

**Legend**

Cabinet and Verts	Copper Joint	Trough Duct Cable Tray	Signal Box	FTN Core Node	Screen Joint Routeworks
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
<b>KEY</b> 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	Screening Conductor Joint with/without Earth	Manhole	Mid Length Sheath Gap Fibre	FTN Access Node	Cabinet Routeworks
	Sheath Gap Copper	Manhole details: Cross-To be used Filled-In use Clear-Empty	Tunnel	FTN Access Node with GSM-R Colocated	Fibre Joint Routeworks
		Overbridge	Underbridge	Signal	Engineer's Line Reference
		Earth Farm	Buffer Stop	Vehicle Access Point	Mile Post
		Crossing	Gantry	Pedestrian Access Point	Platform
		Cable Pull	Gas Line	Telecoms	Mast

**Notes**

B	09-01-2013	Amended by NWR to incorporate final Stage 2 detail	PT	PB	GH
AB2	23/08/11	FJ 10, 14 & 15 Amended, Electronic Signatures Added, AS BUILT	AB	DP	PP
AB1	07/05/10	AS-BUILT	AB	DP	PP
A	26/11/09	Final Issue	MT	AEL	SW
DA	26/09/08	1st Issue	MT	AEL	SW
Rev	Date	Description of Revisions	Drawn	Chkd	Appr

**Contractor(s)**

**As Built**

ELR & Mileage  
SDP1

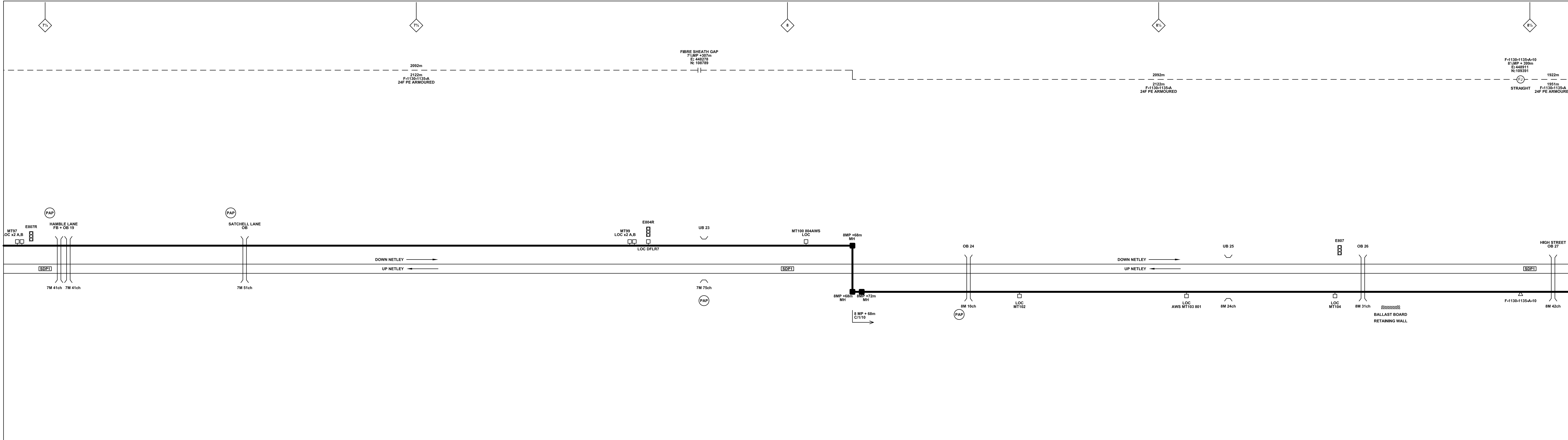
Designed	Andy Bone	Sign.	Date	23.08.2011
Drawn	Andy Bone	Sign.	Date	23.08.2011
Checked	Dave Peakman	Sign.	Date	23.08.2011
Approved	Prakash Patel (C.R.E.)	Sign.	Date	23.08.2011
Project	FTN/GSM-R Project Stage 2 As Built			
Drawing Title	Bursledon (1132) to Tichfield Park (1133)			

Alternative Reference: See Layout Tab A3 Sheets 1 and 2

Drawing Number: NTP0\SLD\1132\1133\001

Revision: B

Sheet 1 of 6



**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
	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		Vehicle Access Point		Mile Post
			Screening Conductor Joint with/without Earth		Cable - Type Identified by FTN Code		Manhole		FTN Access Node		Cabinet Routeworks		Tunnel		Earth Farm		Pedestrian Access Point		Platform
			Manhole		Cable - Type Identified by FTN Code		Mid Length Sheath Gap Fibre		FTN Access Node with GSM-R Colocated		Fibre Joint Routeworks		Sheath Gap Copper		Buffer Stop		Cable Pull		Telephone

**Notes**

B	09-01-2013	Amended by NWR to incorporate final Stage 2 detail	PT	PB	GH
AB2	23/08/11	FJ 10, 14 & 15 Amended, Electronic Signatures Added, AS BUILT	AB	DP	PP
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Rev	Date	Description of Revisions	Drawn	Chkd	Appr

**Contractor(s)**

**As Built**

ELR & Mileage  
SDP1

Designed	Andy Bone	Sign.	Date	23.08.2011
Drawn	Andy Bone	Sign.	Date	23.08.2011
Checked	Dave Peakman	Sign.	Date	23.08.2011
Approved	Prakash Patel (C.R.E.)	Sign.	Date	23.08.2011

**Project**  
FTN/GSM-R Project  
Stage 2 As Built

**Drawing Title**  
Bursledon (1132) to  
Tichfield Park (1133)

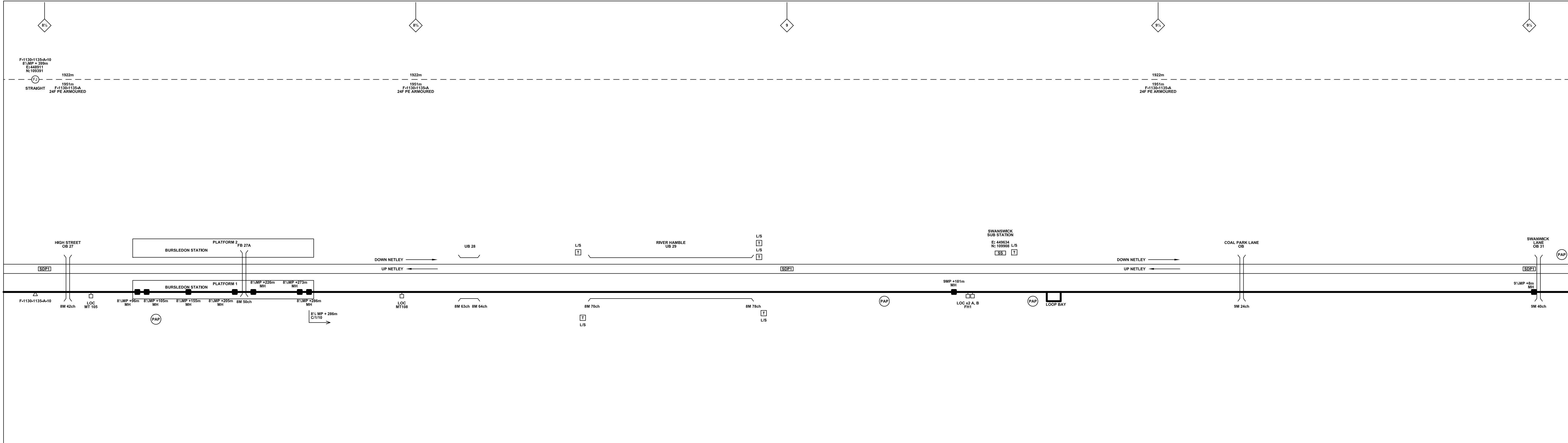
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Tournament House  
Passington  
London  
W2 1HA

Alternative Reference  
See Layout Tab A3 Sheets 3 and 4

Drawing Number  
NTPO\SLD\1132\1133\001

Sheet  
2 of 6

Revision  
B



**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	Gas Line
Cabinet with Regenerator and Verts	Fibre Joint	Cable - Type Identified by FTN Code Status - as per Key Below	Electrical Control Room	Core Node with GSM-R Colocated	Copper Joint Routeworks	Manhole details: Cross-To be used Filled-In use Clear-Empty	Underbridge	Vehicle Access Point	Mile Post	Gantry	HV Cable
<b>KEY</b>	Screening Conductor Joint with/without Earth	1988m Cable - Type Identified by FTN Code Status - as per Key Below	Manhole	FTN Access Node	Cabinet Routeworks	Tunnel	Pedestrian Access Point	Platform	Cable Pull	Sewer	LV Cable
Proposed Fibre & Civils Elements are shown in RED	2034m Cable - Type Identified by FTN Code Status - as per Key Below	Mid Length Sheath Gap Fibre	FTN Access Node with GSM-R Colocated	Fibre Joint Routeworks	Earth Farm	Buffer Stop	Telephone	Copper Blue Fibre Red Screen Green	Mast	Water	
Proposed Copper Elements are shown in BLUE	Sheath Gap Copper	Existing Fibre Cable									
Proposed Screening Elements are shown in MAGENTA		Existing Copper Cable									
All Recoveries are shown in GREEN		Existing Screen Cable									

**Notes**

B	09-01-2013	Amended by NWR to incorporate final Stage 2 detail	PT	PB	GH
AB2	23/08/11	FJ 10, 14 & 15 Amended, Electronic Signatures Added, AS BUILT	AB	DP	PP
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Rev	Date	Description of Revisions	Drawn	Chkd	Appr

**Contractor(s)**

**As Built**

ELR & Mileage  
SDP1

Designed	Andy Bone	Sign.	Date	23.08.2011
Drawn	Andy Bone	Sign.	Date	23.08.2011
Checked	Dave Peakman	Sign.	Date	23.08.2011
Approved	Prakash Patel (C.R.E.)	Sign.	Date	23.08.2011

