

Lower Thames Crossing

7.9 Transport Assessment Appendix A Public Rights of Way

APFP Regulation 5(2)(q)

Infrastructure Planning (Applications: Prescribed Forms and Procedure)
Regulations 2009

Volume 7

DATE: October 2022

Planning Inspectorate Scheme Ref: TR010032 Application Document Ref: TR010032/APP/7.9

VERSION: 1.0

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7.9 Transport Assessment Appendix A Public Rights of Way

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1 Public Rights of Way

1.1 Public Rights of Way (PRoW) surveys

1.1.1 PRoW surveys were undertaken in August and September 2019 in key locations to establish the nature of the PRoW and their usage by walkers, cyclists and horse riders (WCH). The surveys included PRoW and roads that will cross the Project, and other PRoW likely to be affected by the Project. The majority of the PRoW surveys were undertaken during the weekend, at times when recreational use is expected to be highest. Where routes are likely to be used for non-leisure uses such as commuting, surveys were undertaken on a weekday. The surveys were carried out between 06:00 and 19:00 on days with good weather conditions, avoiding rain. The baseline survey results are shown in Table 1.1.

Table 1.1 Surveys of walkers, cyclists and horse riders on PRoW and local roads

MU survey ID	North/ south of the River Thames	PRoW name	Surveyed daily usage pedestrians	Surveyed daily usage cyclists	Surveyed daily usage horse riders	Day of survey	Date of survey
CA1	North	Fort Road between entrance to Tilbury Sewage works and Fort Road	2	8	0	Friday	13/09/2019
CA10	North	B186 North Road between Nelson Road and West Road	0	16	0	Friday	13/09/2019
CA2	North	Muckingford Road between Low Street Lane and Hoford Road	5	28	0	Friday	13/09/2019
CA2	North	Low Street Lane between Muckingford Road and Station Road	0	0	0	Friday	13/09/2019
CA3	North	Brentwood Road between High House Lane and Sleepers Farm Road	0	6	0	Friday	13/09/2019
CA4	North	Rectory Road between A1013 Stanford Road and School Lane	39	20	0	Friday	13/09/2019
CA4	North	Rectory Road between A1013 Stanford Road and School Lane	52	13	0	Saturday	14/09/2019
CA4	North	A1013 Stanford Road between Rectory Road and Hornsby Lane	19	13	0	Friday	13/09/2019
CA4	North	A1013 Stanford Road between Rectory Road and Hornsby Lane	52	52	0	Saturday	14/09/2019
CA5	North	Stifford Clays Road between Green Lane and Stifford Clays Road	1	26	0	Friday	13/09/2019
CA6	North	Ockendon Road between Pea Lane and Church Lane	5	43	0	Friday	13/09/2019
CA7	North	Dennis Road between Pea Lane and West Road	0	19	0	Friday	13/09/2019
CS2	North	B188 Baker Street between Stifford Clays Road and Woolings Close	43	32	0	Friday	13/09/2019
CS2	North	B188 Baker Street between Stifford Clays Road and Woolings Close	55	47	0	Saturday	14/09/2019
CS2	North	Hornsby Lane between A1013 Stanford Road and Gowers Lane	32	15	0	Friday	13/09/2019
CS2	North	Hornsby Lane between A1013 Stanford Road and Gowers Lane	29	18	0	Saturday	14/09/2019
M1	North	FP200 and Station Road	1	0	0	Sunday	25/08/2019
M12	North	Footpath 72 and High House Lane	0	0	0	Sunday	04/08/2019
M14	North	BR161	7	1	0	Saturday	03/08/2019
M15	North	BR219	1	1	0	Saturday	03/08/2019
M16	North	FP136	1	0	0	Saturday	03/08/2019
M17	North	FP146NCN13	40	36	0	Sunday	25/08/2019
M18	North	FP97	2	0	0	Saturday	03/08/2019
M2	North	FP61 and BR58: Coal Road	2	0	0	Sunday	25/08/2019
M3	North	BR206	4	0	1	Sunday	25/08/2019
M4	North	FP231	8	0	3	Saturday	03/08/2019
M5	North	FP230	171	42	0	Saturday	03/08/2019
M6	North	FP119	3	1	8	Saturday	03/08/2019
CA11	South	A226 Gravesend Road between Crutches Lane and Forge Lane	65	44	0	Friday	13/09/2019
CA8	South	Brewers Road between Halfpence Lane and A2 slip road	16	99	0	Friday	13/09/2019
CA9	South	Thong Lane between Vigilant Way and Shorne Ifield Road	13	24	0	Friday	13/09/2019
M10	South	NG7	2	0	0	Sunday	04/08/2019
M11	South	Thong Lane	3	9	0	Sunday	04/08/2019
M13	South	NS163NS164	5	0	0	Sunday	04/08/2019
M7	South	NS174	40	2	0	Sunday	04/08/2019
M8	South	NS169	75	6	0	Sunday	04/08/2019
M9	South	NG8	24	1	0	Sunday	04/08/2019

1.2 Operational impacts

- 1.2.1 Locations where PRoW and cycle routes would be permanently diverted, realigned, redesignated or reinstated during the operational phase of the Project are shown in Table 1.2 to Table 1.4, together with the approximate change in distance, where relevant. Table 1.5 shows locations where local roads would be permanently diverted, realigned or reinstated.
- 1.2.2 The Project would also include improvements to existing connections used by WCH and new WCH routes. These are shown in Table 1.6 to Table 1.8.
- 1.2.3 The locations of permanent changes to PRoW and cycle routes and new provision are shown in Plate 1.1 to Plate 1.3.

