

A14 Cambridge to Huntingdon improvement scheme

Environmental Statement

Appendices

Appendix 3.1: Structures, gantries, watercourse realignments, culverts and crossings schedules

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1 Structures, gantries, watercourse realignments, culverts and crossings schedules

1.1 Structures schedule

Table 1.1: New bridges schedule

Bridge no.	Approx. chainage (m)	Structure name	Structure type	Structure height	Structure length between abutments (m)
BN01	1,300	New Ellington Junction bridge	2 span overbridge with vertical reinforced soil abutments and precast concrete beam deck.	Bridge on a vertical curve with a max level of 22.7m AOD (Above Ordnance Datum).	43.5
BN02	3,500	Grafham Road overbridge	3 span overbridge with vertical reinforced soil abutments and pre-cast concrete girders with cast in-situ reinforced concrete slab.	Bridge on a constant slope with a max level of 25.0m AOD.	104.0
BN03	2,100	A1 Brampton interchange underbridge	3 span underbridge with vertical reinforced soil abutments and steel composite girders with cast in-situ reinforced concrete deck slab.	Bridge on a vertical curve with a max level of 23.1m AOD.	118.6
BN04	4,550	B1514 Buckden Road bridge	Single span underbridge with vertical reinforced soil abutments and precast concrete beam deck.	Bridge on a vertical curve with a max level of 24.0m AOD.	19.8
BN05	6,100	River Great Ouse viaduct	460m long multi 65m span viaduct with haunched weathering steel beams.	Bridge on a vertical S shaped curve with a max level of 18.7m AOD.	475.0

Bridge no.	Approx. chainage (m)	Structure name	Structure type	Structure height	Structure length between abutments (m)
BN06	6,800	East Coast mainline (ECML) railway bridge	Single span, steel composite, reinforced concrete abutments with an additional concrete box to form an underpass through the approach embankment.	Bridge on a vertical curve with a max level of 24.2m AOD.	38.5
BN07	7,300	B1043 Offord Road bridge	3 span overbridge with open abutments and precast concrete beam deck.	Bridge on a vertical curve with a max level of 28.6m AOD	73.7
BN08	8,400	Corpus Christi accommodation bridge	3 span overbridge with open abutments and precast concrete beam deck.	Bridge on a vertical curve with a max level of 41.9m AOD	71.4
BN09	9,300	Silver Street bridge	3 span overbridge with open abutments and precast concrete beam deck.	Bridge on a vertical curve with a max level of 48.2m AOD.	68.3
BN10	11,000	A1198 Ermine Street bridge	3 span overbridge with open abutments and precast concrete beam deck.	Bridge on a vertical curve with a max level of 34.0m AOD.	96.1
BN11	13,000	Mere Way bridge	3 span overbridge with open abutments and precast concrete beam deck.	Bridge on a vertical curve with a max level of 23.0m AOD.	68.3
BN12	14,300	B1040 Potton Road bridge	3 span overbridge with open abutments and precast concrete beam deck.	Bridge on a vertical curve with a max level of 19.4m AOD.	72.2

Bridge no.	Approx. chainage (m)	Structure name	Structure type	Structure height	Structure length between abutments (m)
BN13	14,350	West Brook bridge	Single span underbridge with vertical reinforced concrete abutments and precast concrete beam deck.	Bridge on a constant slope of small gradient with a max level of 11.0m AOD.	12.0
BN14	15,350	Hilton Road bridge	3 span overbridge with open abutments and precast concrete beam deck.	Bridge on a vertical curve with a max level of 18.4m AOD.	73.1
BN15	16,450	Conington Road bridge	3 span overbridge with open abutments and precast concrete beam deck.	Bridge on a vertical curve with a max level of 18.8m AOD.	71.5
BN16	18,000	New Barns Lane bridge	3 span overbridge with open abutments and precast concrete beam deck.	Bridge on a vertical curve with a max level of 21.0m AOD.	73.1
BN17	20,500	Swavesey junction bridge	2 span overbridge with vertical reinforced soil abutments and precast concrete beam deck.	Bridge on a vertical curve with a max level of 28.1m AOD.	51.7
BN18	22,750	Swavesey NMU bridge	Landmark footbridge - a suspension bridge.	Bridge on a vertical curve with a max level of 24.0m AOD.	184.5
BN19	22,400	Robin's Lane bridge	2 span overbridge with vertical reinforced soil abutments and precast concrete beam deck.	Bridge on a constant slope with a max level of 26.0m AOD.	58.8
BN20	23,850	Bar Hill junction west bridge	1 span overbridge with vertical reinforced soil abutments and precast concrete beam deck.	Bridge on a constant slope with a max level of 30m AOD.	37.55

Bridge no.	Approx. chainage (m)	Structure name	Structure type	Structure height	Structure length between abutments (m)
BN21	23,900	Bar Hill junction east bridge	1 span overbridge with vertical reinforced soil abutments and precast concrete beam deck.	Bridge on a constant slope with a max level of 30m AOD.	37.55
BN22	23,800	Bar Hill NMU bridge	Landmark footbridge - a cable stayed bridge.	Bridge on a vertical curve with a max deck level of 28m AOD. Pylons 60m AOD.	182.6
BN23	Bar Hill junction	B1050 Hattons Road bridge	1 span overbridge with vertical reinforced soil abutments and precast concrete beam deck.	Bridge on a constant slope with a max level of 28.5m AOD.	24.2
BN24	Girton interchange	Girton interchange bridge C	Single span underbridge with vertical abutments and precast pre-stressed concrete beams with a composite cast in situ concrete deck slab.	Bridge on a vertical curve with a max level of 28.6m AOD.	27.6
BN25	Girton interchange	Girton interchange bridge A	Single span precast concrete beams over-widened structure square to the road under (i.e. like a short tunnel).	Bridge on a vertical curve with a max level of 23.6m AOD.	103.3
BN26	A14/A1 Link	A14/A1 Link underbridge	2 span underbridge with vertical reinforced soil abutments and steel composite girders with cast in-situ reinforced concrete deck slab.	Bridge on constant slope with a max level of 18.2m AOD.	54.8
BN27	A14/A1 Link	A14/A1 Link overbridge	2 span overbridge with reinforced concrete portal frames.	Bridge on a vertical curve with a max level of 27.3m AOD.	54.8