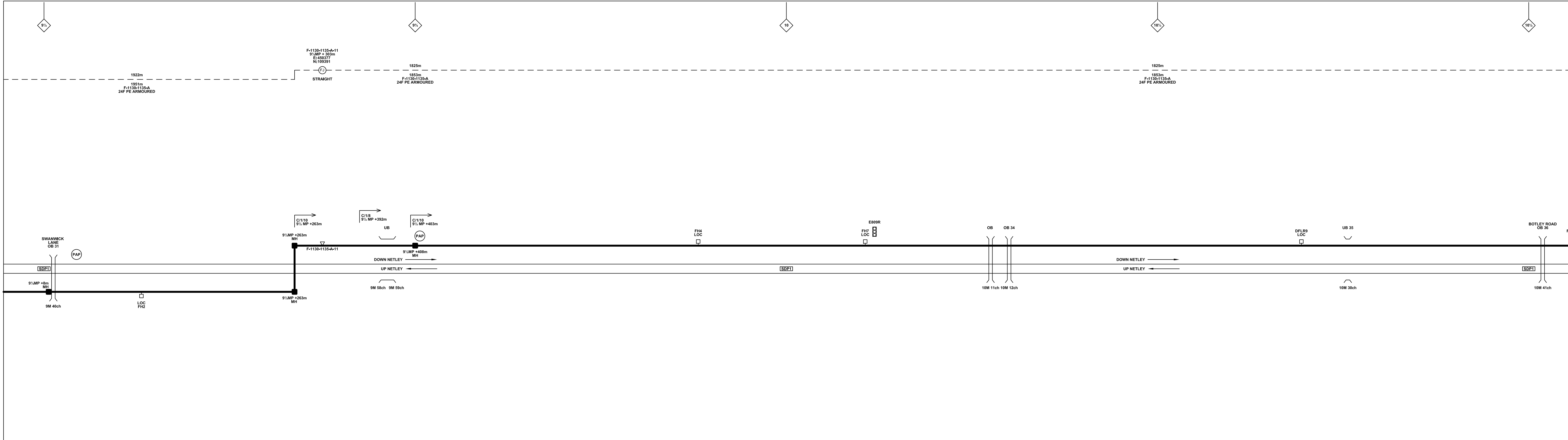
**Project**  
FTN/GSM-R Project  
Stage 2 As Built

**Drawing Title**  
Bursledon (1132) to  
Tichfield Park (1133)

**Alternative Reference**  
See Layout Tab A3 Sheets 5 and 6

**Drawing Number**  
NTPO\SLD\1132\1133\001

**Revision**  
3 of 6  
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 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	Vehicle Access Point	Mile Post	Gantry	HV Cable
<b>KEY</b>	Screening Conductor Joint	Cable - Type Identified by FTN Code Status	Mid Length Sheath Gap Fibre	FTN Access Node	Cabinet Routeworks	Manhole with GSM-R Colocated	Platform	Pedestrian Access Point	Telephone	Sewer	LV Cable
Proposed Fibre & Civils Elements are shown in RED	Screening Conductor Joint with/without Earth	Cable - Type Identified by FTN Code Status - as per Key Below	Sheath Gap Fibre	FTN Access Node with GSM-R Colocated	Fibre Joint Routeworks	Manhole with GSM-R Colocated	Earth Farm	Buffer Stop	Cable Pull	Telecoms	Water
Proposed Copper Elements are shown in BLUE	Sheath Gap Copper	Existing Fibre Cable	Existing Screen Cable					Copper Blue Fibre Red Screen Green		Mast	
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	09-01-2013	Amended by NWR to incorporate final Stage 2 detail	PT	PB	GH
AB2	23/08/11	FJ 10, 14 & 15 Amended, Electronic Signatures Added, AS BUILT	AB	DP	PP
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Rev	Date	Description of Revisions	Drawn	Chkd	Appr

**Contractor(s)**

**As Built**

ELR & Mileage  
SDP1

Designed	Andy Bone	Sign.	Date	23.08.2011
Drawn	Andy Bone	Sign.	Date	23.08.2011
Checked	Dave Peakman	Sign.	Date	23.08.2011
Approved	Prakash Patel (C.R.E.)	Sign.	Date	23.08.2011

**Project**

**FTN/GSM-R Project Stage 2 As Built**

**Drawing Title**

Bursledon (1132) to Tichfield Park (1133)

**Alternative Reference**

See Layout Tab A3 Sheets 7 and 8

**Drawing Number**

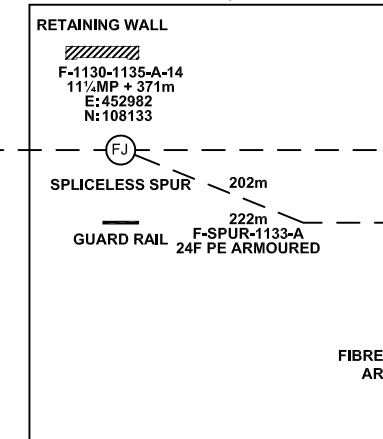
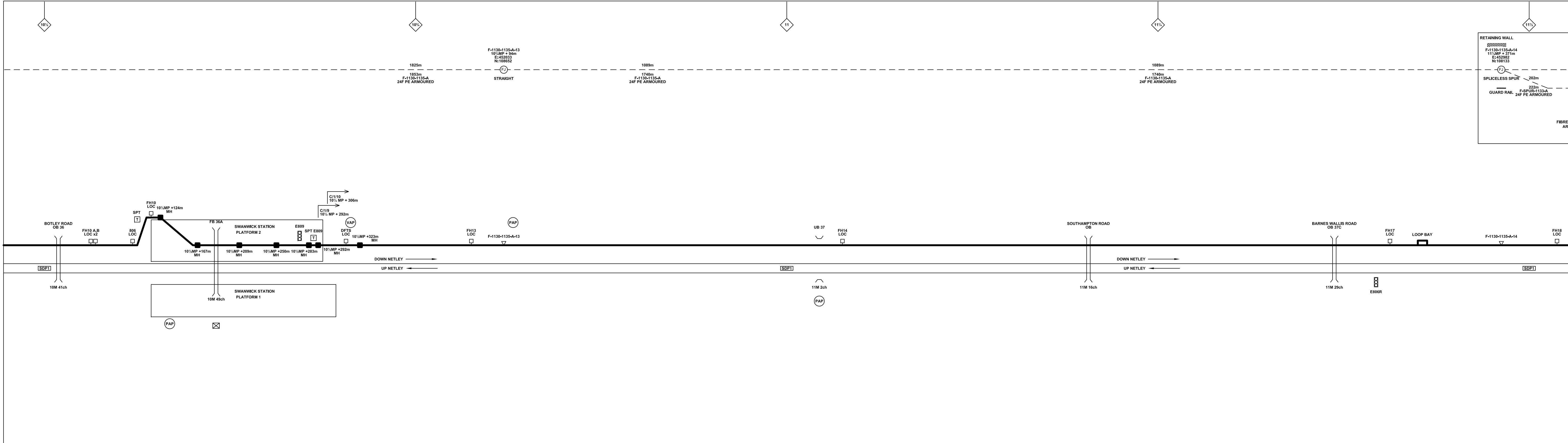
NTPO\SLD\1132\1133\001

**Sheet**

4 of 6

**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 Line		Copper Blue Fibre Red Screen Green		Mast																				
	Cabinet with Regenerator and Verts		Fibre Joint		Cable - Type Identified by FTN Code Status - as per Key Below		Electrical Control Room		Core Node with GSM-R Colocated		Copper Joint Routeworks		Manhole		Underbridge		Vehicle Access Point		Mile Post		Gantry		HV Cable		Copper Blue Fibre Red Screen Green		Earth Farm		Buffer Stop		Telephone		Sewer		Telecoms		Water		Tunnel		Platform		Water		Mast		
	<b>KEY</b> 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		Existing Fibre Cable		Existing Copper Cable		Existing Screen Cable		FTN Access Node		Cabinet Routeworks		Manhole		Manhole		Vehicle Access Point		Pedestrian Access Point		Platform		Gas Line		Copper Blue Fibre Red Screen Green		Mast		Manhole		Buffer Stop		Telephone		Sewer		Telecoms		Water		Tunnel		Platform		Water		Mast

**Notes**

B	09-01-2013	Amended by NWR to incorporate final Stage 2 detail	PT	PB	GH
AB2	23/08/11	FJ 10, 14 & 15 Amended, Electronic Signatures Added, AS BUILT	AB	DP	PP
AB1	07/05/10	AS-BUILT	AB	DP	PP
A	26/11/09	Final Issue	MT	AEL	SW
DA	26/09/08	1st Issue	MT	AEL	SW
Rev	Date	Description of Revisions	Drawn	Chkd	Appr