Table 1.2 Permanent changes to PRoW and cycle routes - south of the River Thames

PRoW type	PRoW name	Impact	Surveyed dai	ly usage *	sage * Change		Comments
			Pedestrians	Cyclists		distance	
Footpath	NS367	closed	N/A	N/A	Footpath to be permanently closed. Usage of the footpath has been assessed as low, and the route is currently curtailed at its junction with the A2	-	Curtailed at A2
Footpath	NS167	diverted	N/A	N/A	Footpath to be permanently diverted around the A2/M2/Lower Thames Crossing junction and reconnected to a new bridleway.	900m	Diversion around M2/A2/Lower Thames Crossing junction
Footpath	NS169	realigned	75	6	The length of the footpath would be reduced and would connect with the diverted footpath NS167 and new bridleway link which connects to the north and across the Thong Lane green bridge. The western section of NS169 would be redesignated as a shared pedestrian and cycle track between Michael Gardens and the proposed bridleway link.	700m	Diversion around M2/A2/Lower Thames Crossing junction
Bridleway	NS174	diverted	40	2	Permanently diverted along west side of the Project to join NG17 and NG167 alignment	<50m	-
Footpath	NG17	diverted and redesignated as bridleway			Footpath redesignated as bridleway and diverted to connect to NS174 and new bridleway link connecting to Thong Lane Green Bridge to the north.	12m	
Footpath	NG7	realigned	2	0	The length of the footpath would be reduced and would connect with a new bridleway link which connects to NG8 which is diverted north around the South Portal.	1,000m	Diversion around Lower Thames Crossing South Portal
Footpath	NG8	diverted	24	1	Footpath to be permanently diverted north around the South Portal connecting to NG9 and new bridleway links. Between Gravesend Road and NG9 the alignment remains as existing.	800m	Diversion around Lower Thames Crossing South Portal
Footpath	NG9	redesignated as bridleway			Footpath redesignated to bridleway	0m	Remains on existing alignment
Footpath	NS175A	redesignated to shared use			Footpath from Church Lane to HS1 bridge resurfaced and redesignated shared pedestrian and cycle track. Footpath from north side of HS1 bridge to north of Hares bridge redesignated as shared pedestrian and cycle track with access control changed	0m	
Cycle route	NCR177	diverted	N/A	N/A	Cycle route permanently diverted south of the A2 and reconnecting north at the Henhurst Road / Hever Court Road Roundabout	300m	-
Footpath	NS179	redesignated a bridleway			Section of footway redesignated as bridleway south of the A2, between NS180 to the east and a new bridleway link to the west which connects to Brewers Road	0m	
Footpath	NS161	realignment			Southern section of footpath realigned north and west of Harlex Haulage connecting to Park Pale	-105m	

^{*} N/A indicates no survey was carried out.

Note: Diversion distances approximate and take into account provision of new routes by the Project

Table 1.3 Permanent changes to PRoW - north of the River Thames (Tilbury area)

PRoW type PRoW name Impa		Impact	Impact Surveyed daily usage		Change	Change in	Comments	
			Pedestrians	Cyclists		distance		
Footpath	FP200	realigned + redesignated as bridleway			Footpath to be redesignated as bridleway and realigned to follow trodden path	-300m	Alignment follows trodden route and desire line.	
Footpath	FP200	diverted	1	0	Footpath to be permanently diverted along field boundary due to new embankment	-30m	Alignment to follow field boundary	
Footpath	FP60	closed	N/A	N/A	Short section permanently stopped up due to Muckingford Road alignment moving south. No diversion required as Footpath 60 will still connect to the realigned Muckingford Road	-	Replaced by diverted Muckingford Road	
Footpath	FP61	diverted	2	0	Footpath to be permanently diverted east of previous alignment to maintain connection under viaduct. Connectivity is maintained via the diversion of BR58	1,000m	New pedestrian and cycle route to be provided along Muckingford Road/ Linford Road	
Bridleway	BR58	diverted	2	0	Permanent diversion of the bridleway south of previous alignment to maintain connection under the viaduct	300m	-	
Footpath	FP78	realigned+ redesignated as bridleway	N/A	N/A	The footpath would be permanently diverted and designated as bridleway	<50m	Realigned to better connect to bridge over the Project	
Footpath	FP95	redesignated as bridleway			Footpath would be designated as bridleway between Brentwood Road and a new bridleway link connecting to diverted footpath FP79 and new footbridge	0m		
Bridleway	BR206 **	diverted	4	0	Bridleway to be permanently diverted away from the A13 and extended to Rectory Road	<50m	Diverted locally to accommodate the Project	
Footpath	FP82	diverted	N/A	N/A	Footpath would be diverted to the diverted BR206	<50m	Diverted locally to accommodate the Project	
Footpath	FP93	realigned	N/A	N/A	Shortened due to the realignment and extension of BR206.	100m	Diverted locally to accommodate the Project	
Bridleway	BR223/ Gammonfields Way	diverted	N/A	N/A	Locally diverted west to avoid Lower Thames Crossing junction	100m	Diverted locally	
Footpath	FP79	diverted and redesignated as bridleway	N/A	N/A	The footpath would be locally diverted over the Project by means of a new footbridge. At its northern end it would connect with the wider PRoW network including the Rectory Road green bridge	100m	-	
Footpath	Two Forts Way	Redesignated to shared track			Footpath along Two Forts Way to be upgraded and redesignated as shared track (pedestrians and cyclists)	0m		
Footpath	FP97	closed	2	0	Section of route is to be permanently stopped up. The route currently ends at the A13 and would therefore be shortened rather than severed	-	No diversion	