Bridge no.	Approx. chainage (m)	Structure name	Structure type	Structure height	Structure length between abutments (m)
BN28	Ellington junction	Ellington Brook bridge	Single span underbridge with vertical abutments and precast pre-stressed concrete beams with a composite cast in situ concrete deck slab.	Bridge on a vertical curve with a max level of 14.9m AOD.	11.7
BN29	6,770	Accommodation underpass	A high profile corrugated steel arch structure.	Top of the structure is 18m AOD, 6m below the road surface (24m AOD).	123.8
BN30	Local access road (A1 chainage: 3,625)	Culvert 112	A precast concrete box culvert.	Local access road level above culvert is 14.8m AOD. Top level of structure is 14.2m.	28.0

Table 1.2: Existing bridges schedule

Bridge no.	Approx. chainage (m)	HA number	Structure name	Structure type	Category	Proposals
BE01	6,200 (A1)	TBC	B1043 Bridge, Alconbury bridge	Overbridge	Unaffected	Bridge unaffected.
BE02	5,100 (A1)	A1/107.40	Matchams bridge	Underbridge	Affected	Bridge to be extended. Existing is 2.74m span reinforced concrete slab on reinforced concrete abutments.
BE03	3,550 (A1)	A1/105.50	Brampton River bridge	Underbridge	Unaffected	Bridge unaffected.

Bridge no.	Approx. chainage (m)	HA number	Structure name	Structure type	Category	Proposals
BE04	3,000	A1/105.40	Brampton Hut North bridge	Underbridge	Affected	Change to alignment on deck. Introduction of concrete step barrier to central reserve.
BE05	3,000	A1.105.30	Brampton Hut South bridge	Underbridge	Affected	Change to alignment on deck. Introduction of concrete step barrier to central reserve.
BE06	3,600	A1/103.10	Park Road bridge (Grafham Road)	Overbridge	Demolish	To be demolished.
BE07	4,500	A1/102.20	Buckden Railway bridge	Underbridge	Unaffected	Bridge unaffected.
BE08	6,700	Network Rail owned structure	Railway overbridge 139	Railway overbridge	Affected	Probable refurbishment of masonry arch structure and parapets. Subject to assessment.
BE09	22,750	A14/90.0	Trinity Foot Interchange overbridge	Overbridge	Demolish	To be demolished.
BE10	25,700	A14/92.90	Bar Hill Interchange overbridge	Overbridge	Demolish	To be demolished.
BE11	27,500	A14/94.80	Dry Drayton Interchange overbridge	Overbridge	Affected	Replace edge beams and upgrade parapets.

Bridge no.	Approx. chainage (m)	HA number	Structure name	Structure type	Category	Proposals
BE12	Girton interchange	M11/90.90/1	Bulls Close bridge	Interchange bridge	Unaffected	Change to Huntingdon Road alignment under bridge only. Structure to be assessed to confirm adequacy for proposed loading.
BE13	Girton interchange	M11/90.90/2	Madingley underpass	Pedestrian subway	Unaffected	Existing A14/M11 link road over the bridge to be de-trunked and designated for maintenance and access only.
BE14	Girton interchange	M11/90.90	Bulls Close underpass	Pedestrian subway	Unaffected	Bridge unaffected.
BE15	Girton interchange	A428/121.90	Madingley Bridleway	Overbridge (over A428)	Affected	Change to existing A428 vertical and horizontal alignment under bridge only; this may lead to an increased risk of collision loading. Possible upgrade of parapet height over the structure.
BE16	Girton interchange	M11/90.10	Girton underpass	Underbridge (under M11)	Unaffected	Bridge unaffected.
BE17	Girton interchange	M11/90.50	Girton interchange	Underbridge (under M11)	Affected	Change to A14 alignment under bridge, amendments to M11/A14 N/B off slip alignment over bridge which may require minor carriageway realignments on the bridge deck. Structure to be assessed to confirm adequacy for proposed loading.

Bridge no.	Approx. chainage (m)	HA number	Structure name	Structure type	Category	Proposals
BE18	Girton interchange	A14/97.60	Huntingdon Road bridge	Overbridge	Affected	Change to A14 alignment under bridge only. Works proposed to address settlement and ongoing movement of embankment and wing walls.
BE19	Girton interchange	Not Known	Huntingdon Road underpass	Underbridge (under A1307)	Unaffected	Bridge unaffected - located South east of A14/97.60 under Huntingdon Road.
BE20	Girton interchange	A14/97.90	Girton Grange accommodation bridge	Overbridge	Affected	Change to A14 alignment under bridge which may lead to increased risk of collision loading with substructure. Upgrade of existing 1.5m high parapet to new compliant 1.8m high equestrian parapet.
BE21	31,200	A14/98.30	Girton Road bridge	Overbridge	Unaffected	Change to A14 Alignment under bridge only.
BE22	31,800	A14/99.10	Woodhouse accommodation bridge	Overbridge	Unaffected	Change to A14 Alignment under bridge only.
BE23	33,000	A14/100.10	Histon junction west bridge	Overbridge	Affected	No change to deck, concrete collar to be cast around piers to connect into step barrier.
BE24	33,000	A14/100.20	Histon junction east bridge	Overbridge	Affected	No change to deck, concrete collar to be cast around piers to connect into step barrier.

Bridge no.	Approx. chainage (m)	HA number	Structure name	Structure type	Category	Proposals
BE25	34,100	A14/101.30	Impington Guided Busway bridge	Underbridge	Affected	Change to alignment on deck. Twin decks to be stitched together. Deck and abutments to be widened.
BE26	34,200	A14/101.5	Kings Hedges bridge	Underbridge	Affected	Change to alignment on deck. Twin decks to be stitched together. Deck and abutments to be widened.
BE27	35,550	A14/102.7	Milton junction west bridge	Overbridge	Affected	No change to deck, concrete collar to be cast around piers to connect into step barrier.
BE28	35,600	A14/102.90	Milton junction east bridge	Overbridge	Affected	Change to alignment on deck, being reassessed to confirm adequacy for proposed loading. Service trough detail to be amended to support widened carriageway alignment.
BE29	n/a	A14/76.20	A14 Huntingdon viaduct	Underbridge	Demolish	To be demolished.
BE30	4,600	Network Rail owned structure	Brampton Road bridge	Road over rail bridge	Affected	Change to alignment on deck. No assessment proposed subject to agreement with Network Rail.
BE31	n/a	A14/76.9	Mill Common underpass	Underbridge	Unaffected	Bridge unaffected.