**Contractor(s)**

**As Built**

Scale(s): NTS

ELR & Mileage: SDP1

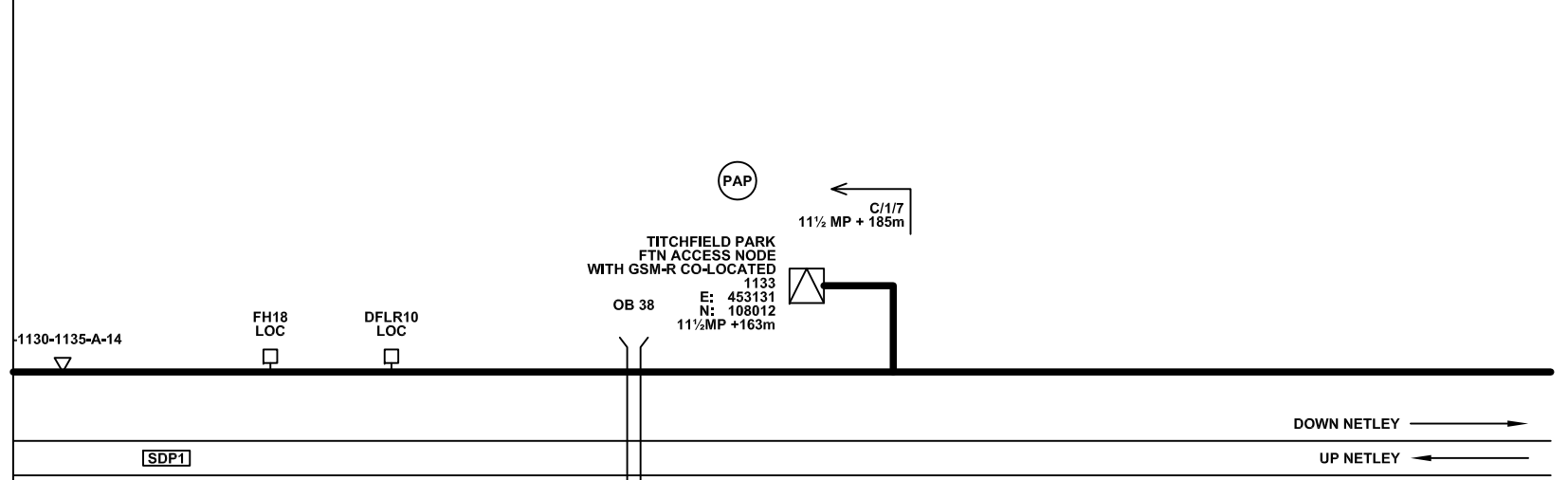
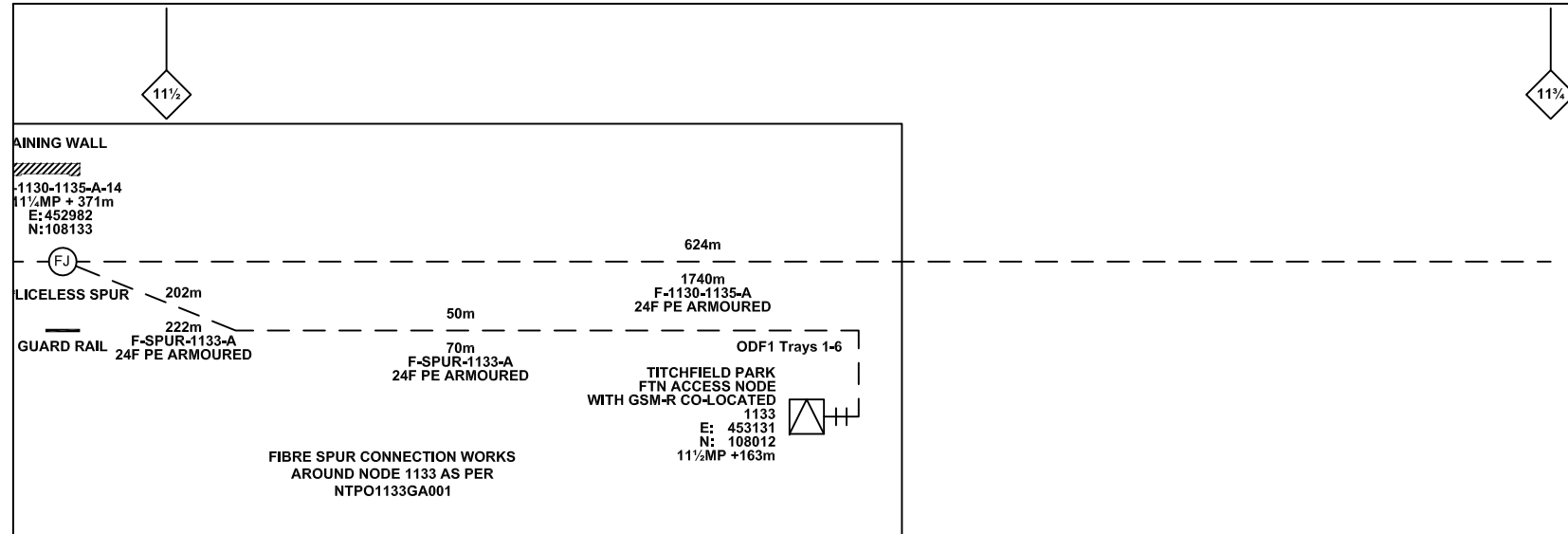
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Drawn	Andy Bone	Sign.	Date	23.08.2011
Checked	Dave Peakman	Sign.	Date	23.08.2011
Approved	Prakash Patel (C.R.E.)	Sign.	Date	23.08.2011
Project	FTN/GSM-R Project Stage 2 As Built			
Drawing Title	Bursledon (1132) to Tichfield Park (1133)			

Alternative Reference: See Layout Tab A3 Sheets 9 and 10

Drawing Number: NTPO\SLD\1132\1133\001

Revision: B

Sheet: 5 of 6



**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	Gas Line
Cabinet with Regenerator and Verts	Fibre Joint	Cable - Type Identified by FTN Code Status - as per Key Below	Electrical Control Room	Core Node with GSM-R Colocated	Copper Joint Routeworks	Mid Length Sheath Gap Fibre	Underbridge	Vehicle Access Point	Mile Post	HV Cable
<b>KEY</b> 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	Screening Conductor Joint with/without Earth	All Existing Elements are shown in BLACK Existing Fibre Cable Existing Copper Cable Existing Screen Cable	Manhole	FTN Access Node	Cabinet Routeworks	Sheath Gap Copper	Tunnel	Pedestrian Access Point	Platform	LV Cable
			Manhole	FTN Access Node with GSM-R Colocated	Fibre Joint Routeworks		Earth Farm	Buffer Stop	Telephone	Sewer
			Manhole				Cable Pull	Mast		Water

**Notes**

Rev	Date	Description of Revisions	Drawn	Chkd	Appr
B	09-01-2013	Amended by NWR to incorporate final Stage 2 detail	PT	PB	GH
AB2	23/08/11	FJ 10, 14 & 15 Amended, Electronic Signatures Added, AS BUILT	AB	DP	PP
AB1	07/05/10	AS-BUILT	AB	DP	PP
A	26/11/09	Final Issue	MT	AEL	SW
DA	26/09/08	1st Issue	MT	AEL	SW
Rev	Date	Description of Revisions	Drawn	Chkd	Appr

**Contractor(s)**

**As Built**

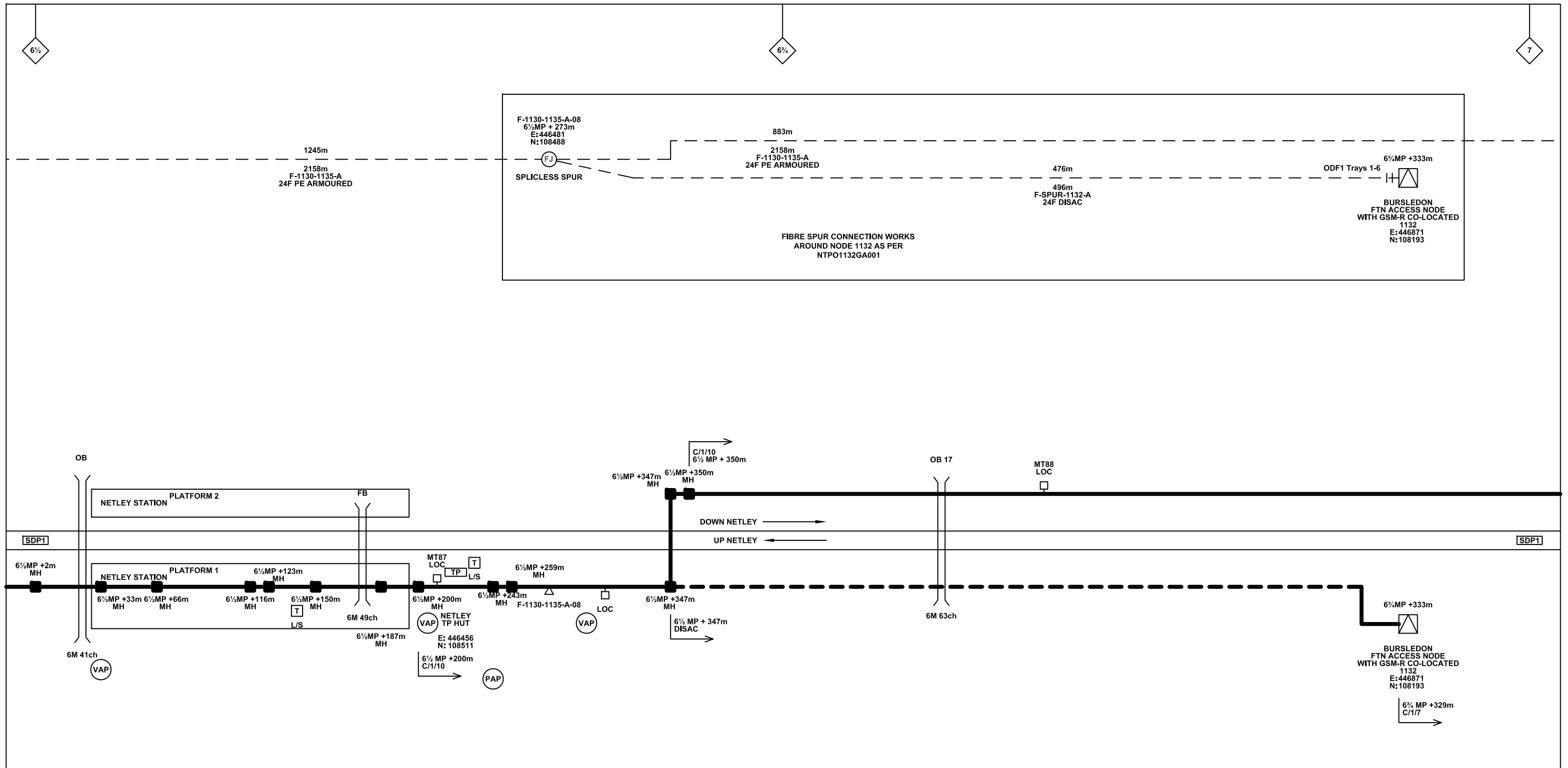
ELR & Mileage  
SDP1

Designed	Andy Bone	Sign.		Date	23.08.2011
Drawn	Andy Bone	Sign.		Date	23.08.2011
Checked	Dave Peakman	Sign.		Date	23.08.2011
Approved	Prakash Patel (C.R.E.)	Sign.		Date	23.08.2011
Project	FTN/GSM-R Project Stage 2 As Built				
Drawing Title	Bursledon (1132) to Titchfield Park (1133)				

Alternative Reference: See Layout Tab A3 Sheet 11

Drawing Number: NTPO\SLD\1132\1133\001

Sheet: 6 of 6  
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
	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		HV Cable
	KEY		Screening Conductor Joint with/without Earth		Manhole		Mid Length Sheath Gap Fibre		FTN Access Node		Cabinet Routeworks		Tunnel		Pedestrian Access Point		Platform		Sewer		LV Cable
Proposed Fibre & Civils Elements are shown in RED					Existing Fibre Cable		Sheath Gap Copper		FTN Access Node with GSM-R Colocated		Fibre Joint Routeworks		Earth Farm		Buffer Stop		Telephone		Water		Copper Blue
Proposed Copper Elements are shown in BLUE					Existing Copper Cable														Fibre Red		Screen Green
Proposed Screening Elements are shown in MAGENTA					Existing Screen Cable														Mast		
All Recoveries are shown in GREEN																					

Notes

B	09-01-2013	Amended by NWR to incorporate final Stage 2 detail	PT	PB	GH
AB2	23/08/11	FJ 10, 14 & 15 Amended, Electronic Signatures Added, AS BUILT	AB	DP	PP
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Rev	Date	Description of Revisions	Drawn	Chkd	Appr

Contractor(s)

