M3

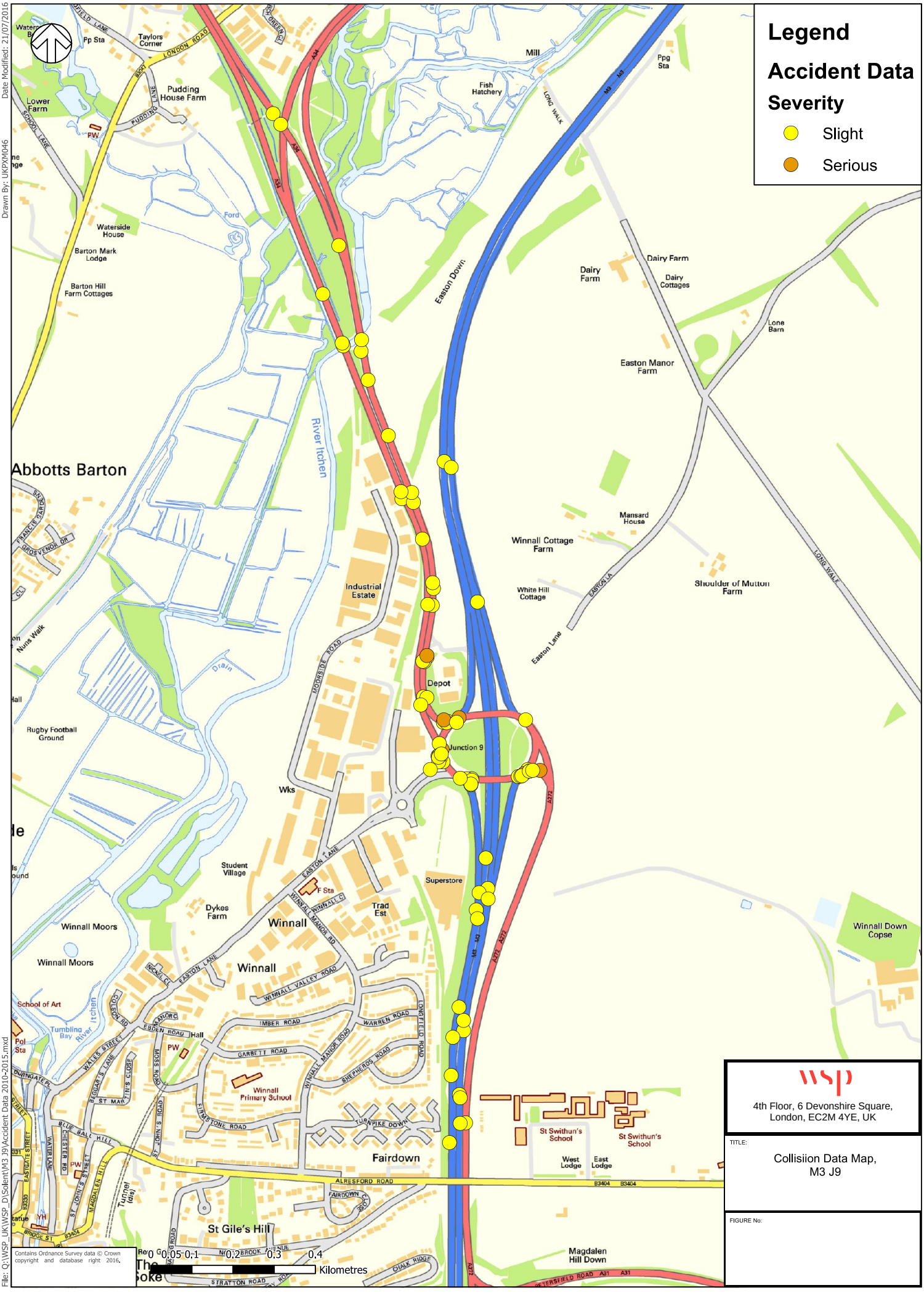
Junction 9 Improvement Scheme

PCF Stage 2 – Scheme Assessment Report

Registered office Bridge House, 1 Walnut Tree Close, Guildford, GU1 4LZ
Highways England Company Limited registered in England and Wales number 09346363

Appendix A

ACCIDENT PLOT



Date Modified: 21/07/2016

Drawn By: UKPXM046

File: Q:\WSP_UK\WSP_D\Solent\M3 J9\Accident Data 2010-2015.mxd

wsp

4th Floor, 6 Devonshire Square,
London, EC2M 4YE, UK

TITLE:

Collisiion Data Map,
M3 J9

FIGURE No:

Appendix B

ENVIRONMENTAL CONSTRAINTS PLAN

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1,000 Metres 0 DO NOT SCALE

KEY:

- LISTED BUILDING
- NON- DESIGNATED HERITAGE ASSETS
- PUBLIC RIGHT OF WAY
- SDNP HAMPSHIRE DOWNS CROPMARKS
- NATIONAL TRAIL
- REGISTERED PARKS AND GARDENS
- HISTORIC LANDFILL
- SCHEDULED MONUMENT
- AIR QUALITY MANAGEMENT AREA (2015)
- NOISE IMPORTANT AREA
- NATIONAL PARK
- SITE OF SPECIAL SCIENTIFIC INTEREST
- SPECIAL AREA OF CONSERVATION
- MAXIMUM AREA OF WORKS (379453m²)
- FLOOD ZONE 3
- FLOOD ZONE 2

Rev.	Date	Description	By	Chk'd	App'd
P01.1	---	First Issue	---	---	---

Drawing Status: SUITABLE FOR REVIEW & COMMENT

Suitability: S3

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wsp.com

Client: Working on behalf of highways england

Project Title: REGIONAL INVESTMENT PROGRAMME M3 JUNCTION 9

Drawing Title: ENVIRONMENTAL CONSTRAINTS

Scale	Drawn	Checked	Aproved	Authorised
1:15,000	CS	CD	MM	DB
Original Size: A3	Date: 24/08/17	Date: 11/08/17	Date: 11/08/17	Date: 11/08/17

Drawing Number: Project HE551511 | Originator WSP | Volume EGN | Location M3J9PCF2 | Type DR | Role LE | Number 10303

Project Ref. No.: 70015218

Revision: P01.2

Path: \\uk.wspgroup.com\central data\Projects\70015xxx\70015218 - M3 J9 PCF Stage 2\E Models & Drawings\E.05 Environment\GIS\Mxd\20170109_70015218_2_3_M3_J9_Environmental_Constraints_v2.mxd: Plotted by: UKCAF001 Date: Aug 24, 2017 - 04:28PM

Appendix C

PCF STAGE 0 REJECTED OPTIONS DRAWINGS

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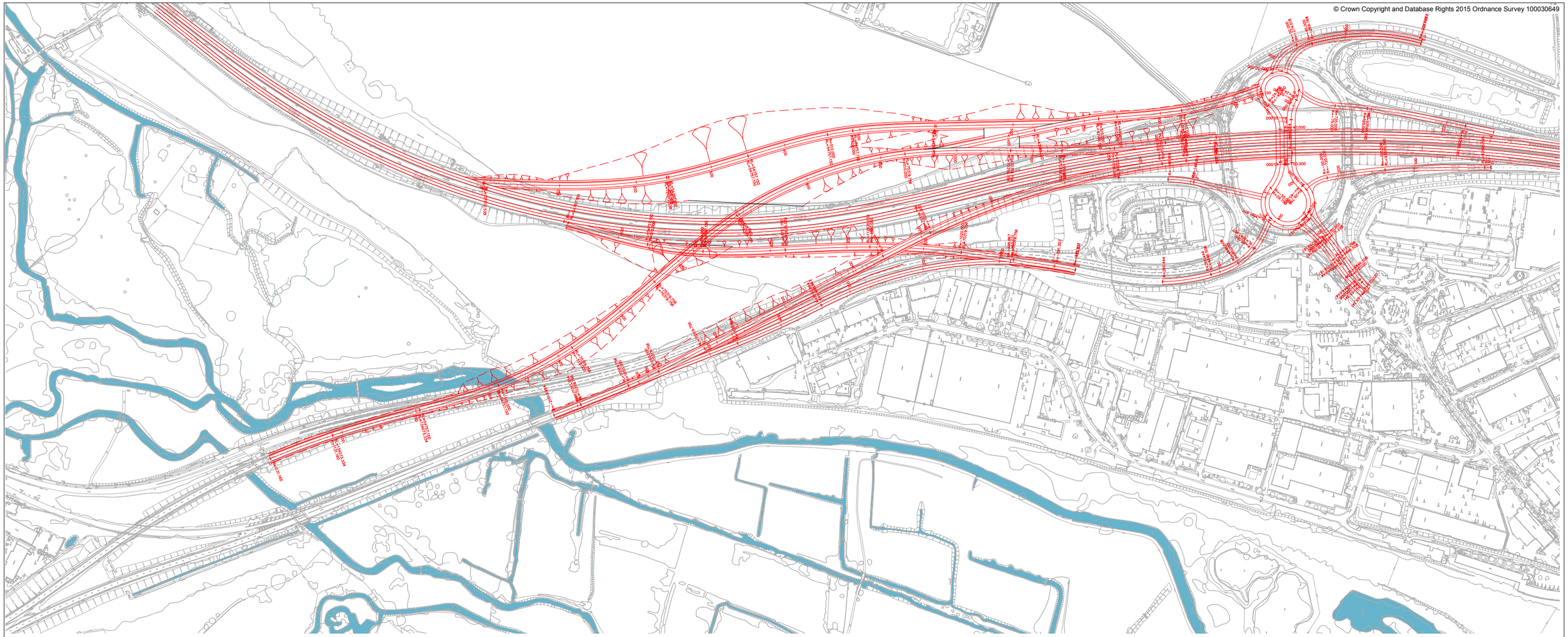