1.2 Gantries schedule

Table 1.3: Gantries schedule

Structure type	Chainage A14	Chainage A1	Sign type	ADS through signs	Direction	ADS exit signs	Direction	ITS first carriageway technology equipment		ITS second carriageway technology equipment	
								MS4	MS3	MS4	MS3
Portal gantry	6,661		1 mile	The north west, the Midlands (M1 North, M6), Kettering A14	W/B	The north east, Peterborough A1, Huntingdon A141	W/B	Yes			
Portal gantry	5,877		1/2 mile	The north west, the Midlands (M1 North, M6), Kettering A14	W/B	The north east, Peterborough A1, Huntingdon A141	W/B	Yes			
Portal gantry	5,098		Final	The north west, the Midlands (M1 North, M6), Kettering A14	W/B	The north east, Peterborough A1, Huntingdon A141	W/B				
Portal gantry	4,508		Confirmatory	The north west, the Midlands (M1 North, M6), Kettering A14	W/B	The north east, Peterborough A1, Huntingdon A141	W/B	Yes			
Portal gantry	8,780		1 Mile	London, Stansted (M11), Felixstowe, Harwich, Cambridge A14	E/B	St Ives (A1096), Royston, Papworth, Godmanchester A1198	E/B	Yes			

Structure type	Chainage A14	Chainage A1	Sign type	ADS through signs	Direction	ADS exit signs	Direction	ITS first carriageway technology equipment		ITS second carriageway technology equipment	
Portal gantry	9,607		1/2 Mile	London, Stansted (M11), Felixstowe, Harwich, Cambridge A14	E/B	St Ives (A1096), Royston, Papworth, Godmanchester A1198	E/B	Yes			
Portal gantry	10,368		Final	London, Stansted (M11), Felixstowe, Harwich, Cambridge A14	E/B	St Ives (A1096), Royston, Papworth, Godmanchester A1198	E/B	Yes			
Portal gantry	10,570		Confirmatory	London, Stansted (M11), Felixstowe, Harwich, Cambridge A14	E/B	St Ives (A1096), Royston, Papworth, Godmanchester A1198	E/B	Yes			
Portal gantry	20,988		2/3 Mile	London, Stansted (M11), Felixstowe, Harwich, Cambridge A14	E/B	Fenstanton A1307, Swavesey	E/B	Yes			
Portal gantry	21,537		1/3 Mile	London, Stansted (M11), Felixstowe, Harwich, Cambridge A14	E/B	Fenstanton A1307, Swavesey	E/B	Yes			

Structure type	Chainage A14	Chainage A1	Sign type	ADS through signs	Direction	ADS exit signs	Direction	ITS first carriageway technology equipment		ITS second carriageway technology equipment	
Portal gantry	22,053		Final	London, Stansted (M11), Felixstowe, Harwich, Cambridge A14	E/B	Fenstanton A1307, Swavesey	E/B	Yes			
Portal gantry	22,264		Confirmatory	London, Stansted (M11), Felixstowe, Harwich, Cambridge A14	E/B	Fenstanton A1307, Swavesey	E/B	Yes			
Portal gantry	24,424		2/3 mile	The north, the Midlands, Kettering A14	W/B	Huntingdon A1307, St Ives (A1096), Swavesey	W/B			Yes	
Portal gantry	23,787		1/3 mile	The north, the Midlands, Kettering A14	W/B	Huntingdon A1307, St Ives (A1096), Swavesey	W/B	Yes		Yes	
Portal gantry	23,237		Final	The north, the Midlands, Kettering A14	W/B	Huntingdon A1307, St Ives (A1096), Swavesey	W/B			Yes	
Portal gantry	22,827		Confirmatory	The north, the Midlands, Kettering A14	W/B	Huntingdon A1307, St Ives (A1096), Swavesey	W/B			Yes	

Structure type	Chainage A14	Chainage A1	Sign type	ADS through signs	Direction	ADS exit signs	Direction	ITS first carriageway technology equipment		ITS second carriageway technology equipment	
Portal gantry	24,035		2/3 mile	London, Stansted (M11), Felixstowe, Harwich, Cambridge A14	E/B	Longstanton, Oakington (Northstowe), Bar Hill B1050	E/B	Yes			
Portal gantry	24,573		1/3 mile	London, Stansted (M11), Felixstowe, Harwich, Cambridge A14	E/B	Longstanton, Oakington (Northstowe), Bar Hill B1050	E/B	Yes			
Portal gantry	25,111		Final	London, Stansted (M11), Felixstowe, Harwich, Cambridge A14	E/B	Longstanton, Oakington (Northstowe), Bar Hill B1050	E/B	Yes			
Portal gantry	25,312		Confirmatory	London, Stansted (M11), Felixstowe, Harwich, Cambridge A14	E/B	Longstanton, Oakington (Northstowe), Bar Hill B1050	E/B	Yes			
Portal gantry	27,659		2/3 mile	The north, the Midlands, Huntingdon A14	W/B	Longstanton, Oakington (Northstowe), Bar Hill B1050	W/B		Yes	Yes	

Structure type	Chainage A14	Chainage A1	Sign type	ADS through signs	Direction	ADS exit signs	Direction	ITS first carriageway technology equipment		ITS second carriageway technology equipment	
Portal gantry	27,142		1/3 mile	The north, the Midlands, Huntingdon A14	W/B	Longstanton, Oakington (Northstowe), Bar Hill B1050	W/B			Yes	
Portal gantry	26,621		Final	The north, the Midlands, Huntingdon A14	W/B	Longstanton, Oakington (Northstowe), Bar Hill B1050	W/B			Yes	
Portal gantry	26,090		Confirmatory	The north, the Midlands, Huntingdon A14	W/B	Longstanton, Oakington (Northstowe), Bar Hill B1050	W/B			Yes	
Portal gantry	27,492		2/3 mile	Felixstowe, Harwich, Cambridge (N) A14, Ely A10	E/B	Cambridge (C) A1307, Non-motorway traffic and London Stansted M11	E/B				
Portal gantry	28,119		1/3 mile	Felixstowe, Harwich, Cambridge (N) A14, Ely A10	E/B	Cambridge (C) A1307, Non-motorway traffic and London Stansted M11	E/B				