Status: **As Built**

Scale(s): NTS

ELR & Mileage: SDP1

Designed	Andy Bone	Sign.	Date	23.08.2011
Drawn	Andy Bone	Sign.	Date	23.08.2011
Checked	Dave Peakman	Sign.	Date	23.08.2011
Approved	Prakash Patel (C.R.E.)	Sign.	Date	23.08.2011
Project	FTN/GSM-R Project Stage 2 As Built			
Drawing Title	Bursledon (1132) to Tichfield Park (1133)			

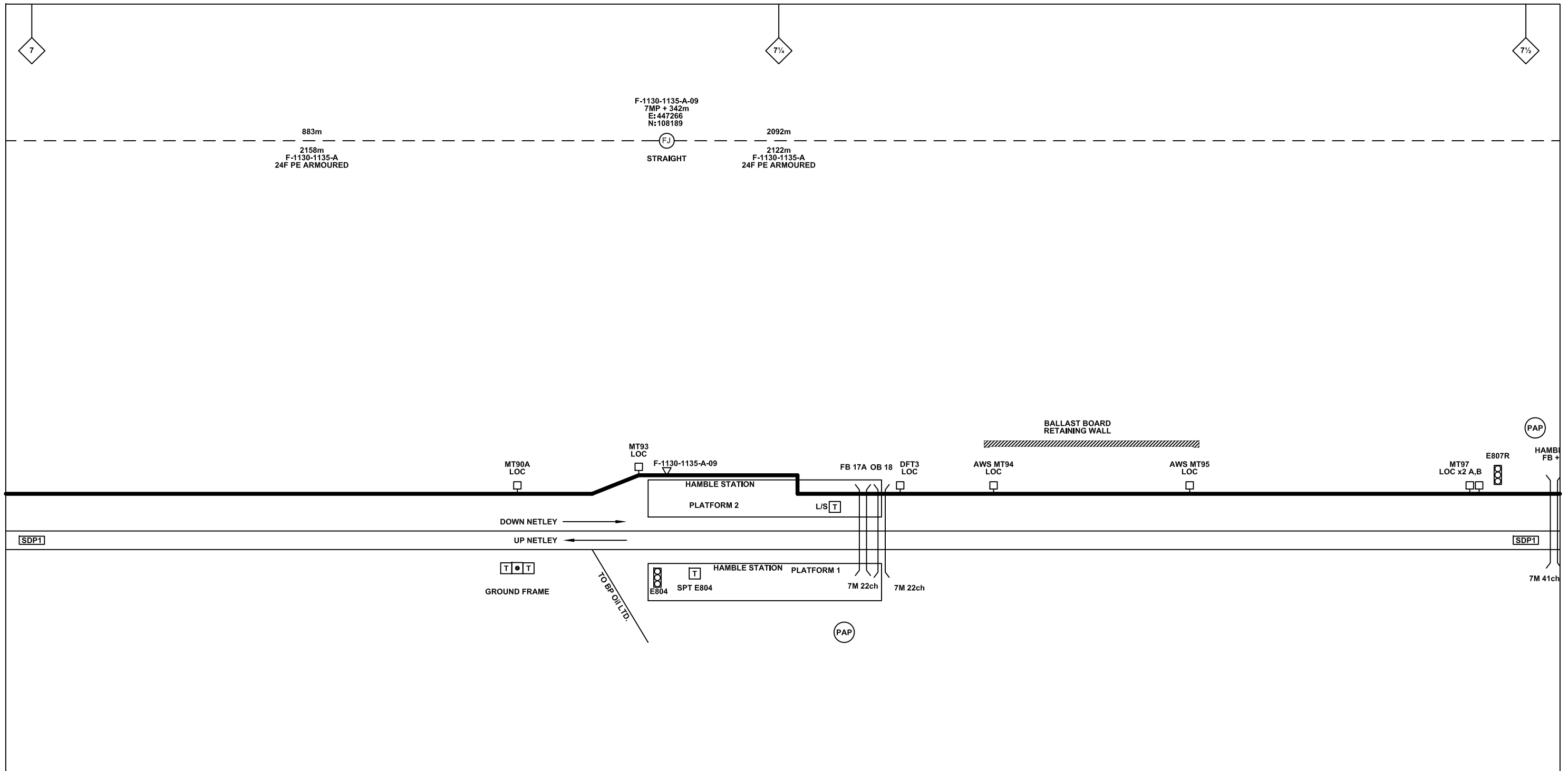
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Tournament House  
Paddington  
London  
W2 1HA

Alternative Reference: See Layout Tab 841 x 297 Sheet 1

Drawing Number: NTPO\SLD\1132\1133\001

Sheet: 1 of 11

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
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	HV Cable
<b>KEY</b> 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	Screening Conductor Joint with/without Earth	Manhole	Mid Length Sheath Gap Fibre	FTN Access Node	Cabinet Routeworks	Tunnel	Pedestrian Access Point	Platform	Sewer	LV Cable
	Existing Fibre Cable	FTN Access Node with GSM-R Colocated	Sheath Gap Copper	Fibre Joint Routeworks	Earth Farm	Buffer Stop	Telephone	Cable Pull	Telecoms	Water

Notes

B	09-01-2013	Amended by NWR to incorporate final Stage 2 detail	PT	PB	GH
AB2	23/08/11	FJ 10, 14 & 15 Amended, Electronic Signatures Added, AS BUILT	AB	DP	PP
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Rev	Date	Description of Revisions	Drawn	Chkd	Appr

Contractor(s)

Status: **As Built**

Scale(s): NTS

ELR & Mileage: SDP1

Designed	Andy Bone	Sign.	Date	23.08.2011
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Project	FTN/GSM-R Project Stage 2 As Built			
Drawing Title	Bursledon (1132) to Tichfield Park (1133)			

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

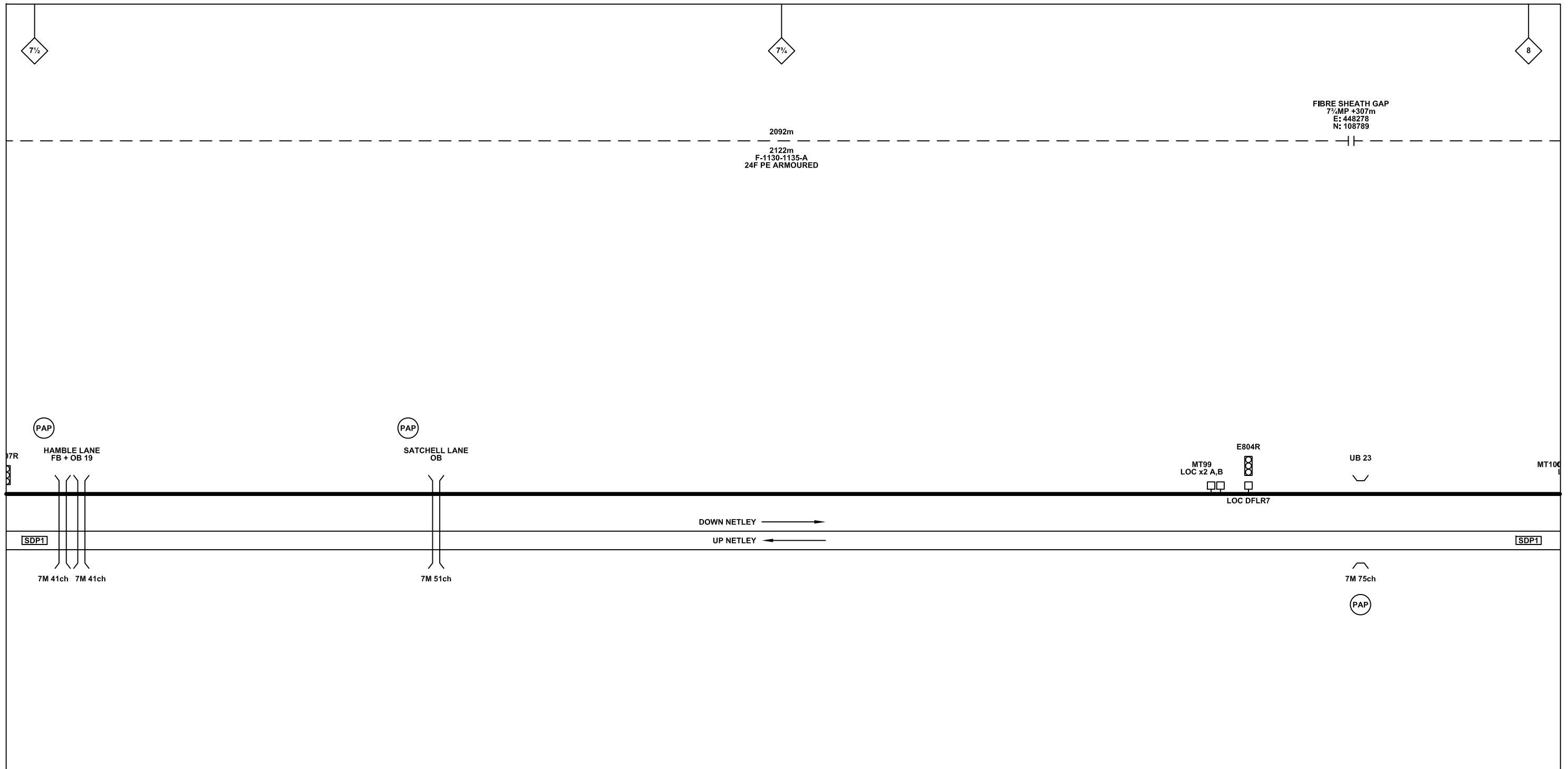
Alternative Reference: See Layout Tab 841 x 297 Sheet 1

Drawing Number: NTPO\SLD\1132\1133\001

Sheet: 2 of 11

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
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	HV Cable	LV Cable
<b>KEY</b> 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	Screening Conductor Joint with/without Earth	Manhole	Mid Length Sheath Gap Fibre	FTN Access Node	Cabinet Routeworks	Tunnel	Pedestrian Access Point	Platform	Sewer	Telecoms
	Existing Fibre Cable	Sheath Gap Copper	FTN Access Node with GSM-R Colocated	Fibre Joint Routeworks	Earth Farm	Buffer Stop	Telephone	Cable Pull	Water	Mast

Notes

Rev	Date	Description of Revisions	Drawn	Chkd	Appr
B	09-01-2013	Amended by NWR to incorporate final Stage 2 detail	PT	PB	GH
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Contractor(s)

Status: **As Built**

Scale(s): NTS

ELR & Mileage: SDP1

Designed	Andy Bone	Sign.	Date	23.08.2011
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Project	FTN/GSM-R Project Stage 2 As Built			
Drawing Title	Bursledon (1132) to Tichfield Park (1133)			