1:1250 Metric

10m 0 10m 50m 100m

DRAFT

Rev	Date	Description	By	Chk	App

Key:

Notes:

Client: highways england driving forward

Site/Project: M3 JUNCTION 9

Title: OPTION E
120Kph TWO STEP RELAXATION
UNDER M3

Drawn: -		Checked: -	
Designed: -		Approved: -	
Date: FEB 2015	Scale: 1:2500	A1	Sheet:
Drawing Number:			Revision: -

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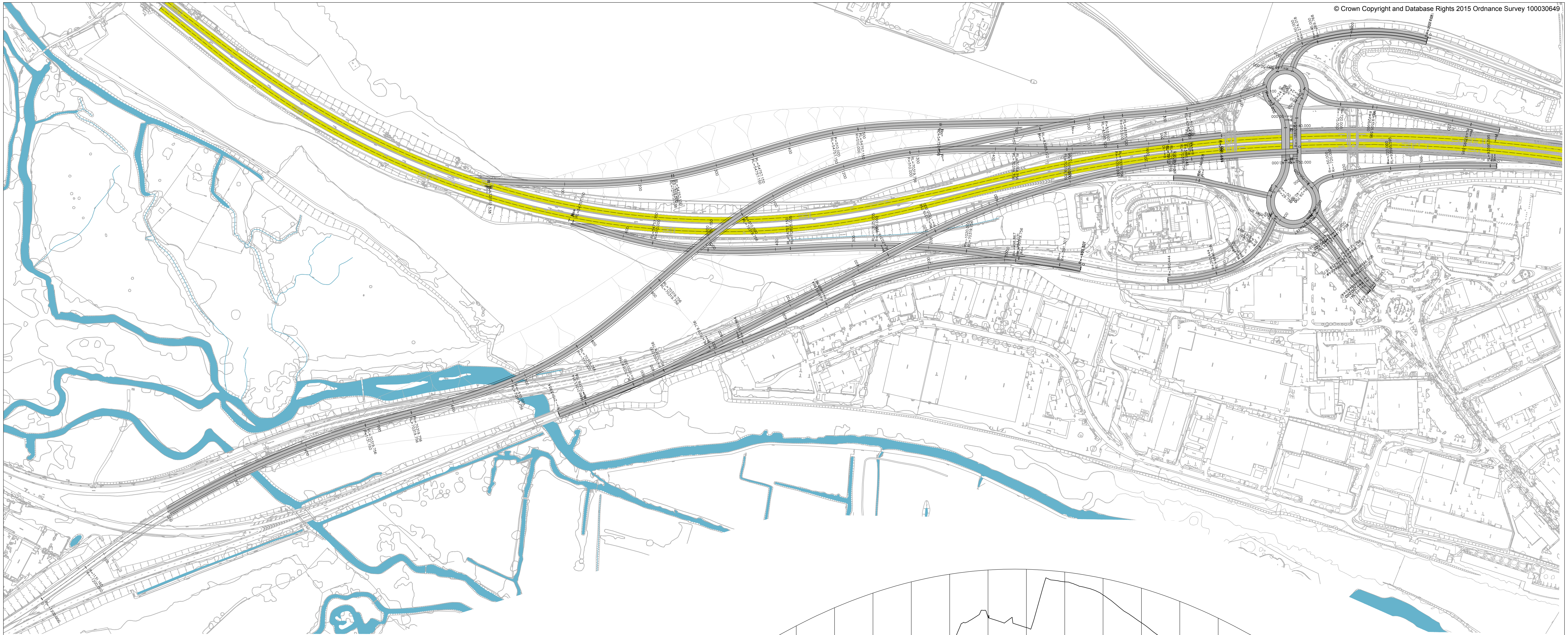

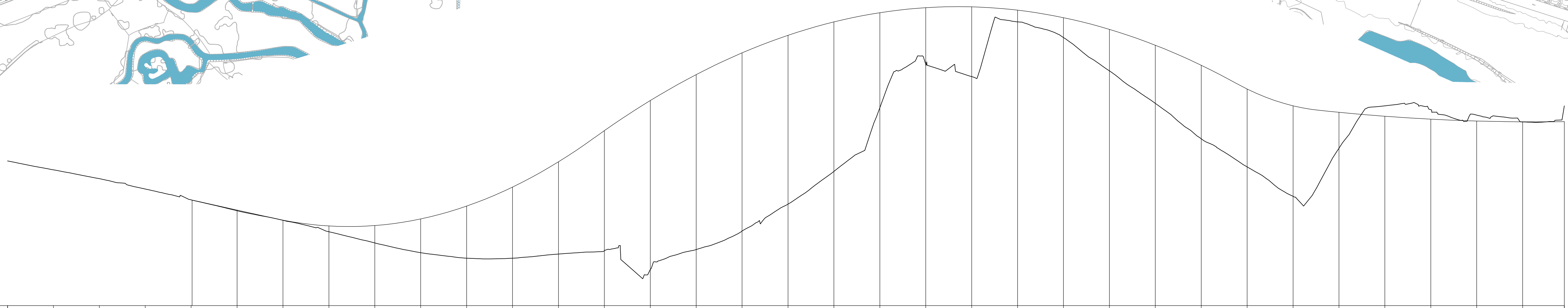

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Proposed Levels	-999.000	-999.000	-999.000	-999.000	-999.000	45.387	44.293	43.661	43.705
Existing Levels	50.73	49.77	48.80	47.68	46.50	45.32	44.27	43.03	41.82
Diff : Prop to Extg						0.07	0.02	0.63	1.89
Vertical Alignment						L=88.725m G=-2.217			
Chainage	0	50	100	150	200	250	300	350	400

Proposed Levels	44.424	45.819	47.890	50.636	54.029	57.303	60.123	62.489	64.400	65.856	66.858
Existing Levels	40.76	40.15	40.15	40.60	40.97	38.93	41.09	43.12	46.03	49.59	56.52
Diff : Prop to Extg	3.67	5.66	7.74	10.03	13.06	18.37	19.03	19.37	18.36	16.26	10.33
Vertical Alignment	R=3700.000m L=348.855m										
Chainage	450	500	550	600	650	700	750	800	850	900	950

Proposed Levels	67.405	67.498	67.136	66.319	65.049	63.323	61.143	58.558	56.730	56.027	55.597	55.280	55.077	54.989	55.007
Existing Levels	61.25	59.91	65.86	64.15	60.53	57.00	53.14	50.09	46.88	52.11	56.72	56.30	55.72	54.98	56.72
Diff : Prop to Extg	6.15	7.59	1.27	2.16	4.51	6.32	8.00	8.47	9.85	3.91	-1.13	-1.02	-0.64	0.01	
Vertical Alignment	L=699.409m R=-5500.000m							R=2000.000m L=88.472m			R=21956.750m L=268.989m				
Chainage	1+000	1+050	1+100	1+150	1+200	1+250	1+300	1+350	1+400	1+450	1+500	1+550	1+600	1+650	1+695

A34 SOUTHBOUND TO M3
Horizontal Scale = 1:2500,Vertical Scale = 1:250

1:1250 Metric
10m 0 10m 50m 100m

DRAFT

Rev	Date	Description	By	Chk	App

Key:

Notes:

Client: highways england driving forward

Site/Project: M3 JUNCTION 9

Title: OPTION 13
120kph TWO STEP RELAXATION
OVER M3

Drawn: - | Checked: -
Designed: - | Approved: -
Date: FEB 2015 | Scale: 1:2500 | A1 | Sheet:
Drawing Number: | Revision: -


