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Norwich to Tilbury

Volume 6: Environmental Statement

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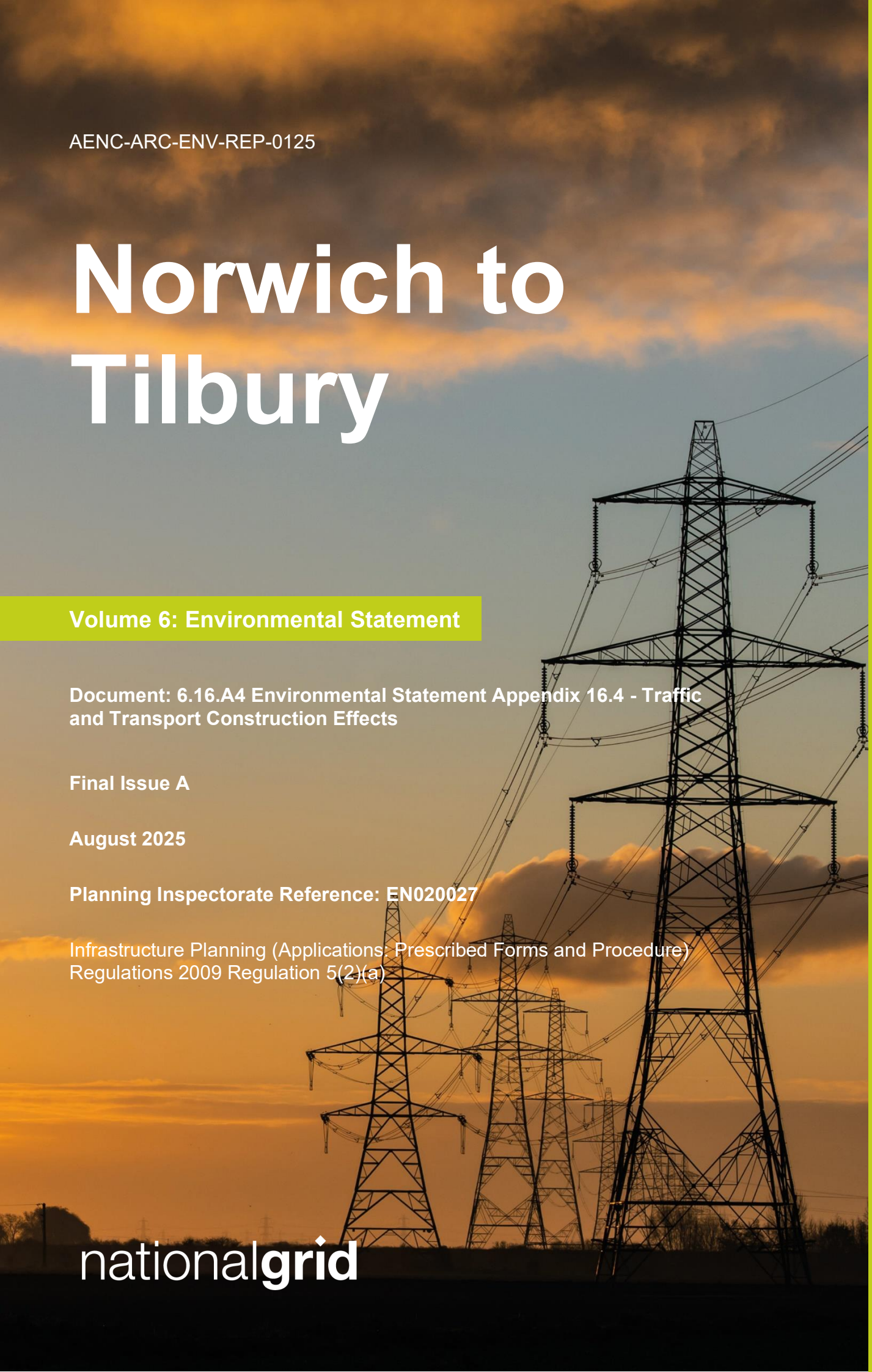

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Contents

16. Traffic and Transport Construction Effects

16.1 Introduction

16.1.1 This appendix has been produced to support Chapter 16: Traffic and Transport (document reference 6.16) of the Environment Statement (ES) (Volume 6 of the Development Consent Order (DCO) application) for Norwich to Tilbury (the 'Project').

16.1.2 The results of the assessment of the traffic and transport construction effects have been summarised for all road links forming the Primary Access Routes (PAR) during the estimated peak year of construction activity for the Project along with the significance of these effects. This assessment includes those committed developments likely to overlap with the Project peak year of construction and that could generate additional traffic along the PARs.

16.1.3 This assessment should be read alongside the methodology for assessment and conclusions presented in Chapter 16: Traffic and Transport (document reference 6.16) of the ES, with reference to Figure 16.1: Primary Access Routes (document reference 6.15.F1).

16.2 Construction Effects

16.2.1 The construction effects considering both the Project and committed developments combined have been assessed relating to the temporary changes in traffic flow on road links forming the PARs during the estimated peak year of construction activity representing the worst-case. This is summarised within Table A16.4.1.

16.2.2 The requirement for further environmental assessment has been identified where the Project may give rise to any significant traffic and transport effects following the following Institute of Environmental Management and Assessment (IEMA) criteria:

- Rule 1: Include highway links where the total traffic flows are predicted to increase by more than 30% (or where the number of Heavy Good Vehicles (HGVs) is predicted to increase by more than 30%)
- Rule 2: Include road links through sensitive areas where total traffic will increase by more than 10% or where there are significant changes in the composition of traffic e.g. large increase in the number of HGVs.

16.2.3 The total daily construction traffic flow (7:00 to 19:00) generated by the Project at each PAR for the duration of the construction activity has been graphically presented in Section 16.5.

16.2.4 All road links were taken forward for further assessment, with the exception of:

- Link PAR 5 Wymondham Road (planned road closure as part of mitigation)
- Link PAR 45 B1008 Essex Regiment Way
- Link PAR 61 B148 West Mayne

- Link PAR 69 Chadwell Hill
- Link PAR 70 Linford Road
- Link PAR 71 Muckingford Road.

Table A16.4.1 Construction effects

Project Section	Road ID	Survey Site	Peak Construction Year	Duration peak (weeks)	Future Baseline 12 hr Weekday Flows (07:00-19:00)		Committed Development + Project Development Construction Traffic Flows, Per Day		Future Baseline + Committed Development + Project Development 12 hr Weekday Flows (07:00 - 19:00)		% Increase in 12 hr Weekday Flows (07:00 - 19:00)		Road sensitivity	Assessment Required	Rule criteria
					HGV	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles			
A	Link PAR 1 - A140 Ipswich Road	Site 105	2028	1	884	21,414	996	7,989	1,880	29,403	113%	37%	Not Sensitive	Yes	Rule 1
A	Link PAR 2 - Mangreen Lane	Site Bell 1a	2028	1	3	253	450	690	453	943	17157%	273%	Not Sensitive	Yes	Rule 1
A	Link PAR 3 - Stansfield Road/Wymondham Road	Site 107	2027	1	138	4,688	494	598	632	5,286	358%	13%	Not Sensitive	Yes	Rule 1
A	Link PAR 4 - B1113	951640	2027	1	83	3,780	340	408	423	4,188	411%	11%	Not Sensitive	Yes	Rule 1
A	Link Par 5 – Wymondham Road (open for construction traffic only)			1			170	202					Not Sensitive	No	Rule 1
A	Link PAR 6 - Fundenhall Road	Site Bell 3a	2027	1	40	1,445	340	408	380	1,853	859%	28%	Not Sensitive	Yes	Rule 1
A	Link PAR 7 - B1134 Station Road/B1134 Long Row	Site Bell 4a	2028	2	151	2,140	336	420	487	2,560	223%	20%	Not Sensitive	Yes	Rule 1
A	Link PAR 8 – A1066/A1066 Victoria Road/A1066 Park Road/A1066 High Road	NDC Site 2	2028	3	1,643	8,867	376	468	2,019	9,335	23%	5%	Sensitive	Yes	Rule 2
		NDC Site 3	2028	3	1,492	16,832	376	468	1,868	17,300	25%	3%			
		NDC Site 4	2028	3	1,128	12,139	376	468	1,504	12,607	33%	4%			
		NDC Site 5	2028	3	1,220	7,680	376	468	1,596	8,148	31%	6%			
		NDC 15a	2028	3	1,061	7,069	376	468	1,437	7,537	35%	7%			
A	Link PAR 9 - A1066 High Road/A1066 Low Road/A1066 Diss Road /A1066 The Street/A1066 Thetford	77197	2028	3	587	10,278	376	468	963	10,746	64%	5%	Sensitive	Yes	Rule 2
		18594	2028	3	644	11,294	376	468	1,020	11,762	58%	4%			

Project Section	Road ID	Survey Site	Peak Construction Year	Duration peak (weeks)	Future Baseline 12 hr Weekday Flows (07:00-19:00)		Committed Development + Project Development Construction Traffic Flows, Per Day		Future Baseline + Committed Development + Project Development 12 hr Weekday Flows (07:00 - 19:00)		% Increase in 12 hr Weekday Flows (07:00 - 19:00)		Road sensitivity	Assessment Required	Rule criteria
					HGV	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles			
	Road/A1066 Hurth Way/A1066 Mundford Road (alternative PAR)	7496	2028	3	475	10,812	376	468	851	11,280	79%	4%			
		92224	2028	3	451	3,908	376	468	827	4,376	83%	12%			
B	Link PAR 10 - A143 Old Bury Road	NDC 17a	2028	1	1,394	6,715	324	552	1,718	7,267	23%	8%	Sensitive	Yes	Rule 2
B	Link PAR 11 - Lion Road	Site Bell 7a	2027	4	64	2,870	204	250	268	3,120	319%	9%	Sensitive	Yes	Rule 2
B	Link PAR 12 - B1113 Finningham Road/B1113 Walsham Road	Site 114	2028	2	143	2,091	316	372	459	2,463	221%	18%	Sensitive	Yes	Rule 2
B	Link PAR 13 - Wickham Road	Site 115	2028	2	103	1,770	316	372	419	2,142	306%	21%	Sensitive	Yes	Rule 2
		NDC 10a	2028	2	222	1,742	166	194	388	1,936	75%	11%			
B	Link PAR 14 - Eastland Lane	Site Bell 10a	2028	9	2	34	150	178	152	212	7260%	528%	Not Sensitive	Yes	Rule 1
B	Link PAR 15 - Thornham Road	Site Bell 9a	2028	9	35	913	100	119	135	1,031	285%	13%	Not Sensitive	Yes	Rule 1
B	Link PAR 16 - A1120 Church Road/A1120 Bell's Lane	27560	2028	1	259	7,579	332	1,454	591	9,033	128%	19%	Sensitive	Yes	Rule 2
		NDC 11b	2028	1	438	3,405	332	1,454	770	4,859	76%	43%			
B	Link PAR 17 - A1120 south of A14 J50	ID07085_70	2028	1	600	2,356	332	388	932	2,744	55%	16%	Sensitive	Yes	Rule 2
B	Link PAR 18 - Mill Lane	Site 117	2028	2	77	872	166	194	243	1,066	214%	22%	Not sensitive	Yes	Rule 1
B	Link PAR 19 - B1113 Needham Road/B1113 Stowmarket Road	NDC 19a	2028	9	773	8,651	208	257	981	8,908	27%	3%	Sensitive	Yes	Rule 2
B	Link PAR 20 - B1113 Bramford Road/B1113 Loraine Way	ID07085_57	2028	1	1,315	3,527	456	601	1,771	4,128	35%	17%	Sensitive	Yes	Rule 2
		ID07085_56	2028	1	241	812	456	601	697	1,413	190%	74%			
B	Link PAR 21 - Bullen Lane	NDC 21b	2028	1	7	63	456	601	463	664	6306%	950%	Not sensitive	Yes	Rule 1

Project Section	Road ID	Survey Site	Peak Construction Year	Duration peak (weeks)	Future Baseline 12 hr Weekday Flows (07:00-19:00)		Committed Development + Project Development Construction Traffic Flows, Per Day		Future Baseline + Committed Development + Project Development 12 hr Weekday Flows (07:00 - 19:00)		% Increase in 12 hr Weekday Flows (07:00 - 19:00)		Road sensitivity	Assessment Required	Rule criteria
					HGV	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles			
C	Link PAR 22 - A1214 London Road	57499	2028	11	903	16,437	432	1,815	1,335	18,252	48%	11%	Sensitive	Yes	Rule 2
C	Link PAR 23 - A1071	ID07085_282	2028	11	701	13,866	432	1,778	1,133	15,644	62%	13%	Sensitive	Yes	Rule 2
		NDC 1a	2028	11	637	10,113	432	1,778	1,069	11,891	68%	18%			
C	Link PAR 24 - B1070 (A12 access)	Site 111	2028	2	105	4,430	314	574	419	5,004	300%	13%	Not sensitive	Yes	Rule 1
C	Link PAR 25 - B1070 Hadleigh Road	NDC 22a	2028	2	338	5,312	314	574	652	5,886	93%	11%	Not sensitive	Yes	Rule 1
C	Link PAR 26 - Ipswich Road	Site Bell 20a	2029	1	87	1,914	316	406	403	2,320	364%	21%	Sensitive	Yes	Rule 2
C	Link PAR 27 - Birchwood Road	Site Bell 22a	2029	1	77	3,635	310	404	387	4,039	403%	11%	Not sensitive	Yes	Rule 1
		Site 128	2030	1	131	2,892	146	166	277	3,058	112%	6%			
C	Link PAR 28 - Wick Road/Grove Hill	809662	2030	1	49	1,413	146	166	195	1,579	300%	12%	Sensitive	Yes	Rule 2
C	Link PAR 29 - Perry Lane	Site Bell 21a	2030	1	4	113	146	166	150	279	3375%	146%	Not sensitive	Yes	Rule 1
C	Link PAR 30 - Bentley Road	NDC Site 8	2028	1	114	737	1,250	2,516	1,364	3,253	1093%	342%	Not sensitive	Yes	Rule 1
		Site Bell 54a	2028	1	38	1,305	1,250	2,516	1,288	3,821	3282%	193%			
C	Link PAR 31 - Ardleigh Road/Little Bromley Road	NDC Site 9	2028	1	16	95	609	1,135	625	1,230	3807%	1193%	Not sensitive	Yes	Rule 1
C	Link PAR 32 - Wick Lane	Site 69	2028	4	30	1,193	152	182	182	1,375	507%	15%	Not sensitive	Yes	Rule 1
C	Link PAR 33 - Old Ipswich Road	810677	2028	4	248	2,770	519	1,648	767	4,418	210%	59%	Sensitive	Yes	Rule 2
		Site Bell 24a	2028	4	145	1,946	367	1,466	512	3,412	252%	75%			
C	Link PAR 34 - Turnpike Close	Site Bell 23a	2028	4	59	396	154	306	213	702	262%	77%	Not sensitive	Yes	Rule 1

Project Section	Road ID	Survey Site	Peak Construction Year	Duration peak (weeks)	Future Baseline 12 hr Weekday Flows (07:00-19:00)		Committed Development + Project Development Construction Traffic Flows, Per Day		Future Baseline + Committed Development + Project Development 12 hr Weekday Flows (07:00 - 19:00)		% Increase in 12 hr Weekday Flows (07:00 - 19:00)		Road sensitivity	Assessment Required	Rule criteria
					HGV	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles			
D	Link PAR 35 - A1341 Via Urbis Romanae	Site 4	2028	1	474	15,201	506	800	980	16,001	107%	5%	Sensitive	Yes	Rule 2
D	Link PAR 36 - A134 Northern Approach Road/A134 Wildeve Avenue/A134 Nayland Road/A134 The Causeway	86033	2028	1	421	10,880	506	800	927	11,680	120%	7%	Sensitive	Yes	Rule 2
		6676	2028	1	270	6,837	506	800	776	7,637	187%	12%			
		Site Bell 26a	2028	1	307	8,779	506	800	813	9,579	165%	9%			
D	Link PAR 37 - A1124 Halsted Road	37390	2027	1	266	8,982	502	606	768	9,588	188%	7%	Sensitive	Yes	Rule 2
D	Link PAR 38 - Mill Road	NDC 4a	2028	7	209	2,086	186	228	395	2,314	89%	11%	Sensitive	Yes	Rule 2
D	Link PAR 39 - Great Tey Road	NDC 13a	2027	3	248	1,955	168	214	416	2,169	68%	11%	Not sensitive	Yes	Rule 1
E	Link PAR 40 - A120 Colchester Road	NDC 23a	2028	1	2,445	17,448	802	1,425	3,247	18,873	33%	8%	Sensitive	Yes	Rule 2
E	Link PAR 41 - B1018 Braintree Road/B1018 Witham Road	Site 147	2028	4	593	12,376	188	1,355	781	13,731	32%	11%	Sensitive	Yes	Rule 2
E	Link PAR 42 - B1389 Hatfield Road	Site 141	2028	1	455	14,460	204	254	659	14,714	45%	2%	Sensitive	Yes	Rule 2
E	Link PAR 43 - Spinks Lane/Highfields Road/Spa Road/Flora Road/Faulkbourne Road/Church Hill	Site 142	2028	1	167	9,213	204	254	371	9,467	122%	3%	Sensitive	Yes	Rule 2
		Site Bell 33a	2028	1	110	4,911	204	254	314	5,165	185%	5%			
E	Link PAR 44 - A131 Great Notley Bypass/A131 Great Leighs Bypass/A131 Braintree Road	Site 132	2028	1	845	17,796	566	3,871	1,411	21,667	67%	22%	Sensitive	Yes	Rule 2
F		90323	2028	1	735	21,505	332	3,389	1,067	24,894	45%	16%			
F	Link PAR 45 - B1008 Essex Regiment Way	NDC 6a	2027	10	652	10,308	32	186	806	10,494	24%	2%	Not sensitive	No	Rule 1

Project Section	Road ID	Survey Site	Peak Construction Year	Duration peak (weeks)	Future Baseline 12 hr Weekday Flows (07:00-19:00)		Committed Development + Project Development Construction Traffic Flows, Per Day		Future Baseline + Committed Development + Project Development 12 hr Weekday Flows (07:00 - 19:00)		% Increase in 12 hr Weekday Flows (07:00 - 19:00)		Road sensitivity	Assessment Required	Rule criteria
					HGV	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles			
F	Link PAR 46 - B1008 Braintree Road/B1008 Main Road	Site 134	2028	1	115	12,237	348	600	463	12,837	304%	5%	Sensitive	Yes	Rule 2
F	Link PAR 47 - Chatham Hall Lane	Site Bell 36a	2028	6	6	315	150	178	156	493	2472%	57%	Not sensitive	Yes	Rule 1
F	Link PAR 48 - Chelmsford Road	Site Bell 37a	2028	1	114	2,832	158	182	272	3,014	139%	6%	Not sensitive	Yes	Rule 1
F	Link PAR 49 - A414 Three Mile Hill/A1114 London Road	18372	2028	1	699	24,360	640	752	1,339	25,112	92%	3%	Sensitive	Yes	Rule 2
F	Link PAR 50 - A1016 Waterhouse Lane/A1016 Rainsford Lane	8614	2028	1	703	26,835	324	380	1,027	27,215	46%	1%	Sensitive	Yes	Rule 2
		38697	2028	1	400	19,835	324	380	724	20,215	81%	2%			
		48678	2028	1	497	39,483	324	380	821	39,863	65%	1%			
F	Link PAR 51 - A1060 Rainsford Road/A1060 Roxwell Road	77151	2028	1	279	12,977	324	380	603	13,357	116%	3%	Sensitive	Yes	Rule 2
		56777	2028	1	361	15,948	324	380	685	16,328	90%	2%			
F	Link PAR 52 - Vicarage road	NDC 7a	2028	1	90	1,519	158	186	248	1,705	175%	12%	Not sensitive	Yes	Rule 1
F	Link PAR 53 - A414 Greenbury Way/A414 Ongar Road	Site 137	2028	1	609	13,067	332	392	941	13,459	54%	3%	Sensitive	Yes	Rule 2
		Site Bell 40a	2028	1	520	13,219	332	392	852	13,611	64%	3%			
G	Link PAR 54 - B1002 Main Road	810780	2028	5	68	5,993	308	364	376	6,357	454%	6%	Sensitive	Yes	Rule 2
		800059	2028	6	44	6,109	158	188	202	6,297	357%	3%			
G	Link PAR 55 - Wantz Road	Site 138	2028	1	202	4,073	166	198	368	4,271	82%	5%	Sensitive	Yes	Rule 2
G	Link PAR 56 - Ivy Barns Lane	Site Bell 41a	2028	1	53	950	166	198	219	1,148	313%	21%	Sensitive	Yes	Rule 2
G	Link PAR 57 - Church Lane	Site Bell 42a	2028	6	1	46	158	188	159	234	15296%	406%	Not sensitive	Yes	Rule 1