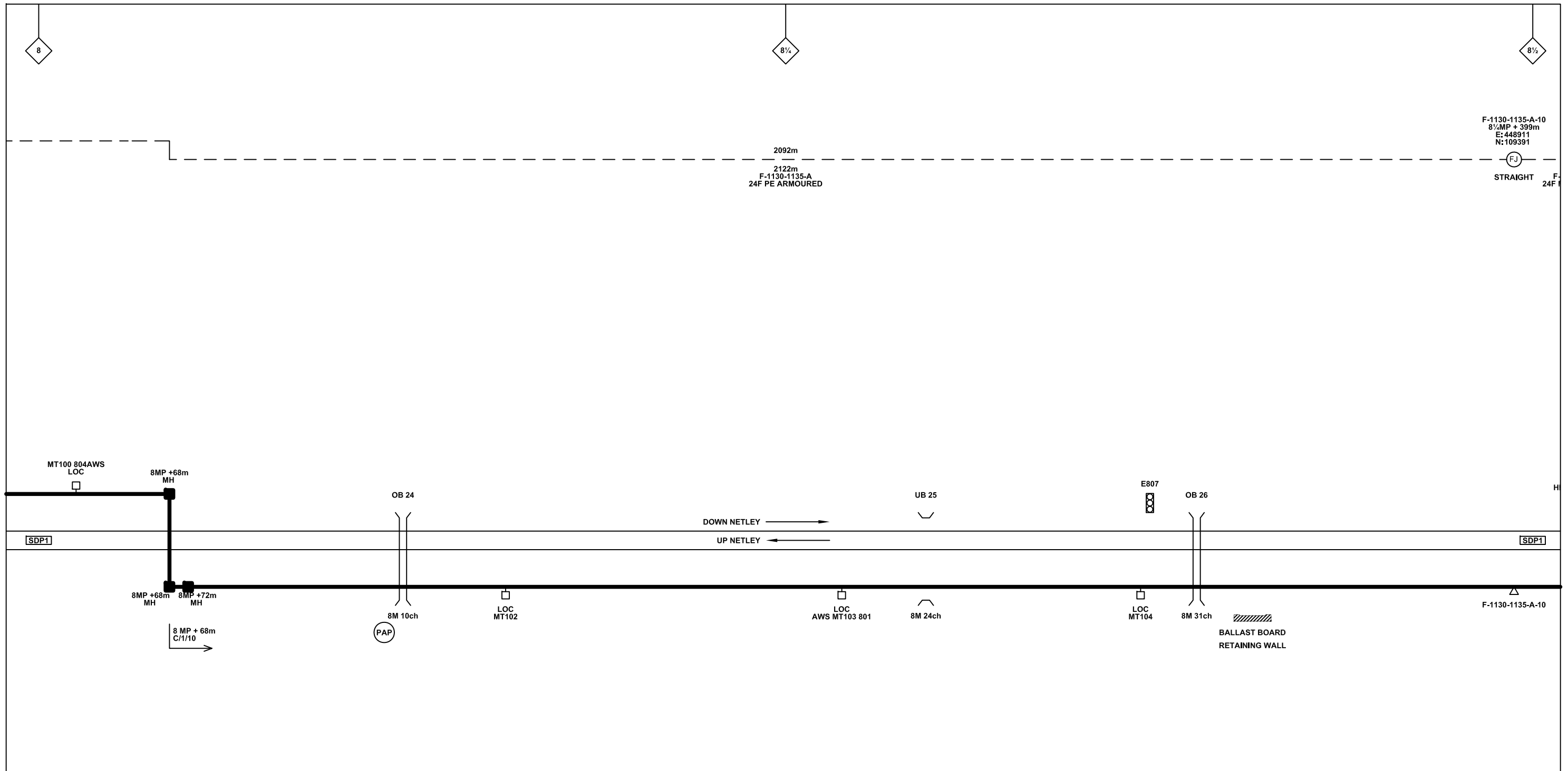
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Tournament House  
Paddington  
London  
W2 1HA

Alternative Reference: See Layout Tab 841 x 297 Sheet 2

Drawing Number: NTPO\SLD\1132\1133\001

Sheet: 3 of 11

Revision: B



F-1130-1135-A-10  
8 1/4 MP + 399m  
E: 448911  
N: 109391

**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
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	HV Cable	LV Cable
<b>KEY</b> 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	Screening Conductor Joint with/without Earth	Status - as per Key Below	Manhole	FTN Access Node	Cabinet Routeworks	Manhole details: Cross-To be used, Filled-In use, Clear-Empty	Pedestrian Access Point	Platform	Sewer	Telecoms
	Existing Fibre Cable	Existing Copper Cable	Mid Length Sheath Gap Fibre	FTN Access Node with GSM-R Colocated	Fibre Joint Routeworks	Tunnel	Earth Farm	Buffer Stop	Water	Mast
	Existing Screen Cable		Sheath Gap Copper							

Rev	Date	Description of Revisions	Drawn	Chkd	Appr
B	09-01-2013	Amended by NWR to incorporate final Stage 2 detail	PT	PB	GH
AB2	23/08/11	FJ 10, 14 & 15 Amended, Electronic Signatures Added, AS BUILT	AB	DP	PP
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A	26/11/09	Final Issue	MT	AEL	SW
DA	26/09/08	1st Issue	MT	AEL	SW

Contractor(s)

Status: **As Built**

Scale(s): NTS

ELR & Mileage: SDP1

Designed	Andy Bone	Sign.	Date	23.08.2011
Drawn	Andy Bone	Sign.	Date	23.08.2011
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Project	FTN/GSM-R Project Stage 2 As Built			
Drawing Title	Bursledon (1132) to Tichfield Park (1133)			

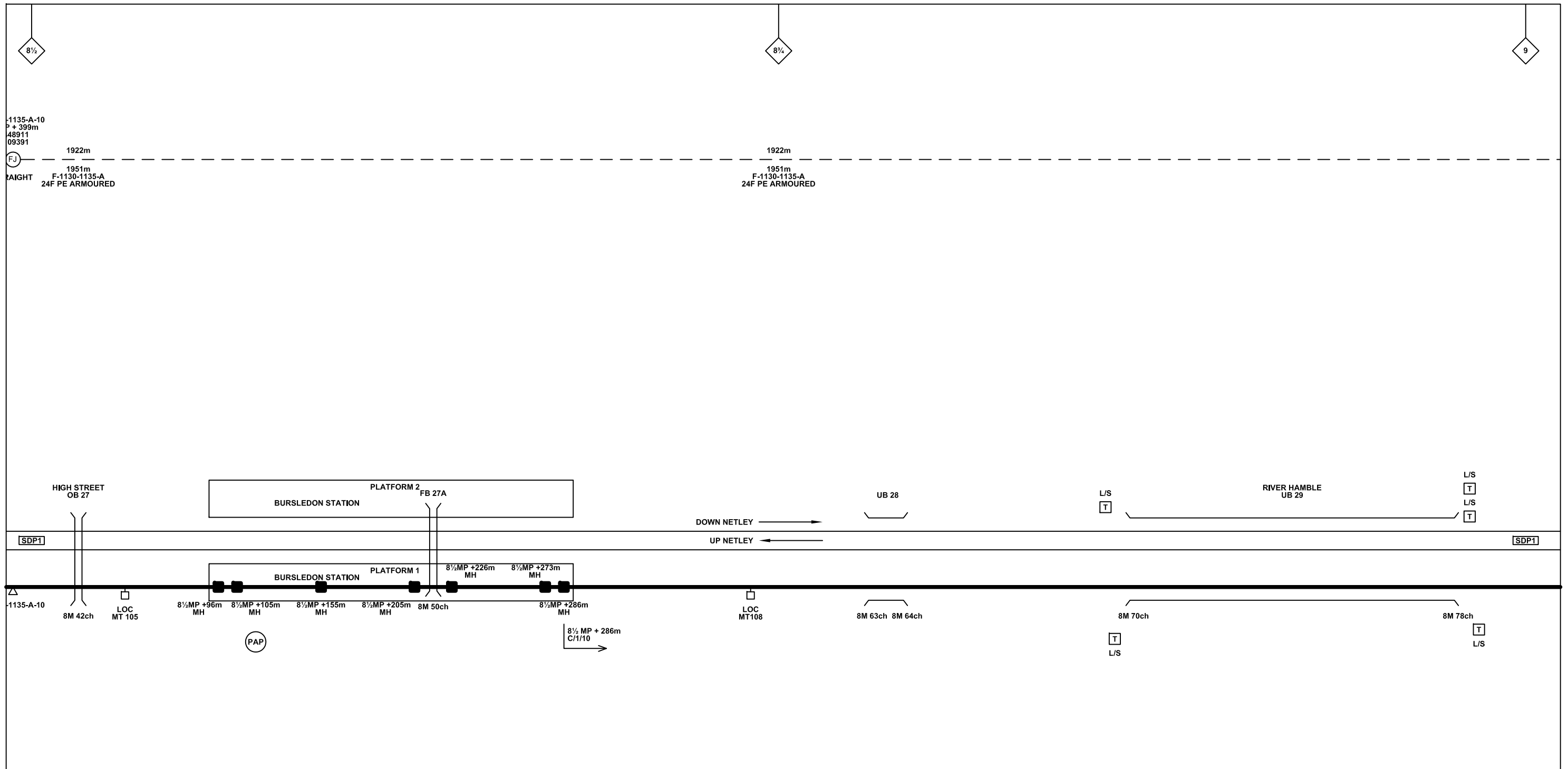
FTN/GSM-R Project  
Tournament House  
Paddington  
London  
W2 1HA

Alternative Reference: See Layout Tab 841 x 297 Sheet 2

Drawing Number: NTPO\SLD\1132\1133\001

Sheet: 4 of 11

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	Underbridge	Vehicle Access Point	Mile Post	HV — HV — HV Cable	LV — LV — LV Cable
<b>KEY</b> 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	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	Pedestrian Access Point	Platform	SEW — SEW — Sewer	TEL — TEL — Telecoms
		Sheath Gap Copper	FTN Access Node with GSM-R Colocated	Fibre Joint Routeworks	Tunnel	Earth Farm	Buffer Stop	Telephone	W — W — Water	Cable Pull

Notes

Rev	Date	Description of Revisions	Drawn	Chkd	Appr
B	09-01-2013	Amended by NWR to incorporate final Stage 2 detail	PT	PB	GH
AB2	23/08/11	FJ 10, 14 & 15 Amended, Electronic Signatures Added, AS BUILT	AB	DP	PP
AB1	07/05/10	AS-BUILT	AB	DP	PP
A	26/11/09	Final Issue	MT	AEL	SW
DA	26/09/08	1st Issue	MT	AEL	SW