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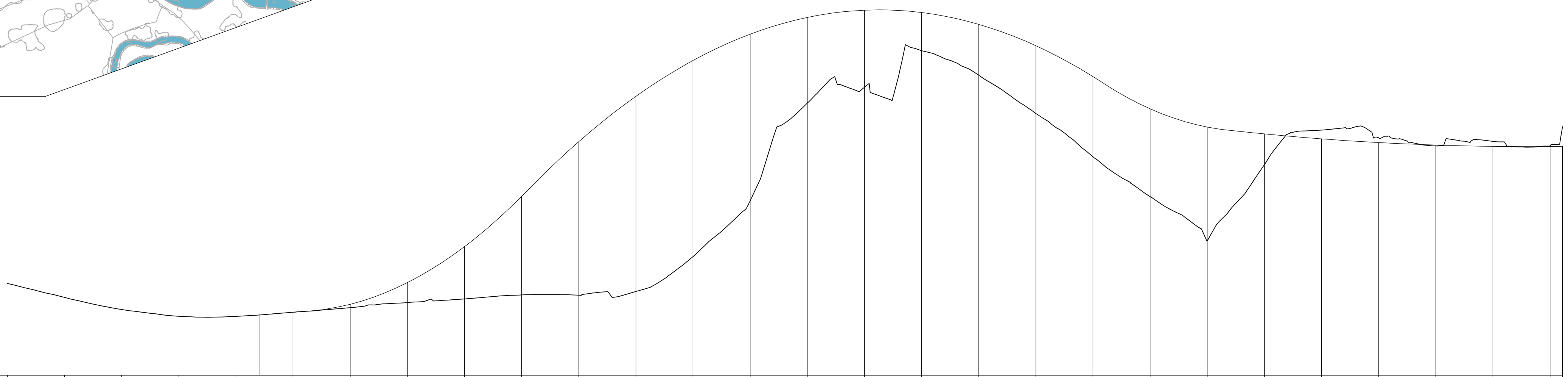

Level Datum = 35.

Chainage	Proposed Levels	Existing Levels	Diff : Prop to Extg
0	-999.000	43.02	
50	-999.000	41.80	
100	-999.000	40.75	
150	-999.000	40.15	
200	-999.000	40.14	
250	40.503	40.51	-0.01
300	41.203	40.91	0.30
350	43.096	41.36	1.74
400	46.239	41.67	4.57
450	50.632	42.02	8.61
500	55.417	42.00	13.42
550	59.379	42.32	17.06
600	62.508	45.37	17.14
650	64.804	50.25	14.55
700	66.268	58.78	7.49
750	66.900	60.17	6.73
800	66.699	63.36	3.34
850	65.665	61.22	4.44
900	63.799	57.87	5.92
950	61.100	54.09	7.01
1+000	58.285	50.62	7.67
1+050	56.690	46.74	9.95
1+100	56.090	53.41	2.68
1+150	55.659	56.42	-0.76
1+200	55.334	55.74	-0.41
1+250	55.115	55.04	0.08
1+300	55.002	55.44	-0.44
1+350	54.994	55.06	-0.07
1+361	55.007	56.72	

Vertical Alignment:
- G=0.791
- R=2000.000m L=189.520m
- L=503.923m R=-3003.000m
- R=2000.000m L=108.113m
- R=23632.980m L=294.250m

A32 SOUTHBOUND TO M3
Horizontal Scale = 1:2500,Vertical Scale = 1:250

1:1250 Metric
10m 0 10m 50m 100m

DRAFT

Rev	Date	Description	By	Chk	App

Key:

Notes:

Client: highways england driving forward

Site/Project: M3 JUNCTION 9

Title: OPTION 15
85kph TWO STEP RELAXATION
OVER M3

Drawn: -		Checked: -	
Designed: -		Approved: -	
Date: FEB 2015	Scale: 1:2500	A1	Sheet:
Drawing Number:			Revision: -

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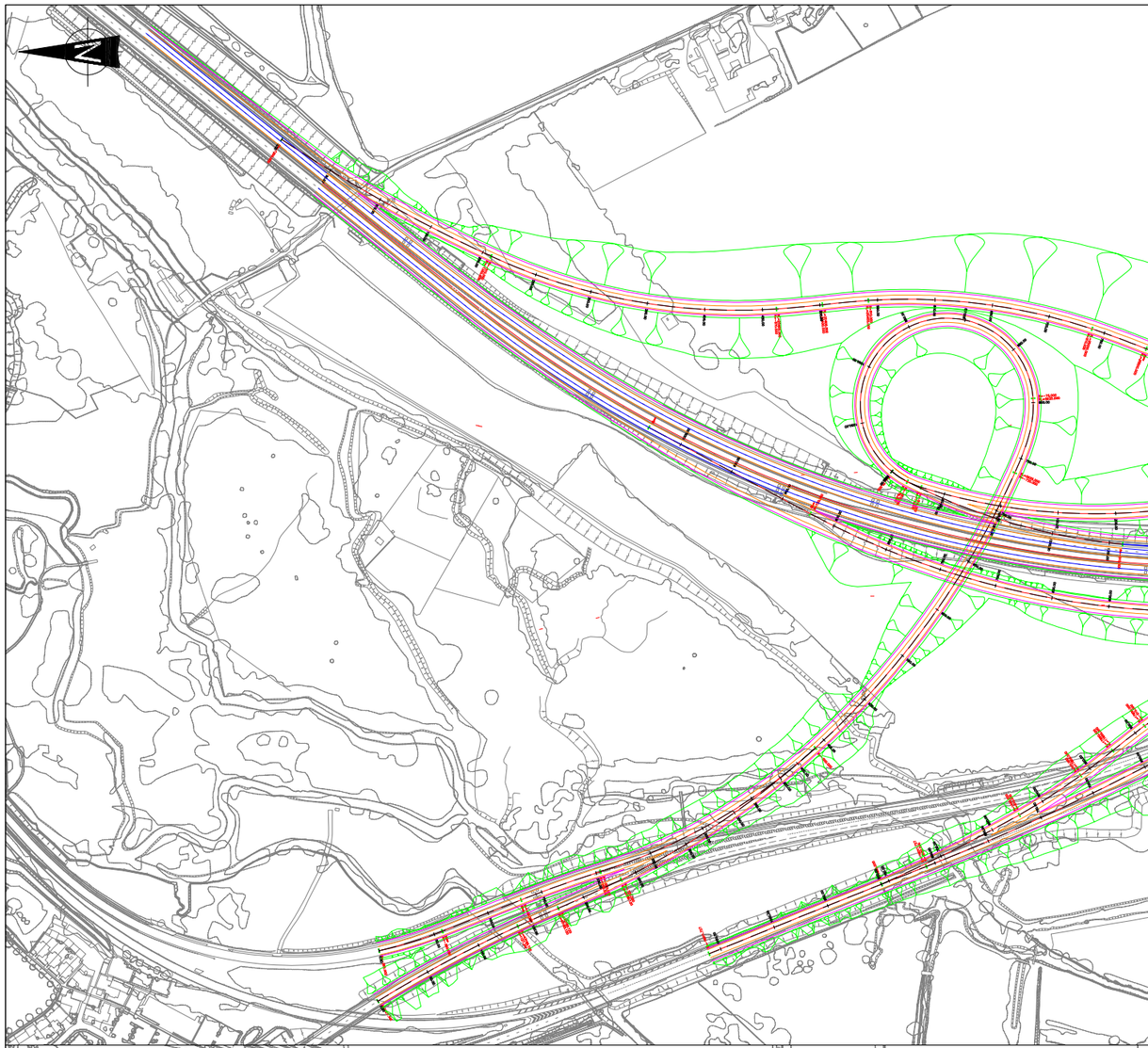

Rev	Date	Description	By	Chk	App

Key:

Notes:

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London
EC2M 4YE
Tel: 44-(0)207-337-1700
Fax: 44-(0)207-337-1701

Client:

Site/Project:
M3 JUNCTION 9

Title:
OPTION 17
LOOP JUNCTION DESIGN
(120KPH)

DRAFT

Drawn:		Checked:	
Designed:		Approved:	
Date:	Scale: 1:2500 @ A1	A1	Sheet:
Drawing Number:			Revision:

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Appendix D

PCF STAGE 1 REJECTED OPTIONS DRAWINGS

Millimetres

100

10

0

DO NOT SCALE

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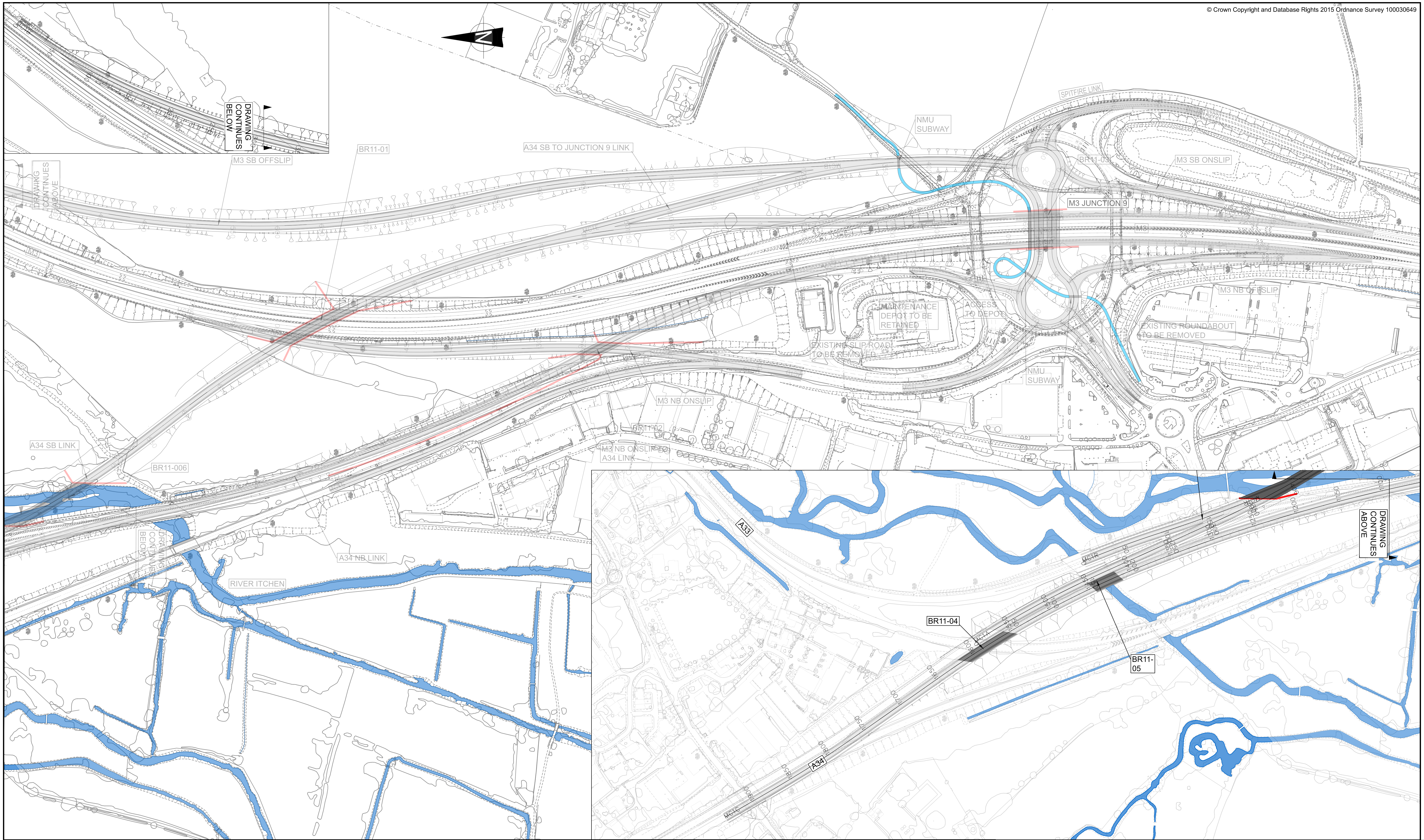

NOT FOR CONSTRUCTION

Information shown on this drawing is at the early stages of concept development. Therefore, this drawing is for information only. The alignment shown is indicative and is subject to changes.

KEY:

LAYOUT PLAN

▢ Proposed Carriageway

■ Bridge Deck

▬ Proposed Non Motorised User Path

▬ Retaining Wall/ Abutment Wall

Rev.	Date	Description	By	Chk'd	App'd
	04/07/16				
P01	04/07/16	FIRST ISSUE	KC	RT	DB
P02	05/08/16	For Stage Approval	KC	RT	DB

Drawing Status: INITIAL STATUS OR WIP

Suitability: S0

WSP
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Client

Working on behalf of highways england

Project Title

REGIONAL INVESTMENT PROGRAMME
M3 JUNCTION 9

Drawing Title

OPTION 11
SHEET 1 OF 3
120KPH FREE FLOW DESIGN
LAYOUT PLAN

Scale	Drawn	Checked	Approved	Authorised
1:2000	K.Coombes	R.Tattersall	D.Brooks	--
Original Size	Date	Date	Date	Date
A1	05/08/16	05/08/16	05/08/16	--

Drawing Number

Project	Originator		Volume
HE551511	WSP		HGN
M3J9PCF1	DR	D	50001
Location	Type	Role	Number

Project Ref. No.

Revision: P02

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DO NOT SCALE

Millimetres 0 10 100

POTENTIAL WIDENING OF EXISTING STRUCTURE BY 2m

A33/A34 NB Diverge

SCALE @ A1 1:2500

A34

MAINTENANCE DEPOT TO BE RETAINED

M3

BR18-01

EXISTING NMU SUBWAY TO BE RECONSTRUCTED

NEW NMU SUBWAY

M3 JUNCTION 9

EASTON LANE

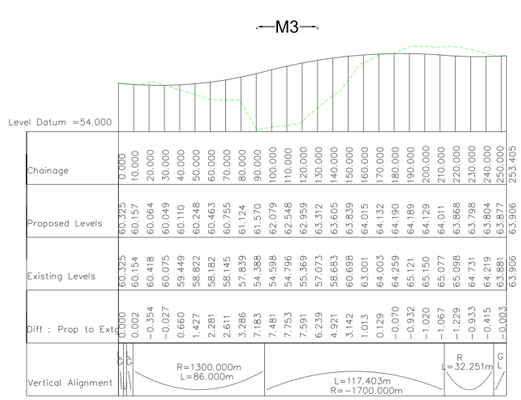
EXISTING NMU SUBWAY TO BE RECONSTRUCTED

A272

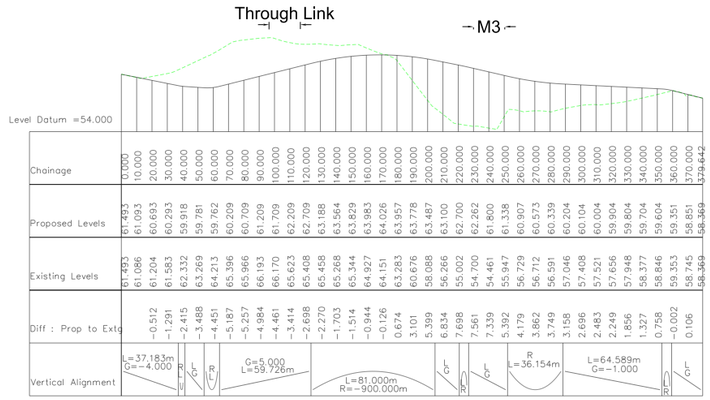
M3

SPITFIRE LINK

SCALE @ A1 1:1250



OPTION 18 THROUGH LINK
Horizontal Scale = 1:400,Vertical Scale = 1:2000



OPTION 18 NON MOTORISED USER PATH
Horizontal Scale = 1:10000,Vertical Scale = 1:2000

NOT FOR CONSTRUCTION

Information shown on this drawing is at the early stages of concept development. Therefore, this drawing is for information only. The alignment shown is indicative and is subject to changes.

KEY:

LAYOUT PLAN:

- Proposed 3m Non Motorised User Path
- Proposed through link carriageway
- Carriageway Widening
- Bridge Decks
- Abutment Wall

LONGSECTION:

- Existing
- Proposed

Rev.	Date	Description	By	Chk'd	App'd
	04/07/16				
P01	04/07/16	FIRST ISSUE	KC	RT	DB
P02	05/08/16	For Stage Approval	KC	RT	DB

Drawing Status: INITIAL STATUS OR WIP

Suitability: S0

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Client: Working on behalf of highways england

Project Title: REGIONAL INVESTMENT PROGRAMME
M3 JUNCTION 9

Drawing Title:
OPTION 18
SHEET 1 OF 1
THROUGHABOUT
LAYOUT PLAN & LONGSECTION

Scale	Drawn	Checked	Approved	Authorised
AS SHOWN	K.Coombes	R.Tattersall	D.Brooks	--
Original Size	Date	Date	Date	Date
A1	05/08/16	05/08/16	05/08/16	--

Drawing Number: Project HE551511 | Originator WSP | Volume HGN | Location M3J9PCF1 | Type DR | Role D | Number 50009

Project Ref. No.