Structure type	Chainage A14	Chainage A1	Sign type	ADS through signs	Direction	ADS exit signs	Direction	ITS first carriageway technology equipment		ITS second carriageway technology equipment	
Portal gantry	28,521		Final	Felixstowe, Harwich, Cambridge (N) A14, Ely A10	E/B	Cambridge (C) A1307, non-motorway traffic and London Stansted M11	E/B	Yes		Yes	
Portal gantry	28,792		Confirmatory	Felixstowe, Harwich, Cambridge (N) A14, Ely A10	E/B	Cambridge (C) A1307, non-motorway traffic and London Stansted M11	E/B	Yes			
Portal gantry	29,076		Final	London Stansted M11	E/B	Cambridge (C) A1307, Non-motorway traffic	E/B	Yes			
Portal gantry	30,543		Final	The north, the Midlands, Huntingdon A14, A428 and A14	W/B	Bedford A428	W/B			Yes	
Portal gantry	30,166		Confirmatory	The north, the Midlands, Huntingdon A14	W/B	Bedford A428	W/B			Yes	
Portal gantry	32,202		2/3 mile	Bedford A428, A428 and A14, the north, the Midlands, Huntingdon A14	W/B	London M11	W/B	Yes			

Structure type	Chainage A14	Chainage A1	Sign type	ADS through signs	Direction	ADS exit signs	Direction	ITS first carriageway technology equipment		ITS second carriageway technology equipment	
Portal gantry	31,677		1/3 mile	Bedford A428, A428 and A14, the north, the Midlands, Huntingdon A14	W/B	London M11	W/B	Yes			
Portal gantry	31,211		Final	Bedford A428, A428 and A14, the north, the Midlands, Huntingdon A14	W/B	London M11	W/B			Yes	
Portal gantry	30,906		Confirmatory	Bedford A428, A428 and A14, the north, the Midlands, Huntingdon A14	W/B	London M11	W/B			Yes	
Portal gantry	31,132		2/3 mile	Felixstowe, Harwich, Newmarket A14, Ely A10	E/B	Cambridge, Histon B1049	E/B	Yes			
Portal gantry	31,677		1/3 mile	Felixstowe, Harwich, Newmarket A14, Ely A10	E/B	Cambridge, Histon B1049	W/B	Yes			

Structure type	Chainage A14	Chainage A1	Sign type	ADS through signs	Direction	ADS exit signs	Direction	ITS first carriageway technology equipment		ITS second carriageway technology equipment	
Portal gantry	32,202		Final	Felixstowe, Harwich, Newmarket A14, Ely A10	E/B	Cambridge, Histon B1049	W/B	Yes			
Portal gantry	32,723		Confirmatory	Felixstowe, Harwich, Newmarket A14, Ely A10	E/B	Cambridge, Histon B1049	E/B	Yes			
Portal gantry	34,759		1/2 mile	The north, the Midlands, Huntingdon A14	W/B	Cambridge, Histon B1049	W/B	Yes		Yes	
Portal gantry	33,896		Final	The north, the Midlands, Huntingdon A14	W/B	Cambridge, Histon B1049	W/B	Yes		Yes	
Portal gantry	33,380		Confirmatory	The north, the Midlands, Huntingdon A14	W/B	Cambridge, Histon B1049	W/B			Yes	
Portal gantry	33,896		1/2 mile	Felixstowe, Harwich, Newmarket A14	E/B	Ely A10, Cambridge A1309, Milton	W/B	Yes		Yes	
Portal gantry	34,759		Final	Felixstowe, Harwich, Newmarket A14	E/B	Ely A10, Cambridge A1309, Milton	W/B	Yes		Yes	

Structure type	Chainage A14	Chainage A1	Sign type	ADS through signs	Direction	ADS exit signs	Direction	ITS first carriageway technology equipment		ITS second carriageway technology equipment	
Portal gantry	35,237		Confirmatory	Felixstowe, Harwich, Newmarket A14	E/B	Ely A10, Cambridge A1309, Milton	E/B	Yes			
Portal gantry		4,874	2/3 mile	The north, Peterborough A1(M)	N/B	The Alconburys, The Stukeleys. Non-motorway traffic B1043	N/B	Yes			Yes
Portal gantry		5,436	1/3 mile	The north, Peterborough A1(M)	N/B	The Alconburys, The Stukeleys. Non-motorway traffic B1043	N/B	Yes		Yes	
Portal gantry		1,199	2/3 mile	The north east, Peterborough A1	N/B	The north west, the Midlands (M1 North, M6), Kettering A14, Huntingdon A141	N/B	Yes			
Portal gantry		2,176	Final	The north east, Peterborough A1	N/B	The north west, the Midlands (M1 North, M6), Kettering A14, Huntingdon A141	N/B				Yes
Portal gantry		2,366	Confirmatory	The north east, Peterborough A1	N/B	The north west, the Midlands (M1 North, M6), Kettering A14, Huntingdon A141	N/B				