Contractor(s)

Status: **As Built**

Scale(s): NTS

ELR & Mileage: SDP1

Designed	Andy Bone	Sign.	Date	23.08.2011
Drawn	Andy Bone	Sign.	Date	23.08.2011
Checked	Dave Peakman	Sign.	Date	23.08.2011
Approved	Prakash Patel (C.R.E.)	Sign.	Date	23.08.2011
Project	FTN/GSM-R Project Stage 2 As Built			
Drawing Title	Bursledon (1132) to Tichfield Park (1133)			

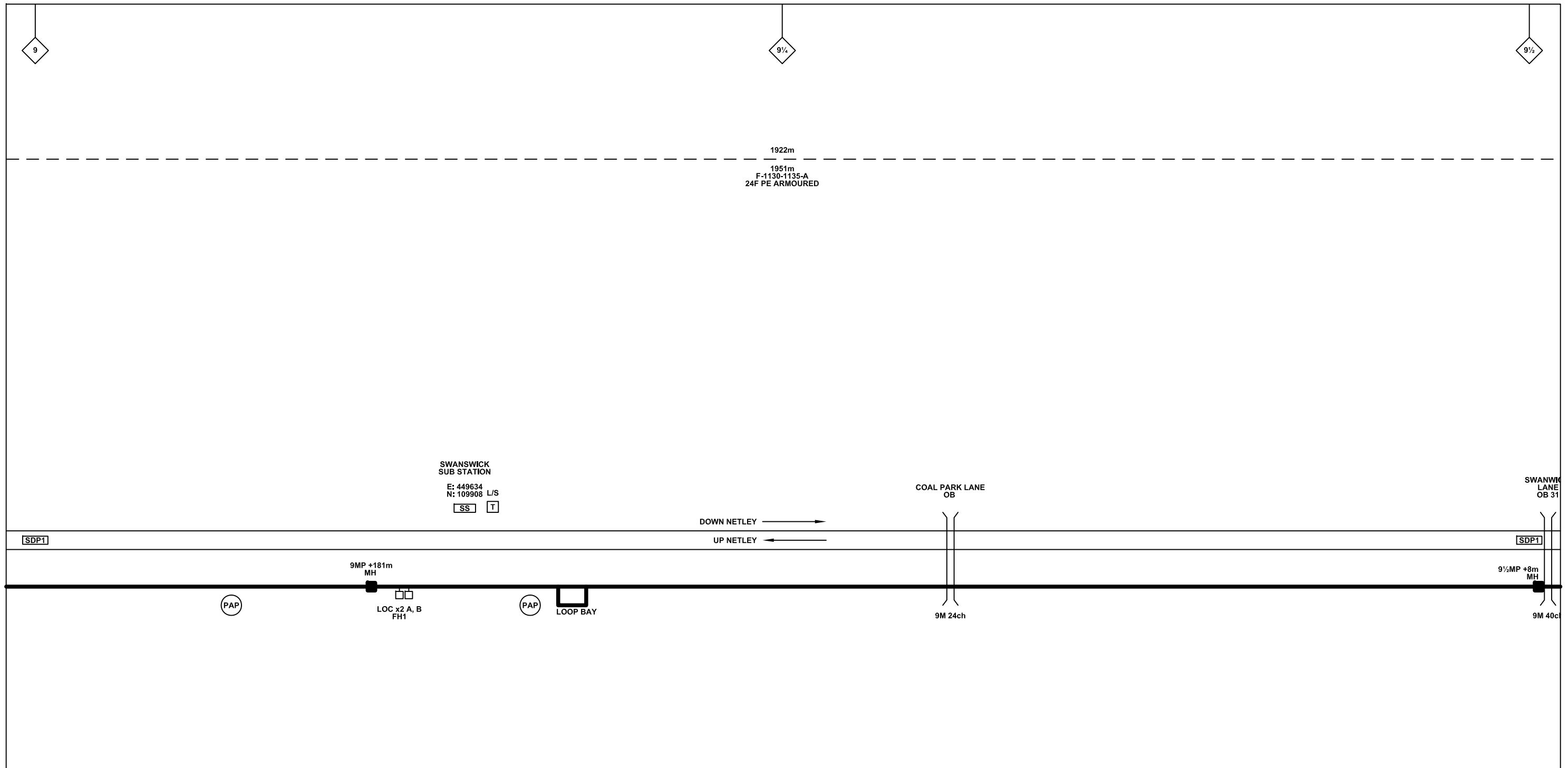
FTN/GSM-R Project  
Tournament House  
Paddington  
London  
W2 1HA

Alternative Reference: See Layout Tab 841 x 297 Sheet 3

Drawing Number: NTPO\SLD\1132\1133\001

Sheet: 5 of 11

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
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 Cable	LV Cable
<b>KEY</b> 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	Screening Conductor Joint with/without Earth	Status - as per Key Below	Mid Length Sheath Gap Fibre	FTN Access Node	Cabinet Routeworks	Manhole details: Cross-To be used, Filled-In use, Clear-Empty	Pedestrian Access Point	Platform	Sewer	Telecoms
		Existing Fibre Cable	Sheath Gap Copper	FTN Access Node with GSM-R Colocated	Fibre Joint Routeworks	Tunnel	Earth Farm	Buffer Stop	Water	Mast

Notes

B	09-01-2013	Amended by NWR to incorporate final Stage 2 detail	PT	PB	GH
AB2	23/08/11	FJ 10, 14 & 15 Amended, Electronic Signatures Added, AS BUILT	AB	DP	PP
AB1	07/05/10	AS-BUILT	AB	DP	PP
A	26/11/09	Final Issue	MT	AEL	SW
DA	26/09/08	1st Issue	MT	AEL	SW
Rev	Date	Description of Revisions	Drawn	Chkd	Appr

Contractor(s)

Status: **As Built**

Scale(s): NTS

ELR & Mileage: SDP1

Designed	Andy Bone	Sign.	Date	23.08.2011
Drawn	Andy Bone	Sign.	Date	23.08.2011
Checked	Dave Peakman	Sign.	Date	23.08.2011
Approved	Prakash Patel (C.R.E.)	Sign.	Date	23.08.2011
Project	FTN/GSM-R Project Stage 2 As Built			
Drawing Title	Bursledon (1132) to Tichfield Park (1133)			

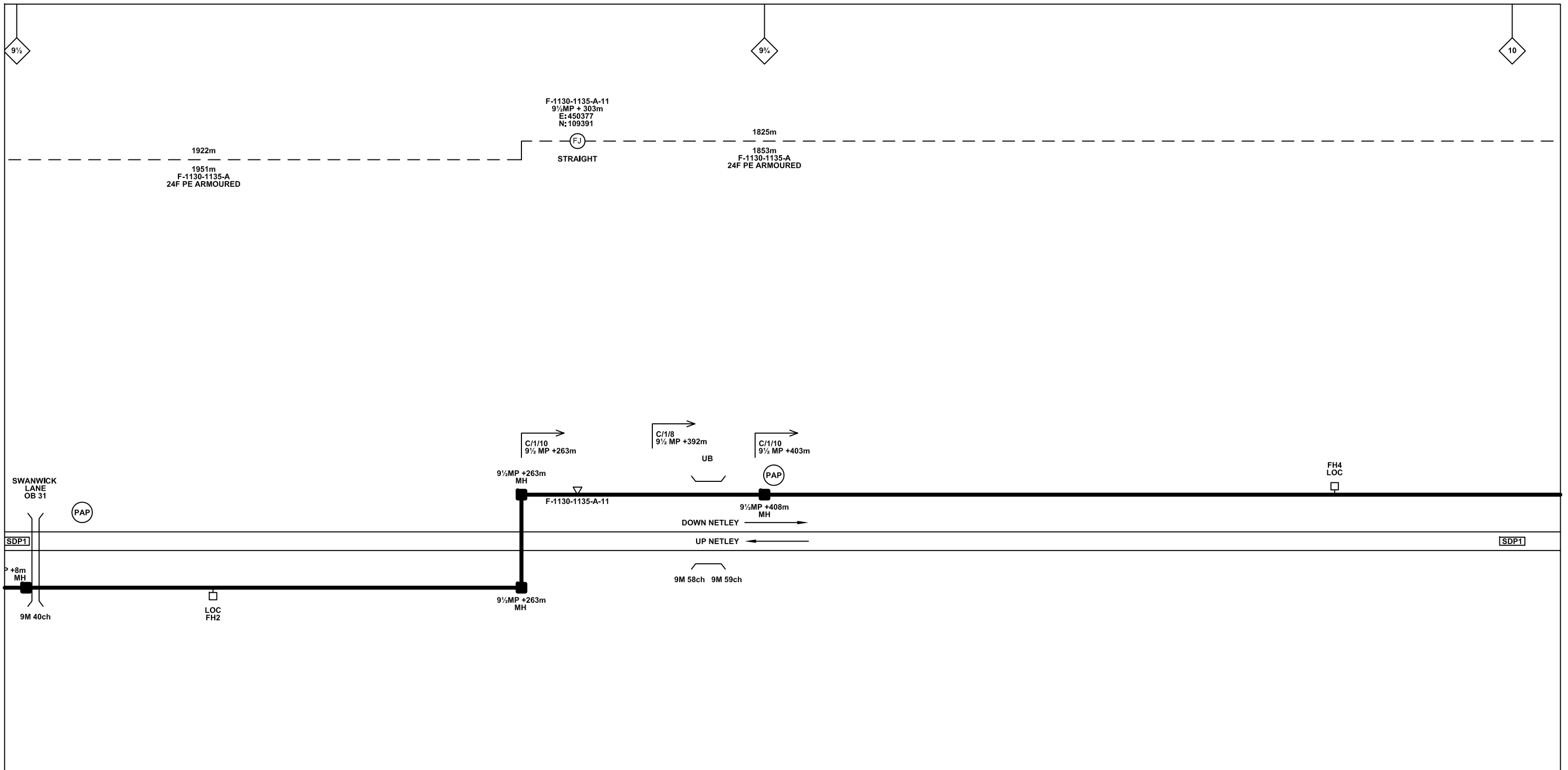
FTN/GSM-R Project  
Tournament House  
Paddington  
London  
W2 1HA