Revision: P02

highways england

Appendix E

DEPARTURES FROM STANDARD

Departures from Standard Checklist
M3 J9 Improvements

Last Update 16 November 2017

RAG		
Cost	**Deadline Float**	
>£1,000,000	<2 weeks	Red
£100,000-£1,000,000	2-6 weeks	Amber
<£100,000	>6 weeks	Green

Scheme	Reference	Das ID	Rev	Departure Type	Standard against which Departure applies	Cost Impact RAG	Qualitative Impact RAG	DAS Status	Expected date for Submission to WebDAS	Actual Date Submitted to WebDAS	Date PM Passed to NetServ	Departure Description	Comments	Potential cost Saving by implementation of departure	Basis of the cost savings, Cost RAG, Qualitative RAG, and Deadline date	Date Last Updated	Changes at last update	Return status	Date received from NetServ	ADP Cert Ref	ADP Cert Issue Date	ADP Approved Date
Departures - Option 14																						
M3 Junction 9 Improvements	DEP-14-0001	-	-	Geometry	TD22/06 Para 4.36	R	R	To be submitted at PCF Stage 3	31/01/2018			**TD22/06 Para 4.36** *For Rural All-Purpose Roads the desirable minimum weaving length is 1km.*	**A34 SB Link (Design Speed 100Akph, Mandatory Speed Limit as existing 50mph):** The weaving length between the A33 merge onto the A34 SB Link (chainage 20) and the A34 SB Junction 9 Link diverge (chainage 640) is 620m. This is below the desirable minimum (1km) and therefore a departure.	**A34 SB Link (Design Speed 100Akph, Mandatory Speed Limit as existing 50mph):** To achieve the standard weaving length the existing M3 J9 would require relocating further south and substantial land take into a flood plain and SDNP. This departure would save the cost of the additional land take, new structures over River Itchen and additional earthworks.	**Cost RAG:** See potential cost saving. **Qualitative RAG:** The current baseline scheme budget is £76M. It is anticipated that the construction cost of this option will be well in excess of this budget. This departure is required to make this option viable. **Deadline date:** N/A	01/07/2016						
M3 Junction 9 Improvements	DEP-14-0002	-	-	Geometry	TD9/93 Table 3	G	R	To be submitted at PCF Stage 3	31/01/2018			**TD9/93 Table 3** *Relaxations of 1 step and greater in horizontal curvature require a superelevation of 7% for 100kph Design Speed.*	**A34 SB Link (Design Speed 100Akph, Mandatory Speed Limit as existing 50mph):** The 3 step relaxation in horizontal curvature in this location would require a superelevation of 7%, however it is deemed inappropriate to provide a superelevation of 7% in this location as vehicles are expected to be slowing as they are on the approach to the interchange junction. A superelevation of 5% is deemed more appropriate and has been provided in preference to the 7% between Chainage 025 to 141. This is therefore a departure from the standard.	**A34 SB Link (Design Speed 100Akph, Mandatory Speed Limit as existing 50mph):** No cost saving associated with departure.	**Cost RAG:** See potential cost saving. **Qualitative RAG:** This departure provides a more appropriate cross section. The current baseline scheme budget is £76M. It is anticipated that the construction cost of this option will be well in excess of this budget. This departure is required to make this option viable. **Deadline date:** N/A	01/07/2016						
M3 Junction 9 Improvements	DEP-14-0003	-	-	Geometry	TD9/93 Table 3	G	R	To be submitted at PCF Stage 3	31/01/2018			**TD9/93 Table 3** *Relaxations of 1 step and greater in horizontal curvature require a superelevation of 7%or 100kph Design Speed.*	**A34 SB Link (Design Speed 100Akph, Mandatory Speed Limit as existing 50mph):** The 3 step relaxation in horizontal curvature in this location would require a superelevation of 7%, however it is deemed inappropriate to provide a superelevation of 7% in this location as vehicles are expected to be slowing as they are on the approach to the interchange junction. A superelevation of 5% is deemed more appropriate and has been provided in preference to the 7% between chainage 446 to 746. This is therefore a departure from the standard.	**A34 SB Link (Design Speed 100Akph, Mandatory Speed Limit as existing 50mph):** No cost saving associated with departure.	**Cost RAG:** See potential cost saving. **Qualitative RAG:** This departure provides a more appropriate cross section. The current baseline scheme budget is £76M. It is anticipated that the construction cost of this option will be well in excess of this budget. This departure is required to make this option viable. **Deadline date:** N/A	01/07/2016						
M3 Junction 9 Improvements	DEP-14-0004	-	-	Geometry	TD9/93 Table 3 Para 1.26	R	R	To be submitted at PCF Stage 3	31/01/2018			**TD9/93 Para 1.26** *Relaxations below Desirable Minimum vertical curvature are not permitted on the immediate approach to a junction for 120kph Design Speed.*	**A34 NB Link (Design Speed 120kph):** As the proposed A34 NB Link passes over the proposed M3 northbound merge the vertical crest curvature is reduced to k = 55. This is a 2 step relaxation in standard. This relaxation is required to enable the scheme to tie into both the existing A34 and M3 carriageways at their earliest point. This relaxation in vertical crest curvature is on the immediate approach to the merge from the J9 Roundabout. Relaxations in vertical curvature are not permitted on the immediate approach to junctions and this is therefore a departure.	**A34 NB Link (Design Speed 120kph):** To achieve the desirable minimum crest curve a longer length of curve would be required and this would prevent the proposed carriageway from tying into the existing alignment to both the north and south without impacting the existing River Itchen bridges or the M3 carriageway. This departure would save the additional cost of earthworks and new bridges.	**Cost RAG:** See potential cost saving. **Qualitative RAG:** The current baseline scheme budget is £76M. It is anticipated that the construction cost of this option will be well in excess of this budget. This departure is required to make this option viable. **Deadline date:** N/A	01/07/2016						
M3 Junction 9 Improvements	DEP-14-0005	-	-	Geometry	TD22/06 Para 4.36	R	R	To be submitted at PCF Stage 3	31/01/2018			**TD22/06 Para 4.36** *For Rural All-Purpose Roads the desirable minimum weaving length is 1km.*	**A34 NB Link (Design Speed 120kph):** The weaving length between the merge between the M3 NB merge to A34 Link onto the A34 NB Link and the A33 diverge is 250m. This is below the desirable minimum (1km) and therefore a departure.	**A34 NB Link (Design Speed 120kph):** To achieve the standard weaving length the existing M3 J9 would require relocating further south and the A33 diverge further north. This departure would save the cost of the additional land take, structures and earthworks.	**Cost RAG:** See potential cost saving. **Qualitative RAG:** The current baseline scheme budget is £76M. It is anticipated that the construction cost of this option will be well in excess of this budget. This departure is required to make this option viable. **Deadline date:** N/A	01/07/2016						
M3 Junction 9 Improvements	DEP-14-0006	-	-	Geometry	TD9/93 Para 1.24 Para 1.26	R	R	Issued	31/01/2018			**TD9/93 Para 1.24** *SSD relaxations of 1 step may be coincident with horizontal curvature relaxations of 1 step. All other combinations of relaxations are not permitted.* **TD9/93 Para 1.26** *Relaxations below Desirable Minimum in SSD are not permitted on the immediate approach to a junction.*	**A34 SB Link (Design Speed 100Akph, Mandatory Speed Limit as existing 50mph):** As the proposed A34 SB Link passes under the M3 (chainage 410 to 500) the SSD is reduced as the abutments to the overbridge restrict visibility. SSD is reduced to a minimum of 160m. This is a 1 step relaxation in standard. The Horizontal Curvature in this location is 255m. This is a 3 step relaxation in standard. The relaxation in SSD is on the immediate approach to the A34 to Junction 9 roundabout diverges junction. Relaxations in SSD are not permitted on the immediate approach to junctions and this is therefore a departure. Combinations of relaxations in SSD and Horizontal Curvature greater than 1 step are not permitted and are therefore a departure.	**A34 SB Link (Design Speed 100Akph, Mandatory Speed Limit as existing 50mph):** To achieve desirable minimum SSD would require the bridge under the M3 to be 9m wider. This departure saves the cost of this additional bridge span.	**Cost RAG:** See potential cost saving. **Qualitative RAG:** The current baseline scheme budget is £76M. It is anticipated that the construction cost of this option will be well in excess of this budget. This departure is required to make this option viable. **Deadline date:** N/A	01/07/2016						

Departures from Standard Checklist
M3 J9 Improvements

Last Update 16 November 2017

RAG		
Cost	**Deadline Float**	
>£1,000,000	<2 weeks	Red
£100,000-£1,000,000	2-6 weeks	Amber
<£100,000	>6 weeks	Green