^{*} N/A indicates no survey was carried out

Note: Diversion distances approximate and take into account provision of new routes by the Project

^{**} One horse rider was identified on BR206 on the survey day

Table 1.4 Permanent changes to PRoW - north of the River Thames (Ockendon area)

PRoW type	PRoW name	Impact	Impact Surveyed daily		Change	Change in	Comments
			Pedestrians	Cyclists		distance	
Footpath	FP252	diverted and redesignated as bridleway	N/A	N/A	Diverted south to provide an east-west connection to FP151 and FP 254	300m	Realigned and converted to bridleway
Undesignated	Thames Chase Culvert	extended	N/A	N/A	Culvert remains open and would be extended under widened M25, connecting to new permissive footpath to the west of the Project	0m	Part of recreational route through Thames Chase Forest
Footpath	FP230	realigned and permissive bridleway	171	42	Footpath 230 is to be realigned and taken over a new crossing over the M25. Footpath would be a permissive bridleway	1,000m	Realigned and converted to bridleway and provide new connection across the M25
Footpath	FP136	diverted	1	0	A new footbridge would carry Footpath 136 over the Project	100m	-
Footpath	FP136	redesignated as bridleway			Footpath 136 between track road and BR219 to be redesignated to bridleway	0m	
Footpath	FP135	redesignated as bridleway			Footpath to be redesignated as bridleway between North Road and farm track connecting to FP136	0m	
Footpath	FP251	closed	N/A	N/A	Section parallel to the M25 will be permanently stopped up with no diversion.	-	No diversion
Bridleway	BR219	realigned			North-south section of bridleway to be realigned	<10m	
Footpath	FP254	redesignated as bridleway			Footpath 254 to be redesignated as bridleway connecting to FP151 and Church Lane		
Footpath	FP231	diverted			Footpath 231 south of Ockendon Road bridge to be diverted adjacent to the Project to avoid slip road	<50m	
Bridleway	BR183	diverted			Bridleway would be diverted to accommodate the Project	<150m	
Footpath	FP151	redesignated as bridleway	N/A	N/A	Footpath to be redesignated to bridleway connecting North Road to diverted FP252	0m	-

^{*} N/A indicates no survey was carried out

Note: Diversion distances are approximate and take into account the provision of new routes by the Project

Table 1.5 Permanent changes to local roads for WCH

Area	Local road name	Impact	Surveyed dail	y usage *	Change	Change in	
			Pedestrians	Cyclists		distance	
South of River Thames	Thong Lane by A2	diverted	N/A	N/A	Diversion across new bridge over A2. Shared track (walkers, cyclists and horse riders)	200m	
South of River Thames	Thong Lane Gravesend	diverted	13	24	Diverted to form green bridge over the Project. Shared track (walkers, cyclists and horse riders)	<50m	
South of River Thames	Brentwood Road	diverted	0	6	Diverted across the Project. No footpath, no change for cyclists	0m	
North of River Thames: south of A13	Hornsby Lane between A1013 Stanford Road and Gowers Lane	closed	32	15	From the west, travel north on Heath Road along footpath, then east along Stanford Road shared surface	<50m	
North of River Thames: south of A13	Muckingford Road between Low Street Lane and Hoford Road	diverted	5	28	Diverted across the Project, shared track (walkers, cyclists)	<50m	
North of River Thames: south of A13	Low Street Lane between Coal Road to Muckingford Road	closed	0	0	No impact	<50m	
North of River Thames: south of A13	Baker Street and Heath Road	diverted	43	32	Baker Street would be diverted to new junction east of its existing location on Stanford Road. Heath Road would be diverted to new junction west of existing location on Stanford Road	100m	
North of River Thames: south of A13	Stifford Clays Road	diverted	1	26	Diverted across the Project and extension of shared track (walkers, cyclists)	<50m	
North of River Thames: south of A13	Long lane	diverted	N/A	N/A	Diverted due to diversion of Gammonfields Way	<50m	
North of River Thames: north of A13	Green Lane	diverted	N/A	N/A	Diverted across the Project. Bridleway	<50m	
North of River Thames: south of A13	Rectory Road	diverted	N/A	N/A	Diverted across the Project, segregated shared track (walkers, cyclists and horse riders)	<50m	
North of River Thames: south of A13	A1013	diverted	N/A	N/A	Diverted to the south and across the Project. Shared track (walkers and cyclists widened and short section of shared track (walkers, cyclists at Rectory Road	<200m	
North of River Thames: south of A13	Hoford Road	diverted	N/A	N/A	Shared track road (walkers, cyclists and horse riders)	<10m	
North of River Thames: north of A13	North Road	diverted	N/A	N/A	Diverted across the Project, with shared track (walkers, cyclists)	<20m	
North of River Thames: north of A13	A127 at M25 junction 29	diverted	N/A	N/A	Diverted due to addition of left turn slip lanes	800m	