Project Section	Road ID	Survey Site	Peak Construction Year	Duration peak (weeks)	Future Baseline 12 hr Weekday Flows (07:00-19:00)		Committed Development + Project Development Construction Traffic Flows, Per Day		Future Baseline + Committed Development + Project Development 12 hr Weekday Flows (07:00 - 19:00)		% Increase in 12 hr Weekday Flows (07:00 - 19:00)		Road sensitivity	Assessment Required	Rule criteria
					HGV	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles			
G	Link PAR 58 - A176 Noak Hill Road/A176 Laindon Road/A129 Southend Road	77132	2028	7	332	16,277	174	208	506	16,485	52%	1%	Sensitive	Yes	Rule 2
		27916	2028	7	299	14,664	174	208	473	14,872	58%	1%			
		77137	2028	7	332	16,277	87	104	419	16,381	26%	1%			
		Site 144	2028	7	271	6,563	87	104	358	6,667	32%	2%			
G	Link PAR 59 - A129 Sun Street/A129 London Road/A129 Rayleigh Road	Site 145	2028	7	124	10,846	87	104	211	10,950	70%	1%	Sensitive	Yes	Rule 2
		77136	2028	7	135	11,984	174	208	309	12,192	129%	2%			
		46687	2028	7	108	13,045	174	208	282	13,253	162%	2%			
		Site Bell 43a	2028	7	379	12,604	174	208	553	12,812	46%	2%			
G	Link PAR 60 - Dunton Road/Brentwood Road	NDC 14A	2028	15	127	1,293	142	164	269	1,457	112%	13%	Not sensitive	Yes	Rule 1
G	Link PAR 61 - B148 West Mayne	Site 149	2028	2	538	16,956	150	182	688	17,138	28%	1%	Not sensitive	No	Rule 1
G	Link PAR 62 - Lower Dunton Road	Site Bell 46a	2028	2	164	4,139	150	182	314	4,321	91%	4%	Not sensitive	Yes	Rule 1
H	Link PAR 63 - A128 Brentwood Road	NDC 25a	2028	9	1,405	11,078	180	214	1,585	11,292	13%	2%	Sensitive	Yes	Rule 2
H	Link PAR 64 - A1013 Stanford Road (east of Orsett Cock Roundabout)	92177	2028	4	402	9,772	502	1,527	904	11,299	125%	16%	Sensitive	Yes	Rule 2
H	Link PAR 65 - Buckingham Hill Road	NDC 8a	2028	4	617	8,391	658	2,144	1,275	10,535	107%	26%	Sensitive	Yes	Rule 2
H	Link PAR 66 - Brentwood Road	Link PAR 68	2028	1	162	11,777	484	1,058	646	12,835	299%	9%	Sensitive	Yes	Rule 2
H	Link PAR 67 - A1013 Stanford Road (west of Orsett Cock Roundabout)	Link PAR 69	2028	2	591	13,722	554	834	1,145	14,556	94%	6%	Sensitive	Yes	Rule 2

Project Section	Road ID	Survey Site	Peak Construction Year	Duration peak (weeks)	Future Baseline 12 hr Weekday Flows (07:00-19:00)		Committed Development + Project Development Construction Traffic Flows, Per Day		Future Baseline + Committed Development + Project Development 12 hr Weekday Flows (07:00 - 19:00)		% Increase in 12 hr Weekday Flows (07:00 - 19:00)		Road sensitivity	Assessment Required	Rule criteria
					HGV	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles			
H	Link PAR 68 - Heath Road	Link PAR 70	2028	2	17	2,964	448	564	465	3,528	2676%	19%	Sensitive	Yes	Rule 2
H	Link PAR 69 - Chadwell Hill	Link PAR 71	2028	1	745	7,843	0	116	745	7,959	0%	1%	Sensitive	No	Rule 2
H	Link PAR 70 - Linford Road	Link PAR 72	2028	1	187	5,933	0	116	187	6,049	0%	2%	Sensitive	No	n/a
H	Link PAR 71 - Muckingford Road	NDC Site 40b	2028	1	410	4,040	0	116	410	4,156	0%	3%	Not sensitive	No	n/a

16.3 Significance of Effects

16.3.1 The assessment of traffic and transport significance of effects as a result of the Project has been summarised within the following tables and includes the sensitivity of receptors, percentage change in total and HGV traffic from future baseline year, magnitude of impact, and significance of effects for all road links taken forward for further assessment.

16.3.2 The traffic and transport significance of effects has been assessed in relation to the following environmental impacts:

- Driver Delay and Public Transport Delay to Passengers
- Pedestrians, Cyclists, and Horse-riders Delay
- Pedestrian, cyclist and horse-rider Severance
- Pedestrian, cyclist and horse-rider Amenity
- Pedestrian, cyclist and horse-rider Fear and Intimidation
- Parking and Loading.

Driver Delay and Public Transport Delay to Passengers

16.3.3 The driver delay has been assessed considering the change in traffic flows in the road links. Changes in total traffic or HGV flows of 30%, 60% and 90% are considered minor, moderate and major changes in magnitude. The assessment for the road links forming part of the PARs is presented in Table A16.4.2. There are several road links where the significance of effect is moderate or large. For some of these road links, further mitigation measures are to be investigated.

Table A16.4.2 Significance of effect driver and passenger delay

Project Section	Road ID	Receptor Sensitivity	Basis for Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact (Total vehicles)	Significance of Effect	Significance	Comments
A	Link PAR 1 - A140 Ipswich Road	Low	No sensitive receptors. There are no bus stops in the section of A140 Ipswich Rd between A47 and Mangreen Lane.	113%	37%	**Major**	**Slight**	**Not Significant**	N/A
A	Link PAR 2 - Mangreen Lane	Low	No sensitive receptors and no public transport.	17157%	273%	**Minor**	**Slight**	**Not Significant**	Future baseline total and HGV traffic flow is notably low. Short section of road to Site Access Point (SAP). Magnitude of impact has therefore been adjusted from Major to Minor.
A	Link PAR 3 - Stansfield Road/Wymondham Road	Low	No sensitive receptors and no public transport.	358%	13%	**Minor**	**Slight**	**Not Significant**	Future baseline HGV traffic flow is notably low and total traffic % increase is well below 30% threshold. Magnitude of impact has therefore been adjusted from Major to Minor.
A	Link PAR 4 - B1113	Low	No sensitive receptors. There are several kerbside bus stops along the road and the bus frequency is low.	411%	11%	**Moderate**	**Slight**	**Not Significant**	Future baseline HGV traffic flow is notably low. Total traffic % increase is well below 30% threshold. Magnitude of impact has therefore been adjusted from Major to Moderate.
A	Link PAR 6 - Fundenhall Road	Low	No sensitive receptors, some sections of narrow carriageway for construction vehicles.	859%	28%	**Major**	**Slight**	**Not Significant**	Future baseline HGV traffic flow is notably low. However total traffic % increase is close to 30% threshold. Magnitude of impact to remain at Major to be robust.
A	Link PAR 7 - B1134 Station Road/B1134 Long Row	Low	No sensitive receptors, some sections of narrow carriageway for construction vehicles.	223%	20%	**Minor**	**Slight**	**Not Significant**	Future baseline HGV traffic flow is notably low and total traffic % increase is well below 30% threshold. Magnitude of impact has therefore been adjusted from Major to Minor.
A	Link PAR 8 – A1066/A1066 Victoria Road/A1066 Park	High	High sensitive receptors, bus stops without lay-by and multiple junctions	35%	7%	**Moderate**	**Slight**	**Not Significant**	N/A

Project Section	Road ID	Receptor Sensitivity	Basis for Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact (Total vehicles)	Significance of Effect	Significance	Comments
	Road/A1066 High Road		including roundabouts. Capacity issues identified. Some sections have narrow carriageway and limited visibility for construction vehicles.						
A	Link PAR 9 - A1066 High Road/A1066 Low Road/A1066 Diss Road /A1066 The Street/A1066 Thetford Road/A1066 Hurth Way/A1066 Mundford Road (alternative PAR)	High	High sensitivity receptors. There are several kerbside bus stops and one lay-by along the road and various bus routes with one service every hour per direction. Capacity issues identified at the A11 roundabout.	83%	12%	**Minor**	**Slight**	**Not Significant**	Although deemed significant, there would only be an additional 20 vehicles an hour in each direction. Junction modelling of the route through Thetford shows Negligible/Minor impact on capacity, therefore, magnitude of impact has therefore been adjusted from Moderate to Minor and significance of effects adjusted from Large or moderate to Slight effects.
B	Link PAR 10 - A143 Old Bury Road	Low	High sensitive receptors within 150 m, but in general rural character. No public transport.	23%	8%	**Negligible**	**Slight**	**Not Significant**	N/A
B	Link PAR 11 - Lion Road	Low	High sensitive receptor that is accessed by car only. No public transport.	319%	9%	**Major**	**Slight**	**Not Significant**	Future baseline HGV traffic flow is notably low. Total traffic % increase is close to 10% threshold. Magnitude of impact to remain at Major to be robust.
B	Link PAR 12 - B1113 Finningham Road/B1113 Walsham Road	Low	High sensitive receptors. No public transport.	221%	18%	**Major**	**Slight**	**Not Significant**	Future baseline HGV traffic flow is notably low.
B	Link PAR 13 - Wickham Road	Low	Low sensitive receptors. There is a kerbside bus stop along the road and the bus frequency is low with only one or two services running on Thursdays and Fridays.	306%	21%	**Major**	**Slight**	**Not Significant**	Future baseline HGV traffic flow is notably low.
B	Link PAR 14 - Eastland Lane	Low	No sensitive receptors. No public transport.	7260%	528%	**Minor**	**Slight**	**Not Significant**	Future baseline total and HGV traffic flow is notably low. Magnitude of impact has therefore been adjusted from Major to Minor

Project Section	Road ID	Receptor Sensitivity	Basis for Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact (Total vehicles)	Significance of Effect	Significance	Comments
B	Link PAR 15 - Thornham Road	Low	No sensitive receptors. No public transport	285%	13%	**Minor**	**Slight**	**Not Significant**	Future baseline total and HGV traffic flow is notably low, and so is construction traffic with only five vehicles in each direction estimated. Magnitude of impact has therefore been adjusted from Major to Minor
B	Link PAR 16 - A1120 Church Road/A1120 Bell's Lane	Low	High sensitive receptors including schools. There are two kerbside bus stops along the road and one lay-by bus stops at Freeman Primary School.	128%	43%	**Moderate**	**Slight**	**Not Significant**	Future baseline total and HGV traffic flow is notably low. Magnitude of impact has therefore been adjusted from Major to Moderate
B	Link PAR 17 - A1120 south of A14 J50	Low	High sensitive receptors. There are no bus stops in the road link and frequency is low.	55%	16%	**Minor**	**Slight**	**Not Significant**	N/A
B	Link PAR 18 - Mill Lane	Low	No sensitive receptors. No public transport.	214%	22%	**Moderate**	**Slight**	**Not Significant**	Future baseline HGV traffic flow is notably low. Total traffic % increase is below 30% threshold. Magnitude of impact has therefore been adjusted from Major to Moderate
B	Link PAR 19 - B1113 Needham Road/B1113 Stowmarket Road	Low	No sensitive receptors. There are several kerbside bus stops along the road and there are some bus routes with a frequency of 30 to 45 minutes in both directions and a school bus route.	27%	3%	**Negligible**	**Slight**	**Not Significant**	N/A
B	Link PAR 20 - B1113 Bramford Road/B1113 Loraine Way	Low	Low sensitive receptors. There are several kerbside bus stops along the road and the bus frequency is low with some school bus routes.	190%	74%	**Major**	**Slight**	**Not Significant**	Future baseline total and HGV traffic flow is notably low on a section of this road link. However, magnitude of impact to remain at Major to be robust over full link road
B	Link PAR 21 - Bullen Lane	Negligible	Road to access Bramford Substation. No public transport.	6306%	950%	**Minor**	**Neutral**	**Not Significant**	Future baseline total and HGV traffic flow is notably low. Magnitude of impact has

Project Section	Road ID	Receptor Sensitivity	Basis for Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact (Total vehicles)	Significance of Effect	Significance	Comments
									therefore been adjusted from Major to Minor
C	Link PAR 22 - A1214 London Road	Medium	Dual carriageway with a roundabout and a signalised junction. Capacity issues identified. There are no bus stops along the road link although the Park and Ride (P&R) bus route has a frequency of 20 minutes.	48%	11%	**Minor**	**Slight**	**Not Significant**	N/A
C	Link PAR 23 - A1071	Medium	No sensitive receptors. Capacity issues identified. There are several kerbside and lay-by bus stops along the road and the bus frequency is low with a school bus route.	68%	18%	**Moderate**	**Moderate**	**Significant**	Additional mitigation has been defined in the junction A1214 London Rd/A1071. The modelling of other junctions in the road link showed that the A1071/B1113 Swan Hill roundabout has a marginal increase in Ratio of Flow to Capacity due to the Project construction flows. There are planned upgrades on both junctions as part of the planning application for the Land North of the A1071, Ipswich (Wolsey Grange) Ref DC/21/02671 granted in 2023, it is planned to convert the existing A1071/B1113 Swan Hill roundabout to a traffic signal controlled crossroad and some improvements to A1214 London Rd/A1071 which includes carriageway widening to allow two lanes of traffic to turn right from the A1071 (eastbound) to the A1214 (southbound). Therefore no other additional mitigation has been proposed. Further details are provided in the Transport Assessment (document reference 7.11).
C	Link PAR 24 - B1070 (A12 access)	Low	No sensitive receptors. There are no bus stops in the road.	300%	13%	**Major**	**Slight**	**Not Significant**	Future baseline HGV traffic flow is notably low

Project Section	Road ID	Receptor Sensitivity	Basis for Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact (Total vehicles)	Significance of Effect	Significance	Comments
C	Link PAR 25 - B1070 Hadleigh Road	Low	No sensitive receptors. There are no bus stops in the road link, and the bus frequency is low with some school bus routes.	93%	11%	**Major**	**Slight**	**Not Significant**	Future baseline HGV traffic flow is notably low
C	Link PAR 26 - Ipswich Road	Low	No sensitive receptors. There are no bus stops in the road link, and the bus frequency is low.	364%	21%	**Major**	**Slight**	**Not Significant**	Future baseline HGV traffic flow is notably low
C	Link PAR 27 - Birchwood Road	Low	No sensitive receptors. There are kerbside bus stops and the bus frequency is low.	403%	11%	**Moderate**	**Slight**	**Not Significant**	Future baseline HGV traffic flow is notably low. Total traffic % increase is well below 30% threshold. No existing traffic congestion identified. Magnitude of impact has therefore been adjusted from Major to Moderate
C	Link PAR 28 - Wick Road/Grove Hill	Low	No sensitive receptors. There are kerbside bus stops and the bus frequency is low.	300%	12%	**Major**	**Slight**	**Not Significant**	Future baseline HGV traffic flow is notably low
C	Link PAR 29 - Perry Lane	Low	No sensitive receptors. No public transport.	3375%	146%	**Minor**	**Slight**	**Not Significant**	Future baseline total and HGV traffic flow is notably low as no-through road. Magnitude of impact has therefore been adjusted from Major to Minor
C	Link PAR 30 - Bentley Road	Low	No sensitive receptors. There are no bus stops in the road link, and the bus frequency is low.	3282%	342%	**Major**	**Slight**	**Not Significant**	Future baseline total and HGV traffic flow is notably low. However, magnitude of impact to remain at Major to be robust due to notable number of construction vehicles along narrow roads
C	Link PAR 31 - Ardleigh Road/Little Bromley Road	Low	No sensitive receptors. No public transport.	3807%	1193%	**Major**	**Slight**	**Not Significant**	Future baseline total and HGV traffic flow is notably low. However, magnitude of impact to remain at Major to be robust due to notable number of construction vehicles along narrow roads
C	Link PAR 32 - Wick Lane	Low	No sensitive receptors. No public transport.	507%	15%	**Moderate**	**Slight**	**Not Significant**	Future baseline HGV traffic flow is notably low. Total traffic % increase is well below 30% threshold. Magnitude of impact has therefore been adjusted from Major to Moderate

Project Section	Road ID	Receptor Sensitivity	Basis for Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact (Total vehicles)	Significance of Effect	Significance	Comments
C	Link PAR 33 - Old Ipswich Road	Low	No sensitive receptors. No public transport.	252%	75%	**Major**	**Slight**	**Not Significant**	Future baseline HGV traffic flow is notably low
C	Link PAR 34 - Turnpike Close	Low	No sensitive receptors. No public transport.	262%	77%	**Minor**	**Slight**	**Not Significant**	Future baseline total and HGV traffic flow is notably low. Magnitude of impact has therefore been adjusted from Major to Minor
D	Link PAR 35 - A1341 Via Urbis Romanae	High	High sensitive receptors. Capacity issues identified. Bus frequency is high with a bus lane in each carriageway along the road link.	107%	5%	**Major**	**Large**	**Significant**	Total traffic % increase is below 10% threshold and duration of the peak is short term (i.e. one week). Additional mitigation has been defined for the junctions along the road link. Further details are provided in the Transport Assessment (document reference 7.11)
D	Link PAR 36 - A134 Northern Approach Road/A134 Wildeve Avenue/A134 Nayland Road/A134 The Causeway	High	High sensitive receptors. Capacity issues identified. There are several kerbside and lay-by bus stops along the road. The bus frequency is high.	187%	12%	**Major**	**Large**	**Significant**	The duration of the peak is short term (i.e. one week). Additional mitigation has been defined in the junction A1341 Via Urbis Romanae/A134 Northern Approach Rd. The modelling of other junctions in the road link showed that no additional mitigation was required due to a marginal increase in Ratio of Flow to Capacity. Further details are provided in the Transport Assessment (document reference 7.11)
D	Link PAR 37 - A1124 Halsted Road	High	High sensitive receptors. Capacity issues identified. There are several kerbside and lay-by bus stops along the road.	188%	7%	**Major**	**Large**	**Significant**	Future baseline HGV traffic flow is notably low. Existing capacity issued noted. Magnitude of impact to remain as Major to be robust. Total traffic % increase is below 10% threshold and duration of the peak is short term (i.e. one week)
D	Link PAR 38 - Mill Road	Low	No sensitive receptors. There are no bus stops in the road link, and the bus frequency is low.	89%	11%	**Moderate**	**Slight**	**Not Significant**	N/A
D	Link PAR 39 - Great Tey Road	Low	No sensitive receptors. There are no bus stops in the road link, and the bus frequency is low.	68%	11%	**Moderate**	**Slight**	**Not Significant**	N/A
E	Link PAR 40 - A120 Colchester Road	Low	No sensitive receptors.	33%	8%	**Minor**	**Slight**	**Not Significant**	N/A

Project Section	Road ID	Receptor Sensitivity	Basis for Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact (Total vehicles)	Significance of Effect	Significance	Comments
E	Link PAR 41 - B1018 Braintree Road/B1018 Witham Road	Low	High sensitive receptors. There are two kerbside bus stops along the road.	32%	11%	**Minor**	**Slight**	**Not Significant**	N/A
E	Link PAR 42 - B1389 Hatfield Road	Low	High sensitive receptors. There are several kerbside bus stops along the road.	45%	2%	**Minor**	**Slight**	**Not Significant**	N/A
E	Link PAR 43 - Spinks Lane/Highfields Road/Spa Road/Flora Road/Faulkbourne Road/Church Hill	Low	High sensitive receptors. There are several kerbside bus stops along the road.	185%	5%	**Major**	**Slight**	**Not Significant**	Future baseline HGV traffic flow is notably low. Although total traffic % lower than threshold of 10% this is a residential area where traffic congestion already noted at peak times. Magnitude of impact to remain as Major to be robust
E/F	Link PAR 44 - A131 Great Notley Bypass/A131 Great Leighs Bypass/A131 Braintree Road	Low	High sensitive receptors. There are several lay-by bus stops along the road and frequency is high.	67%	22%	**Moderate**	**Slight**	**Not Significant**	n/a
F	Link PAR 46 - B1008 Braintree Road/B1008 Main Road	Low	High sensitive receptors. There are no bus stops along the road link.	304%	5%	**Moderate**	**Slight**	**Not Significant**	Future baseline HGV traffic flow is notably low. Total traffic % increase is well below 30% threshold. Magnitude of impact has therefore been adjusted from Major to Moderate
F	Link PAR 47 - Chatham Hall Lane	Low	No sensitive receptors. No public transport.	2472%	57%	**Minor**	**Neutral**	**Not Significant**	Future baseline total and HGV traffic flow is notably low. Short section of road. Magnitude of impact has therefore been adjusted from Major to Minor
F	Link PAR 48 - Chelmsford Road	Low	No sensitive receptors. There are no bus stops in the road link, and the bus frequency is low.	139%	6%	**Moderate**	**Slight**	**Not Significant**	Future baseline HGV traffic flow is notably low. Total traffic % increase is well below 30% threshold. Short section of road. Magnitude of impact has therefore been adjusted from Major to Moderate
F	Link PAR 49 - A414 Three Mile Hill/A1114 London Road	Medium	Medium sensitive receptors. There are several lay-by bus stops along the road. Capacity issues identified.	92%	3%	**Moderate**	**Large**	**Significant**	Total traffic % increase is below 10% threshold and duration of the peak is short term (i.e. one week). Additional mitigation has been defined for the junctions along the road link. Further details are provided in the Transport Assessment (document reference 7.11)