Structure type	Chainage A14	Chainage A1	Sign type	ADS through signs	Direction	ADS exit signs	Direction	ITS first carriageway technology equipment		ITS second carriageway technology equipment	
Portal gantry		5,436	1 mile	London Stansted (M11), Cambridge (A14(E)) A1	S/B	The Midlands, Kettering A14 (W), Huntingdon A141	S/B	Yes		Yes	
Portal gantry		4,546	1/2 mile	London Stansted (M11), Cambridge (A14(E)) A1	S/B	The Midlands, Kettering A14 (W), Huntingdon A141	S/B	Yes			
Portal gantry		3,739	Final	London Stansted (M11), Cambridge (A14(E)) A1	S/B	The Midlands, Kettering A14 (W), Huntingdon A141	S/B				
Portal gantry		3,481	Confirmatory	London Stansted (M11), Cambridge (A14(E)) A1	S/B	The Midlands, Kettering A14 (W) and Huntingdon A141	S/B	Yes			
Portal gantry		2,676	2/3 mile	London (central and west) A1	S/B	London (E) Stansted (M11), Felixstowe, Harwich, Cambridge A14	S/B				
Portal gantry		2,033	1/3 mile	London (central and west) A1	S/B	London (E) Stansted (M11), Felixstowe, Harwich, Cambridge A14	S/B	Yes			

Structure type	Chainage A14	Chainage A1	Sign type	ADS through signs	Direction	ADS exit signs	Direction	ITS first carriageway technology equipment		ITS second carriageway technology equipment	
Portal gantry		1,500	Final	London (central and west) A1	S/B	London (E) Stansted (M11), Felixstowe, Harwich, Cambridge A14	S/B		Yes	Yes	
Portal gantry		961	Confirmatory	London (central and west) A1	S/B	London (E) Stansted (M11), Felixstowe, Harwich, Cambridge A14	S/B	Yes			
Only ITS											
Cantilever	-992								Yes		
Cantilever	-131								Yes		
Cantilever	418							Yes			
Cantilever	1,739							Yes			
Cantilever	2,661							Yes			
Cantilever	3,298							Yes			
Cantilever	3,650							Yes			
Cantilever	6,368								Yes		
Cantilever	6,954								Yes		
Cantilever	8,384								Yes		
Cantilever	8,425							Yes			
Cantilever	9,296								Yes		

Structure type	Chainage A14	Chainage A1	Sign type	ADS through signs	Direction	ADS exit signs	Direction	ITS first carriageway technology equipment	ITS second carriageway technology equipment
Cantilever	9,968							Yes	
Cantilever	11,555							Yes	
Cantilever	12,032							Yes	
Cantilever	13,144							Yes	
Cantilever	13,478							Yes	
Cantilever	14,733							Yes	
Cantilever	14,923							Yes	
Cantilever	16,370							Yes	
Cantilever	17,521							Yes	
Cantilever	20,037								Yes
Cantilever	21,336								Yes
Cantilever	24,959								Yes
Cantilever	26,939							Yes	
Cantilever	27,848								Yes
Portal gantry	550		Confirmatory		E/B		E/B		
Cantilever	31,977								Yes
Cantilever	32,367								Yes
Cantilever		828						Yes	
Cantilever		2,944						Yes	
Cantilever		3,320						Yes	

Structure type	Chainage A14	Chainage A1	Sign type	ADS through signs	Direction	ADS exit signs	Direction	ITS first carriageway technology equipment	ITS second carriageway technology equipment
Only ADS									
Portal gantry	11,010		1 mile	(M11), (A14), London, Stansted, Cambridge A1(M)	S/B	A1307 Huntingdon, St Ives (A1096)	S/B		
Portal gantry	10,206		1/2 mile	(M11), (A14), London, Stansted, Cambridge A1(M)	S/B	A1307 Huntingdon, St Ives (A1096)	S/B		
Portal gantry	9,401		Final	(M11), (A14), London, Stansted, Cambridge A1(M)	S/B	A1307 Huntingdon, St Ives (A1096)	S/B		
Portal gantry	8,903		Supplementary	(M11), (A14), London, Stansted, Cambridge A1(M)	S/B	A1307 Huntingdon, St Ives (A1096)	S/B		
Portal gantry	8,403		Confirmatory	(M11), (A14), London, Stansted, Cambridge A1(M)	S/B	A1307 Huntingdon, St Ives (A1096)	S/B		

Structure type	Chainage A14	Chainage A1	Sign type	ADS through signs	Direction	ADS exit signs	Direction	ITS first carriageway technology equipment		ITS second carriageway technology equipment	
Cantilever	-784		1 mile	Stansted (M11), Felixstowe, Harwich, Cambridge A14	E/B	The north, Peterborough (A1(N)), London (A1(S)), Huntingdon (A141)	E/B				
Cantilever	24		1/2 mile	Stansted (M11), Felixstowe, Harwich, Cambridge A14	E/B	The north, Peterborough (A1(N)), London (A1(S)), Huntingdon (A141)	E/B				
Cantilever	823		Final	Stansted (M11), Felixstowe, Harwich, Cambridge A14	E/B	The north, Peterborough (A1(N)), London (A1(S)), Huntingdon (A141)	E/B				
Portal gantry	1,022		Confirmatory	Stansted (M11), Felixstowe, Harwich, Cambridge A14	E/B	The north, Peterborough (A1(N)), London (A1(S)), Huntingdon (A141)	E/B				
Portal gantry		6,025	Final	The north, Peterborough A1(M)	N/B	The Alconburys, The Stukeleys. Non-motorway traffic B1043	N/B				

Structure type	Chainage A14	Chainage A1	Sign type	ADS through signs	Direction	ADS exit signs	Direction	ITS first carriageway technology equipment		ITS second carriageway technology equipment	
Portal gantry		1,639	1/3 mile	The north east, Peterborough A1	N/B	The north west, the Midlands (M1 (N), M6), Kettering A14, Huntingdon A141	N/B				

Note: W/B west bound, E/B east bound, S/B south bound and N/B north bound. Where portal gantries in *Table 1.3* have the same chainage, these have double usage.