^{*} N/A indicates no survey was carried out

Table 1.6 New provision for WCH - south of the River Thames

Location	Type of shared surface	Length (m)
Adjacent to Church Road between Henhurst Road and Footpath NS175A	shared track (walkers, cyclists and horse riders)	880
Jeskyns Community woodlands	Temporary shared track (walkers, cyclists)	1100
New pedestrian and cycle track from slip road connecting NCR177 to Park Pale	shared track (walkers, cyclists)	253
Realignment and extension of existing ped-cycle track alongside A2 to the south of Harlex Haulage	shared track (walkers, cyclists)	433
Halfpence Lane roundabout to north of Brewers Road Green Bridge	shared track (walkers, cyclists and horse riders)	583
Existing pedestrian and cycle track (part of existing NCR177) between Hever Court Road and Valley Drive	shared track (walkers, cyclists and horse riders)	243
South Portal east of the Project new connections	New bridleways	3,634
Along new car park in Shorne Woods	shared track (walkers, cyclists)	48
Thong Lane (north over green bridge)	New Bridleway	234
Thong Lane (south and over green bridge) between new connector road and Shorne Woods	shared track (walkers, cyclists and horse riders)	578
Gravesend Road connecting to new bridleway, east of Thames View Crematorium and Cemetery	shared track (walkers, cyclists and horse riders)	156
South Portal west of the Project new connections	unmade footpaths and new bridleways	4,970
South Portal west of the Project new and upgraded connections	shared track (walkers, cyclists)	5,384

Table 1.7 New provision for WCH - north of the River Thames (Tilbury area)

Location	Type of shared surface	Length (m)
From East Tilbury to Chadwell St Mary along Muckingford Road and Linford Road	shared track (walkers, cyclists) and shared track (walkers, cyclists and horse riders)	2,100
Between FP95 and FP79	bridleway	125
Connecting existing cycle track to Rectory Road Bridge	cycle track	325
Parallel and west of Baker Street	cycle track	520
A1013 southwest of Heath Road to better connect Orsett Cock junction with Little Thurrock	shared track (walkers, cyclists)	400
Adjacent to Stifford Clays Road connecting to existing shared track (walkers, cyclists)	shared track (walkers, cyclists)	180
Farm track between FP135 and FP136	bridleway	283
Between Stifford Clays Rd and Green Lane	shared track (walkers, cyclists)	586
Between BR219 and Green Lane	bridleway	1,471
Between FP136 to BR219	footpath	705
South of A13 connecting Blackshots Lane to Long Lane	bridleway	1,299
Tilbury Fields	permissive footpaths and footpaths	4,492
Station Road to FP200	bridleway	1063
Off-road track north of Station Road	shared track (walkers, cyclists and horse riders)	587
East Tilbury area linking to Princess Margaret Road and East Tilbury Battery	Permissive footpaths	1,538

Table 1.8 New provision for WCH - north of the River Thames (Ockendon area)

Location	Type of shared surface	Length (m)
Connecting North and South Ockendon	Shared track (walkers, cyclists, horse riders)	1,079
Adjacent to Dennises Lane and Dennis Road	Shared track (walkers, cyclists, horse riders)	1,714
Access track from proposed Thames Chase bridge and Ockendon Road	bridleway	496
Between North Road and new permissive bridleway east of project connecting to FP200	bridleway	345
Between diverted FP200 east of proposed Thames Chase footbridge and track road being converted to bridleway	permissive bridleway	171
Connecting Forest centre to BR289 and new permissive footpath leading to the culvert under the M25	permissive bridleway	480
Connecting new permissive bridleway to the culvert under the M25	Permissive footpath	151
A127 – east of M25 junction 29	Shared route (walkers, cyclists, horse riders)	60
A127 – west of M25 junction 29	Shared track (walkers, cyclists, horse riders)	75