Scheme	Reference	Das ID	Rev	Departure Type	Standard against which Departure applies	Cost Impact RAG	Qualitative Impact RAG	DAS Status	Expected date for Submission to WebDAS	Actual Date Submitted to WebDAS	Date PM Passed to NetServ	Departure Description	Comments	Potential cost Saving by implementation of departure	Basis of the cost savings, Cost RAG, Qualitative RAG, and Deadline date	Date Last Updated	Changes at last update	Return status	Date received from NetServ	ADP Cert Ref	ADP Cert Issue Date	ADP Approved Date
M3 Junction 9 Improvements	DEP-14-0007	-	-	Geometry	TD9/93 Para 1.24 Para 1.26	R	R	To be submitted at PCF Stage 3	31/01/2018			**TD9/93 Para 1.24** *SSD relaxations of 1 step may be coincident with horizontal curvature relaxations of 1 step. All other combinations of relaxations are not permitted.* **TD9/93 Para 1.26** *Relaxations below Desirable Minimum in SSD are not permitted on the immediate approach to a junction.*	**A34 SB Link (Design Speed 100Akph, Mandatory Speed Limit as existing 50mph):** As the proposed A34 SB Link ascends after passing under the M3 the crest curve is reduced to k = 55 (chainage 570 to 765). This is a 1 step relaxation in standard. This relaxation is required to enable the scheme to tie into both the levels under the proposed under bridge and the existing M3. The Horizontal Curvature in this location is 255m. This is a 3 step relaxation in standard. The relaxation in vertical crest curvature is on the immediate approach to the A34 to Junction 9 roundabout diverge junction. Relaxations in vertical curvature are not permitted on the immediate approach to junctions and this is therefore a departure. Combinations of relaxations in Horizontal and Vertical curvature are not permitted and are therefore a departure.	**A34 SB Link (Design Speed 100Akph, Mandatory Speed Limit as existing 50mph):** To achieve the desirable minimum crest curve a longer length of curve would be required and this would prevent the proposed carriageway from tieing in to the existing alignment on the M3 without moving the M3 underbridge further north and the impacts that would bring to the rest of the alignment.	**Cost RAG:** See potential cost saving. **Qualitative RAG:** The current baseline scheme budget is £76M. It is anticipated that the construction cost of this option will be well in excess of this budget. This departure is required to make this option viable. **Deadline date:** N/A	01/07/2016						
M3 Junction 9 Improvements	DEP-14-0008	-	-	Geometry	TD22/06 Para 2.46	R	R	To be submitted at PCF Stage 3	31/01/2018			**TD22/06 Para 2.46** *A near straight at least equal in length to the nose length must be provided downstream of the back of the diverge nose.*	**M3 NB onslip to A34 Link (Design Speed 85kph):** To minimise the deviation from the existing slip road and due to land constraints, the nose of the diverge (chainage 70) follows a curve. A near straight at least equal in length to the nose length must be provided downstream of the back of the diverge nose, therefore this is a departure.	**M3 NB onslip to A34 Link (Design Speed 85kph):** To achieve the required straight length would require additional land take. This departure would save the cost of additional land take.	**Cost RAG:** See potential cost saving. **Qualitative RAG:** The current baseline scheme budget is £76M. It is anticipated that the construction cost of this option will be well in excess of this budget. This departure is required to make this option viable. **Deadline date:** N/A	05/05/2017						
M3 Junction 9 Improvements	DEP-14-0009	-		Geometry	TD9/93 Table 3	R	R	To be submitted at PCF Stage 3	31/01/2018			**TD9/93 Table 3** *The one step below desirable minimum stopping sight distance for a 85kph design speed is 120m.*	**M3 NB onslip to A34 Link (Design Speed 85kph):** The stopping sight distance at the horizontal curve (chainage 0 to 549) is 90m. This is below the one step below desirable minimum value (120m) and is therefore a departure. According to IAN 198/17 because this is an improvement to existing carriageway this can be categorised as a relaxation instead of a departure.	**M3 NB onslip to A34 Link (Design Speed 85kph):** No cost saving associated with departure.	**Cost RAG:** See potential cost saving. **Qualitative RAG:** The current baseline scheme budget is £76M. It is anticipated that the construction cost of this option will be well in excess of this budget. This departure is required to make this option viable. **Deadline date:** N/A	05/05/2017						
Departures - Option 16B																						
M3 Junction 9 Improvements	DEP-16B-0001	-	-	Geometry	TD9/93 Table 3 Para 1.24	R	R	To be submitted at PCF Stage 3	31/01/2018			**TD9/93 Para 1.24** *SSD relaxations of 1 step may be coincident with horizontal curvature relaxations of 1 step. All other combinations of relaxations are not permitted.*	**A34 SB Link to roundabout (Design Speed 85kph):** As the proposed A34 SB Link to roundabout passes under the proposed A34 NB link (chainage 279 to 400) the SSD is reduced as the abutments to the overbridge restrict visibility. SSD is reduced to a range between 119m to 90m. This is a 2 step relaxation in standard. The Horizontal Curvature in this location is 255m. This is a 2 step relaxation in standard. Combinations of relaxations in SSD and Horizontal Curvature greater than 1 step are not permitted and are therefore a departure.	**A34 SB Link to roundabout (Design Speed 85kph):** To achieve desirable minimum SSD would require the bridge under the M3 to be 11m wider.This departure saves the cost of this additional bridge span.	**Cost RAG:** See potential cost saving. **Qualitative RAG:** The current baseline scheme budget is £76M. It is anticipated that the construction cost of this option may be in excess of this budget. This departure is required to make this option viable. **Deadline date:** N/A	01/07/2016						
M3 Junction 9 Improvements	DEP-16B-0002	-	-	Geometry	TD27/05/ IAN149 Table 4-1	R	R	To be submitted at PCF Stage 3	31/01/2018			**TD27/05 / IAN149 Table 4-1** *Hierarchy of reduced cross-sections of widening for D3 and D4 on existing rural motorways.*	**M3 Mainline at Junction 9 Underbridge (Design Speed 120kph):** To widen the existing M3 through the existing J9 over bridges it is proposed to reduce the cross section using IAN 149 Table 4-1. The proposed cross section is based on IAN 149, Table 4-1 Priority 11 with: Central Reserve: 2.60m (including hard strips) Lane 3: 3.30m Lane 2: 3.55m Lane 1: 3.65m Discontinuous HS/EA: 0.70m Setback to barrier: 0.60m	**M3 Mainline at Junction 9 Underbridge (Design Speed 120kph):** To achieve the standard cross section for a D3M would require demolition of the existing sturcture and replacement with a new structure to provide the available width for a standard cross-section.	**Cost RAG:** See potential cost saving. **Qualitative RAG:** The current baseline scheme budget is £76M. It is anticipated that the construction cost of this option may be in excess of this budget. This departure is required to make this option viable. **Deadline date:** N/A	01/07/2016						
M3 Junction 9 Improvements	DEP-16B-0003	-	-	Geometry	TD22/06 Para 4.36	R	R	To be submitted at PCF Stage 3	31/01/2018			**TD22/06 Para 4.36** *For Rural All-Purpose Roads the desirable minimum weaving length is 1km.*	**A34 NB Link (Design Speed 120kph):** The weaving length between the merge between the A34 NB Link and the roundabout to A34 NB Link and the A33 diverge is 250m. This is below the desirable minimum (1km) and therefore a departure.	**A34 NB Link (Design Speed 120kph):** To achieve the standard weaving length the existing M3 J9 would require relocating further south and the A33 diverge further north. This departure would save the cost of the additional land take, structures and earthworks.	**Cost RAG:** See potential cost saving. **Qualitative RAG:** The current baseline scheme budget is £76M. It is anticipated that the construction cost of this option may be in excess of this budget. This departure is required to make this option viable. **Deadline date:** N/A	01/07/2016						

Departures from Standard Checklist
M3 J9 Improvements

Last Update 16 November 2017

RAG		
Cost	**Deadline Float**	
>£1,000,000	<2 weeks	Red
£100,000-£1,000,000	2-6 weeks	Amber
<£100,000	>6 weeks	Green