1.3 Watercourse realignment locations

Table 1.4: Schedule of watercourse realignments required by the scheme

Feature name	Location	Easting (approx)	Northing (approx)	Length of realignment (approx)	Reason for realignment
Alconbury Brook	East of the A1	519273	273168	150m	To allow for the widening of the A1 carriageway.
Brampton Brook	West of the A1	519743	269916	22m	To allow for the westward widening of the A1 carriageway.
Grafham Road Drain	East of the A1	519853	269606	300m	To allow for the eastern widening of the A1 carriageway.
Internal Drainage Board (IDB) Drain No.1	Near the river Great Ouse	521317	268385	50m	To allow for the pier locations under the A14 viaduct.
Huntingdonshire District Council Award Drain	West of Potton Road	528299	267656	1.4km	The existing road runs over the top of it on its existing alignment and the east-west flow of the drain needs to be maintained.
West Brook	North of Five Arch Bridge to the east of Potton Road	529552	267757	1km	Due to the realignment of Potton Road.
Covell's Drain (in two places)	South of the new junction of the new A14 and the existing A14	533394	267139	Each approximately 100m	The embankment for the newly raised New Barns Lane runs over it and the flow of this drain needs to be maintained.
A tributary of Covell's Drain	By Friesland Farm	534670	266416	50m	To allow for the new widening of the existing A14.
Unnamed watercourse	East of Friesland Farm	534894	266229	150m	To allow for the new widening of the existing A14.
A tributary of Swavesey Drain	Within Swavesey Junction	535754	265741	150m	To allow for alterations to the Swavesey Junction.
A tributary of Utton's Drove Drain	North of Clare College Farm	536814	264937	650m	To allow for the new widening of the existing A14.

Feature name	Location	Easting (approx)	Northing (approx)	Length of realignment (approx)	Reason for realignment
Lolworth Drain	South of A14, north of Grange Farm	537622	264427	350m	To allow for the new widening of the existing A14.
Longstanton Brook	West of Bar Hill junction	538018	264199	40m	To allow for alterations to the Bar Hill Junction.
Award Drain No. 271	East of Bar Hill junction	538437	263924	150m	To allow for alterations to the Bar Hill Junction.
A tributary of Oakington Brook	East of Bar Hill junction	538507	263863	50m	To allow for the new widening of the existing A14.
Drain	West of Oakington Road	539646	262917	325m	To allow for the new access road.
A tributary of Oakington Brook	-	539455	262666	150m	Connecting south of Oak Road with south of local access road.
Drain	Between Oak road and Cambridge Crematorium Road	539803	262513	50m	Crossing the local access road.
Drain	Adjacent to Cambridge Crematorium	539831	262658	220m	The flow of this drain needs to be maintained.
A tributary of Washpit Brook	South-eastern part of Girton interchange	541138	261298	650m	Due to widening of A428 on the southern side.
Washpit Brook	South of Huntingdon Road	541652	261371	40m	Due to proposed roundabout.
Drain	Parallel to A14, south of the lake	544969	261888	600m	Due to embankment at east of Histon Junction.
Drain	Parallel to A14	545479	261991	200m	Due to embankment between Cambridgeshire Guided Busway and Mere way.
13th Public drain	Milton Junction	546825	262190	350m	To allow for the new widening of the existing A14.

1.4 Culverts schedule

Table 1.5: Culverts schedule

Culvert no.	Main line chainage (m)	Easting	Northing	Culvert length (m)	Culvert diameter (m)
113	1,350	518799	271686	23	1.2
114	1,500	518958	271677	10	0.7
115	1,745	519183	271638	64	1.2
115a	2,000	519385	271605	5	0.7
116	2,400	519364	271017	9	0.7
116a	2,340	519522	271150	5	0.7
118	2,700	519742	270885	5	0.7
118a	2,700	519756	270886	5	0.7
118b	2,600	519725	271005	5	0.7
118c	2,200	519629	271371	5	0.7
103	2,700	519642	270860	17	1.5
104	2,700	519642	270860	65	1.5
120	3,250	519750	270308	52	1.2
121	3,350	520081	270261	7	0.7
122	3,500	519980	270080		
123	3,700	519939	269896	5	0.7
125	3,800	519762	269806	17	1.2
126	4,000	519886	269557	87	1.2
127	4,200	519866	269316	73	1.2
128	4,200	519963	269365	54	1.2

Culvert no.	Main line chainage (m)	Easting	Northing	Culvert length (m)	Culvert diameter (m)
129	4,500	520535	269207	18	0.7
130	4,500	520430	269191	8	0.7
131	4,700	520328	269036	39	0.7
132	4,800	520389	268987	7	0.7
133	4,500	519992	269021	15	0.7
134	4,600	520061	268986	20	0.7
135	4,700	520088	268885	17	0.7
136	5,900	521474	268529	10	0.7
137	5,900	521300	268436	12	0.7
138	5,900	521217	268344	56	0.7
139	5,900	521049	268219	91	0.7
140	6,480	521836	268331	150	1.2
141	6,700	522056	268308	133	1.2
142	6,700	522079	268384	8	0.7
143	7,000	522400	268303	75	1.2
144	7,250	522730	268449	13	0.5
145	7,200	522607	268293	40	1.2
146	7,250	522486	268128	8	0.8
147	7,250	522327	267906	13	0.8
148	7,300	522707	268330	114	1.2
149	7,250	522367	267915	12	1.1
150	8,400	523746	268078	27	1.2

Culvert no.	Main line chainage (m)	Easting	Northing	Culvert length (m)	Culvert diameter (m)
151a	9,450	524642	268142	18	0.5
151	9,450	524656	267787	8	0.5
152	9,450	524664	267770	8	0.5
153	9,450	524656	267729	19	0.5
154	9,500	524853	267846	70	1.2
155	9,500	524851	267798	4	0.7
156	9,900	525213	267780	56	0.7
157	9,900	525207	267735	4	0.7
158	10,850	526139	267987	5	0.7
159	11,050	526394	267751	13	0.7
160	11,050	526417	267736	23	0.7
161	11,050	526353	267502	8	0.7
162	11,050	526415	267564	21	0.7
163	12,250	527606	267702	48	1.8
164	13,000	528307	267783	65	1.8
165	13,000	528286	267660	65	1.8
166	13,340	528640	267744	64	1.8
167	13,700	529003	267726	50	2.0
169	14,400	529832	268030	7	1.1
170	14,400	529793	267969	8 (added to existing)	0.7
171	14,250	529612	267736	100	2.2
172	14,250	529574	267705	133	0.7