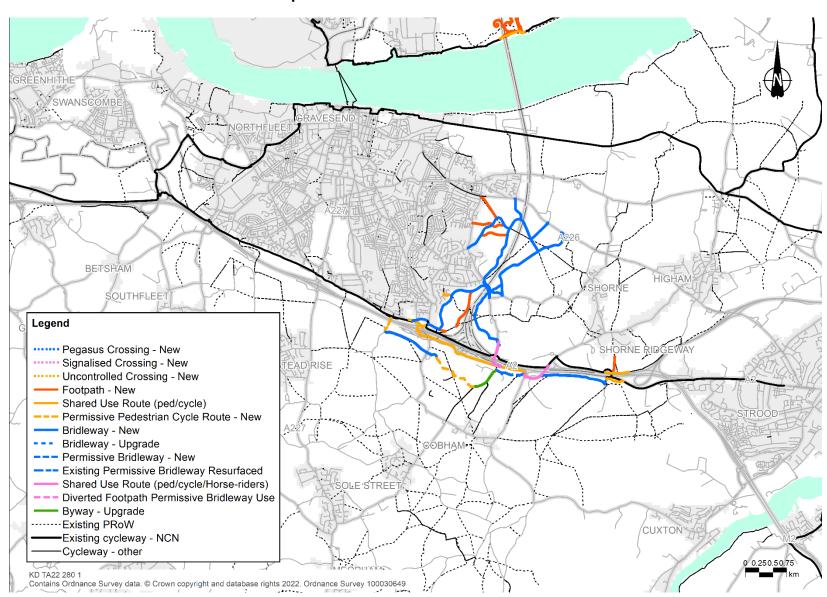


Plate 1.1 New provision for WCH - south of the River Thames

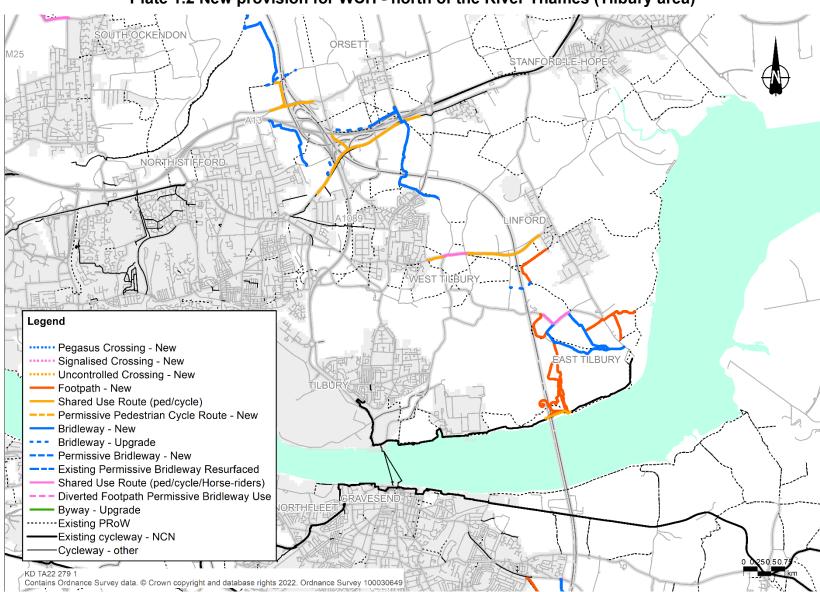
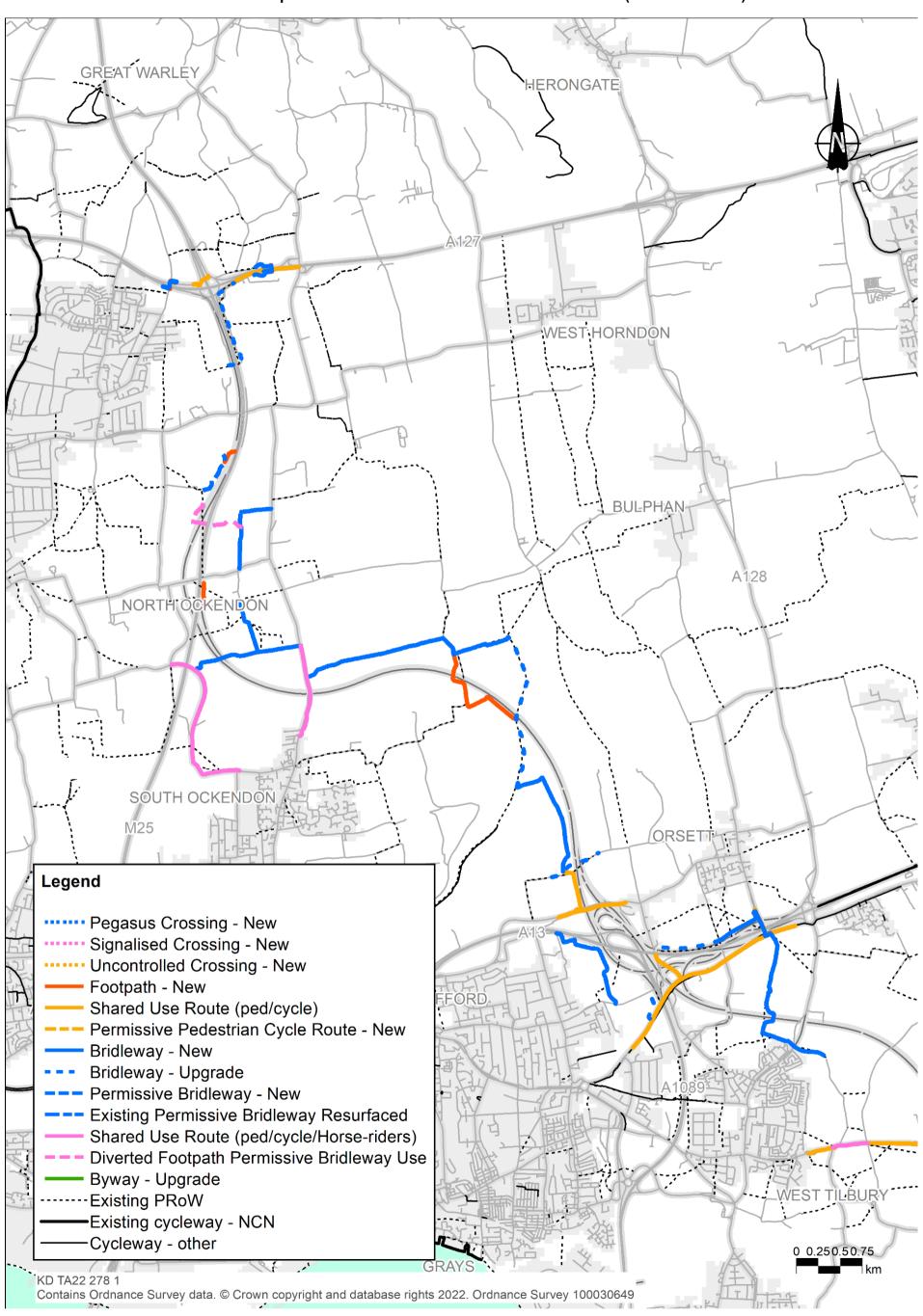


Plate 1.2 New provision for WCH - north of the River Thames (Tilbury area)

Plate 1.3 New provision for WCH - north of the River Thames (Ockendon area)



1.3 Construction impacts

1.3.1 Locations where routes used by walkers, cyclists and horse riders would be temporarily diverted, realigned, closed or otherwise impacted to accommodate the construction of the Project are shown in Table 1.9 to Table 1.14.