Scheme	Reference	Das ID	Rev	Departure Type	Standard against which Departure applies	Cost Impact RAG	Qualitative Impact RAG	DAS Status	Expected date for Submission to WebDAS	Actual Date Submitted to WebDAS	Date PM Passed to NetServ	Departure Description	Comments	Potential cost Saving by implementation of departure	Basis of the cost savings, Cost RAG, Qualitative RAG, and Deadline date	Date Last Updated	Changes at last update	Return status	Date received from NetServ	ADP Cert Ref	ADP Cert Issue Date	ADP Approved Date
M3 Junction 9 Improvements	DEP-16B-0004	-	-	Geometry	TD9/93 Table 3	R	R	To be submitted at PCF Stage 3	01/02/2018			**TD9/93 Table 3** *Absolute minimum Sag K value for a 120kph design speed is k=37.*	**A34 NB Link (Design Speed 120kph):** The Sag K value of the vertical curve at the merge with the A34 (chainage 599 to 752) is k=26. This is below the absolute minimum (k=37) and is therefore a departure.	**A34 NB Link (Design Speed 120kph):** To achieve the required Sag K value would require merging with the A34 further north, resulting in additional land acquisition and affecting the bridge over the River Itchen. This departure would save the cost of additional land take and bridge works.	**Cost RAG:** See potential cost saving. **Qualitative RAG:** The current baseline scheme budget is £76M. It is anticipated that the construction cost of this option may be in excess of this budget. This departure is required to make this option viable. **Deadline date:** N/A	05/05/2017						
M3 Junction 9 Improvements	DEP-16B-0005	-	-	Geometry	TD9/93 Table 3	R	R	To be submitted at PCF Stage 3	02/02/2018			**TD9/93 Table 3** *One step below desirable minimum Crest K value for a 120kph design speed is k = 100.*	**A34 NB Link (Design Speed 120kph):** The start of the slip road follows the edge of the M3. In order to maintain sufficient crossfall and minimise land acquisition a vertical crest curve with k=55 has been used over the A34 SB Link to roundabout and M3 NB onslip (chainage 167 to 582). This is below the one step below desirable minimum value (k=100) and is therefore a departure.	**A34 NB Link (Design Speed 120kph):** To achieve the required Crest K value would require additional land take. This departure would save the cost of the additional land take.	**Cost RAG:** See potential cost saving. **Qualitative RAG:** The current baseline scheme budget is £76M. It is anticipated that the construction cost of this option may be in excess of this budget. This departure is required to make this option viable. **Deadline date:** N/A	05/05/2017						
M3 Junction 9 Improvements	DEP-16B-0006	-	-	Geometry	TD9/93 Table 3	R	R	To be submitted at PCF Stage 3	03/02/2018			**TD9/93 Table 3** *The one step below desirable minimum stopping sight distance for a 120kph design speed is 215m.*	**A34 NB Link (Design Speed 120kph):** The stopping sight distance at the merge with the A34 (chainage 599 to 752) is 160m. This is below the one step below desirable minimum value (215m) and is therefore a departure.	**A34 NB Link (Design Speed 120kph):** To achieve the required Sag K value would require merging with the A34 further north, resulting in additional land acquisition and affecting the bridge over the River Itchen. This departure would save the cost of additional land take and bridge works.	**Cost RAG:** See potential cost saving. **Qualitative RAG:** The current baseline scheme budget is £76M. It is anticipated that the construction cost of this option may be in excess of this budget. This departure is required to make this option viable. **Deadline date:** N/A	05/05/2017						
M3 Junction 9 Improvements	DEP-16B-0007	-	-	Geometry	TD9/93 Table 3	R	R	To be submitted at PCF Stage 3	04/02/2018			**TD9/93 Table 3** *The one step below desirable minimum stopping sight distance for a 120kph design speed is 215m.*	**A34 NB Link (Design Speed 120kph):** The start of the slip road follows the edge of the M3. In order to maintain sufficient crossfall and minimise land acquisition a stopping sight distance of 160m has been used over the A34 SB Link to roundabout and M3 NB onslip (chainage 167 to 582). This is below the one step below desirable minimum value (215m) and is therefore a departure.	**A34 NB Link (Design Speed 120kph):** To achieve the required stopping sight distance would require additional land take. This departure would save the cost of the additional land take.	**Cost RAG:** See potential cost saving. **Qualitative RAG:** The current baseline scheme budget is £76M. It is anticipated that the construction cost of this option may be in excess of this budget. This departure is required to make this option viable. **Deadline date:** N/A	05/05/2017						
M3 Junction 9 Improvements	DEP-16B-0008	-	-	Geometry	TD9/93 Table 3	R	R	To be submitted at PCF Stage 3	08/02/2018			**TD9/93 Table 3** *The one step below desirable minimum stopping sight distance for a 85kph design speed is 120m.*	**Roundabout to A34 NB Link (Design Speed 85kph):** The stopping sight distance at the horizontal curve (chainage 0 to 549) is 90m. This is below the one step below desirable minimum value (120m) and is therefore a departure. According to IAN 198/17 because this is an improvement to existing carriageway this can be categorised as a relaxation instead of a departure.	**Roundabout to A34 NB Link (Design Speed 85kph):** No cost saving associated with departure.	**Cost RAG:** See potential cost saving. **Qualitative RAG:** The current baseline scheme budget is £76M. It is anticipated that the construction cost of this option may be in excess of this budget. This departure is required to make this option viable. **Deadline date:** N/A	05/05/2017						
M3 Junction 9 Improvements	DEP-16B-0009	-	-	Geometry	TD9/93 Table 3	R	R	To be submitted at PCF Stage 3	09/02/2018			**TD9/93 Table 3** *Required superelevation for a horizontal curvature of 255m and a 70kph design speed is 7%.*	**M3 NB Onslip (Design Speed 70kph):** The superelevation from chainage 187 to 292 is 5%. This is below the required value (7%) and is therefore a departure.	**M3 NB Onslip (Design Speed 70kph):** No cost saving associated with departure.	**Cost RAG:** See potential cost saving. **Qualitative RAG:** The current baseline scheme budget is £76M. It is anticipated that the construction cost of this option may be in excess of this budget. This departure is required to make this option viable. **Deadline date:** N/A	05/05/2017						

Departures from Standard Checklist
M3 J9 Improvements

Last Update 16 November 2017

RAG		
Cost	Deadline Float	
>£1,000,000	<2 weeks	Red
£100,000-£1,000,000	2-6 weeks	Amber
<£100,000	>6 weeks	Green

Scheme	Reference	Das ID	Rev	Departure Type	Standard against which Departure applies	Cost Impact RAG	Qualitative Impact RAG	DAS Status	Expected date for Submission to WebDAS	Actual Date Submitted to WebDAS	Date PM Passed to NetServ	Departure Description	Comments	Potential cost Saving by implementation of departure	Basis of the cost savings, Cost RAG, Qualitative RAG, and Deadline date	Date Last Updated	Changes at last update	Return status	Date received from NetServ	ADP Cert Ref	ADP Cert Issue Date	ADP Approved Date
Departures - Option 16C																						
M3 Junction 9 Improvements	DEP-16C-0001	-	-	Geometry	TD22/06 Para 4.36	R	R	To be submitted at PCF Stage 3	31/01/2018			**TD22/06 Para 4.36** *For Rural All-Purpose Roads the desirable minimum weaving length is 1km.*	**A34 SB Link (Design Speed 100Akph, Mandatory Speed Limit as existing 50mph):** The weaving length between the A33 merge onto the A34 SB Link (chainage 20) and the A34 SB Junction 9 Link diverge (chainage 640) is 620m. This is below the desirable minimum (1km) and therefore a departure.	**A34 SB Link (Design Speed 100Akph, Mandatory Speed Limit as existing 50mph):** To achieve the standard weaving length the existing M3 J9 would require relocating further south and substantial land take into a flood plain and SDNP. This departure would save the cost of the additional land take, structures and earthworks.	**Cost RAG:** See potential cost saving. **Qualitative RAG:** The current baseline scheme budget is £76M. It is anticipated that the construction cost of this option will be well in excess of this budget. This departure is required to make this option viable. **Deadline date:** N/A	01/07/2016						
M3 Junction 9 Improvements	DEP-16C-0002	-	-	Geometry	TD9/93 Table 3	G	R	To be submitted at PCF Stage 3	31/01/2018			**TD9/93 Table 3** *Relaxations of 1 step and greater in horizontal curvature require a superelevation of 7%.*	**A34 SB Link (Design Speed 100Akph, Mandatory Speed Limit as existing 50mph):** The 3 step relaxation in horizontal curvature in this location would require a superelevation of 7%, however it is deemed inappropriate to provide a superelevation of 7% in this location as vehicles are expected to be slowing as they are on the approach to the interchange junction. A superelevation of 5% is deemed more appropriate and has been provided in preference to the 7% between Chainage 025 to 141. This is therefore a departure from the standard.	**A34 SB Link (Design Speed 100Akph, Mandatory Speed Limit as existing 50mph):** No cost saving associated with departure.	**Cost RAG:** See potential cost saving. **Qualitative RAG:** This departure provides a more appropriate cross section. The current baseline scheme budget is £76M. It is anticipated that the construction cost of this option will be well in excess of this budget. This departure is required to make this option viable. **Deadline date:** N/A	01/07/2016						
M3 Junction 9 Improvements	DEP-16C-0003	-	-	Geometry	TD9/93 Table 3	G	R	To be submitted at PCF Stage 3	31/01/2018			**TD9/93 Table 3** *Relaxations of 1 step and greater in horizontal curvature require a superelevation of 7%.*	**A34 SB Link (Design Speed 100Akph, Mandatory Speed Limit as existing 50mph):** The 3 step relaxation in horizontal curvature in this location would require a superelevation of 7%, however it is deemed inappropriate to provide a superelevation of 7% in this location as vehicles are expected to be slowing as they are on the approach to the interchange junction. A superelevation of 5% is deemed more appropriate and has been provided in preference to the 7% between chainage 446 to 746. This is therefore a departure from the standard.	**(Design Speed 100Akph, Mandatory Speed Limit as existing 50mph):** No cost saving associated with departure.	**Cost RAG:** See potential cost saving. **Qualitative RAG:** This departure provides a more appropriate cross section. The current baseline scheme budget is £76M. It is anticipated that the construction cost of this option will be well in excess of this budget. This departure is required to make this option viable. **Deadline date:** N/A	01/07/2016						
M3 Junction 9 Improvements	DEP-16C-0004	-	-	Geometry	TD9/93 Table 3 Para 1.26	R	R	To be submitted at PCF Stage 3	31/01/2018			**TD9/93 Para 1.24** *SSD relaxations of 1 step may be coincident with horizontal curvature relaxations of 1 step. All other combinations of relaxations are not permitted.* **TD9/93 Para 1.26** *Relaxations below Desirable Minimum in SSD are not permitted on the immediate approach to a junction.*	**A34 SB Link (Design Speed 100Akph, Mandatory Speed Limit as existing 50mph):** As the proposed A34 SB Link passes under the M3 (chainage 410 to 500) the SSD is reduded as the abutments to the overbridge restrict visibility. SSD is reduced to a minimum of 160m. This is a 1 step relaxation in standard. The Horizontal Curvature in this location is 255m. This is a 3 step relaxation in standard. The relaxation in SSD is on the immediate approach to the A34 to Junction 9 roundabout diverges junction. Relaxations in SSD are not permitted on the immediate approach to junctions and this is therefore a departure. Combinations in SSD and Horizontal Curvature greater than 1 step are not permitted and are therefore a departure.	**A34 SB Link (Design Speed 100Akph, Mandatory Speed Limit as existing 50mph):** To achieve desirable minimum SSD would require the bridge under the M3 to be 9m wider. This departure saves the cost of this additional bridge span.	**Cost RAG:** See potential cost saving. **Qualitative RAG:** The current baseline scheme budget is £76M. It is anticipated that the construction cost of this option will be well in excess of this budget. This departure is required to make this option viable. **Deadline date:** N/A	01/07/2016						
M3 Junction 9 Improvements	DEP-16C-0005	-	-	Geometry	TD9/93 Para 1.24 Para 1.26	R	R	To be submitted at PCF Stage 3	31/01/2018			**TD9/93 Para 1.24** *SSD relaxations of 1 step may be coincident with horizontal curvature relaxations of 1 step. All other combinations of relaxations are not permitted.* **TD9/93 Para 1.26** *Relaxations below Desirable Minimum in SSD are not permitted on the immediate approach to a junction.*	**A34 SB Link (Design Speed 100Akph, Mandatory Speed Limit as existing 50mph):** As the proposed A34 SB Link ascends after passing under the M3 the crest curve is reduced to k = 55 (chainage 570 to 765). This is a 1 step relaxation in standard. This relaxation is required to enable the scheme to tie into both the levels under the proposed under bridge and the existing M3. The Horizontal Curvature in this location is 255m. This is a 3 step relaxation in standard. The relaxation in vertical crest curvature is on the immediate approach to the A34 to Junction 9 roundabout diverge junction. Relaxations in vertical curvature are not permitted on the immediate approach to junctions and this is therefore a departure. Combinations in Horizontal and Vertical curvature are not permitted and are therefore a departure.	**A34 SB Link (Design Speed 100Akph, Mandatory Speed Limit as existing 50mph):** To achieve the desirable minimum crest curve a longer length of curve would be required and this would prevent the proposed carriageway from tieing in to the existing alignment on the M3 without moving the M3 underbridge further north and the impacts that would bring to the rest of the alignment.	**Cost RAG:** See potential cost saving. **Qualitative RAG:** The current baseline scheme budget is £76M. It is anticipated that the construction cost of this option will be well in excess of this budget. This departure is required to make this option viable. **Deadline date:** N/A	01/07/2016						