Project Section	Road ID	Receptor Sensitivity	Basis for Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact (Total vehicles)	Significance of Effect	Significance	Comments
F	Link PAR 50 - A1016 Waterhouse Lane/A1016 Rainsford Lane	High	High sensitive receptors. There are several kerbside bus stops along the road and bus frequency is high. Capacity issues identified.	81%	2%	**Major**	**Large**	**Significant**	Total traffic % increase is below 10% threshold and duration of the peak is short term (i.e. one week). Additional mitigation has been defined for the junctions along the road link. Further details are provided in the Transport Assessment (document reference 7.11)
F	Link PAR 51 - A1060 Rainsford Road/A1060 Roxwell Road	High	High sensitive receptors. There are several kerbside bus stops along the road and bus frequency is low. Capacity issues identified.	116%	3%	**Major**	**Large**	**Significant**	Total traffic % increase is below 10% threshold and duration of the peak is short term (i.e. one week). Additional mitigation has been defined for the junctions along the road link. Further details are provided in the Transport Assessment (document reference 7.11)
F	Link PAR 52 - Vicarage road	Low	No sensitive receptors. There is one kerbside bus stop and bus frequency is low.	175%	12%	**Moderate**	**Slight**	**Not Significant**	Future baseline HGV traffic flow is notably low. Total traffic % increase is well below 30% threshold. Short section of road, low receptor sensitivity. Magnitude of impact has therefore been adjusted from Major to Moderate
F	Link PAR 53 - A414 Greenbury Way/A414 Ongar Road	Low	Medium sensitive receptors. No public transport.	64%	3%	**Moderate**	**Slight**	**Not Significant**	N/A
G	Link PAR 54 - B1002 Main Road	Low	High sensitive receptors. There are several kerbside and lay-by bus stops along the road.	454%	6%	**Moderate**	**Slight**	**Not Significant**	Future baseline HGV traffic flow is notably low. Total traffic % increase is below the 10% threshold. Magnitude of impact has therefore been adjusted from Major to Moderate
G	Link PAR 55 - Wantz Road	Low	Medium sensitive receptors. No public transport.	82%	5%	**Major**	**Slight**	**Not Significant**	N/A
G	Link PAR 56 - Ivy Barns Lane	Low	Medium sensitive receptors. No public transport.	313%	21%	**Major**	**Slight**	**Not Significant**	Future baseline HGV traffic flow is notably low
G	Link PAR 57 - Church Lane	Low	No sensitive receptors. No public transport.	15,296%	406%	**Moderate**	**Slight**	**Not Significant**	Future baseline total and HGV traffic flow is notably low. Short section of road but narrow. Magnitude of impact has therefore been adjusted from Major to Moderate
G	Link PAR 58 - A176 Noak Hill Road/A176	High	High sensitive receptors. There are	112%	13%	**Minor**	**Slight**	**Not Significant**	N/A

Project Section	Road ID	Receptor Sensitivity	Basis for Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact (Total vehicles)	Significance of Effect	Significance	Comments
	Laindon Road/A129 Southend Road		several lay-by bus stops and bus frequency is high. Capacity issues identified.						
G	Link PAR 59 - A129 Sun Street/A129 London Road/A129 Rayleigh Road	High	High sensitive receptors. There are several kerbside bus stops and bus frequency is high. Capacity issues identified.	162%	2%	**Major**	**Large**	**Significant**	Future baseline HGV traffic flow is notably low. Although total traffic % change lower than threshold of 10% this is a residential area where traffic congestion already noted at peak times. Magnitude of impact to remain as Major to be robust. Additional mitigation has been defined for the junctions along the road link. Further details are provided in the Transport Assessment (document reference 7.11)
G	Link PAR 60 - Dunton Road/Brentwood Road	Low	No sensitive receptors. No public transport.	112%	13%	**Major**	**Slight**	**Not Significant**	Future baseline HGV traffic flow is notably low
G	Link PAR 62 - Lower Dunton Road	Low	No sensitive receptors. No public transport.	91%	4%	**Major**	**Slight**	**Not Significant**	N/A
H	Link PAR 63 - A128 Brentwood Road	Low	No sensitive receptors. There are several kerbside and lay-by bus stops and frequency is low.	13%	2%	**Negligible**	**Slight**	**Not Significant**	N/A
H	Link PAR 64 - A1013 Stanford Road (east of Orsett Cock Roundabout)	Medium	Low sensitive receptors. There are several kerbside and lay-by bus stops and frequency is low. Sensitivity has been classified as Medium because there is a school bus route.	125%	16%	**Major**	**Moderate**	**Significant**	Total duration is short term (i.e. four weeks). The modelling of the junction in the road link (Orsett Cock roundabout) showed that no additional mitigation was required due to minimum increases in queue lengths. Additional mitigation has been defined for A1013 Stanford Road/Buckingham Hill Road junction. Further details are provided in the Transport Assessment (document reference 7.11)
H	Link PAR 65 - Buckingham Hill Road	High	Low sensitive receptors. There are several kerbside bus stops and bus frequency is high. Sensitivity has been classified as High	107%	26%	**Major**	**Large**	**Significant**	Total duration is short term (i.e. four weeks). Additional mitigation has been defined for A1013 Stanford Road/Buckingham Hill Road junction.

Project Section	Road ID	Receptor Sensitivity	Basis for Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact (Total vehicles)	Significance of Effect	Significance	Comments
			because there are several school bus routes.						Further details are provided in the Transport Assessment (document reference 7.11)
H	Link PAR 66 - Brentwood Road	Medium	Low sensitive receptors, capacity issues identified.	299%	9%	**Moderate**	**Moderate**	**Significant**	Future baseline HGV traffic flow is notably low. Total traffic % increase is below the 10% threshold. Magnitude of impact has therefore been adjusted from Major to moderate. Total duration is short term (i.e. one week). The modelling of the junction in the road link (Orsett Cock roundabout) showed that no additional mitigation was required due to minimum increases in queue lengths. Further details are provided in the Transport Assessment (document reference 7.11)
H	Link PAR 67 - A1013 Stanford Road (west of Orsett Cock Roundabout)	High	High sensitive receptors. Capacity issues identified. Bus stops present.	94%	6%	**Minor**	**Moderate**	**Significant**	Future baseline HGV traffic flow is notably low. Total traffic % increase is below the 10% threshold. Magnitude of impact has therefore been adjusted from Moderate to minor. Total duration is short term (i.e. two weeks). The modelling of the junction in the road link (Orsett Cock roundabout) showed that no additional mitigation was required due to minimum increases in queue lengths. Further details are provided in the Transport Assessment (document reference 7.11)
H	Link PAR 68 - Heath Road	Low	No sensitive receptors. No public transport.	2676%	19%	**Major**	**Slight**	**Not Significant**	Future baseline HGV traffic flow is notably low

Pedestrians, Cyclists and Horse-Riders - Delay

16.3.4 The pedestrian, cyclist and horse-rider delays have been analysed for those Public Rights of Way (PRoW) that have a diversion.

16.3.5 The magnitude of impact considered for the pedestrian, cyclist and horse-rider delay depends on the journey length increase as defined in the Design Manual for Roads and Bridges (DMRB) *LA 104 Environmental Assessment and Monitoring* (National Highways, 2020*).* An increase of more than 500 m is major, between 250 and 500 m is moderate, between 50 and 250 m is minor and under 50 m is negligible. The magnitude of the impact is adjusted based on the duration of the impact, if the temporary increase in journey length along a road or other PRoW is less than four weeks in any 12-month period.

16.3.6 The assessment of the pedestrian, cyclist and horse-rider delay is presented in Table A16.4.3. There are several PRoW where the significance of effect is moderate or large. For some of these PRoW further mitigation measures are to be investigated.

Table A16.4.3 Significance of effect pedestrian, cyclist and horse-rider delay

Project Section	Region	PRoW – Local Planning Authority Designation	Receptor Sensitivity	Basis for Sensitivity	Net change of Length (m)	Duration	Magnitude of Impact	Significance of Effect	Significance	Comments
A	Norfolk	Ashwellthorpe FP5	High	Route connects Fundenhall and Hapton, where there is a primary school and play area.	79	15 weeks	**Minor**	**Slight**	**Not significant**	N/A
A	Norfolk	Forncett FP26	Medium	Alternative routes available between Forncett End, Forncett St Peter and Aslacton. Route does not connect with sensitive receptors.	22	15 weeks	**Negligible**	**Slight**	**Not significant**	N/A
A	Norfolk	Forncett FP25	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	366	2 months	**Minor**	**Slight**	**Not significant**	The magnitude of impact has been adjusted from Moderate to Minor as the expected increase in journey time would be less than 5 minutes
A	Norfolk	Roydon South Norfolk FP4	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	45	2 months	**Negligible**	**Neutral**	**Not significant**	N/A
A	Norfolk	Roydon South Norfolk FP2	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	8	Duration of works	**Negligible**	**Neutral**	**Not significant**	N/A
A	Norfolk	Roydon South Norfolk FP14 (Part of Angles Way)	High	Angles Way Long Distance Trail, section Diss Mere to Redgrave B1113 at Roydon.	126	2 months	**Minor**	**Slight**	**Not significant**	N/A
B	Suffolk	W-426/003/0	Medium	Route likely to be used for recreational use. Alternative routes available, including Millway Lane (quiet lane). Route does not connect with sensitive receptors.	157	2 months	**Minor**	**Slight**	**Not significant**	N/A
B	Suffolk	W-172/022/0	High	Route likely to be used for recreational use but not off-carriageway alternative routes for horse-riders.	25	2 days	**Negligible**	**Slight**	**Not significant**	N/A
B	Suffolk	W-172/027/0	Medium	Route likely to be used for recreational use. Alternative routes available, Route does not connect with sensitive receptors.	82	2 months	**Minor**	**Slight**	**Not significant**	N/A
B	Suffolk	W-172/036/0	Low	Route likely to be used for recreational use. Alternative routes available. Route does not seem feasible for walking.	129	3 months	**Minor**	**Slight**	**Not significant**	N/A

Project Section	Region	PRoW – Local Planning Authority Designation	Receptor Sensitivity	Basis for Sensitivity	Net change of Length (m)	Duration	Magnitude of Impact	Significance of Effect	Significance	Comments
B	Suffolk	W-389/002/0	High	Route likely to be used for recreational use but not off-carriageway alternative routes.	2	3 days	**Negligible**	**Slight**	**Not significant**	N/A
B	Suffolk	W-563/001/0	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	5	Duration of works	**Negligible**	**Neutral**	**Not significant**	N/A
B	Suffolk	W-246/011/0, W-203/048/0, W-203/054/0 and W-563/003/0	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	5	2 months	**Negligible**	**Neutral**	**Not significant**	N/A
B	Suffolk	W-392/059/0	Medium	Route likely to be used for recreational use. Alternative routes available (including promoted route. Route does not connect with sensitive receptors.	26	Duration of works	**Negligible**	**Neutral**	**Not significant**	N/A
B	Suffolk	W-392/046/0	Low	No signposts available for identifying the route. Route does not connect with sensitive receptors and alternative routes available.	92	Duration of works	**Minor**	**Slight**	**Not significant**	N/A
B	Suffolk	W-209/006/0	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	26	15 weeks	**Negligible**	**Neutral**	**Not significant**	N/A
B	Suffolk	W-209/014/0	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	123	2 months	**Minor**	**Slight**	**Not significant**	N/A
B	Suffolk	W-117/013/0	High	Route likely to be used for recreational use connecting to Badley Church (historic church) and part of the Combs and Badley path. No available off-carriageway alternative routes for horse-riders.	94	2 months	**Minor**	**Slight**	**Not significant**	N/A
B	Suffolk	W-117/023/0	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors	-3	3 days	**Negligible**	**Neutral**	**Not significant**	N/A
B	Suffolk	W-129/016/0	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	218	2 months	**Minor**	**Slight**	**Not significant**	N/A

Project Section	Region	PRoW – Local Planning Authority Designation	Receptor Sensitivity	Basis for Sensitivity	Net change of Length (m)	Duration	Magnitude of Impact	Significance of Effect	Significance	Comments
B	Suffolk	W-129/018/0	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	22	15 weeks	**Negligible**	**Neutral**	**Not significant**	N/A
B	Suffolk	W-121/006/0 and W-129/025/0	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	1,300	2 months	**Major**	**Large**	**Significant**	The route is likely used for recreational trips, with an increase of around 15 minutes of additional time
B	Suffolk	W-418/031/0	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	1	Duration of works	**Negligible**	**Neutral**	**Not significant**	N/A
B	Suffolk	W-418/058/0	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	8	Duration of works	**Negligible**	**Neutral**	**Not significant**	N/A
B	Suffolk	W-472/027/0	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	231	15 weeks	**Minor**	**Slight**	**Not significant**	N/A
B	Suffolk	W-370/054/0	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	168	2 months	**Minor**	**Slight**	**Not significant**	N/A
B	Suffolk	W-155/039/A	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	14	9 days	**Negligible**	**Neutral**	**Not significant**	N/A
C	Suffolk	W-486/003/0	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	62	2 months	**Minor**	**Slight**	**Not significant**	N/A
C	Suffolk	W-543/002/0	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	202	2 months	**Minor**	**Slight**	**Not significant**	N/A
C	Suffolk	W-543/003/0	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	20	2 months	**Negligible**	**Neutral**	**Not significant**	N/A
C	Suffolk	W-284/014/0	High	Route likely to be used for recreational use. No available off-carriageway alternative routes for	150	2 months	**Minor**	**Slight**	**Not significant**	N/A

Project Section	Region	PRoW – Local Planning Authority Designation	Receptor Sensitivity	Basis for Sensitivity	Net change of Length (m)	Duration	Magnitude of Impact	Significance of Effect	Significance	Comments
				horse-riders. Route is diverted via a footpath.						
C	Suffolk	W-284/006/0	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	32	Duration of works	**Negligible**	**Neutral**	**Not significant**	N/A
C	Suffolk	W-438/007/0	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	-88	Duration of works	**Negligible**	**Neutral**	**Not significant**	N/A
C	Suffolk	W-323/010/0	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	79	5 years	**Minor**	**Slight**	**Not significant**	N/A
C	Essex	Langham 1 (Part of St Edmund Way / Stour Valley Path)	High	St Edmund Way and Stour Valley Path.	13	Duration of works	**Negligible**	**Slight**	**Not significant**	N/A
C	Essex	Langham 16	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	41	Duration of works	**Negligible**	**Neutral**	**Not significant**	N/A
C	Essex	Langham 21	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	149	Duration of works	**Minor**	**Slight**	**Not significant**	N/A
C	Essex	Ardleigh 2	High	Route likely to be used for recreational use, identified as sensitive by Essex County Council. No available off-carriageway alternative routes for horse-riders.	12	6 days	**Negligible**	**Slight**	**Not significant**	N/A
C	Essex	Little Bromley 13	Medium	Route likely to be used for recreational use. Alternative routes available. Route connects to St. Mary's Church.	5	Duration of works	**Negligible**	**Neutral**	**Not significant**	N/A
C	Essex	Little Bromley 14	Medium	Route likely to be used for recreational use. Alternative routes available. Route connects to St. Mary's Church.	11	Duration of works	**Negligible**	**Neutral**	**Not significant**	N/A
D	Essex	Boxted 38	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	53	2 months	**Minor**	**Slight**	**Not significant**	N/A

Project Section	Region	PRoW – Local Planning Authority Designation	Receptor Sensitivity	Basis for Sensitivity	Net change of Length (m)	Duration	Magnitude of Impact	Significance of Effect	Significance	Comments
D	Essex	Great Horkesley 30	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	784	2 months	**Major**	**Moderate**	**Significant**	The route is likely used for recreational trips, with an increase of less than 10 minutes of additional time
D	Essex	Fordham 16	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	21	2 months	**Negligible**	**Neutral**	**Not significant**	N/A
D	Essex	Fordham 22	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	19	3 days	**Negligible**	**Neutral**	**Not significant**	N/A
D	Essex	Fordham 24	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	46	2 months	**Negligible**	**Neutral**	**Not significant**	N/A
D	Essex	Fordham 36	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	312	2 months	**Minor**	**Slight**	**Not significant**	The magnitude of impact has been adjusted from Moderate to Minor as the expected increase in journey time would be less than 5 minutes
D	Essex	Aldham 3	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	46	2 months	**Negligible**	**Neutral**	**Not significant**	N/A
D	Essex	Aldham 12	Low	No signposts available for identifying the route. Route does not connect with sensitive receptors and alternative routes available.	-15	15 weeks	**Negligible**	**Neutral**	**Not significant**	N/A
D	Essex	Aldham 18	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	7	Duration of works	**Negligible**	**Neutral**	**Not significant**	N/A
D	Essex	Aldham 20	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	20	Duration of works	**Negligible**	**Neutral**	**Not significant**	N/A
D	Essex	Great Tey 36 (Part of Essex Way)	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	372	2 days	**Minor**	**Slight**	**Not significant**	The magnitude of impact has been adjusted from Moderate to Minor as the duration of the impact is less than 1 week

Project Section	Region	PRoW – Local Planning Authority Designation	Receptor Sensitivity	Basis for Sensitivity	Net change of Length (m)	Duration	Magnitude of Impact	Significance of Effect	Significance	Comments
D	Essex	Great Tey 38	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	768	2 months	**Major**	**Moderate**	**Significant**	The route is likely used for recreational trips, with an increase of less than 10 minutes of additional time
D	Essex	Great Tey 50	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	1,400	1 day	**Minor**	**Slight**	**Not significant**	The magnitude of impact has been adjusted from Major to Minor as the duration of the impact is 1 day
D	Essex	Great Tey 59	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	6	15 weeks	**Negligible**	**Neutral**	**Not significant**	N/A
D	Essex	Great Tey 46 and Great Tey 42 (Part of Essex Way)	High	Route likely to be used for recreational use. No available off-carriageway alternative routes for horse-riders.	147	15 weeks	**Minor**	**Slight**	**Not significant**	N/A
E	Essex	Kelvedon 1	High	Route likely to be used for recreational use. No available off-carriageway alternative routes for horse-riders.	125	2 months	**Minor**	**Slight**	**Not significant**	N/A
E	Essex	Kelvedon 2	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	81	Duration of works	**Minor**	**Slight**	**Not significant**	N/A
E	Essex	Kelvedon 4	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	353	2 months	**Minor**	**Slight**	**Not significant**	The magnitude of impact has been adjusted from Moderate to Minor as the expected increase in journey time would be less than 5 minutes
E	Essex	Kelvedon 5	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	71	2 months	**Minor**	**Slight**	**Not significant**	N/A
E	Essex	Silver End 15	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	206	15 weeks	**Minor**	**Slight**	**Not significant**	N/A
E	Essex	Silver End 14 and Cressing 19 (Part of John Ray Walk)	High	Route likely to be used for recreational use, part of The John Ray Walk. Alternative routes	0	5 days	**Negligible**	**Slight**	**Not significant**	N/A

