Mile Post	Gantry	HV — HV — HV Cable	LV — LV — LV Cable
Screening Conductor Joint with/without Earth	1988m	Status - as per Key Below	Mid Length Sheath Gap Fibre	FTN Access Node	Cabinet Routeworks	Tunnel	Pedestrian Access Point	Platform	Water	SEW — SEW — Sewer	TEL — TEL — Telecoms
KEY	2034m F-DIDC-RGAC-A	Sheath Gap Copper	FTN Access Node with GSM-R Colocated	Fibre Joint Routeworks	Earth Farm	Buffer Stop	Telephone	Cable Pull	Mast	Screen Green	Copper Blue Fibre Red

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

Notes

Rev	Date	Description of Revisions	Drawn	Chkd	Appr
B	15/11/12	As Built	RM	JH	IA
A	27/06/12	Redrafted from As Built: 2102-RAYS FTN001_01430_DRAB_0001 Rev C.dwg	OW	JW	CT

Contractor(s)

Status: **As Built**

Scale(s): NTS

ELR & Mileage: BML1 / MPC /RPE

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Drawn	Sign.	Date 27/06/2012
Checked	Sign.	Date 27/06/2012
Approved	Sign.	Date 27/06/2012
Project: FTN/GSM-R Project Stage 2		
Drawing Title: Raynes Park (2101) to Motspur Park (2102)		

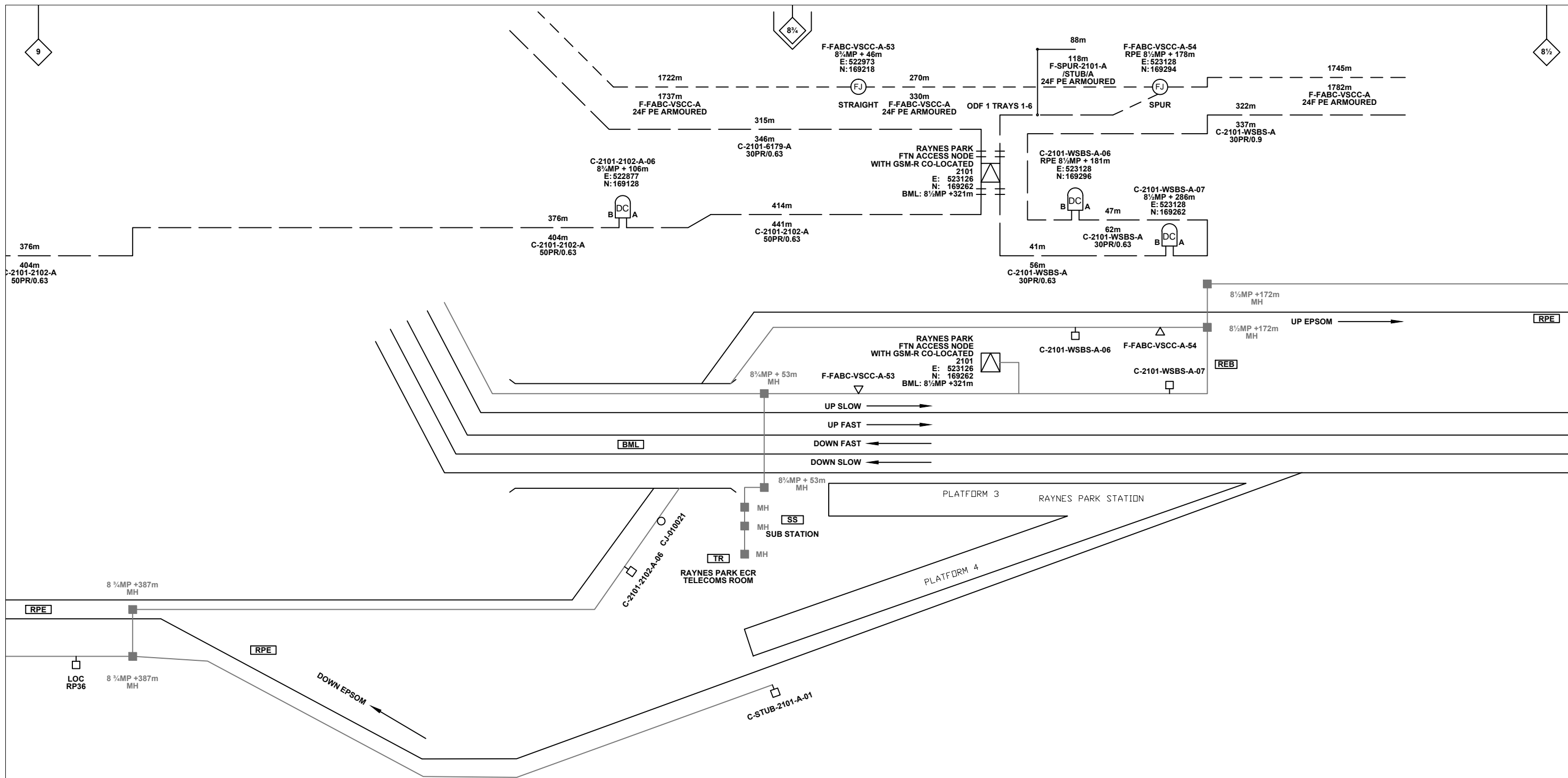
FTN/GSM-R Project
Tournament House
Paddington
London
W2 1HA

Alternative Reference: See Layout Tab 841 x 297 Sheet 2

Sheet: 3 of 4

Drawing Number: NTPO\SLD\2101\2102\001

Revision: B



Legend

	Cabinet and Verts		Copper Joint		Trough Duct Cable Tray		Signal Box		FTN Core Node		Screen Joint Routeworks		Manhole details: Cross-To be used Filled-In use Clear-Empty		Overbridge		Signal		Engineer's Line Reference		Crossing		GAS	Gas Line
	Cabinet with Regenerator and Verts		Fibre Joint		Electrical Control Room		Core Node with GSM-R Colocated		Copper Joint Routeworks		Underbridge		Vehicle Access Point		HV	HV Cable		Mile Post		LV	LV Cable		SEW	Sewer
	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		v	Water
KEY		All Existing Elements are shown in BLACK		Cable - Type Identified by FTN Code		Status - as per Key Below																		
Proposed Fibre & Civils Elements are shown in RED		Existing Fibre Cable		2034m F-DIDC-RGAC-A		FTN Access Node with GSM-R Colocated																		
Proposed Copper Elements are shown in BLUE		Existing Copper Cable		F-DIDC-RGAC-A		FTN Access Node with GSM-R Colocated																		
Proposed Screening Elements are shown in MAGENTA		Existing Screen Cable		F-DIDC-RGAC-A		FTN Access Node with GSM-R Colocated																		
All Recoveries are shown in GREEN																								

Rev	Date	Description of Revisions	Drawn	Chkd	Appr
B	15/11/12	As Built	RM	JH	IA
A	27/06/12	Redrafted from As Built 2102-RAYS FTN001_01430_DRAB_0001 Rev C.dwg	OW	JW	CT

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Drawing Title: Raynes Park (2101) to Motspur Park (2102)		

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

Alternative Reference: See Layout Tab 841 x 297 Sheet 2

Drawing Number: NTPO\SLD\2101\2102\001

Sheet: 4 of 4

Revision: B