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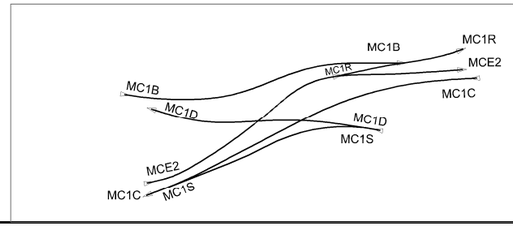
DO NOT SCALE

Millimetres 0 10 100

M3 SB OFFSLIP
DEP-14-0006
DEP-14-0003
DEP-14-0007
A34 SB JUNCTION 9 LINK
SPITFIRE LINK
A272
M3 JUNCTION 9
M3
EASTON LANE
DEP-14-0001
A34 SB LINK
DEP-14-0002
M3 NB ONSLIP
DEP-14-0008
M3 NB ONSLIP TO A34 LINK
DEP-14-0004
DEP-14-0009
A34 NB LINK
DEP-14-0005
RIVER ITCHEN
BRIDGE OVER RIVER

LOCATION OF DEPARTURES

CHAINAGE STRINGS



Rev.	Date	Description	By	Chk'd	App'd
P01	13/11/17	FIRST ISSUE	EL	DR	DB

Drawing Status: SUITABLE FOR STAGE APPROVAL
Suitability: S3

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wsp.com

Client: Working on behalf of highways england

Project Title: REGIONAL INVESTMENT PROGRAMME
M3 JUNCTION 9

Drawing Title: OPTION 14
DEPARTURES AND RELAXATIONS
GENERAL ARRANGEMENT

Scale	Drawn	Checked	Approved	Authorised
AS SHOWN	E.Lovatt	Dileep.R	D.Brooks	---
Original Size	**Date**	**Date**	**Date**	**Date**
A1	13/11/17	13/11/17	13/11/17	---

Drawing Number: Project HE551511 | Originator WSP | Volume HAC
Location M3J9PCF2 | Type DR | Role CH | Number 10050
Project Ref. No.
Revision: P01

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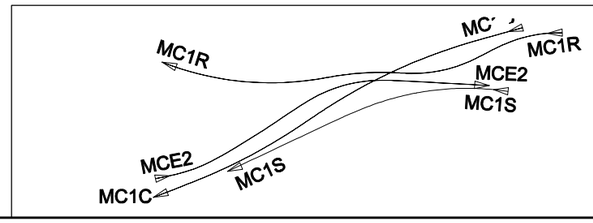
DO NOT SCALE

Millimetres 0 10 100

M3
M3 NB ONSLIP
DEP-16B-0001
DEP-16B-0005
A34 SB LINK TO ROUNDABOUT
DEP-16B-0007
DEP-16B-0004
DEP-16B-0006
DEP-16B-0008
DEP-16B-0003
RIVER ITCHEN
A34 NB LINK
ROUNDABOUT TO A34 NB LINK
DEP-16B-0009
MAINTENANCE DEPOT TO BE RETAINED
DEP-16B-0002
M3 JUNCTION 9
M3
SPITFIRE LINK
A272
EASTON LANE
MC1R
MC1C
MCE2
MC1S

LOCATION OF DEPARTURES

CHAINAGE STRINGS



Rev.	Date	Description	By	Chk'd	App'd
P01	13/10/2017	FIRST ISSUE	EL	DR	DB

Drawing Status: SUITABLE FOR STAGE APPROVAL
Suitability: S3

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Client: Working on behalf of highways england

Project Title: REGIONAL INVESTMENT PROGRAMME
M3 JUNCTION 9

Drawing Title:
OPTION 16B
DEPARTURES AND RELAXATION
GENERAL ARRANGEMENT

Scale	Drawn	Checked	Approved	Authorised
1:2000	E.Lovatt	Dileep.R	D.Brooks	---
Original Size	Date	Date	Date	Date
A1	13/11/2017	13/11/2017	13/11/2017	---

Drawing Number

Project	Originator	Volume	Project Ref. No.
HE551511	WSP	HAC	
M3J9PCF2	DR	CH	10150
Location	Type	Role	Number

Revision: P01

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Millimetres 100 10 0

DO NOT SCALE

N

M3

M3 SB OFFSLIP

DEP-16C-0004

DEP-16C-0003

DEP-16C-0005

A34 SB JUNCTION 9 LINK

SPITFIRE LINK

A272

A272

M3 JUNCTION 9

ACCESS TO DEPOT

MAINTENANCE DEPOT TO BE RETAINED

EASTON LANE

DEP-16C-0001

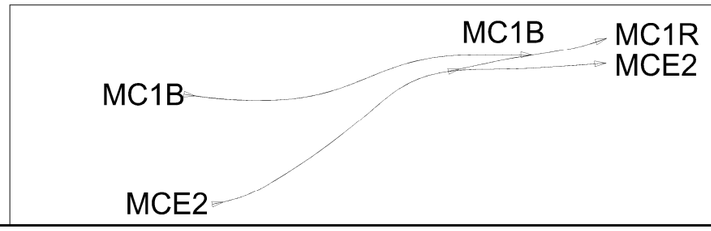
A34 SB LINK

DEP-16C-0002

RIVER ITCHEN

LOCATION OF DEPARTURES

CHAINAGE STRINGS



Rev.	Date	Description	By	Chk'd	App'd
P01	13/10/2017	FIRST ISSUE	EL	DR	DB

Drawing Status: SUITABLE FOR STAGE APPROVAL

Suitability: S3

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Client: Working on behalf of highways england

Project Title: REGIONAL INVESTMENT PROGRAMME
M3 JUNCTION 9

Drawing Title: OPTION 16C
DEPARTURES AND RELAXATIONS
GENERAL ARRANGEMENT

Scale	Drawn	Checked	Approved	Authorised
1:2000	E.Lovatt	Dileep.R	D.Brooks	---
Original Size	Date	Date	Date	Date
A1	13/10/2017	13/10/2017	13/10/2017	---

Drawing Number

Project	Originator	Volume	Project Ref. No.
HE551511	WSP	HAC	
Location	Type	Role	Number	Revision
M3J9PCF2	DR	CH	10250	P01