Project Section	Region	PRoW – Local Planning Authority Designation	Receptor Sensitivity	Basis for Sensitivity	Net change of Length (m)	Duration	Magnitude of Impact	Significance of Effect	Significance	Comments
				available. Route does not connect with sensitive receptors.						
E	Essex	Rivenhall 11	High	Route likely to be used for recreational use, identified as sensitive by Essex County Council. Alternative routes available. Route does not connect with sensitive receptors.	2	Duration of works	**Negligible**	**Slight**	**Not significant**	N/A
E	Essex	White Notley 12	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	17	15 weeks	**Negligible**	**Neutral**	**Not significant**	N/A
E	Essex	White Notley 15 (Part of Essex Way and White Notley Circular Walk)	High	Route part of White Notley Circular Walk, likely to be used for recreational use. No available off-carriageway alternative routes for horse-riders.	122	Duration of works	**Minor**	**Slight**	**Not significant**	N/A
E	Essex	White Notley 22	Medium	Route part of The Essex Way, likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	366	15 weeks	**Minor**	**Slight**	**Not significant**	The magnitude of impact has been adjusted from Moderate to Minor as the expected increase in journey time would be less than 5 minutes
E	Essex	Faulkbourne 1	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	40	Duration of works	**Negligible**	**Neutral**	**Not significant**	N/A
E	Essex	Fairstead 20	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	37	15 weeks	**Negligible**	**Neutral**	**Not significant**	N/A
F	Essex	Great And Little Leighs 40 (Part of Essex Way)	High	Route likely to be used for recreational use part of The Essex Way Walk. Alternative routes available. Route does not connect with sensitive receptors.	11	Duration of works	**Negligible**	**Slight**	**Not significant**	N/A
F	Essex	Great And Little Leighs 45	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	29	15 weeks	**Negligible**	**Neutral**	**Not significant**	N/A
F	Essex	Little Waltham 8	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors	94	2 months	**Minor**	**Slight**	**Not significant**	N/A

Project Section	Region	PRoW – Local Planning Authority Designation	Receptor Sensitivity	Basis for Sensitivity	Net change of Length (m)	Duration	Magnitude of Impact	Significance of Effect	Significance	Comments
F	Essex	Little Waltham 13	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	322	15 weeks	**Minor**	**Slight**	**Not significant**	The magnitude of impact has been adjusted from Moderate to Minor as the expected increase in journey time would be less than 5 minutes
F	Essex	Little Waltham 21	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	308	15 weeks	**Minor**	**Slight**	**Not significant**	The magnitude of impact has been adjusted from Moderate to Minor as the expected increase in journey time would be less than 5 minutes
F	Essex	Great Waltham 74 (Part of Little Waltham and Broomfield Circular and Pleshey and Great Waltham Loop)	High	Route likely to be used for recreational use, part of Little Waltham and Broomfield Circular. Alternative routes available. Route does not connect with sensitive receptors.	272	15 weeks	**Minor**	**Slight**	**Not significant**	The magnitude of impact has been adjusted from Moderate to Minor as the expected increase in journey time would be less than 5 minutes
F	Essex	Great Waltham 76 (Part of Little Waltham and Broomfield Circular and Pleshey and Great Waltham Loop)	High	Route likely to be used for recreational use, part of Little Waltham and Broomfield Circular and Pleshey and Great Waltham loop. Alternative routes available. Route does not connect with sensitive receptors.	13	2 months	**Negligible**	**Slight**	**Not significant**	N/A
F	Essex	Broomfield 1 (Part of Saffron Trail)	High	Route likely to be used for recreational use, part of Saffron Trail. Alternative routes available. Route does not connect with sensitive receptors.	7	3 days	**Negligible**	**Slight**	**Not significant**	N/A
F	Essex	Broomfield 3	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	312	15 weeks	**Minor**	**Slight**	**Not significant**	The magnitude of impact has been adjusted from Moderate to Minor as the expected increase in journey time would be less than 5 minutes
F	Essex	Broomfield 5 (Part of Pleshey and Great Waltham Loop)	High	Route likely to be used for recreational use, part of Pleshey and Great Waltham loop. Alternative routes available. Route does not connect with sensitive receptors.	84	2 months	**Minor**	**Slight**	**Not significant**	N/A
F	Essex	Broomfield 9	High	Route likely to be used for recreational use. Alternative routes available. Part of route is adjacent to a High School.	-17	Duration of works	**Negligible**	**Slight**	**Not significant**	N/A

Project Section	Region	PRoW – Local Planning Authority Designation	Receptor Sensitivity	Basis for Sensitivity	Net change of Length (m)	Duration	Magnitude of Impact	Significance of Effect	Significance	Comments
F	Essex	Broomfield 31	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	24	15 weeks	**Negligible**	**Neutral**	**Not significant**	N/A
F	Essex	Chignall 26	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	8	8 days	**Negligible**	**Neutral**	**Not significant**	N/A
F	Essex	Chignall 30	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	3	15 weeks	**Negligible**	**Neutral**	**Not significant**	N/A
F	Essex	Writtle 66	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	136	2 months	**Minor**	**Slight**	**Not significant**	N/A
F	Essex	Writtle 68	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	8	Duration of works	**Negligible**	**Neutral**	**Not significant**	N/A
F	Essex	Writtle 69	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	21	15 weeks	**Negligible**	**Neutral**	**Not significant**	N/A
F	Essex	Writtle 83	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	62	15 weeks	**Minor**	**Slight**	**Not significant**	N/A
G	Essex	Margaretting 13 (Part of St Peter's Way)	High	Route likely to be used for recreational use, part of the St Peter's Way Walk. Alternative routes available. Route does not connect with sensitive receptors.	556	2 months	**Major**	**Large**	**Significant**	The route is likely used for recreational trips, with an increase of less than 10 minutes of additional time
G	Essex	Margaretting 38	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	53	Duration of works	**Minor**	**Slight**	**Not significant**	N/A
G	Essex	Ingatestone 23	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	33	2 months	**Negligible**	**Neutral**	**Not significant**	N/A
G	Essex	Stock 37	Medium	Route likely to be used for recreational use. Alternative routes	150	15 weeks	**Minor**	**Slight**	**Not significant**	N/A

Project Section	Region	PRoW – Local Planning Authority Designation	Receptor Sensitivity	Basis for Sensitivity	Net change of Length (m)	Duration	Magnitude of Impact	Significance of Effect	Significance	Comments
				available. Route does not connect with sensitive receptors.						
G	Essex	Brentwood 96	High	Route likely to be used for recreational use, identified as sensitive by Essex County Council. Alternative routes available. Route does not connect with sensitive receptors.	1	15 weeks	**Negligible**	**Slight**	**Not significant**	N/A
G	Essex	Little Burstead 15	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	-54	2 months	**Negligible**	**Neutral**	**Not significant**	N/A
G	Essex	Little Burstead 19	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	6	Duration of works	**Negligible**	**Neutral**	**Not significant**	N/A
G	Essex	Little Burstead 54	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	428	15 weeks	**Minor**	**Slight**	**Not significant**	The magnitude of impact has been adjusted from Moderate to Minor as the expected increase in journey time would be around 5 minutes
G	Essex	Basildon 161 and West Horndon 61	High	Route likely to be used for recreational use but no off-carriageway alternative routes for horse-riders.	57	2 months	**Minor**	**Slight**	**Not significant**	N/A
G	Essex	West Horndon 62	Low	No signposts available for identifying the route. Route does not connect with sensitive receptors and alternative routes available.	0	2 months	**Negligible**	**Neutral**	**Not significant**	N/A
G	Essex	West Horndon 68	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	66	2 months	**Minor**	**Slight**	**Not significant**	N/A
G	Essex	West Horndon 69	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	636	15 weeks	**Major**	**Large**	**Significant**	The route is likely used for recreational trips, with an increase of less than 10 minutes of additional time
H	Thurrock	Footpath 10	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	83	Duration of works	**Minor**	**Slight**	**Not significant**	N/A

Project Section	Region	PRoW – Local Planning Authority Designation	Receptor Sensitivity	Basis for Sensitivity	Net change of Length (m)	Duration	Magnitude of Impact	Significance of Effect	Significance	Comments
H	Thurrock	Bridleway 63	High	Route likely to be used for recreational use and links to BR 58, identified as sensitive by Thurrock Council. There is no off-carriageway alternative routes for horse-riders. Route does not connect with sensitive receptors.	34	15 weeks	**Negligible**	**Slight**	**Not significant**	N/A
H	Thurrock	Footpath 42	Low	No signposts available for identifying the route. Route does not connect with sensitive receptors and alternative routes available.	150	15 weeks	**Minor**	**Slight**	**Not significant**	N/A
H	Thurrock	Footpath 67	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	207	15 weeks	**Minor**	**Slight**	**Not significant**	N/A
H	Thurrock	Footpath 91	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	-29	15 weeks	**Negligible**	**Neutral**	**Not significant**	N/A
H	Thurrock	Footpath 107	Medium	Route likely to be used for recreational use. Alternative routes available. Route does not connect with sensitive receptors.	31	Duration of works	**Negligible**	**Neutral**	**Not significant**	N/A
H	Thurrock	Bridleway 223	High	No signposts available for identifying the route. Route likely to be used for recreational use but no off-carriageway alternative routes for horse-riders.	325	15 weeks	**Minor**	**Slight**	**Not significant**	The magnitude of impact has been adjusted from Moderate to Minor as the expected increase in journey time would be less than 5 minutes

Pedestrian, Cyclist and Horse-Rider Severance

16.3.7 The road link sensitivity for the assessment of pedestrian, cyclist and horse-rider severance, amenity and fear and intimidation is shown in Table A16.2.79 within Appendix 16.2: Traffic and Transport Baseline Conditions (document reference 6.16.A2).

16.3.8 Pedestrian severance occurs when there is difficulty experienced in crossing a heavily trafficked route. Changes in total traffic flows of 30%, 60% and 90% are considered minor, moderate and major changes in magnitude. The assessment for the road links forming part of the PARs is presented in Table A16.4.4, and it shows that the significance of effect for all the road links is classified as slight or neutral. Therefore, no mitigation measures are to be investigated.

Table A16.4.4 Significance of effect pedestrian, cyclist and horse-rider severance

Project Section	Road ID	Pedestrian, cyclist and horse-rider Crossing Provision	Receptor Sensitivity	HGVs % Change	Total vehicles % Change	Magnitude of Impact (total vehicles)	Significance of Effect	Significance	Comments
A	Link PAR 1 - A140 Ipswich Rd	Uncontrolled crossings for pedestrians and cyclists at the A47 roundabout.	Medium	113%	37%	**Minor**	**Slight**	**Not Significant**	N/A
A	Link PAR 2 - Mangreen Lane	None	Negligible	17,157%	273%	**Moderate**	**Neutral**	**Not Significant**	Future baseline flows has a total of 253 vehicles over the 12-hour period (07:00 to 19:00) which equates to 12 vehicles an hour (one vehicle every two or three minutes). The total Project construction flows would be 360 vehicles, which equates to 30 vehicles an hour (one vehicle every two minutes). The committed development flows would be 330 vehicles, which equates to 28 vehicles per hour (one vehicle every two minutes). Therefore, the magnitude of impact has been adjusted from Major to Moderate
A	Link PAR 3 - Stansfield Rd/Wymondham Rd	None	Negligible	358%	13%	**Negligible**	**Neutral**	**Not Significant**	N/A
A	Link PAR 4 - B1113	Informal crossing for footpath FP10 in the northern section, between Wymondham Road and Stansfield Road/Wymondham Road.	Low	411%	11%	**Negligible**	**Slight**	**Not Significant**	N/A
A	Link PAR 6 - Fundenhall Rd	None	Negligible	859%	28%	**Negligible**	**Neutral**	**Not Significant**	N/A
A	Link PAR 7 - B1134 Station Rd/B1134 Long Row	None	Negligible	223%	20%	**Negligible**	**Neutral**	**Not Significant**	N/A
A	Link PAR 8 – A1066/A1066 Victoria Rd/A1066 Park Rd/A1066 High Rd	Formal and informal crossings present along the urban sections. Uncontrolled crossings for pedestrians and cyclists at the A140 roundabout.	High	35%	7%	**Negligible**	**Slight**	**Not Significant**	N/A
A	Link PAR 9 - A1066 High Road/A1066 Low Road/A1066 Diss Road /A1066 The Street/A1066 Thetford Road/A1066 Hurth Way/A1066 Mundford Road	Formal and informal crossings present along Thetford. There are two cycle route crossing at Old Croxton Rd (uncontrolled) and at Green Lane (signalised).	High	83%	12%	**Negligible**	**Slight**	**Not Significant**	N/A

Project Section	Road ID	Pedestrian, cyclist and horse-rider Crossing Provision	Receptor Sensitivity	HGVs % Change	Total vehicles % Change	Magnitude of Impact (total vehicles)	Significance of Effect	Significance	Comments
B	Link PAR 10 - A143 Old Bury Road	Uncontrolled crossings for pedestrians and cyclists at the B1077 roundabout. National Cycle Network (NCN) Route 30 crosses the A143 Old Bury Road on its connection between Palgrave to Thrandeston.	Medium	23%	8%	**Negligible**	**Slight**	**Not Significant**	N/A
B	Link PAR 11 - Lion Road	None	Low	319%	9%	**Negligible**	**Neutral**	**Not Significant**	N/A
B	Link PAR 12 - B1113 Finningham Road/B1113 Walsham Road	Informal crossing located at the junction with Wickham Road.	Medium	221%	18%	**Negligible**	**Slight**	**Not Significant**	N/A
B	Link PAR 13 - Wickham Road	Footway, when present, is located in one side of the road only and serves some residential properties.	Low	306%	21%	**Negligible**	**Slight**	**Not Significant**	N/A
B	Link PAR 14 - Eastland Lane	None	Negligible	7,260%	528%	**Moderate**	**Neutral**	**Not Significant**	Future baseline flows have a total of 34 vehicles over the 12-hour period (07:00 to 19:00) which equates to three vehicles an hour (one vehicle every 20 minutes). The total Project construction flows would be 178 vehicles, which equates to 15 vehicles an hour (one vehicle every four minutes). No additional flows from committed developments. Therefore, the magnitude of impact has been adjusted from Major to Moderate
B	Link PAR 15 - Thornham Road	None	Negligible	285%	13%	**Negligible**	**Neutral**	**Not Significant**	N/A
B	Link PAR 16 - A1120 Church Road/A1120 Bell's Lane	Various formal and informal pedestrian crossings in Stowupland.	High	128%	43%	**Minor**	**Slight**	**Not Significant**	N/A
B	Link PAR 17 - A1120 south of A14 J50	Signalised crossings at the junctions.	Medium	55%	16%	**Negligible**	**Slight**	**Not Significant**	N/A
B	Link PAR 18 - Mill Lane	None	Negligible	214%	22%	**Negligible**	**Neutral**	**Not Significant**	N/A
B	Link PAR 19 - B1113 Needham Road/B1113 Stowmarket Road	Footway, when present, is located in one side of the road only.	Low	27%	3%	**Negligible**	**Slight**	**Not Significant**	N/A

Project Section	Road ID	Pedestrian, cyclist and horse-rider Crossing Provision	Receptor Sensitivity	HGVs % Change	Total vehicles % Change	Magnitude of Impact (total vehicles)	Significance of Effect	Significance	Comments
B	Link PAR 20 - B1113 Bramford Road/B1113 Loraine Way	NCN Route 48 crosses the B1113 Loraine Way between Tye Lane and The Street with an informal crossing.	Low	190%	74%	**Moderate**	**Slight**	**Not Significant**	N/A
B	Link PAR 21 - Bullen Lane	None	Negligible	6,306%	950%	**Moderate**	**Neutral**	**Not Significant**	Future baseline flows has a total of 63 vehicles over the 12-hour period (07:00 to 19:00) which equates to six vehicles an hour (one vehicle every 10 minutes). The total Project construction flows would be 568 vehicles, which equates to 47 vehicles an hour (one vehicle every one or two minutes). The committed development flows would be 33 vehicles, which equates to three vehicles per hour. Therefore, the magnitude of impact has been adjusted from Major to Moderate
C	Link PAR 22 - A1214 London Road	Signalised pedestrian crossing in the vicinity of Aldi providing connection to both PRoWs W-486/015/0 and W-543/054/0, and at the Scrivener Road roundabout (access to Interchange Retail Park).	Low	48%	11%	**Negligible**	**Slight**	**Not Significant**	N/A
C	Link PAR 23 - A1071	Footway and shared footway/cycleway only.	Low	68%	18%	**Negligible**	**Slight**	**Not Significant**	N/A
C	Link PAR 24 - B1070 (A12 access)	There are uncontrolled pedestrian/cyclist crossings at the access from and to the A12 J31 Northbound.	Low	300%	13%	**Negligible**	**Slight**	**Not Significant**	N/A
C	Link PAR 25 - B1070 Hadleigh Road	Footway only.	Medium	93%	11%	**Negligible**	**Slight**	**Not Significant**	N/A
C	Link PAR 26 - Ipswich Rd	Footway only.	Negligible	364%	21%	**Negligible**	**Neutral**	**Not Significant**	N/A
C	Link PAR 27 - Birchwood Rd	Footway only.	High	403%	11%	**Negligible**	**Slight**	**Not Significant**	N/A
C	Link PAR 28 - Wick Rd/Grove Hill	Footway only.	Medium	300%	12%	**Negligible**	**Slight t**	**Not Significant**	N/A
C	Link PAR 29 - Perry Ln	None	Negligible	3,375%	146%	**Moderate**	**Neutral**	**Not Significant**	Future baseline flows have a total of 113 vehicles over the 12-hour period (07:00 to 19:00) which equates to 10 vehicles an hour (one vehicle every six minutes). The total Project construction flows

Project Section	Road ID	Pedestrian, cyclist and horse-rider Crossing Provision	Receptor Sensitivity	HGVs % Change	Total vehicles % Change	Magnitude of Impact (total vehicles)	Significance of Effect	Significance	Comments
									would be 166 vehicles, which equates to 14 vehicles an hour (one vehicle every four or five minutes). No additional flows from committed developments. Therefore, the magnitude of impact has been adjusted from Major to Moderate
C	Link PAR 30 - Bentley Rd	None	Medium	3,282%	342%	**Minor**	**Slight**	**Not Significant**	Shared pedestrian/cycle route adjacent to Bentley Road has been proposed as part of the embedded mitigations. A suitable crossing point has been provided as part of the design of the shared pedestrian/cycle route. Therefore, the magnitude of impact has been adjusted from Major to Minor
C	Link PAR 31 - Ardleigh Rd/Little Bromley Rd	None	Negligible	3,807%	1,193%	**Moderate**	**Neutral**	**Not Significant**	Future baseline flows have a total of 95 vehicles over the 12-hour period (07:00 to 19:00) which equates to eight vehicles an hour (one vehicle every seven or eight minutes). The total Project construction flows would be 862 vehicles, which equates to 71 vehicles an hour (one vehicle every minute). The committed development flows would be 273 vehicles, which equates to 23 vehicles per hour. Therefore, the magnitude of impact has been adjusted from Major to Moderate
C	Link PAR 32 - Wick Ln	None	Negligible	507%	15%	**Negligible**	**Neutral**	**Not Significant**	N/A
C	Link PAR 33 - Old Ipswich Rd	Footway only.	Low	252%	75%	**Moderate**	**Slight**	**Not Significant**	N/A
C	Link PAR 34 - Turnpike Close	Footway only.	Low	262%	77%	**Moderate**	**Slight**	**Not Significant**	N/A
D	Link PAR 35 - A1341 Via Urbis Romanae	Presence of various signalised pedestrian crossings.	Low	107%	5%	**Negligible**	**Slight**	**Not Significant**	N/A
D	Link PAR 36 - A134 Northern Approach Rd/A134 Wildeve Avenue/A134 Nayland Rd/A134 The Causeway	Signalised pedestrian crossings are available in the urban section in Colchester.	High	187%	12%	**Negligible**	**Slight**	**Not Significant**	N/A
D	Link PAR 37 - A1124 Halsted Rd	Presence of informal and formal pedestrian crossings.	Medium	188%	7%	**Negligible**	**Slight**	**Not Significant**	N/A
D	Link PAR 38 - Mill Rd	None	Medium	89%	11%	**Negligible**	**Neutral**	**Not Significant**	N/A