Alternative Reference: See Layout Tab 841 x 297 Sheet 3

Drawing Number: NTPO\SLD\1132\1133\001

Sheet: 6 of 11

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	
	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		HV Cable	
			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		Pedestrian Access Point		Platform		Sewer		LV Cable	
			Existing Fibre Cable		Sheath Gap Copper		FTN Access Node with GSM-R Colocated		Fibre Joint Routeworks		Tunnel		Earth Farm		Buffer Stop		Telephone		Water		Copper Blue	
			Existing Copper Cable																	Screen Green		Mast
			Existing Screen Cable																			

Notes

Rev	Date	Description of Revisions	Drawn	Chkd	Appr
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A	26/11/09	Final Issue	MT	AEL	SW
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Contractor(s)

Status: **As Built**

Scale(s): NTS

ELR & Mileage: SDP1

Designed	Andy Bone	Sign.	Date	23.08.2011
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Project	FTN/GSM-R Project Stage 2 As Built			
Drawing Title	Bursledon (1132) to Tichfield Park (1133)			

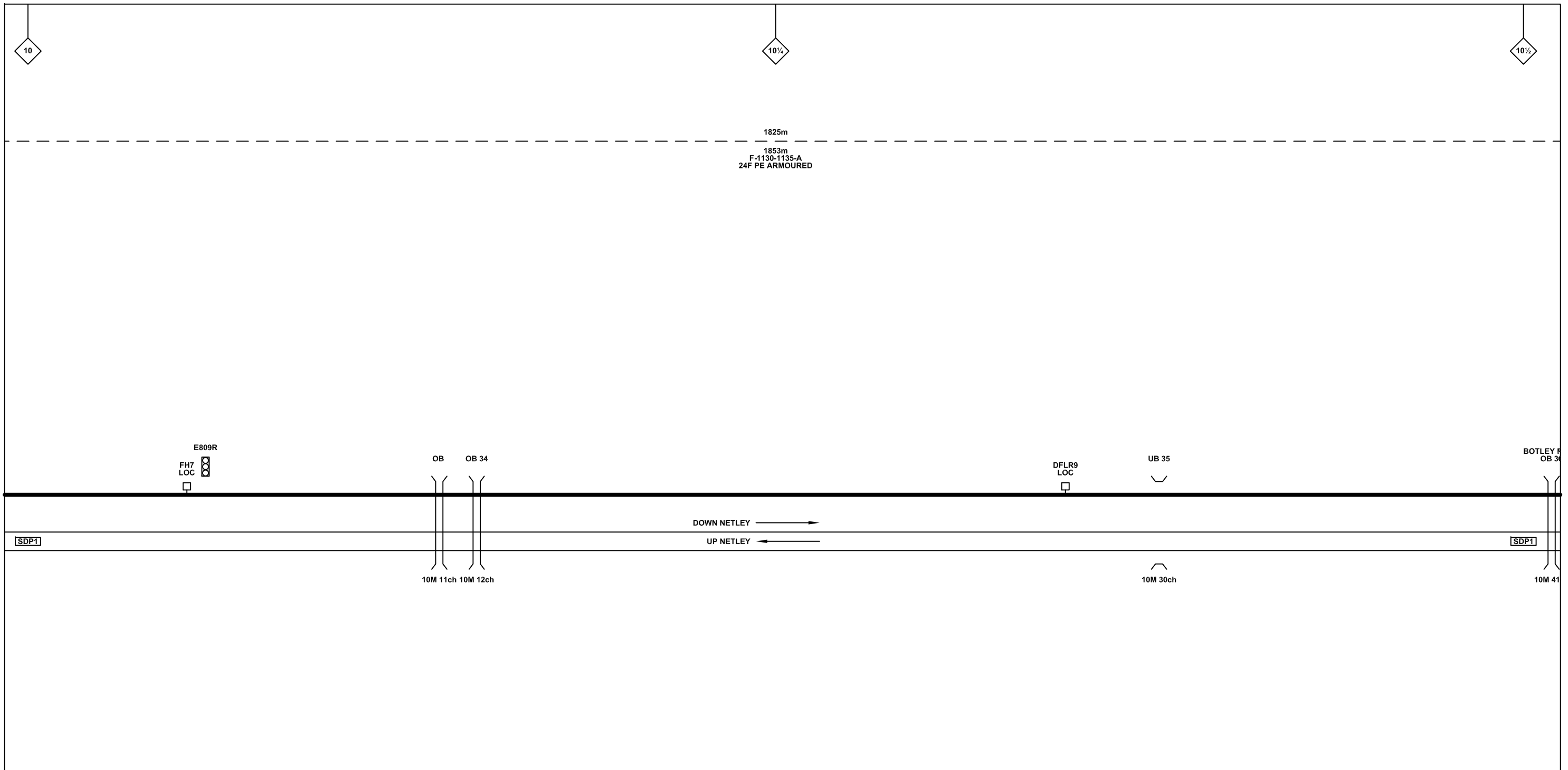
FTN/GSM-R Project  
Tournament House  
Paddington  
London  
W2 1HA

Alternative Reference: See Layout Tab 841 x 297 Sheet 4

Drawing Number: NTPO\SLD\1132\1133\001

Sheet: 7 of 11

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		Cable - Type Identified by FTN Code Status - as per Key Below		Electrical Control Room		Core Node with GSM-R Colocated		Copper Joint Routeworks		Manhole		Underbridge		Vehicle Access Point		Mile Post		Gantry		HV	HV Cable
			Screening Conductor Joint with/without Earth		1988m		Mid Length Sheath Gap Fibre		FTN Access Node		Cabinet Routeworks		Tunnel		Platform		Pedestrian Access Point		Telephone		v	Water		Copper Blue
			2034m F-DIDC-RGAC-A		Existing Fibre Cable		Sheath Gap Copper		FTN Access Node with GSM-R Colocated		Fibre Joint Routeworks		Earth Farm		Buffer Stop		Mast		Cable Pull		Screen Green		Mast	

Notes

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Contractor(s)

Status: **As Built**

Scale(s): NTS

ELR & Mileage: SDP1

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Project	FTN/GSM-R Project Stage 2 As Built			
Drawing Title	Bursledon (1132) to Tichfield Park (1133)			

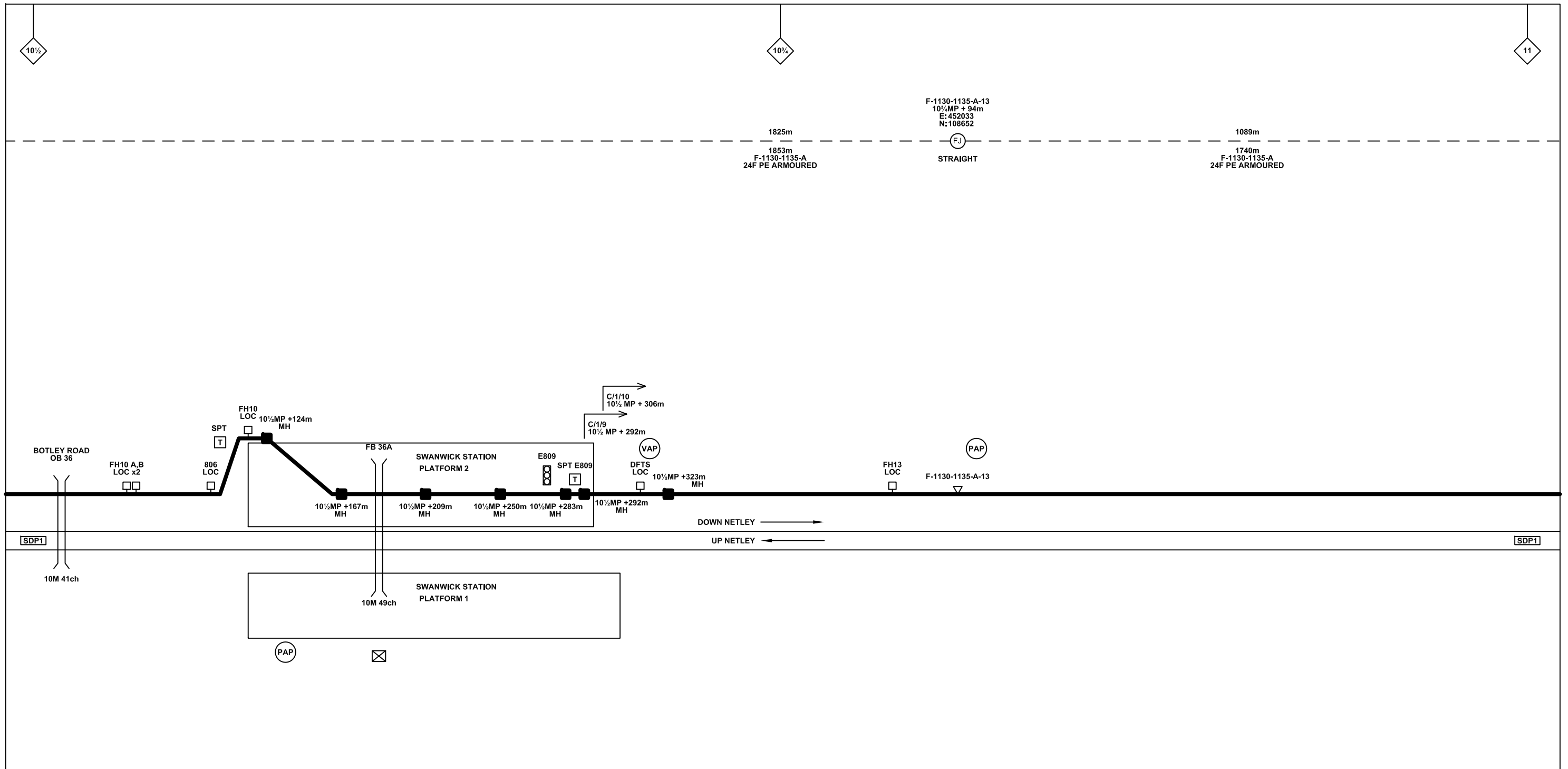
FTN/GSM-R Project  
Tournament House  
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Alternative Reference: See Layout Tab 841 x 297 Sheet 4

Drawing Number: NTPO\SLD\1132\1133\001

Sheet: 8 of 11

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 — 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	Vehicle Access Point	Mile Post	HV — HV — HV — HV Cable	LV — LV — LV — LV Cable
<b>KEY</b> 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	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	Pedestrian Access Point	Platform	SEW — SEW — SEW — Sewer	v — v — v — Water
		Sheath Gap Copper	FTN Access Node with GSM-R Colocated	Fibre Joint Routeworks	Tunnel	Earth Farm	Buffer Stop	Telephone	Gantry	Copper Blue Fibre Red Screen Green