Table 1.9 Construction changes on PRoW and cycle routes for WCH - south of the River Thames

PRoW Type	PRoW name	Impact	Surveyed daily usage *		
			Pedestrians	Cyclists	
Footpath	NG2	The route would be affected by utility works to provide a power supply to the Milton construction compound, for a period of less than a month.	N/A	N/A	
Footpath	NG7	Footpath would be closed during construction of South Portal and Gravesend Link. A permanent diversion would be provided from towards the end of the construction phase.	2	0	
Footpath	NG8	Footpath would be permanently diverted as a result of the construction of the South Portal and Gravesend Link. Impact duration identified as 66 months. A permanent diversion would be provided from towards the end of the construction phase.	24	1	
Footpath	NG9	This would be impacted by gas and power utility diversions. The footpath also crosses the southern tunnel entrance compound and would be impacted by the construction of the South Portal and Gravesend Link. Impact duration identified as 66 months.	N/A	N/A	
Footpath	NS17	A section of the existing route would need to be closed permanently to accommodate the A2 eastbound to A122 northbound slip road. The remaining route would be temporarily closed for less than a month and upgraded for reopening as a bridleway	N/A	N/A	
Footpath	NU48	The route would be affected by utility works and so would be closed for less than a month.	N/A	N/A	
Footpath	NS161	The existing route would be closed for six months to facilitate utility diversion works.	N/A	N/A	
Footpath	NS164	This route would be closed temporarily for four months for gas main diversion works, and two periods of two months for overhead line works. In addition, a section would be closed for the duration of the construction period due to the siting of the southern tunnel entrance compound.	N/A	N/A	
Footpath	NS165	This route would be closed temporarily for four months for gas main diversion works, and two periods of two months for overhead line works. In addition, a section would be closed for the duration of the construction period due to the siting of the southern tunnel entrance compound.	N/A	N/A	
Footpath	NS167	The route would be affected by utility diversion works in the area. A section would need to be closed for a period of 48 months and would be permanently diverted	0	0	
Footpath	NS169	The western end of the existing route within the residential area would be affected by utility diversion works requiring temporary closure of less than one month. This section would also be upgraded and resurfaced to form a new cycle route. The eastern section of the existing route would be affected by the main construction works and would be permanently closed until the diversion is opened to the north and across the Thong Lane green bridge.	75	6	
Bridleway	NS174	Footpath would be impacted by construction activities between the A2 and the Thong Lane green bridge. Impact duration likely to be 48 months.	40	2	
Footpath	NS175/A	Temporary closure arising from surfacing works to the A2 for less than a month.	N/A	N/A	
Cycle route	NCR177	National cycle route – the section between the Gravesend East junction and the Park Pale bridge over the A2 would be affected by utility works and would be permanently closed. A temporary diversion would be in place until the new route was open.	N/A	N/A	
Cycle route	NCR177	National cycle route – the section between the Gravesend Easy junction and B262 Hall Road would be affected by utility works to divert overhead lines. Duration of impact likely to be two periods of two months. A temporary diversion would be created.	N/A	N/A	

PRoW Type	pe PRoW name Impact		Surveyed daily usage *		
			Pedestrians	Cyclists	
Footpath	NS179	The route would not be affected by the construction of the Project, but would be upgraded and resurfaced, requiring closure for less than a month.	N/A	N/A	
Footpath	NS195	The route would not be affected by the construction of the Project, but would be upgraded and resurfaced, requiring closure for less than a month.	N/A	N/A	
Footpath	NS311	The route would not be affected by the construction of the Project, but would be upgraded and resurfaced, requiring closure for less than a month.	N/A	N/A	
Footpath	NS367	The route would be permanently closed as a result of the Project.	N/A	N/A	
Path	Undesignated route in Ashenbank Woods south of A2 and north of NS178	The route may be temporarily affected by utility works where the footpath ties in with Halfpence Lane road bridge. The route would also to be upgraded and resurfaced to form new routes which would require closure of less than a month.	N/A	N/A	
Path	Undesignated route in Jeskyns Community Woodland south of A2 and north of NS177A	The route would be affected by utilities diversion works for two periods of two months and would also to be upgraded and resurfaced to form new routes which would require closure for less than a month.	N/A	N/A	

*N/A indicates no survey was carried out

Table 1.10 Construction changes on PRoW and cycle routes for WCH – north of the River Thames (Tilbury area)