Project Section	Road ID	Pedestrian, cyclist and horse-rider Crossing Provision	Receptor Sensitivity	HGVs % Change	Total vehicles % Change	Magnitude of Impact (total vehicles)	Significance of Effect	Significance	Comments
D	Link PAR 39 - Great Tey Rd	Informal pedestrian crossing at the junction with A120 Coggeshall Road.	Low	68%	11%	**Negligible**	**Slight**	**Not Significant**	N/A
E	Link PAR 40 - A120 Colchester Road	Footway only.	Low	33%	8%	**Negligible**	**Slight**	**Not Significant**	N/A
E	Link PAR 41 - B1018 Braintree Rd/B1018 Witham Rd	There is an informal pedestrian and cycling crossing at the approaches to the A120 roundabout. An informal crossing is located in the access to Cressing Primary School.	High	32%	11%	**Negligible**	**Slight**	**Not Significant**	N/A
E	Link PAR 42 - B1389 Hatfield Rd	Formal and informal pedestrian crossings.	Medium	45%	2%	**Negligible**	**Slight**	**Not Significant**	N/A
E	Link PAR 43 - Spinks Ln/Highfields Rd/Spa Rd/Flora Rd/Faulkbourne Rd/Church Hill	There are various formal and informal pedestrian/cyclist crossings. Footpath 77 Witham (Spa Road Playground) crosses Spa Road with a signalised pedestrian crossing.	High	185%	5%	**Negligible**	**Slight**	**Not Significant**	N/A
E/F	Link PAR 44 - A131 Great Notley Bypass/A131 Great Leighs Bypass/A131 Braintree Rd	There are various uncontrolled and signalised crossings.	Low	67%	22%	**Negligible**	**Slight**	**Not Significant**	N/A
F	Link PAR 46 - B1008 Braintree Rd/B1008 Main Rd	There is an informal crossing at the intersection with The Street (Little Waltham).	Low	304%	5%	**Negligible**	**Slight**	**Not Significant**	N/A
F	Link PAR 47 - Chatham Hall Ln	None	Negligible	2,472%	57%	**Minor**	**Neutral**	**Not Significant**	N/A
F	Link PAR 48 - Chelmsford Rd	Footway only.	Low	139%	6%	**Negligible**	**Slight**	**Not Significant**	N/A
F	Link PAR 49 - A414 Three Mile Hill/A1114 London Rd	There are several uncontrolled and formal crossings for pedestrians/cyclists.	Medium	92%	3%	**Negligible**	**Slight**	**Not Significant**	N/A

Project Section	Road ID	Pedestrian, cyclist and horse-rider Crossing Provision	Receptor Sensitivity	HGVs % Change	Total vehicles % Change	Magnitude of Impact (total vehicles)	Significance of Effect	Significance	Comments
F	Link PAR 50 - A1016 Waterhouse Ln/A1016 Rainsford Ln	There are various pedestrian/cycling crossings.	High	81%	2%	**Negligible**	**Slight**	**Not Significant**	N/A
F	Link PAR 51 - A1060 Rainsford Rd/A1060 Roxwell Rd	There are various formal and informal pedestrian crossings. The signalised crossing at Park Avenue junction connects a cycleway at the Admiral Parks with the cycle path towards North Melbourne via Park Avenue.	High	116%	3%	**Negligible**	**Slight**	**Not Significant**	N/A
F	Link PAR 52 - Vicarage Rd	None	Negligible	175%	12%	**Negligible**	**Neutral**	**Not Significant**	N/A
F	Link PAR 53 - A414 Greenbury Way/A414 Ongar Rd	There is an uncontrolled pedestrian/cyclist crossing at the A414 Widford Roundabout and the Highwood Road/Bulimers Way roundabout. Footpath 70 Writtle crosses the A414 Greenbury Way without any formal or informal crossing.	Low	64%	3%	**Negligible**	**Slight**	**Not Significant**	N/A
G	Link PAR 54 - B1002 Main Rd	There are various uncontrolled pedestrian crossings.	High	454%	6%	**Negligible**	**Slight**	**Not Significant**	N/A
G	Link PAR 55 - Wantz Rd	Footway only.	Low	82%	5%	**Negligible**	**Slight**	**Not Significant**	N/A
G	Link PAR 56 - Ivy Barns Ln	Footway only.	Low	313%	21%	**Negligible**	**Slight**	**Not Significant**	N/A
G	Link PAR 57 - Church Ln	There is an informal pedestrian crossing at the B1002 Main Road junction.	Negligible	15296%	406%	**Moderate**	**Slight**	**Not Significant**	Future baseline flows have a total of 46 vehicles over the 12-hour period (07:00 to 19:00) which equates to four vehicles an hour (one vehicle every 15 minutes). The total Project construction flows would be 188 vehicles, which equates to 16 vehicles an hour (one vehicle every three or four minutes). No additional flows from committed developments. Therefore, the magnitude of impact has been adjusted from Major to Moderate
G	Link PAR 58 - A176 Noak Hill Road/A176 Laindon	There are various formal and informal crossings.	High	112%	13%	**Negligible**	**Slight**	**Not Significant**	N/A

Project Section	Road ID	Pedestrian, cyclist and horse-rider Crossing Provision	Receptor Sensitivity	HGVs % Change	Total vehicles % Change	Magnitude of Impact (total vehicles)	Significance of Effect	Significance	Comments
	Road/A129 Southend Road								
G	Link PAR 59 - A129 Sun Street/A129 London Road/A129 Rayleigh Road	There are various formal and informal crossings.	High	15296%	406%	**Major**	**Slight**	**Not Significant**	N/A
G	Link PAR 60 - Dunton Road/Brentwood Road	Footway only.	Low	58%	2%	**Negligible**	**Neutral**	**Not Significant**	N/A
G	Link PAR 62 - Lower Dunton Road	Footway only.	Low	91%	4%	**Negligible**	**Slight**	**Not Significant**	N/A
H	Link PAR 63 - A128 Brentwood Road	Footway only.	High	13%	2%	**Negligible**	**Slight**	**Not Significant**	N/A
H	Link PAR 64 - A1013 Stanford Road (east of Orsett Cock Roundabout)	Footway and shared footway/cycleway only.	High	125%	16%	**Negligible**	**Slight**	**Not Significant**	Concerns of safety raised by Local Authority at the location where people cross to accessing to McDonald's on the A13. A mitigation has been proposed at this location: • Within Outline Construction Traffic Management Plan (CTMP) (document reference 7.3) - Driver information pack identifying potential hazard location where pedestrians may be crossing the carriageway away from designated crossing point
H	Link PAR 65 - Buckingham Hill Road	There is a signalised pedestrian/cyclist crossing at the A1013 Stanford Road junction.	High	107%	26%	**Negligible**	**Slight**	**Not Significant**	There is a PRoWs crossing, safety concerns have been raised at this location as this route is already heavily used by HGVs. A mitigation has been proposed at this location: • Within Outline CTMP (document reference 7.3) – Driver information pack identifying locations where pedestrians may be walking on verge and crossing the carriageway • Ensure adjacent vegetation is maintained to allow visibility
H	Link PAR 66 - Brentwood Road	Footway only.	Medium	299%	9%	**Negligible**	**Slight**	**Not Significant**	Safety concerns have been raised at the crossing of pedestrians and cyclists on the approach to Orsett Cock Roundabout. A mitigation has been proposed at this location:

Project Section	Road ID	Pedestrian, cyclist and horse-rider Crossing Provision	Receptor Sensitivity	HGVs % Change	Total vehicles % Change	Magnitude of Impact (total vehicles)	Significance of Effect	Significance	Comments
									• Within Outline CTMP (document reference 7.3) – Driver information pack identifying potential hazard location where pedestrians/cyclists are crossing the carriageway
H	Link PAR 67 - A1013 Stanford Road (west of Orsett Cock Roundabout)	Uncontrolled crossings.	High	94%	6%	**Negligible**	**Slight**	**Not Significant**	N/A
H	Link PAR 68 - Heath Road	Footway only	High	2,676%	19%	**Negligible**	**Slight**	**Not Significant**	N/A

Pedestrian, Cyclist and Horse-Rider Amenity

16.3.9 Pedestrian amenity is defined as the relative pleasantness of a journey and is considered to be affected by traffic flow, traffic composition and footway width/separation from traffic and where a temporary increase is forecast of more than 30% in HGVs or total flow on a route intersecting a PRoW, bridleway or near an equestrian centre for more than four weeks in any 12-month period. Changes in total traffic of over 100% or where there is an increase of HGV flows of 30%, 60% and 90% are considered minor, moderate and major changes in magnitude. The scope of the assessment has been broadened to include cyclists and horse riders. The assessment for the road links forming part of the Primary Access Routes is presented in Table A16.4.5. There are several road links where the significance of effect is moderate or large. For some of these road links, further mitigation measures are to be investigated.

Table A16.4.5 Significance of effect pedestrian, cyclist and horse-rider amenity

Project Section	Road ID	Pedestrian, cyclist and horse-rider Provision	Receptor Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact	Significance of Effect	Significance	Comments	Potential Mitigation
A	Link PAR 1 - A140 Ipswich Rd	Shared footway/cycleway to approach and cross the A140/A47 roundabout.	Medium	113%	37%	**Minor**	**Slight**	**Not Significant**	There is not a designated cycling route on this road link and Norfolk County Council has not raised concerns. Traffic surveys shown a low number of cyclists.	Within the Outline CTMP (document reference 7.3) the Driver information pack will identify locations where pedestrians/cyclists cross the carriageway. Maintenance of adjacent vegetation along shared footway to ensure width is fully accessible. Magnitude of impact has been adjusted from Major to Minor
A	Link PAR 2 - Mangreen Lane	None	Negligible	17,157%	273%	**Major**	**Slight**	**Not Significant**	N/A	N/A
A	Link PAR 3 - Stansfield Rd/Wymondham Rd	None	Negligible	358%	13%	**Major**	**Slight**	**Not Significant**	N/A	N/A

Project Section	Road ID	Pedestrian, cyclist and horse-rider Provision	Receptor Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact	Significance of Effect	Significance	Comments	Potential Mitigation
A	Link PAR 4 - B1113	There is a footway with appropriate width in Fundenhall serving various residential properties.	Low	411%	11%	**Major**	**Slight**	**Not Significant**	N/A	N/A
A	Link PAR 6 - Fundenhall Rd	None	Negligible	859%	28%	**Major**	**Slight**	**Not Significant**	N/A	N/A
A	Link PAR 7 - B1134 Station Rd/B1134 Long Row	None	Negligible	223%	20%	**Major**	**Slight**	**Not Significant**	N/A	N/A
A	Link PAR 8 – A1066/A1066 Victoria Rd/A1066 Park Rd/A1066 High Rd	Presence of footway of adequate width, segregated cycle lanes in the urban section. Narrow footway between Diss and A140. Shared footway/cycleway to approach and cross the A140 roundabout.	High	35%	7%	**Minor**	**Slight**	**Not Significant**	N/A	N/A
A	Link PAR 9 - A1066 High Road/A1066 Low Road/A1066 Diss Road /A1066 The Street/A1066 Thetford Road/A1066 Hurth Way/A1066 Mundford Road	Presence of footway of adequate width on one or both sides of the road between Wyatt Way and Rosecroft Way. Shared footway/cycleway to approach and cross the Wyatt Way roundabout.	High	83%	12%	**Minor**	**Slight**	**Not Significant**	The pedestrian, cyclist and horse-rider provision is adequate, but there is an uncontrolled crossing for pedestrians and cyclists at Old Croxton Road.	The pedestrian, cyclist and horse-rider provision appears adequate, but there is an uncontrolled crossing for pedestrians and cyclists at Old Croxton Road. Within the Construction Traffic Management Plan (CTMP) the Driver information pack will identify locations where pedestrians/ cyclists cross the carriageway. Magnitude of impact has been adjusted from Moderate to Minor
B	Link PAR 10 - A143 Old Bury Road	Segregated cycleway at the NCN Route 30 crossing. Shared footway/cycleway to approach and cross the B1077 roundabout	Medium	23%	8%	**Negligible**	**Slight**	**Not Significant**	N/A	N/A
B	Link PAR 11 - Lion Road	None	Low	319%	9%	**Major**	**Slight**	**Not Significant**	N/A	N/A
B	Link PAR 12 - B1113 Finningham Road/B1113 Walsham Road	Footway on one side of the road only before Finningham and up to Gislingham Road, of	Medium	221%	18%	**Minor**	**Slight**	**Not Significant**	The stretch of B1113 between Gislingham Road and Wickham Road has no footway	The section of the B1113 between Gislingham Road and Wickham Road has no footway available, where the

Project Section	Road ID	Pedestrian, cyclist and horse-rider Provision	Receptor Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact	Significance of Effect	Significance	Comments	Potential Mitigation
		adequate width serving some residential properties.							available, where the footpath W-246/013 access from the playground. Speed limit of 30 mph but the signage is hidden behind vegetation.	footpath W-246/013 accesses the playground. Speed limit of 30 mph but the signage is hidden behind vegetation. Within the CTMP the Driver information pack will identify locations where pedestrians cross the carriageway or may be walking on carriageway from playground. Adjacent vegetation and verge to be maintained to improve visibility to PRoW access and existing advanced warning signs. Existing signage (height of post/backing boards to be improved and/or Variable Message Sign to provide information at PRoW access of construction route. Surface colouring under SLOW markings. Magnitude of impact has been adjusted from Major to Minor as a result of mitigation
B	Link PAR 13 - Wickham Road	Footway located in Finningham on one side of the road, serving some residential properties and of adequate width.	Low	306%	21%	**Major**	**Slight**	**Not Significant**	N/A	N/A
B	Link PAR 14 - Eastland Lane	None	Negligible	7260%	528%	**Major**	**Slight**	**Not Significant**	N/A	N/A
B	Link PAR 15 - Thornham Road	None	Negligible	285%	13%	**Major**	**Slight**	**Not Significant**	N/A	N/A
B	Link PAR 16 - A1120 Church Road/A1120 Bell's Lane	Footway on one or both sides of the carriageway in Stowupland.	High	128%	43%	**Minor**	**Slight**	**Not Significant**	School route at Stowupland	School route at Stowupland therefore construction traffic along this PAR will be avoided during school pick-up and drop-off times. The magnitude of impact has been adjusted from Major to Minor
B	Link PAR 17 - A1120 south of A14 J50	Shared footway/cycleway on the western side between	Medium	55%	16%	**Minor**	**Slight**	**Not Significant**	N/A	N/A

Project Section	Road ID	Pedestrian, cyclist and horse-rider Provision	Receptor Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact	Significance of Effect	Significance	Comments	Potential Mitigation
		B1113 Needham Road and Gun Cotton Way.								
B	Link PAR 18 - Mill Lane	None	Negligible	214%	22%	**Major**	**Slight**	**Not Significant**	N/A	N/A
B	Link PAR 19 - B1113 Needham Road/B1113 Stowmarket Road	Shared footway/cycleway on the northern side. National Cycle Network (NCN) Route 51 on this road link.	Low	27%	3%	**Negligible**	**Slight**	**Not Significant**	N/A	N/A
B	Link PAR 20 - B1113 Bramford Road/B1113 Loraine Way	Footway located in at least one side of the road link between Broomvale House and Sterling Suffolk Limited, and between Somersham Road and Bullen Lane. In general, the width is appropriate but in some sections it is narrow although there is a buffer between it and the carriageway.	Low	190%	74%	**Major**	**Slight**	**Not Significant**	N/A	N/A
B	Link PAR 21 - Bullen Lane	None	Negligible	6,306%	950%	**Major**	**Slight**	**Not Significant**	N/A	N/A
C	Link PAR 22 - A1214 London Road	Shared footway/cycleway on the western side of the road between London Road and the A1071. Footway to provide access to the bus stop.	Low	48%	11%	**Minor**	**Slight**	**Not Significant**	N/A	N/A
C	Link PAR 23 - A1071	Shared footway/cycleway on one side between A1214 London Road and the bus stop at the Holiday Inn. Uneven footway on the eastern side between the B1113 Swan Hill roundabout and the Holiday Inn bus stop.	Low	68%	18%	**Moderate**	**Slight**	**Not Significant**	N/A	N/A
C	Link PAR 24 - B1070 (A12 access)	Footway on one or both sides of the road between B1070 road access to A12 NB direction and B1070 Hardleigh Road.	Low	300%	13%	**Major**	**Slight**	**Not Significant**	N/A	N/A
C	Link PAR 25 - B1070 Hadleigh Road	Footway on one side of the road. South Suffolk Route B,	Medium	93%	11%	**Minor**	**Slight**	**Not Significant**	Bellmouth access to haul road proposed on the same side of	The crossing of the bellmouth access to the haul road is proposed on the same side of the footway, used as a

Project Section	Road ID	Pedestrian, cyclist and horse-rider Provision	Receptor Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact	Significance of Effect	Significance	Comments	Potential Mitigation
		between Hadleigh and Shotley on this road link.							the footway, that is a school route to East Bergholt. Cycle route at B1070 with no dedicated cycling infrastructure for the cycle users.	route to schools in East Bergholt. Cycle route at B1070 with no dedicated cycling infrastructure. Crossing facilities at the bellmouth junction to be incorporated. Within the CTMP the Driver information pack will identify locations where pedestrians/ cyclists cross the carriageway or could be cycling on carriageway. Maintenance of adjacent vegetation along footway to ensure width is fully accessible. The magnitude of impact has been adjusted from Major to Minor
C	Link PAR 26 - Ipswich Rd	Footway on the eastern side between the industrial state and the A12 and a footway between the A12 and Arley Grange.	Negligible	364%	21%	**Major**	**Slight**	**Not Significant**	N/A	N/A
C	Link PAR 27 - Birchwood Rd	Footway on the southern side between Wick Road and the A12 overbridge.	High	403%	11%	**Minor**	**Slight**	**Not Significant**	Users of Birchwood Corner bus stops are not provided with footway or crossing facilities. The number of construction vehicles expected in this section of Birchwood Road towards Wick Lane is expected to be low.	Within the CTMP the Driver information pack will identify locations where pedestrians may be walking to bus stops either on verge or carriageway. Ensure adjacent vegetation is maintained to keep verge clear. Place signs to warn drivers of upcoming pedestrians in road ahead crossing the carriageway. The magnitude of impact has been adjusted from Major to Minor as a result of mitigation
C	Link PAR 28 - Wick Rd/Grove Hill	Footway on the western side of the road between Birchwood Road and St. Margaret's Cross. NCN Route 1 on this road link between Grove Hill and St. Margaret's Cross.	Medium	300%	12%	**Moderate**	**Moderate**	**Significant**	Adequate width for the footway serving mainly residential properties but no dedicated cycling infrastructure for the cycle path users.	Within the CTMP the Driver information pack will identify the presence of the NCN and where higher number of cyclists may be on the carriageway. The magnitude of impact has been adjusted from Major to Moderate
C	Link PAR 29 - Perry Ln	None	Negligible	3375%	146%	**Major**	**Slight**	**Not Significant**	N/A	N/A

Project Section	Road ID	Pedestrian, cyclist and horse-rider Provision	Receptor Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact	Significance of Effect	Significance	Comments	Potential Mitigation
C	Link PAR 30 - Bentley Rd	Shared footway/cycleway to cross the A120.	Medium	3282%	342%	**Minor**	**Slight**	**Not Significant**	Shared pedestrian/cycle route adjacent to Bentley Road has been proposed as part of the embedded mitigations.	Shared pedestrian/cycle route adjacent to Bentley Road has been proposed as part of the embedded mitigations. The magnitude of impact has been adjusted from Major to Minor
C	Link PAR 31 - Ardleigh Rd/Little Bromley Rd	None	Negligible	3807%	1193%	**Major**	**Slight**	**Not Significant**	N/A	N/A
C	Link PAR 32 - Wick Ln	None	Negligible	507%	15%	**Major**	**Slight**	**Not Significant**	N/A	N/A
C	Link PAR 33 - Old Ipswich Rd	Footway on the western side from the A12 entry to the site access point to pylons TB9 to TB20. On the eastern side, the footway is intermittent. In the underpass to Turnpike Road there is a footway on both sides of the road.	Low	252%	75%	**Major**	**Slight**	**Not Significant**	N/A	N/A
C	Link PAR 34 - Turnpike Close	Footway on the western side.	Low	262%	77%	**Major**	**Slight**	**Not Significant**	N/A	N/A
D	Link PAR 35 - A1341 Via Urbis Romanae	Shared footway/cycleway on both sides of the road and various signalised pedestrian crossing.	Low	107%	5%	**Major**	**Slight**	**Not Significant**	N/A	N/A
D	Link PAR 36 - A134 Northern Approach Rd/A134 Wildeve Avenue/A134 Nayland Rd/A134 The Causeway	Shared footway/cycleway on both sides of the road link between A1341 Via Urbis Romanae and A134 Wildeve Avenue no. 88. On the other section, there is a footway on the western side of the road and an intermittent footway on the eastern side.	High	187%	12%	**Moderate**	**Large**	**Significant**	Potential presence on the verge of pedestrians and horse-riders at locations where there are PRoW access points.	Within the Outline CTMP (document reference 7.3) – Driver information pack will identify locations where pedestrians may be walking either on verge or carriageway. Ensure adjacent vegetation is maintained to keep verge and PRoW access points clear and allow full width of footway to be utilised. Place signs to warn drivers of upcoming pedestrians in road ahead crossing the carriageway. The magnitude of impact has been adjusted from Major to Moderate