Notes

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Rev	Date	Description of Revisions	Drawn	Chkd	Appr

Contractor(s)

Status: **As Built**

Scale(s): NTS

ELR & Mileage: SDP1

Designed	Andy Bone	Sign.	Date	23.08.2011
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Project	FTN/GSM-R Project Stage 2 As Built			
Drawing Title	Bursledon (1132) to Tichfield Park (1133)			

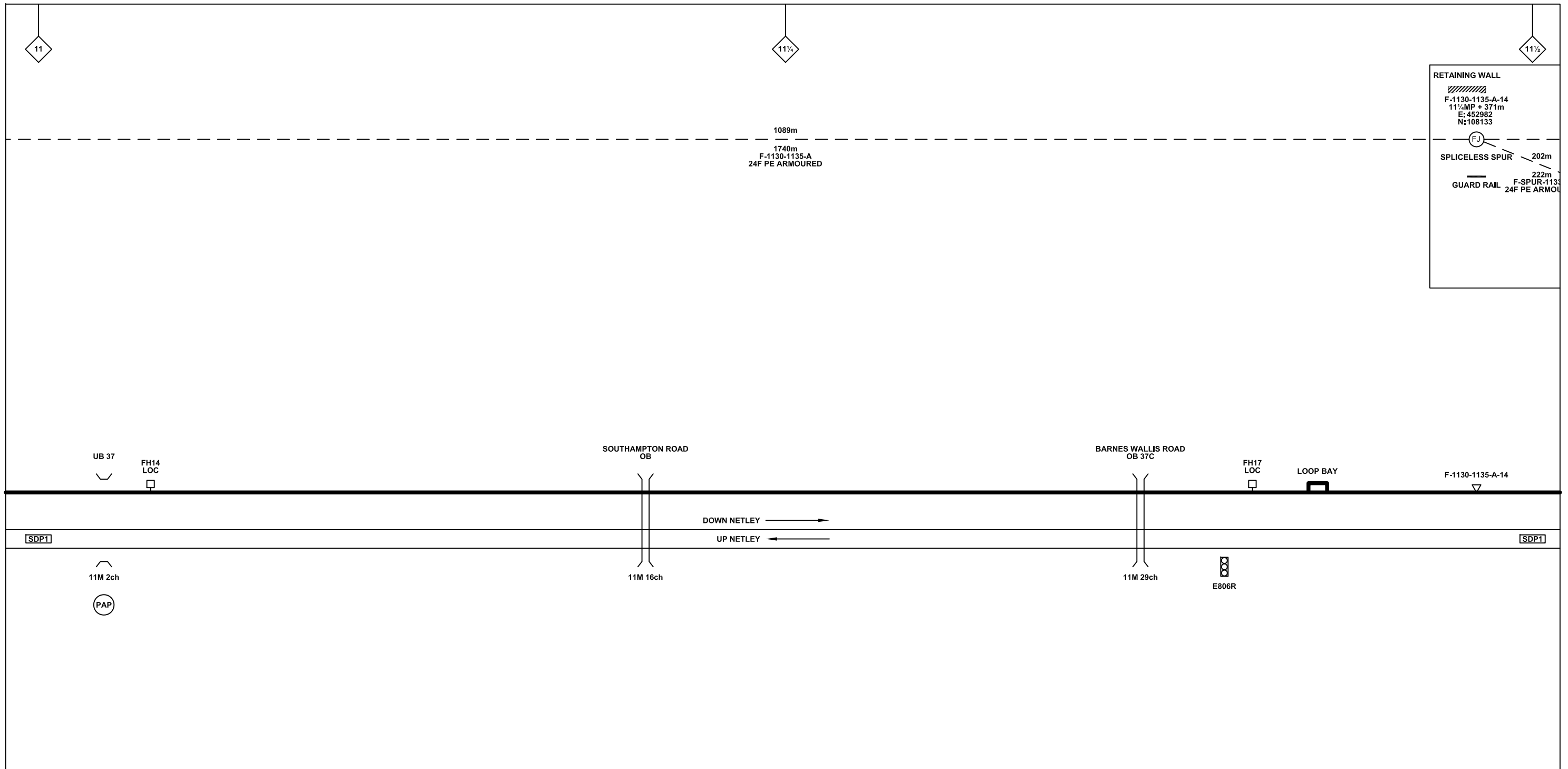
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Tournament House  
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Alternative Reference: See Layout Tab 841 x 297 Sheet 5

Drawing Number: NTPO\SLD\1132\1133\001

Sheet: 9 of 11

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	Underbridge	VAP Vehicle Access Point	Mile Post	Gantry	HV — HV — HV Cable
<b>KEY</b> 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	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 — SEW — Sewer	W — W — Water
All Existing Elements are shown in BLACK	Existing Fibre Cable	Sheath Gap Copper	FTN Access Node with GSM-R Colocated	Fibre Joint Routeworks	Tunnel	Earth Farm	Buffer Stop	Telephone	Cable Pull	Mast

Notes

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Contractor(s)

Status: **As Built**

Scale(s): NTS

ELR & Mileage: SDP1

Designed	Andy Bone	Sign.	Date	23.08.2011
Drawn	Andy Bone	Sign.	Date	23.08.2011
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Drawing Title	Bursledon (1132) to Tichfield Park (1133)			

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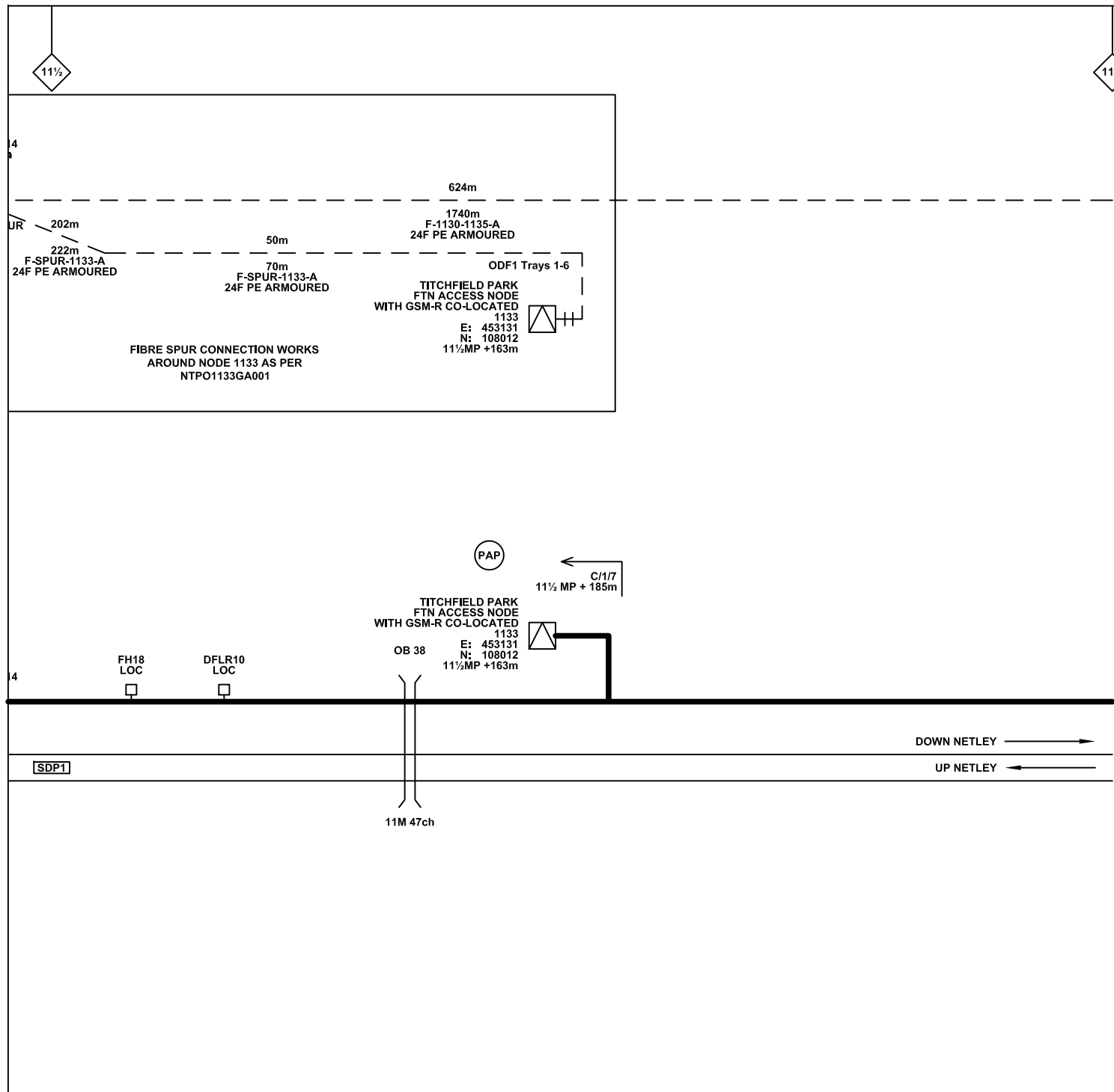
Alternative Reference: See Layout Tab 841 x 297 Sheet 5

Drawing Number: NTPO\SLD\1132\1133\001

Sheet: 10 of 11

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	Underbridge	VAP Vehicle Access Point	Mile Post	HV — HV — HV Cable	LV — LV — LV Cable
<b>KEY</b> 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	Screening Conductor Joint with/without Earth	Status - as per Key Below	Manhole	FTN Access Node	Cabinet Routeworks	Manhole details: Cross-To be used, Filled-In use, Clear-Empty	PAP Pedestrian Access Point	Platform	SEW — SEW — Sewer	W — W — Water
		Existing Fibre Cable	Mid Length Sheath Gap Fibre	FTN Access Node with GSM-R Colocated	Fibre Joint Routeworks	Tunnel	Earth Farm	Buffer Stop	Telephone	Copper Blue Fibre Red Screen Green
		Existing Copper Cable	Sheath Gap Copper							Mast

Notes

Rev	Date	Description of Revisions	Drawn	Chkd	Appr
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A	26/11/09	Final Issue	MT	AEL	SW
DA	26/09/08	1st Issue	MT	AEL	SW

Contractor(s)

**bam nuttall**

Status: **As Built**

Scale(s): NTS

ELR & Mileage: SDP1

Designed	Andy Bone	Sign.	Date	23.08.2011
Drawn	Andy Bone	Sign.	Date	23.08.2011
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Drawing Number: NTPO\SLD\1132\1133\001

Sheet: 11 of 11

Revision: B