PRoW type	PRoW name	Impact	Surveyed daily usage *	
			Pedestrians	Cyclists
Bridleway	BR58	Bridleway BR58 would be permanently divided by the Project. The route would be permanently realigned to the south of the existing alignment, maintaining connection under the proposed Tilbury viaduct. The route would be closed for two years. A temporary route via the new Muckingford Road bridge would be provided once it is constructed and would be in place until the permanent new alignment would open.	2	0
Footpath	FP60	Would be impacted due to traffic management required for Muckingford Road utility diversions and construction activities. Duration of impact is likely to be approximately 24 months.	N/A	N/A
Footpath	FP61	The footpath would be severed during the construction of the Project. The route would be closed for two years. A temporary route via the new Muckingford Road bridge would be provided once it is constructed and would be in place until the permanent new alignment would open.	2	0
Footpath	FP78	Utilities diversion works would require the temporary stopping up of the footpath. Duration of impact is likely to be intermittent closures of a month or less.	N/A	N/A
Footpath	FP79	The footpath would be severed by the construction of the Project. Closure would be required to facilitate utilities diversion works and construction of the Project road. Following construction, the route would be permanently diverted over the Project by means of a new equestrian standard bridge. The route would also be resurfaced and redesignated as a bridleway. The route would be closed for 60 months, with a temporary route provided.	N/A	N/A
Footpath	FP82	The southern end of the route would be impacted by utilities diversion works and subsequent works to construct the link roads that form the A13/A1089/A122 Lower Thames Crossing junction. The section of this route that falls within the Order Limits would be closed until diversion is opened.	N/A	N/A
Footpath	FP93	The southern end of the route would be impacted by utilities diversion works and subsequent works to construct the link roads that form the A13/A1089/A122 Lower Thames Crossing junction. The section of this route that falls within the Order Limits would be closed until diversion is opened.	N/A	N/A
Footpath	FP96	Utilities diversion works would require the temporary stopping up of the PRoW for up to eight months.	N/A	N/A
Footpath	FP97	The route extending from Long Lane would be closed during the construction phase (60 months) as a result of the construction of the A13/A1089/A122 Lower Thames Crossing junction and construction site compounds. Following construction the route would be permanently shortened by approximately 200m to accommodate new link roads adjacent to the A13. Following the construction phase a new bridleway would be provided through Blackshots.	2	0
Footpath	FP104	The southern end of the route would be impacted by utilities diversion works. The section of this route that falls within the Order Limits would be closed during this period (8 months). The route would then be reopened on the existing alignment or via a minor diversion to avoid the works to construct the links roads that form the A13/A1089/A122 Lower Thames Crossing junction.	N/A	N/A
Footpath	FP105	The northern end of the route would be impacted by utilities diversion works and subsequent works to construct the links roads that form the A13/A1089/A122 Lower Thames Crossing junction. The section of FP105 that falls within the Order Limits (approx. 60m) would be closed during the construction phase (60 months).	N/A	N/A
Footpath	FP146	A section of Two Forts Way would be upgraded to bridleway with a temporary closure of less than a month.	N/A	N/A
Bridleway	BR161	A section extending between Stifford Clays Road and the proposed new Green Lane bridge (BRN0000059) would be used as a construction access route. During this period the route would be closed to WCH for safety reasons. In addition a new bridge would be constructed to carry the bridleway over the Project road.	7	1
Footpath	FP200	The northern end of the route would require temporary closure due to utilities protection works and section of the route would also be permanently closed to facilitate construction of a new viaduct to take the Project road over the Tilbury Loop railway line. An alternative route would be made available prior to the closure.	1	0
Bridleway	BR206	Utilities diversion would initially require temporary closure of the route. The bridleway would be subsequently affected by works to construct the link roads that form the A13/A1089/A122 Lower Thames Crossing junction and closed until a diversion is opened towards the end of the construction phase	4	0

PRoW type	PRoW name	Impact	Surveyed daily usage *	
			Pedestrians	Cyclists
Footpath	FP207	This route would be permanently closed as it clashes with the alignment of the Project	N/A	N/A
Bridleway	BR223/ Gammonfields Lane	Utilities diversion works would initially require the temporary closure of the route for 60 months. Construction activities would require a permanent diversion of the route along the realigned Gammonfields Way which would be provided once construction is complete.	N/A	N/A

^{*.} N/A indicates no survey was carried out

Table 1.11 Construction changes on PRoW and cycle routes for WCH – north of the River Thames (Ockendon area)

PRoW type	PRoW name	Impact	Surveyed daily usage *	
			Pedestrians	Cyclists
Footpath	FP135	Utilities diversion would require temporary closure of this route. Part of route would be upgraded to a shared track. This route would also form the secondary access route for the Medebridge Compound.	N/A	N/A
Footpath	FP136	The route clashes with the proposed Project route. The section of the route that falls within the Order Limits would be closed for a period of approximately 30 months to facilitate the diversion of utilities in the area and construction of the new FP136 footbridge to carry the route over the Project. The route would then be upgraded and reopened.	1	0
Footpath	FP151	The route would require temporarily realigning at the eastern end to accommodate the proposed site access from the B186. The route would also be resurfaced and redesignated as bridleway and forms part of a new route.		
Footpath	FP176	The section of the route that falls within the Order Limits would be temporarily closed for around 60 months to facilitate M25 widening works.	N/A	N/A
Footpath	FP177	The section of the route that falls within the Order Limits would be temporarily closed for less than a month to facilitate the construction of a utilities maintenance access track.		
Footpath	FP179	The section of the route that falls within the Order Limits would be temporarily closed for around 60 months to facilitate M25 widening works.	N/A	N/A
Footpath	FP180	The section of the route that falls within the Order Limits would be temporarily closed for around 60 months to facilitate M25 widening works.	N/A	N/A
Bridleway	BR183	The existing route would need to be closed for around 60 months to accommodate works to divert utilities, widen the M25 and construct the M25 junction 29 capacity improvements. The route would be diverted and upgraded via a new route.	N/A	N/A
Footpath	FP230	The section of the route extending between Ockendon Road and Thames Chase Community Forest would be permanently closed to accommodate the Project route. The route would be replaced by a diverted and upgraded route via a new equestrian standard footbridge over the M25. The new route would be re-designated as bridleway and forms part of new route for previous users of the Thames Chase culvert (an undesignated recreational route). These new routes would not be available until towards the end of the construction phase.	171	42
Footpath	FP231**	The route would clash with the alignment of the Project and would be permanently closed. A new alignment would be available after the completion of a utility diversion and site setup.	8	0
Footpath	FP251	Section of the route extending between the railway line and the M25 would be permanently closed to accommodate the proposed Project route. The section of the route west of the railway line would need to be temporarily closed for a period of 12 months to facilitate utilities diversion works. The section extending east of the M25 would be permanently shortened by approximately 30m to accommodate the link roads that would form the M25/A122 Lower Thames Crossing junction	N/A	N/A
Footpath	FP252	The route would be permanently closed for construction of the Project route. The route would be replaced with an upgraded route via a new equestrian standard bridge over the railway and the Project. The new route would be designated as a bridleway and forms part of new route. The new routes would not be available until towards the end of the construction phase due to the need for the construction of two the new footbridges and the clash with the M25 compound.	N/A	N/A
Footpath	FP254	The route would be resurfaced and redesignated as a bridleway	N/A	N/A
Bridleway	BR219	Two temporary closures or management for periods of two months would be required to facilitate utilities diversion works. A further temporary closure of the section that falls within the Order Limits for a period of 36 months would be required for construction of the Project route. Following construction the route would be upgraded and resurfaced prior to reopening.	N/A	N/A
Footpath	Paths in Thames Chase Forest (not PRoW)	A temporary closure of this undesignated route would be required to facilitate the widening of the M25. An alternative route via a new equestrian standard footbridge over the M25 would be provided as part of the Project however, this would not be available until towards the end of the construction phase.	N/A	N/A