Project Section	Road ID	Pedestrian, cyclist and horse-rider Provision	Receptor Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact	Significance of Effect	Significance	Comments	Potential Mitigation
D	Link PAR 37 - A1124 Halsted Rd	Footway in at least one side of the road and present at the bus stops.	Medium	188%	7%	**Moderate**	**Moderate**	**Significant**	Potential presence on the verge of pedestrians and horse-riders at locations where there are PRoW access points.	Within the Outline CTMP (document reference 7.3) – Driver information pack will identify locations where pedestrians may be walking either on verge or carriageway. Ensure adjacent vegetation is maintained to keep verge clear and allow full width of footway to be utilised. Place signs to warn drivers of upcoming pedestrians in road ahead crossing the carriageway. The magnitude of impact has been adjusted from Major to Moderate
D	Link PAR 38 - Mill Rd	NCN Route 13 on this road link.	Medium	89%	11%	**Minor**	**Slight**	**Not Significant**	NCN Route 13 on this road link with no dedicated cycling infrastructure for the cycle path users.	Within the Outline CTMP (document reference 7.3) – Driver information pack will identify the NCN location where higher number of cyclists may be on the carriageway. Potential speed limit reduction through this section (from national speed limit 60 mph). Project construction flows relatively low with only an additional 10 vehicles in each direction an hour. The magnitude of impact has been adjusted from Moderate to Minor
D	Link PAR 39 - Great Tey Rd	Footway on the western side between the A120 Coggeshall Road and the access to the residential properties.	Low	68%	11%	**Moderate**	**Slight**	**Not Significant**	N/A	N/A
E	Link PAR 40 - A120 Colchester Road	Footway on the northern side.	Low	33%	8%	**Minor**	**Slight**	**Not Significant**	N/A	N/A
E	Link PAR 41 - B1018 Braintree Rd/B1018 Witham Rd	Shared footway/cycleway on the eastern side of the road between the A120 and the B1018 Millennium Way roundabout. Paved or unpaved footway on one or both sides of the road between the B1018 Millennium Way roundabout and the latest	High	32%	11%	**Minor**	**Slight**	**Not Significant**	N/A	N/A

Project Section	Road ID	Pedestrian, cyclist and horse-rider Provision	Receptor Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact	Significance of Effect	Significance	Comments	Potential Mitigation
		residential properties at Braintree Road before Petit Lane junction.								
E	Link PAR 42 - B1389 Hatfield Rd	Footways on the A12 slip roads in one side of the road. Shared footway/cycleway on the western side between the A12 slip roads and the south entry to Bradshaw Gardens and on the eastern side the shared footway/cycleway is present between the A12 slip roads and Graham Brown Walk. For the rest of the section, there is a footway on one or both sides of the road.	Medium	45%	2%	**Minor**	**Slight**	**Not Significant**	N/A	N/A
E	Link PAR 43 - Spinks Ln/Highfields Rd/Spa Rd/Flora Rd/Faulkbourne Rd/Church Hill	Footways on both sides of the road, between B1389 Hatfield Road and the end of the urban area around Faulkbourne Road no. 20. Shared footway/cycleway on the western side between the Footpath 77 Witham (Spa Road Playground) and the access road to Powers Hall Academy. Other walking infrastructure has been identified at the Witham and Faulkbourne settlements, with footways on one or both sides of the road. NCN Route 16 between Spinks Lane and Highfield Road.	High	185%	5%	**Moderate**	**Large**	**Significant**	Potential presence on the verge of pedestrians and horse-riders at locations where there are PRoW access points	Within the Outline CTMP (document reference 7.3) – Driver information pack identifying locations where pedestrians may be walking either on verge or carriageway. Ensure adjacent vegetation is maintained to keep verge clear. Place signs to warn drivers of upcoming pedestrians in road ahead crossing the carriageway. Magnitude of impact has been adjusted from Large to Moderate as a result of mitigation
E/F	Link PAR 44 - A131 Great Notley Bypass/A131 Great Leighs Bypass/A131 Braintree Rd	Footway on lay-by parkings and at the bus stops in A131 Braintree Road, allowing connection to Strawbrookhill via PRoW 221_69 and to Chatham Green	Low	67%	22%	**Moderate**	**Slight**	**Not Significant**	N/A	N/A
F	Link PAR 46 - B1008 Braintree Rd/B1008 Main Rd	None	Low	304%	5%	**Major**	**Slight**	**Not Significant**	N/A	N/A

Project Section	Road ID	Pedestrian, cyclist and horse-rider Provision	Receptor Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact	Significance of Effect	Significance	Comments	Potential Mitigation
F	Link PAR 47 - Chatham Hall Ln	None	Negligible	2472%	57%	**Major**	**Slight**	**Not Significant**	N/A	N/A
F	Link PAR 48 - Chelmsford Rd	Footway on one or both sides of the road.	Low	139%	6%	**Major**	**Slight**	**Not Significant**	N/A	N/A
F	Link PAR 49 - A414 Three Mile Hill/A1114 London Rd	Shared footway/cycleway between the A1016 Waterhouse Lane/A1114 London Road roundabout and one of the accesses to Hylands Park (Repton's Approach) on the western side. On the remaining sections, there is an intermittent footway on one or both sides of the road, that are paved or unpaved.	Medium	92%	3%	**Moderate**	**Moderate**	**Significant**	Good pedestrian, cyclist and horse-rider provision for pedestrians, accessing from PRoW and to the bus stops but no crossing points present (dual carriageway).	Within the CTMP the Driver information pack will identify locations where pedestrians may be crossing ahead. Ensure adjacent vegetation is maintained to allow visibility. Magnitude of impact has been adjusted from Major to Moderate as a result of mitigation.
F	Link PAR 50 - A1016 Waterhouse Ln/A1016 Rainsford Ln	Shared footway/cycleway on the western side between A1114 London Road and Writtle Road and a shared footway/cycleway on the eastern side between River Can and Rainsford Lane. For the rest of the road link, there is a footway on both sides of the road.	High	81%	2%	**Minor**	**Slight**	**Not Significant**	Existing good pedestrian, cyclist and horse-rider provision and not significant increase of traffic. The high % increase of HGVs is due to the low number of baseline HGV traffic.	Magnitude of impact has been adjusted from Moderate to Minor as a result of mitigation
F	Link PAR 51 - A1060 Rainsford Rd/A1060 Roxwell Rd	Footway on both sides of the road in the urban area. Footway on the southern side between 70 Roxwell Road and the Lordship Road roundabout. After the roundabout a footway is present intermittently on the southern side where there are some settlements.	High	116%	3%	**Moderate**	**Large**	**Significant**	There is no footway or path to access the bus stop Reeds Farm.	Within the CTMP the Driver information pack will identify locations where pedestrians may be walking on the verge. Ensure adjacent vegetation is maintained to allow visibility. Magnitude of impact has been adjusted from Major to Moderate as a result of mitigation
F	Link PAR 52 - Vicarage Rd	None	Negligible	175%	12%	**Major**	**Slight**	**Not Significant**	N/A	N/A
F	Link PAR 53 - A414 Greenbury	Footway to access Hyland Park.	Low	64%	3%	**Moderate**	**Slight**	**Not Significant**	N/A	N/A

Project Section	Road ID	Pedestrian, cyclist and horse-rider Provision	Receptor Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact	Significance of Effect	Significance	Comments	Potential Mitigation
	Way/A414 Ongar Rd									
G	Link PAR 54 - B1002 Main Rd	Footway on both sides of the road between the A12 J15 and Margaretting. Between Margaretting and Church Road, there is a footway on one or two sides of the road. In some sections the footway is narrow although there is a separation buffer from the carriageway.	High	454%	6%	**Minor**	**Slight**	**Not Significant**	Potential presence of horse-riders on the carriageway. School route in Margaretting.	Within the CTMP the Driver information pack will identify locations where horse-riders may be on the carriageway. Construction traffic to avoid the pick-up and drop-off times at the school. Project construction flows relatively low with only an additional 15 vehicles in each direction an hour. Magnitude of impact has been adjusted from Major to Minor as a result of mitigation
G	Link PAR 55 - Wantz Rd	Footway on the western side of the road, and a footway on the eastern side at and on the approaches to the bridge over the A12.	Low	82%	5%	**Moderate**	**Slight**	**Not Significant**	N/A	N/A
G	Link PAR 56 - Ivy Barns Ln	Footway on the northern side of the road between Wantz Road and the approach to the junction with the A12 J14 offslip road.	Low	313%	21%	**Major**	**Slight**	**Not Significant**	N/A	N/A
G	Link PAR 57 - Church Ln	None	Negligible	58%	2%	**Minor**	**Neutral**	**Not Significant**	N/A	N/A
G	Link PAR 58 - A176 Noak Hill Road/A176 Laindon Road/A129 Southend Road	Footway on the western side of the road between A127 and A176 Laindo Road and an intermittent footway on the eastern side. Footway in one or both sides of the road between A176 Laindon Road and the A129 Sun Street roundabout. NCN Route 13 coincident with A176 Noak Hill Road in the southern section and with A176 Laindon Road southbound carriageway.	High	58%	2%	**Minor**	**Slight**	**Not Significant**	N/A	N/A

Project Section	Road ID	Pedestrian, cyclist and horse-rider Provision	Receptor Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact	Significance of Effect	Significance	Comments	Potential Mitigation
G	Link PAR 59 - A129 Sun Street/A129 London Road/A129 Rayleigh Road	In the A129 Sun Street there is a Footway on both sides of the road in A129 Sun Street. Footway on one or both sides of the road for the rest of the road link.	High	162%	2%	**Minor**	**Slight**	**Not Significant**	Existing good pedestrian, cyclist and horse-rider provision and not significant increase of traffic. The high % increase of HGVs is due to the low number of baseline HGV traffic.	Construction traffic relatively low with an additional 18 vehicles an hour predicted. Magnitude of impact has been adjusted from Moderate to Minor as a result of mitigation
G	Link PAR 60 - Dunton Road/Brentwood Road	Footway on the eastern side along Dunton Road/Brentwood Road and a short section of footway in the approach to the A127 Southend Arterial Road roundabout on the western side.	Low	112%	13%	**Major**	**Slight**	**Not Significant**	N/A	N/A
G	Link PAR 62 - Lower Dunton Road	Footway on the southern side of the road.	Low	91%	4%	**Major**	**Slight**	**Not Significant**	N/A	N/A
H	Link PAR 63 - A128 Brentwood Road	Footway on the bus stops at the Halway House. Unpaved footway on the western side between Tilbury Road and Station Road. Footway on the western side between Brentwood Road and Church Road, that is narrow in some sections although there is a separation buffer from the carriageway. Unsegregated cycle lane approximately between Orsett Hall and the south of Orsett Road, on both sides of the carriageway.	High	13%	2%	**Negligible**	**Slight**	**Not Significant**	N/A	N/A
H	Link PAR 64 - A1013 Stanford Road (east of Orsett Cock Roundabout)	Shared footway/cycleway on the southern side and a footway on the northern side in the approach to the A13 Stanford-le-Hope Bypass roundabout and at the bus stops.	High	125%	16%	**Minor**	**Slight**	**Not Significant**	The pedestrian, cyclist and horse-rider provision is adequate. Mitigation proposed for pedestrian, cyclist and horse-	N/A

Project Section	Road ID	Pedestrian, cyclist and horse-rider Provision	Receptor Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact	Significance of Effect	Significance	Comments	Potential Mitigation
									rider severance at this location. Magnitude of impact has been adjusted from Moderate to Minor as a result of mitigation.	
H	Link PAR 65 - Buckingham Hill Road	None	High	107%	26%	**Moderate**	**Moderate**	**Significant**	A mitigation has been proposed at this location. Refer to Table A16.4.4 Significance of Effect Pedestrian, cyclist and horse-rider Severance Magnitude of impact has been adjusted from Major to Moderate as a result of mitigation	N/A
H	Link PAR 66 - Brentwood Road	Footway between Orsett Cock Roundabout and Welling Road on the east side.	Medium	299%	9%	**Moderate**	**Moderate**	**Significant**	The pedestrian, cyclist and horse-rider provision is adequate. Mitigation proposed for pedestrian, cyclist and horse-rider severance at this location. Magnitude of impact has been adjusted from Major to Moderate as a result of mitigation.	N/A
H	Link PAR 67 - A1013 Stanford Road (west of Orsett Cock Roundabout)	Shared footway/cycleway and presence of footways. Cyclists are required to dismount when travelling along the overbridge over A1089.	High	94%	6%	**Minor**	**Slight**	**Not Significant**	Cyclists are required to join carriageway at the A1013 Standford Rd overbridge over A1089.	Within the Outline CTMP (document reference 7.3) – Driver information pack will identify NCN location and warning of off carriageway section over bridge where higher number of cyclists may be on the carriageway. Warning signage to provided.

Project Section	Road ID	Pedestrian, cyclist and horse-rider Provision	Receptor Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact	Significance of Effect	Significance	Comments	Potential Mitigation
										Magnitude of impact has been adjusted from Moderate to Minor as a result of mitigation
H	Link PAR 68 - Heath Road	Footway on the western side. Main route for a school located south of the road link.	High	2,676%	19%	**Minor**	**Slight**	**Not Significant**	This road link is a school route between the bus stops at A1013 Stanford Road and schools located in Chadwell St. Mary, with an adequate pedestrian, cyclist and horse-rider provision. The PAR at this location is for a short section and the bellmouth access is located on the opposite side of the footway, on the east side.	Within the CTMP the Driver information pack will identify school routes. Magnitude of impact has been adjusted from Moderate to Minor as a result of mitigation

Pedestrians, Cyclists and Horse-Riders - Fear and Intimidation

16.3.10 Fear and intimidation occur through a combination of traffic flow, speed, HGV composition and its proximity to people or lack of protection caused by such factors as narrow pavements. The assessment has been based on the sensitivity established for the pedestrian, cyclist and horse-rider Amenity and a weighting system defined in the IEMA Guidelines Environmental Assessment of Traffic and Movement (2023). This weighting system is based on the average hourly traffic flow (a), 18-hour heavy vehicle flow (b) and average speed over an 18-hour day (c).

16.3.11 For each road link forming the PARs, a total score from those three elements has been calculated to estimate a level of fear of intimidation in the baseline and future scenarios. The total score from all three elements is combined (a+b+c) to obtain the total hazard score, resulting in a Level of fear and intimidation of ‘Small’ if the total hazard score is between 0-20; ‘Moderate’ if the total hazard score if between 21-40; ‘Great’ if the total hazard score is between 41 and 70; and ‘Extreme’ if the total hazard score is over 71. The magnitude of impact is then calculated based on the number of step changes in level, with negligible for no step changes and high for two step changes. One step change is classified as Low or Medium depending on the increase in total flow or HGV flows.

16.3.12 The assessment for the road links forming part of the PARs is presented in Table A16.4.6.

Table A16.4.6 Significance of effect pedestrian, cyclist and horse-rider fear and intimidation

Project Section	Road ID	Receptor Sensitivity	Baseline Level of Fear and Intimidation	Future Level of Fear and Intimidation	Magnitude of Impact	Significance of Effect	Significance	Comments
A	Link PAR 1 - A140 Ipswich Rd	Medium	Great	Great	**Negligible**	**Slight**	**Not Significant**	N/A
A	Link PAR 2 - Mangreen Ln	Negligible	Small	Small	**Negligible**	**Neutral**	**Not Significant**	N/A
A	Link PAR 3 - Stansfield Rd/Wymondham Rd	Negligible	Moderate	Moderate	**Negligible**	**Neutral**	**Not Significant**	N/A
A	Link PAR 4 - B1113	Low	Moderate	Moderate	**Negligible**	**Slight**	**Not Significant**	N/A
A	Link PAR 6 - Fundenhall Rd	Negligible	Small	Small	**Negligible**	**Neutral**	**Not Significant**	N/A
A	Link PAR 7 - B1134 Station Rd/B1134 Long Row	Negligible	Moderate	Moderate	**Negligible**	**Neutral**	**Not Significant**	N/A
A	Link PAR 8 – A1066/A1066 Victoria Rd/A1066 Park Rd/A1066 High Rd	High	Moderate	Moderate	**Negligible**	**Slight**	**Not Significant**	N/A
A	Link PAR 9 - A1066 High Road/A1066 Low Road/A1066 Diss Road /A1066 The Street/A1066 Thetford Road/A1066 Hurth Way/A1066 Mundford Road	High	Moderate	Great	**Moderate**	**Large**	**Significant**	Refer to Table A16.4.5-Significance of Effect Pedestrian, Cyclist and Horse-rider Amenity
B	Link PAR 10 - A143 Old Bury Road	Medium	Moderate	Moderate	**Negligible**	**Slight**	**Not Significant**	N/A
B	Link PAR 11 - Lion Road	Low	Small	Small	**Negligible**	**Slight**	**Not Significant**	N/A
B	Link PAR 12 - B1113 Finningham Road/B1113 Walsham Road	Medium	Moderate	Moderate	**Negligible**	**Slight**	**Not Significant**	N/A
B	Link PAR 13 - Wickham Road	Low	Moderate	Moderate	**Negligible**	**Slight**	**Not Significant**	N/A
B	Link PAR 14 - Eastland Lane	Negligible	Small	Small	**Negligible**	**Neutral**	**Not Significant**	N/A
B	Link PAR 15 - Thornham Road	Negligible	Small	Small	**Negligible**	**Neutral**	**Not Significant**	N/A
B	Link PAR 16 - A1120 Church Road/A1120 Bell's Lane	High	Moderate	Moderate	**Negligible**	**Slight**	**Not Significant**	N/A
B	Link PAR 17 - A1120 south of A14 J50	Medium	Moderate	Moderate	**Negligible**	**Slight**	**Not Significant**	N/A
B	Link PAR 18 - Mill Lane	Negligible	Small	Small	**Negligible**	**Neutral**	**Not Significant**	N/A

Project Section	Road ID	Receptor Sensitivity	Baseline Level of Fear and Intimidation	Future Level of Fear and Intimidation	Magnitude of Impact	Significance of Effect	Significance	Comments
B	Link PAR 19 - B1113 Needham Road/B1113 Stowmarket Road	Low	Moderate	Moderate	**Negligible**	**Slight**	**Not Significant**	N/A
B	Link PAR 20 - B1113 Bramford Road/B1113 Loraine Way	Low	Moderate	Moderate	**Negligible**	**Slight**	**Not Significant**	N/A
B	Link PAR 21 - Bullen Lane	Negligible	Small	Small	**Negligible**	**Neutral**	**Not Significant**	N/A
C	Link PAR 22 - A1214 London Road	Low	Great	Great	**Negligible**	**Slight**	**Not Significant**	N/A
C	Link PAR 23 - A1071	Low	Moderate	Great	**Moderate**	**Slight**	**Not Significant**	N/A
C	Link PAR 24 - B1070 (A12 access)	Low	Moderate	Moderate	**Negligible**	**Slight**	**Not Significant**	N/A
C	Link PAR 25 - B1070 Hadleigh Road	Medium	Small	Small	**Negligible**	**Slight**	**Not Significant**	N/A
C	Link PAR 26 - Ipswich Rd	Negligible	Small	Small	**Negligible**	**Neutral**	**Not Significant**	N/A
C	Link PAR 27 - Birchwood Rd	High	Small	Small	**Negligible**	**Slight**	**Not Significant**	N/A
C	Link PAR 28 - Wick Rd/Grove Hill	Medium	Small	Small	**Negligible**	**Slight**	**Not Significant**	N/A
C	Link PAR 29 - Perry Ln	Negligible	Small	Small	**Negligible**	**Neutral**	**Not Significant**	N/A
C	Link PAR 30 - Bentley Rd	Medium	Moderate	Moderate	**Negligible**	**Slight**	**Not Significant**	N/A
C	Link PAR 31 - Ardleigh Rd/Little Bromley Rd	Negligible	Small	Small	**Negligible**	**Neutral**	**Not Significant**	N/A
C	Link PAR 32 - Wick Ln	Negligible	Small	Small	**Negligible**	**Neutral**	**Not Significant**	N/A
C	Link PAR 33 - Old Ipswich Rd	Low	Moderate	Moderate	**Negligible**	**Slight**	**Not Significant**	N/A
C	Link PAR 34 - Turnpike Close	Low	Small	Small	**Negligible**	**Slight**	**Not Significant**	N/A
D	Link PAR 35 - A1341 Via Urbis Romanae	Low	Moderate	Great	**Moderate**	**Slight**	**Not Significant**	N/A
D	Link PAR 36 - A134 Northern Approach Rd/A134 Wildeve Avenue/A134 Nayland Rd/A134 The Causeway	High	Moderate	Moderate	**Moderate**	**Large**	**Significant**	Refer to Table A16.4.5 - Significance of Effect Pedestrian, Cyclist and Horse-rider Amenity