Culvert no.	Main line chainage (m)	Easting	Northing	Culvert length (m)	Culvert diameter (m)
173	14,250	529560	267656	110	0.7
174	14,250	529527	267597	100	2.2
175	14,200	529417	267443	5	0.7
176	15,400	530873	267901	4 (added to existing)	0.9
177	15,400	530866	267882	18	0.7
178	15,400	530807	267813	17	0.7
179	15,400	530786	267813	17	2.4
180	15,300	530633	267650	10	0.7
181	15,300	530574	267561	45	0.7
182	15,300	530563	267553	89	2.4
183	15,300	530368	267361	5 (added to existing)	0.7
184	15,300	530351	267340	5	2.4
185	15,200	530393	267327	15	0.7
186	15,650	530950	267569	5	0.7
187	16,300	531592	267422	81	1.5
188	16,300	531662	267470	19	0.7
189	16,300	531622	267367	19	0.7
190	16,400	531780	267626	6	0.7
191	16,400	531721	267421	75	0.7
192	16,400	531714	267374	80	0.7
193	16,300	531705	267315	73	1.2
194	16,400	531741	267171	6	0.7

Culvert no.	Main line chainage (m)	Easting	Northing	Culvert length (m)	Culvert diameter (m)
195	16,400	531739	267122	6	0.7
196	17,540	533279	267188	98	2.0
197	17,540	532692	267033	4	0.7
198	18,000	533375	267230	16	2.5
199	18,050	533293	267079	60	3.0
124	850	519799	269910	100	2.4
119	1,400	519700	270297	35	1.2
117	1,950	519526	270859	54	1.2
111	3,700	519241	272577	20	0.7
110	5,050	519116	273914	30	0.7
211	21,580	534725	266322	10	0.9
212	21,609	534803	266396	10	1.5
213	21,609	534771	266340	44.5	1.5
214	21,609	534745	266300	35	1.5
210	21,680	535516	266067	10	0.9
215	22,378	535650	265970	44.7	1.4
216	22,535	535619	265837	10	0.8
217	22,593	535454	265724	18.8	1.4
218	22,629	535673	265674	10	0.8
219	22,642	535780	265731	25	1.8
202	22,786	535761	265703	25 (added to existing)	1.0
220	22,787	535780	265731	22	1.8

Culvert no.	Main line chainage (m)	Easting	Northing	Culvert length (m)	Culvert diameter (m)
209	22,915	535797	265512	35 (added to existing)	1.2
221	23,832	536649	265151	12	1.2
222	23,833	536588	265059	10	1.8
203	23,856	536658	265104	38	1.8
223	23,860	536677	265143	10	2.1
224	24,123	536835	264906	10	1.2
225	24,156	536904	264961	108	1.4
226	24,269	537044	264952	30	1.2
227	24,280	537020	264897	42	1.4
228	24,368	537042	264783	108	1.4
229	24,400	536955	264589	11	0.9
204	24,707	537357	264640	31 (added to existing)	1.1
230	24,713	537329	264583	10	1.5
205	25,512	538002	264197	57 (added to existing)	1.8
232	25,522	538095	264276	10	0.9
233	25,532	538113	264261	10	1.8
234	25,549	538134	264286	26	1.8
236	25,856	538398	264107	34	1.2
235	25,860	537417	264147	23	1.2
237	25,922	538452	264084	31	1.4
238	26,250	538691	263842	10	0.8
239	26,307	538686	263802	12	0.9

Culvert no.	Main line chainage (m)	Easting	Northing	Culvert length (m)	Culvert diameter (m)
206	26,385	538743	263687	6 (added to existing)	1.1
240	26,460	538850	263710	39	1.5
207	27,104	539323	263258	13 (added to existing)	1.0
241	27,122	539359	263283	10	1.2
242	27,128	539382	263306	28	1.5
243	27,600	539756	263007	12	1.4
244	27,605	539728	262943	47	1.5
245	27,685	540476	262170	10	1.2
246	25,800	538201	263917	54	1.4
247	25,475	537976	264165	6	1.8
250	22,820	535810	265715	65	1.4
251	21,280	534538	266586	10	0.8
252	21,730	534923	266356	10	0.9
253	21,765	534880	266218	10	1.2
254	22,490	535407	265698	10	1.2
256	22,805	535733	265626	10	0.8
257	23,125	536099	265617	10	0.9
258	23,400	536230	265305	10	1.2
259	23,420	536306	265374	10	0.9
260	24,995	537557	264415	10	1.5
261	25,660	538265	264249	10	0.9
262	26,480	538806	263611	30	1.5

Culvert no.	Main line chainage (m)	Easting	Northing	Culvert length (m)	Culvert diameter (m)
263	26,480	538911	263533	30	1.5
264	26,845	539151	263466	10	0.9
301	27,185	539461	262665	23	0.9
303	27,875	539869	262722	9	0.7
304A	28,023	539666	262238	15	0.5
305	LAR ch740	540284	262064	28	1.5
305A	LAR ch750	540281	262084	13	0.5
305B	LAR ch615	540392	262003	13	0.5
306	28,820	540662	262212	16 existing (no extension)	3.0
307	29,230	540775	261713	28	0.8
308	Hook loop ch1,600	541020	261637	19	0.6
309	A1307 ch1,000	541329	261431	71 existing (no extension)	1.2
309A	M11 ch90	541383	261499	16	1.2
309B	A1307 ch970	541426	261425	10	1.2
309C	A1307 ch740	541641	261376	10	1.2
310	Hook loop ch1,020	541023	261119	160	1.2
310A	A428 ch630			12	0.9
310B	A428 ch480			12	0.9
310C	A428 ch400			12	0.9
311	A428 ch30,300	541702	261244	71 existing (no extension)	1.1

Culvert no.	Main line chainage (m)	Easting	Northing	Culvert length (m)	Culvert diameter (m)
312	A1307 ch790	541602	261429	47 existing (no extension)	1.2
313	A14 ch1,160	541579	261511	36 existing (no extension)	2
314	New access track and NMU path ch790	541593	262615	16	1.4
415	32,300	543667	261634		
416	32,450	543769	261653	12 existing (no extension)	1.1
416A	32,700	544000	261818	10	0.5

1.5 Crossings schedule

Table 1.6: Nature conservation crossings schedule

Note: This list contains those structures that are bespoke or require structural modification to permit a secondary wildlife crossing function. It is not an exhaustive record of wildlife crossings at the preliminary design stage. Other structures that could benefit wildlife as a secondary function e.g. certain drainage culverts which only require non-structural works, i.e. guiding planting, to realise that function are not recorded separately here.