^{*.} N/A indicates no survey was carried out

^{**}Three horse riders were identified on FP231 on the survey day

Table 1.12 Local roads with temporary impacts on WCH arising from construction – south of the River Thames

Road name	Impact	Surveyed daily	usage *
		Pedestrians	Cyclists
Brewers Road between Halfpence Lane and A2 slip road	Various construction activities likely to require long-term closures (approximately 19 months to facilitate demolition of existing bridge and construction of replacement structure). Construction of local link road between the Henhurst roundabout and the Thong Lane/Brewers Road roundabout.	16	99
Thong Lane	Thong Lane would be affected by various construction activities, including the diversion of utility services, the construction of the Thong Lane green bridges and construction of the local link road between the Henhurst roundabout and Thong Lane/Brewers Road roundabout. Construction of the green bridge likely to necessitate traffic management measures.	13	24
A226 Gravesend Road between Crutches Lane and Forge Lane	Construction activities affecting Gravesend Road would include the creation of a temporary haul route to provide access to the South Portal. This would take the form of a dedicated temporary access road from the A226 to the South Portal construction area.	0	16

^{*.} N/A indicates no survey was carried out

Table 1.13 Local roads with temporary impacts on WCH arising from construction – north of the River Thames (Tilbury area)

Road name	Impact	Surveyed daily usage *	
		Pedestrians	Cyclists
Fort Road between entrance to Tilbury Sewage works and Fort Road	Fort Road will be used as an access road to provide access to construction compounds. There is a potential impact on the quality of route for WCH due to increased traffic flows.	2	8
B188 Baker Street between Stifford Clays Road and Woolings Close	Baker Street accessed from the A1013 would be closed to public traffic and used as access for construction vehicles. A diversion route for vehicles to the north would be created.	43	32
B188 Baker Street between Stifford Clays Road and Woolings Close	Diverted traffic arising from other road closures.	43	32
Brentwood Road between High House Lane and Sleepers Farm Road	Construction activities relate to the construction of a new bridge and road realignment works.	0	6
Hornsby Lane between Heath Road and Stanford Road	Hornsby Lane would be affected by the construction of a new bridge.	32	15
Rectory Road between A1013 Stanford Road and School Lane	Construction activities relate to a new bridge to carry the realigned Rectory Road over the Project, together with improvement works to the existing Rectory Road.	39	20
Rectory Road between A1013 Stanford Road and School Lane	Diverted traffic arising from other road closures.	39	20
A1013 Stanford Road between Rectory Road and Hornsby Lane	Construction of a new bridge to carry the realigned A1013 over the improved A1089, the new link road between the northbound carriageway of the A1089 and the northbound carriageway of the Project.	19	13
A1089	Construction route	N/A	N/A
Stifford Clays Road between Green Lane and Stifford Clays Road	The construction of a new bridge to carry the realigned Stifford Clays Road over the new northbound link road from the A1089 connecting onto the northbound carriageway of the Project and the dual carriageway westbound of the improved A13	1	26
Station Road/ Church Road between Princess Margaret Lane and Turnpike Lane	Short-term temporary closures	N/A	N/A
Love Lane between Station Road and Princess Margaret Road	Short-term temporary closures	N/A	N/A
Green Lane west of Fen Lane	Temporarily closed and construction route	N/A	N/A
Heath Road north of Orsett Heath to the A1013 Stanford Road	Short term temporary closures	N/A	N/A
Hoford Road between Blue Anchor Lane and south of Buckingham Hill Road	A new bridge would be constructed to carry the realigned Hoford Road over the Lower Thames Crossing	N/A	N/A
Muckingford Road between Low Street Lane and Hoford Road	Construction activities relate to the construction of a new bridge and road realignment works	5	28
Low Street Lane between Coal Road to Muckingford Road	Closed for construction activities	0	0

^{*} N/A indicates no survey was carried out

Table 1.14 Local roads with temporary impacts on WCH arising from construction – north of the River Thames (Ockendon area)

Road name	Impact		Surveyed daily usage *	
		Pedestrians	Cyclists	
Ockendon Road between Pea Lane and Church Lane	Long-term closure	5	43	
Dennis Road between Pea Lane and West Road	Diverted traffic from long-term closure of Ockendon Road	0	19	
B187 St Marys Lane	Diverted traffic from long-term closure of Ockendon Road	N/A	N/A	
B186 North Road between Nelson Road and West Road	A number of utilities assets along North Road will require diversion. New bridge construction activities. Construction route.	16	99	
B187 St Marys Lane	Construction route and potential short-term closures	N/A	N/A	
A127 across the M25	Temporarily closed at nights/weekends	N/A	N/A	

^{*} N/A indicates no survey was carried out

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Registered office Bridge House, 1 Walnut Tree Close, Guildford GU1 4LZ

National Highways Company Limited registered in England and Wales number 09346363