Project Section	Road ID	Receptor Sensitivity	Baseline Level of Fear and Intimidation	Future Level of Fear and Intimidation	Magnitude of Impact	Significance of Effect	Significance	Comments
D	Link PAR 37 - A1124 Halsted Rd	Medium	Moderate	Moderate	**Negligible**	**Slight**	**Not Significant**	N/A
D	Link PAR 38 - Mill Rd	Medium	Small	Small	**Negligible**	**Slight**	**Not Significant**	N/A
D	Link PAR 39 - Great Tey Rd	Low	Small	Small	**Negligible**	**Slight**	**Not Significant**	N/A
E	Link PAR 40 - A120 Colchester Road	Low	Great	Great	**Negligible**	**Slight**	**Not Significant**	N/A
E	Link PAR 41 - B1018 Braintree Rd/B1018 Witham Rd	High	Moderate	Moderate	**Negligible**	**Slight**	**Not Significant**	N/A
E	Link PAR 42 - B1389 Hatfield Rd	Medium	Moderate	Moderate	**Negligible**	**Slight**	**Not Significant**	N/A
E	Link PAR 43 - Spinks Ln/Highfields Rd/Spa Rd/Flora Rd/Faulkbourne Rd/Church Hill	High	Small	Small	**Negligible**	**Slight**	**Not Significant**	N/A
E/F	Link PAR 44 - A131 Great Notley Bypass/A131 Great Leighs Bypass/A131 Braintree Rd	Low	Great	Great	**Moderate**	**Slight**	**Not Significant**	N/A
F	Link PAR 46 - B1008 Braintree Rd/B1008 Main Rd	Low	Moderate	Moderate	**Negligible**	**Slight**	**Not Significant**	N/A
F	Link PAR 47 - Chatham Hall Ln	Negligible	Small	Small	**Negligible**	**Neutral**	**Not Significant**	N/A
F	Link PAR 48 - Chelmsford Rd	Low	Small	Small	**Negligible**	**Slight**	**Not Significant**	N/A
F	Link PAR 49 - A414 Three Mile Hill/A1114 London Rd	Medium	Great	Great	**Negligible**	**Slight**	**Not Significant**	N/A
F	Link PAR 50 - A1016 Waterhouse Ln/A1016 Rainsford Ln	High	Great	Great	**Negligible**	**Slight**	**Not Significant**	N/A
F	Link PAR 51 - A1060 Rainsford Rd/A1060 Roxwell Rd	High	Moderate	Moderate	**Negligible**	**Slight**	**Not Significant**	N/A
F	Link PAR 52 - Vicarage Rd	Negligible	Small	Small	**Negligible**	**Neutral**	**Not Significant**	N/A
F	Link PAR 53 - A414 Greenbury Way/A414 Ongar Rd	Low	Moderate	Great	**Moderate**	**Slight**	**Not Significant**	N/A
G	Link PAR 54 - B1002 Main Rd	High	Moderate	Moderate	**Negligible**	**Slight**	**Not Significant**	N/A
G	Link PAR 55 - Wantz Rd	Low	Small	Small	**Negligible**	**Slight**	**Not Significant**	N/A

Project Section	Road ID	Receptor Sensitivity	Baseline Level of Fear and Intimidation	Future Level of Fear and Intimidation	Magnitude of Impact	Significance of Effect	Significance	Comments
G	Link PAR 56 - Ivy Barns Ln	Low	Small	Small	**Negligible**	**Slight**	**Not Significant**	N/A
G	Link PAR 57 - Church Ln	Negligible	Small	Small	**Negligible**	**Neutral**	**Not Significant**	N/A
G	Link PAR 58 - A176 Noak Hill Road/A176 Laindon Road/A129 Southend Road	High	Moderate	Moderate	**Negligible**	**Slight**	**Not Significant**	N/A
G	Link PAR 59 - A129 Sun Street/A129 London Road/A129 Rayleigh Road	High	Moderate	Moderate	**Negligible**	**Slight**	**Not Significant**	N/A
G	Link PAR 60 - Dunton Road/Brentwood Road	Low	Small	Small	**Negligible**	**Slight**	**Not Significant**	N/A
G	Link PAR 62 - Lower Dunton Road	Low	Small	Small	**Negligible**	**Slight**	**Not Significant**	N/A
H	Link PAR 63 - A128 Brentwood Road	High	Great	Great	**Negligible**	**Slight**	**Not Significant**	N/A
H	Link PAR 64 - A1013 Stanford Road (east of Orsett Cock Roundabout)	High	Moderate	Moderate	**Negligible**	**Slight**	**Not Significant**	N/A
H	Link PAR 65 - Buckingham Hill Road	High	Moderate	Great	**Moderate**	**Large**	**Significant**	Refer to Table A16.4.5 - Significance of Effect Pedestrian, Cyclist and Horse-rider Amenity
H	Link PAR 66 - Brentwood Road	Medium	Moderate	Moderate	**Negligible**	**Slight**	**Not Significant**	N/A
H	Link PAR 67 - A1013 Stanford Road (west of Orsett Cock Roundabout)	High	Moderate	Great	**Moderate**	**Large**	**Significant**	Refer to Table A16.4.5 - Significance of Effect Pedestrian, Cyclist and Horse-rider Amenity
H	Link PAR 68 - Heath Road	High	Small	Small	**Negligible**	**Slight**	**Not Significant**	N/A

Parking and Loading

16.3.13 The parking and loading impacts have been assessed for those road links forming the PARs where the Project proposes to suspend any formal or informal parking spaces. The magnitude of impact has been defined based on the loss of more than four weeks in any 12-month period of one or more on-street loading bay, five or more on-street residential/business bay; five or more cycle/motorcycle spaces or 20 general parking spaces or equivalent length of unrestricted kerbside spaces. This is based on professional judgement and takes into consideration the location of any temporary suspension of parking and loading bays or kerbside parking. It also considers whether a direct impact on residents/businesses would be realised, leading to increased journey times for drivers to reach their destination.

16.3.14 The assessment, which is presented in Table A16.4.7, shows that the significance of effect for all the road links is classified as slight or neutral. Therefore, no mitigation measures have been investigated.

Table A16.4.7 Significance of effect parking and loading

Project Section	Road ID	Parking and Loading Bays	Receptor Sensitivity	Basis for Sensitivity	Description of Impact	Magnitude of Impact	Significance of Effect	Significance	Comments
A	Link PAR 1 - A140 Ipswich Rd	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
A	Link PAR 2 - Mangreen Ln	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
A	Link PAR 3 - Stansfield Rd/Wymondham Rd	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
A	Link PAR 4 - B1113	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
A	Link PAR 6 - Fundenhall Rd	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
A	Link PAR 7 - B1134 Station Rd/B1134 Long Row	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
A	Link PAR 8 – A1066/A1066 Victoria Rd/A1066 Park Rd/A1066 High Rd	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
A	Link PAR 9 - A1066 High Road/A1066 Low Road/A1066 Diss Road /A1066 The Street/A1066 Thetford Road/A1066 Hurth Way/A1066 Mundford Road	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
B	Link PAR 10 - A143 Old Bury Road	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
B	Link PAR 11 - Lion Road	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
B	Link PAR 12 - B1113 Finningham Road/B1113 Walsham Road	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
B	Link PAR 13 - Wickham Road	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
B	Link PAR 14 - Eastland Lane	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
B	Link PAR 15 - Thornham Road	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
B	Link PAR 16 - A1120 Church Road/A1120 Bell's Lane	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A

Project Section	Road ID	Parking and Loading Bays	Receptor Sensitivity	Basis for Sensitivity	Description of Impact	Magnitude of Impact	Significance of Effect	Significance	Comments
B	Link PAR 17 - A1120 south of A14 J50	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
B	Link PAR 18 - Mill Lane	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
B	Link PAR 19 - B1113 Needham Road/B1113 Stowmarket Road	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
B	Link PAR 20 - B1113 Bramford Road/B1113 Loraine Way	None	Low	There are no sensitive receptors within this area. Residential properties have driveways available	Parking/waiting restriction required along B1113 Loraine Way	**Minor**	**Slight**	**Not Significant**	N/A
B	Link PAR 21 - Bullen Lane	None	Negligible	No parking or loading	Parking/waiting restriction required along Bullen Lane	**Minor**	**Neutral**	**Not Significant**	N/A
C	Link PAR 22 - A1214 London Road	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
C	Link PAR 23 - A1071	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
C	Link PAR 24 - B1070 (A12 access)	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
C	Link PAR 25 - B1070 Hadleigh Road	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
C	Link PAR 26 - Ipswich Rd	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
C	Link PAR 27 - Birchwood Rd	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
C	Link PAR 28 - Wick Rd/Grove Hill	There are around four or five non-designated parking spaces	Low	There are no sensitive receptors nearby. The nearest one is Langham Primary School and is located around 450 m and there is no evidence that these spaces are used for pick-ups and drop-offs.	None expected	**Negligible**	**Neutral**	**Not Significant**	N/A
C	Link PAR 29 - Perry Ln	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
C	Link PAR 30 - Bentley Rd	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
C	Link PAR 31 - Ardleigh Rd/Little Bromley Rd	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A

Project Section	Road ID	Parking and Loading Bays	Receptor Sensitivity	Basis for Sensitivity	Description of Impact	Magnitude of Impact	Significance of Effect	Significance	Comments
C	Link PAR 32 - Wick Ln	None	Negligible	No parking or loading	Parking/waiting restriction required along Wick Lane	**Minor**	**Neutral**	**Not Significant**	N/A
C	Link PAR 33 - Old Ipswich Rd	A 6 hour parking bay is located on the eastern side of Old Ipswich Road opposite the Dragonfly Hotel. Additionally, 12 informal kerb side parking spaces along the section of Old Ipswich Road are located under the A12.	Low	There are no sensitive receptors within this area. Parking bays/kerbside parking is also available on the west side of the A12 to use as an alternative. Adjacent land use provides car parking facilities.	Temporary suspension of parking bay during arrival/departure of Abnormal Indivisible Load (AIL) vehicles with duration of less than four weeks at any one time	**Minor**	**Slight**	**Not Significant**	Parking bays are to be temporarily suspended only when AIL movements are required
C	Link PAR 34 - Turnpike Close	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
D	Link PAR 35 - A1341 Via Urbis Romanae	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
D	Link PAR 36 - A134 Northern Approach Rd/A134 Wildeve Avenue/A134 Nayland Rd/A134 The Causeway	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
D	Link PAR 37 - A1124 Halsted Rd	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
D	Link PAR 38 - Mill Rd	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
D	Link PAR 39 - Great Tey Rd	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
E	Link PAR 40 - A120 Colchester Road	None	Low	Layby parking on the southern side	Parking suspension within layby during main works	**Moderate**	**Slight**	**Not Significant**	N/A
E	Link PAR 41 - B1018 Braintree Rd/B1018 Witham Rd	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
E	Link PAR 42 - B1389 Hatfield Rd	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	n/a
E	Link PAR 43 – Spinks Lane	Informal kerbside parking. School ‘keep clear’ carriageway marking extends along eastern side of Spinks Lane. Parking restricted Monday to Friday 8:00 to 9:30 and 14:20 to 16:00 except school contract vehicles.	High	Witham Leisure Centre, Maltings Academy, ACL Witham located along Spinks Lane. Residential properties north of Highfields Road. Parking within schools for teachers and visitors only.	Temporary suspension of informal kerbside parking during arrival/departure of AIL vehicles. Duration of suspension less than four weeks at any one time. Nearby residents have private driveways and parking provided for Leisure Centre.	**Minor**	**Slight**	**Not Significant**	Suspension on parking only when AIL movements are required to avoid school drop-off parent parking preventing AIL or delivery of materials

Project Section	Road ID	Parking and Loading Bays	Receptor Sensitivity	Basis for Sensitivity	Description of Impact	Magnitude of Impact	Significance of Effect	Significance	Comments
E	Link PAR 43 – Highfields Road	Potential informal kerbside parking along section of Highfields Road between Blunts Hall Road and Guithavon Road	High	Witham Leisure Centre, Maltings Academy, ACL Witham located along Spinks Lane. Residential properties north of Highfields Road. Parking within schools for teachers and visitors only.	Temporary suspension of informal kerbside parking during arrival/departure of AIL vehicles with duration less than four weeks at any one time. Nearby residents have private driveways. Informal parking is available nearby along Blunts Hall Road.	**Minor**	**Slight**	**Not Significant**	Suspension on parking only when AIL movements are required to avoid school drop-off parent parking preventing AIL or delivery of materials
E/F	Link PAR 44 - A131 Great Notley Bypass/A131 Great Leighs Bypass/A131 Braintree Rd	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
F	Link PAR 46 - B1008 Braintree Rd/B1008 Main Rd	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
F	Link PAR 47 - Chatham Hall Ln	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
F	Link PAR 48 - Chelmsford Rd	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
F	Link PAR 49 - A414 Three Mile Hill/A1114 London Rd	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
F	Link PAR 50 - A1016 Waterhouse Ln/A1016 Rainsford Ln	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
F	Link PAR 51 - A1060 Rainsford Rd/A1060 Roxwell Rd	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
F	Link PAR 52 - Vicarage Rd	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
F	Link PAR 53 - A414 Greenbury Way/A414 Ongar Rd	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
G	Link PAR 54 - B1002 Main Rd	There are designated bays located west of Wantz Road and in the opposite site of The Red Lion. Additionally, there is evidence of some informal parking located near the Margaretting CofE Primary School on the	High	Likely to be used during drop off and pick up times of the Margaretting CofE Primary School pupils	There will be no HGV movements going past the school during drop off and pick up times	**Negligible**	**Slight**	**Not Significant**	N/A

Project Section	Road ID	Parking and Loading Bays	Receptor Sensitivity	Basis for Sensitivity	Description of Impact	Magnitude of Impact	Significance of Effect	Significance	Comments
		eastbound side of the carriageway.							
G	Link PAR 55 - Wantz Rd	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
G	Link PAR 56 - Ivy Barns Ln	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
G	Link PAR 57 - Church Ln	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
G	Link PAR 58 - A176 Noak Hill Road/A176 Laindon Road/A129 Southend Road	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
G	Link PAR 59 - A129 Sun Street/A129 London Road/A129 Rayleigh Road	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
G	Link PAR 60 - Dunton Road/Brentwood Road	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
G	Link PAR 62 - Lower Dunton Road	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
H	Link PAR 63 - A128 Brentwood Road	None	Low	Layby parking on the eastern side	Suspension of layby required where bellmouth is proposed	**Moderate**	**Slight**	**Not Significant**	N/A
H	Link PAR 64 - A1013 Stanford Road (east of Orsett Cock Roundabout)	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
H	Link PAR 65 - Buckingham Hill Road	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
H	Link PAR 66 - Brentwood Road	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
H	Link PAR 67 - A1013 Stanford Road (west of Orsett Cock Roundabout)	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A
H	Link PAR 68 - Heath Road	None	Negligible	No parking or loading	No change	**Negligible**	**Neutral**	**Not Significant**	N/A

16.4 Summary of Impact Assessment

16.4.1 A summary of the impact assessment for the road links forming part of the PARs is presented in Table A16.4.8.

Table A16.4.8 Summary of impact assessment

Project Section	Road ID	Potential Significance of Effect			
		Driver and Public Transport Delay	Pedestrian, cyclist and horse-rider Severance	Pedestrian, cyclist and horse-rider Amenity	Fear and Intimidation
A	Link PAR 1 - A140 Ipswich Road	**Slight**	**Slight**	**Slight**	**Slight**
A	Link PAR 2 - Mangreen Lane	**Slight**	**Neutral**	**Slight**	**Neutral**
A	Link PAR 3 - Stansfield Road/Wymondham Road	**Slight**	**Neutral**	**Slight**	**Neutral**
A	Link PAR 4 - B1113	**Slight**	**Slight**	**Slight**	**Slight**
A	Link PAR 6 - Fundenhall Road	**Slight**	**Neutral**	**Slight**	**Neutral**
A	Link PAR 7 - B1134 Station Road/B1134 Long Row	**Slight**	**Neutral**	**Slight**	**Neutral**
A	Link PAR 8 – A1066/A1066 Victoria Road/A1066 Park Road/A1066 High Road	**Slight**	**Slight**	**Slight**	**Slight**
A	Link PAR 9 - A1066 High Road/A1066 Low Road/A1066 Diss Road /A1066 The Street/A1066 Thetford Road/A1066 Hurth Way/A1066 Mundford Road (alternative PAR)	**Slight**	**Slight**	**Slight**	**Large**
B	Link PAR 10 - A143 Old Bury Road	**Slight**	**Slight**	**Slight**	**Slight**
B	Link PAR 11 - Lion Road	**Slight**	**Neutral**	**Slight**	**Slight**
B	Link PAR 12 - B1113 Finningham Road/B1113 Walsham Road	**Slight**	**Slight**	**Slight**	**Slight**
B	Link PAR 13 - Wickham Road	**Slight**	**Slight**	**Slight**	**Slight**
B	Link PAR 14 - Eastland Lane	**Slight**	**Neutral**	**Slight**	**Neutral**
B	Link PAR 15 - Thornham Road	**Slight**	**Neutral**	**Slight**	**Neutral**
B	Link PAR 16 - A1120 Church Road/A1120 Bell's Lane	**Slight**	**Slight**	**Slight**	**Slight**
B	Link PAR 17 - A1120 south of A14 J50	**Slight**	**Slight**	**Slight**	**Slight**
B	Link PAR 18 - Mill Lane	**Slight**	**Neutral**	**Slight**	**Neutral**

Project Section	Road ID	Potential Significance of Effect			
		Driver and Public Transport Delay	Pedestrian, cyclist and horse-rider Severance	Pedestrian, cyclist and horse-rider Amenity	Fear and Intimidation
B	Link PAR 19 - B1113 Needham Road/B1113 Stowmarket Road	**Slight**	**Slight**	**Slight**	**Slight**
B	Link PAR 20 - B1113 Bramford Road/B1113 Loraine Way	**Slight**	**Slight**	**Slight**	**Slight**
B	Link PAR 21 - Bullen Lane	**Neutral**	**Neutral**	**Slight**	**Neutral**
C	Link PAR 22 - A1214 London Road	**Slight**	**Slight**	**Slight**	**Slight**
C	Link PAR 23 - A1071	**Moderate**	**Slight**	**Slight**	**Slight**
C	Link PAR 24 - B1070 (A12 access)	**Slight**	**Slight**	**Slight**	**Slight**
C	Link PAR 25 - B1070 Hadleigh Road	**Slight**	**Slight**	**Slight**	**Slight**
C	Link PAR 26 - Ipswich Road	**Slight**	**Neutral**	**Slight**	**Neutral**
C	Link PAR 27 - Birchwood Road	**Slight**	**Slight**	**Slight**	**Slight**
C	Link PAR 28 - Wick Road/Grove Hill	**Slight**	**Slight**	**Moderate**	**Slight**
C	Link PAR 29 - Perry Lane	**Slight**	**Neutral**	**Slight**	**Neutral**
C	Link PAR 30 - Bentley Road	**Slight**	**Slight**	**Slight**	**Slight**
C	Link PAR 31 - Ardleigh Road/Little Bromley Road	**Slight**	**Neutral**	**Slight**	**Neutral**
C	Link PAR 32 - Wick Lane	**Slight**	**Neutral**	**Slight**	**Neutral**
C	Link PAR 33 - Old Ipswich Road	**Slight**	**Slight**	**Slight**	**Slight**
C	Link PAR 34 - Turnpike Close	**Slight**	**Slight**	**Slight**	**Slight**
D	Link PAR 35 - A1341 Via Urbis Romanae	**Large**	**Slight**	**Slight**	**Slight**
D	Link PAR 36 - A134 Northern Approach Road/A134 Wildeve Avenue/A134 Nayland Road/A134 The Causeway	**Large**	**Slight**	**Large**	**Large**
D	Link PAR 37 - A1124 Halsted Road	**Large**	**Slight**	**Moderate**	**Slight**
D	Link PAR 38 - Mill Road	**Slight**	**Neutral**	**Slight**	**Slight**
D	Link PAR 39 - Great Tey Road	**Slight**	**Slight**	**Slight**	**Slight**