Receptor	Chainage (approx) (m)	Purpose of mitigation	Mitigation proposed	Comments
Badgers (<i>Meles meles</i>)	1,600-1,650	To reduce traffic mortality/reduce severance.	Dedicated badger underpass. 600mm class M concrete pipe.	Allows safe passage of badgers beneath the A14. In conjunction with guiding planting/fencing and sensitive lighting design. Underpass to be installed as early as practicable in construction period to support wider badger mitigation.
Otters (<i>Lutra lutra</i>), water vole (<i>Arvicola amphibious</i>), bats, Great Crested Newts (GCN) (<i>Triturus cristatus</i>), badgers	3,200-3,250	To improve west/east connectivity.	Large existing arch culvert to be extended. Provide a ledge for dry passage for badgers and for otters to use in high flows if possible.	In conjunction with guiding planting and sensitive lighting design.
Otter and badger	3,600-3,850	To reduce traffic mortality.	A pair of 900mm class M concrete pipe underpasses.	Allows safe passage for mammals beneath Grafham Road. In conjunction with guiding planting and sensitive lighting design.

Receptor	Chainage (approx) (m)	Purpose of mitigation	Mitigation proposed	Comments
Badgers and GCN	9,900-9,950	To reduce traffic mortality.	A 1050mm class H concrete pipe could be adapted to include a dry run for mammal/GCN passage.	Allows safe passage of badgers and GCN under A14. Linked to suitable habitats.
Badgers and otters	12,250-12,300	To reduce traffic mortality/reduce severance.	Dedicated badger underpass. 900mm class M concrete pipe (so suitable for otters too)	Positioned adjacent to culvert to provide dry passage beneath road.
Otters and other mammals	13,700	To reduce traffic mortality/reduce severance.	Culvert of sufficient diameter for large mammals. Esp. otters. Provide a ledge for dry passage for badgers and for otters to use in high flows if possible. Alternatively provide a separate underpass to the west where sufficient cover exists beneath the road surface	Guiding planting and sensitive lighting design.
Bats, badgers, otters etc.	14,150-14,300	To reduce traffic mortality/reduce severance.	Make proposed large culvert suitable for use by a range of species. Provide a ledge for dry passage for badgers and for otters to use in high flows if possible. Alternatively provide a separate underpass beneath the Potton Road embankments.	Allows passage beneath Potton Road embankments. In conjunction with guiding planting and sensitive lighting design.

Receptor	Chainage (approx) (m)	Purpose of mitigation	Mitigation proposed	Comments
Otters and badgers	14,200-14,350	To reduce traffic mortality/reduce severance.	Culvert of sufficient diameter for large mammals. Especially otters. Provide a ledge for dry passage for badgers and for otters to use in high flows if possible. Alternatively provide a separate underpass beneath the Potton Road embankments.	Allows safe passage of mammals beneath Potton Road. In conjunction with guiding planting/fencing and sensitive lighting design.
Otters and other mammals	14,350-14,400	To reduce traffic mortality/reduce severance.	West Brook bridge. Design includes dry passage along both banks and a ramp into the water at each end of structure so suitable for both otters and badgers.	Guiding planting and sensitive lighting design.
Badgers, otters, bats	15,300	To reduce traffic mortality/reduce severance.	Make proposed large culvert suitable for use by a range of species. Provide a ledge for dry passage for badgers and for otters to use in high flows if possible. Alternatively provide a separate underpass beneath the road.	Hilton Road Bridge. Crossing In conjunction with guiding planting/fencing and sensitive lighting design.
Otter and badger	15,300-15,400	To reduce traffic mortality.	A pair of 900mm class M concrete pipe underpasses.	Allows safe passage for mammals beneath Hilton Road.
GCN	15,600-15,600	To reduce traffic mortality/reduce severance.	Provide a dedicated dry GCN underpass (avoid concrete where possible - provide a good depth of soil at base). Minimum 0.5m high x 1m wide.	In conjunction with guiding planting/fencing.

Receptor	Chainage (approx) (m)	Purpose of mitigation	Mitigation proposed	Comments
Badgers	17,900	To reduce traffic mortality/reduce severance.	Dedicated badger underpass west of New Barns Lane. 600mm class M concrete pipe.	Allow safe passage for mammals beneath road.
Badgers	17,900-18,050	To reduce traffic mortality.	A pair of 900mm class M concrete pipe underpasses.	Allows safe passage for mammals beneath New Barns Lane.
Badgers	19,950	To reduce traffic mortality/reduce severance.	Large bore culvert east of New Barns Lane. Provide a ledge for dry passage for badgers and for otters to use in high flows if possible. Alternatively provide a separate underpass beneath the road.	A key area for this species on the scheme. Crossing In conjunction with guiding planting/fencing and sensitive lighting design.
Bats, GCN, general biodiversity	28,750-28,800	To improve north/south connectivity.	Large box culvert suitable for a range of mammals. Especially otters and bats. Provide a ledge for dry passage for badgers/GCN and for otters to use in high flows if possible.	In conjunction with guiding planting/fencing and sensitive lighting design.
GCN	N/A	To reduce traffic mortality/reduce severance.	Provide three dedicated dry GCN underpasses beneath Crematorium local access road (LAR) (avoid concrete where possible - provide a good depth of soil at base). Minimum 0.5m high x 1m wide.	To allow GCN from Crematorium ponds access to the wider countryside. Underpass either side of crematorium/Hacker's Fruit Farm junction and one leading out of GCN receptor site. In conjunction with guiding planting/fencing.

Receptor	Chainage (approx) (m)	Purpose of mitigation	Mitigation proposed	Comments
GCN	N/A	To reduce traffic mortality/reduce severance.	Provide three dedicated dry GCN underpasses beneath Views Common Link Road (avoid concrete where possible - provide a good depth of soil at base). Minimum 0.5m high x 1m wide.	To prevent GCN being isolated from their ponds by Views Common Link Road and allow them access to receptor sites and common land either side of road. In conjunction with guiding planting/fencing.