Project Section	Road ID	Potential Significance of Effect			
		Driver and Public Transport Delay	Pedestrian, cyclist and horse-rider Severance	Pedestrian, cyclist and horse-rider Amenity	Fear and Intimidation
E	Link PAR 40 - A120 Colchester Road	**Slight**	**Slight**	**Slight**	**Slight**
E	Link PAR 41 - B1018 Braintree Road/B1018 Witham Road	**Slight**	**Slight**	**Slight**	**Slight**
E	Link PAR 42 - B1389 Hatfield Road	**Slight**	**Slight**	**Slight**	**Slight**
E	Link PAR 43 - Spinks Lane/Highfields Road/Spa Road/Flora Road/Faulkbourne Road/Church Hill	**Slight**	**Slight**	**Large**	**Slight**
E/F	Link PAR 44 - A131 Great Notley Bypass/A131 Great Leighs Bypass/A131 Braintree Road	**Slight**	**Slight**	**Slight**	**Slight**
F	Link PAR 46 - B1008 Braintree Road/B1008 Main Road	**Slight**	**Slight**	**Slight**	**Slight**
F	Link PAR 47 - Chatham Hall Lane	**Neutral**	**Neutral**	**Slight**	**Neutral**
F	Link PAR 48 - Chelmsford Road	**Slight**	**Slight**	**Slight**	**Slight**
F	Link PAR 49 - A414 Three Mile Hill/A1114 London Road	**Large**	**Slight**	**Moderate**	**Slight**
F	Link PAR 50 - A1016 Waterhouse Lane/A1016 Rainsford Lane	**Large**	**Slight**	**Slight**	**Slight**
F	Link PAR 51 - A1060 Rainsford Road/A1060 Roxwell Road	**Large**	**Slight**	**Large**	**Slight**
F	Link PAR 52 - Vicarage road	**Slight**	**Neutral**	**Slight**	**Neutral**
F	Link PAR 53 - A414 Greenbury Way/A414 Ongar Road	**Slight**	**Slight**	**Slight**	**Slight**
G	Link PAR 54 - B1002 Main Road	**Slight**	**Slight**	**Slight**	**Slight**
G	Link PAR 55 - Wantz Road	**Slight**	**Slight**	**Slight**	**Slight**
G	Link PAR 56 - Ivy Barns Lane	**Slight**	**Slight**	**Slight**	**Slight**
G	Link PAR 57 - Church Lane	**Slight**	**Slight**	**Neutral**	**Neutral**
G	Link PAR 58 - A176 Noak Hill Road/A176 Laindon Road/A129 Southend Road	**Slight**	**Slight**	**Slight**	**Slight**
G	Link PAR 59 - A129 Sun Street/A129 London Road/A129 Rayleigh Road	**Large**	**Slight**	**Slight**	**Slight**

Project Section	Road ID	Potential Significance of Effect			
		Driver and Public Transport Delay	Pedestrian, cyclist and horse-rider Severance	Pedestrian, cyclist and horse-rider Amenity	Fear and Intimidation
G	Link PAR 60 - Dunton Road/Brentwood Road	**Slight**	**Neutral**	**Slight**	**Slight**
G	Link PAR 62 - Lower Dunton Road	**Slight**	**Slight**	**Slight**	**Slight**
H	Link PAR 63 - A128 Brentwood Road	**Slight**	**Slight**	**Slight**	**Slight**
H	Link PAR 64 - A1013 Stanford Road (east of Orsett Cock Roundabout)	**Moderate**	**Slight**	**Slight**	**Slight**
H	Link PAR 65 - Buckingham Hill Road	**Large**	**Slight**	**Moderate**	**Large**
H	Link PAR 66 - Brentwood Road	**Moderate**	**Slight**	**Moderate**	**Slight**
H	Link PAR 67 - A1013 Stanford Road (west of Orsett Cock Roundabout)	**Moderate**	**Slight**	**Slight**	**Large**
H	Link PAR 68 - Heath Road	**Slight**	**Slight**	**Slight**	**Slight**

16.5 Daily Total Peak Week Vehicle Distribution on Primary Access Routes (7 am – 7 pm)

16.5.1 The total daily construction traffic flow (7:00 to 19:00) generated by the Project at each PAR for the peak week has been graphically presented identifying the split between HGV's and total traffic. It can be seen that in general the worst-case peak activity is short-term and temporary in nature. Outside of this period that has been assessed within the ES, construction flows are generally lower but may occur over medium term.

Image A16.4.1 Construction vehicles daily trip distribution of A140 Ipswich Road (Link PAR 1)

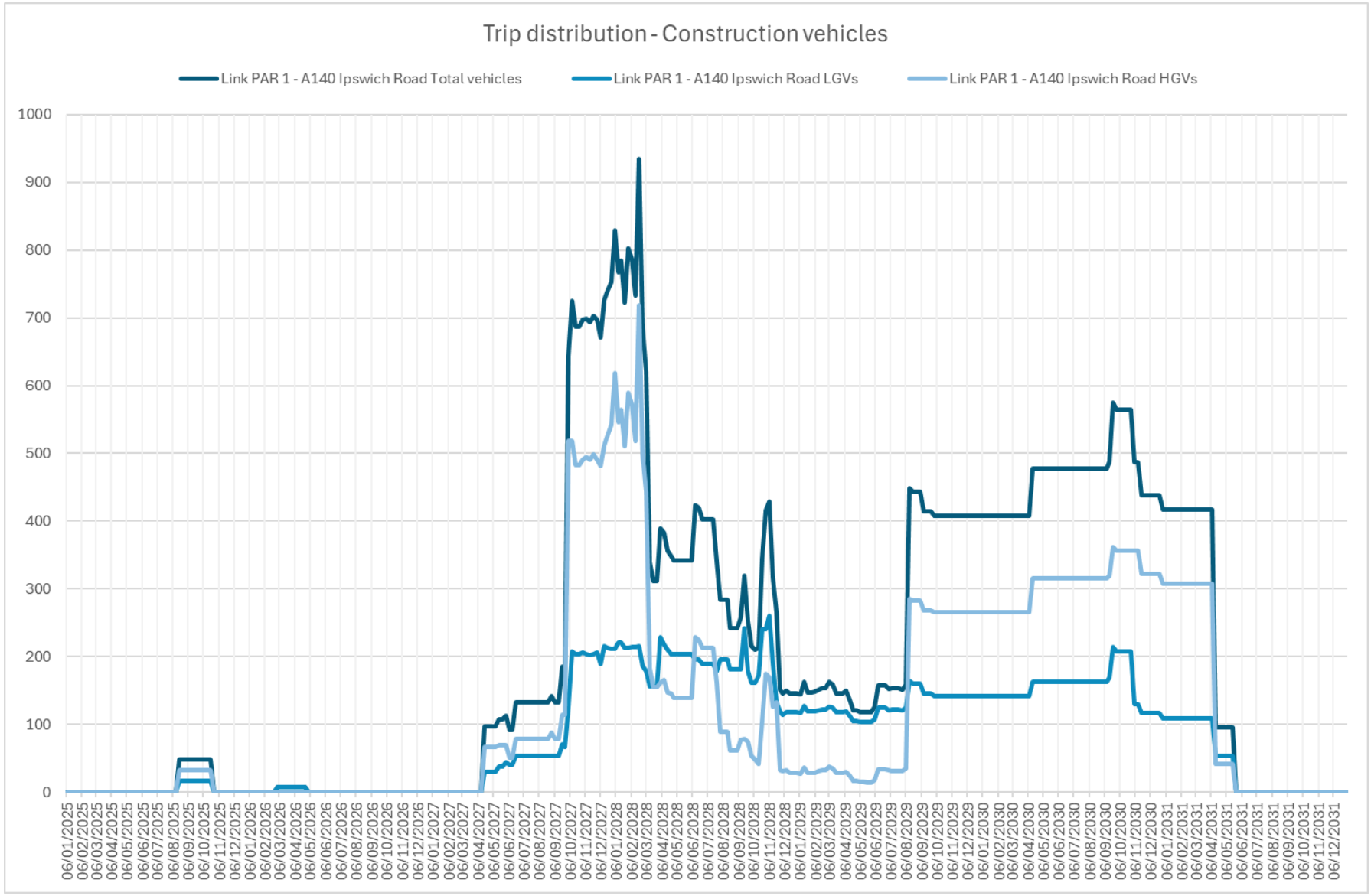


Image A16.4.2 Construction vehicles daily trip distribution of Mangreen Lane (Link PAR 2)

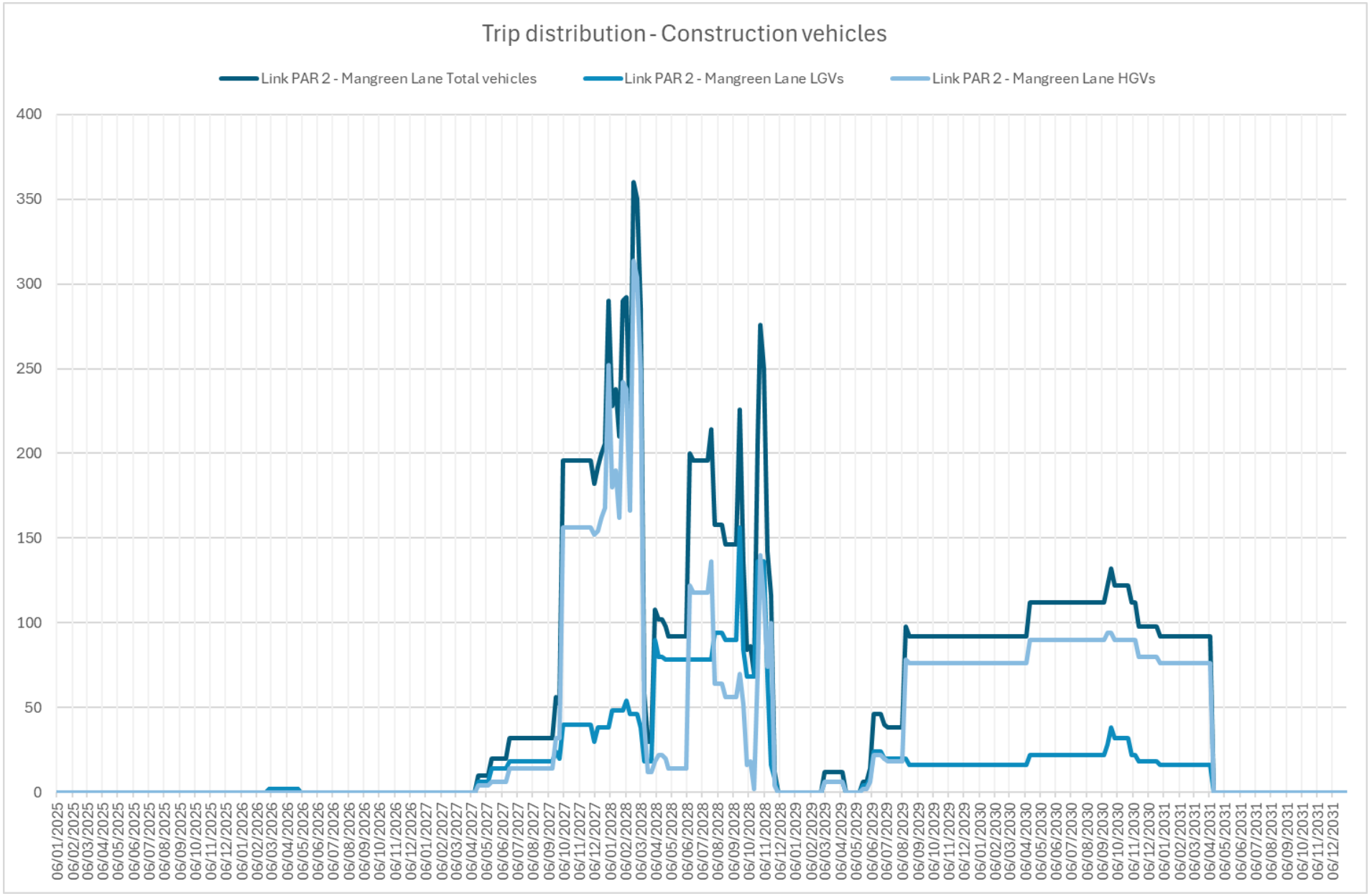


Image A16.4.3 Construction vehicles daily trip distribution of Stansfield Road/Wymondham Road (Link PAR 3)

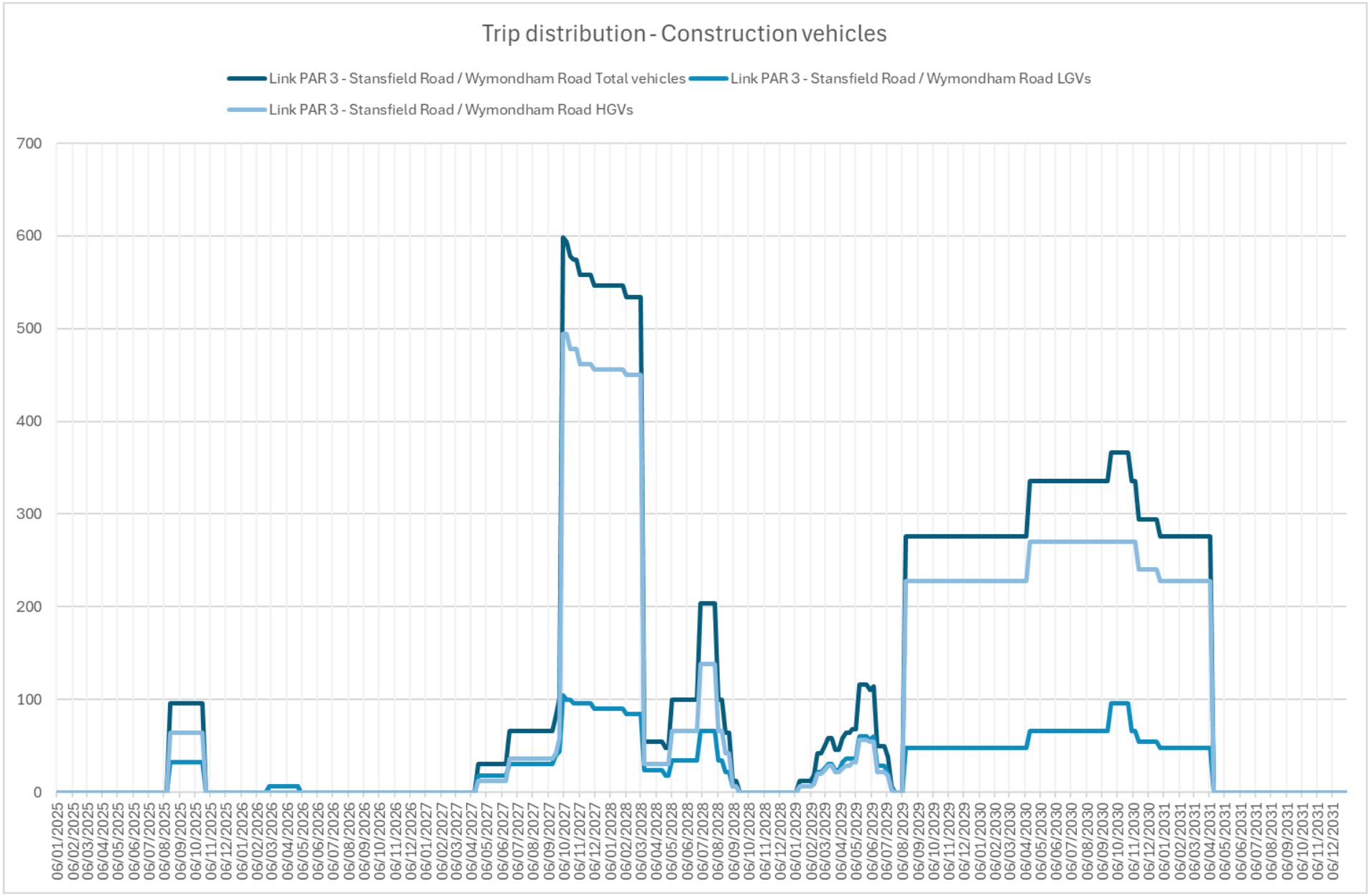


Image A16.4.4 Construction vehicles daily trip distribution of B1113 (Link PAR 4)

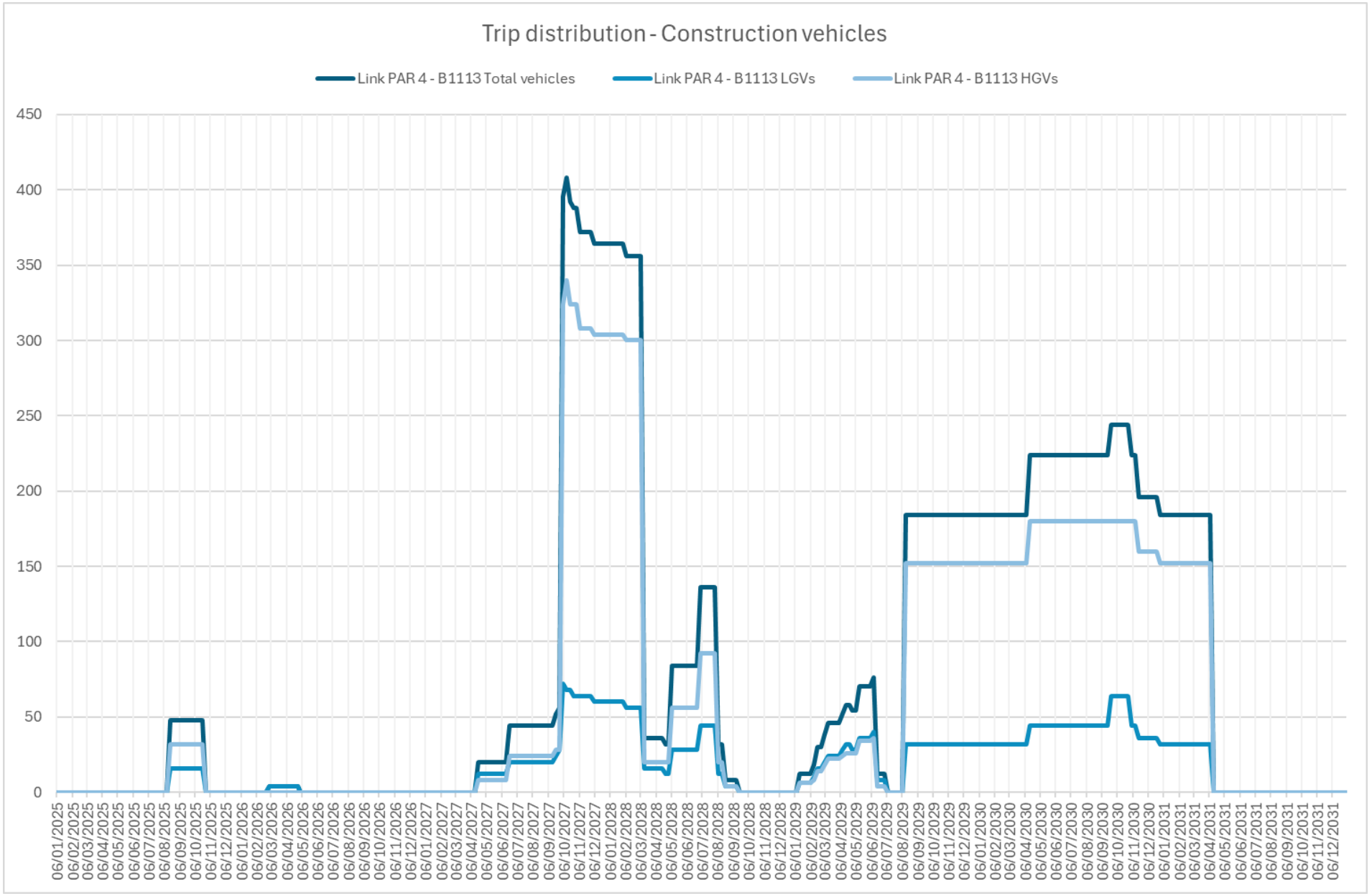


Image A16.4.5 Construction vehicles daily trip distribution of Wymondham Road (Link PAR 5)

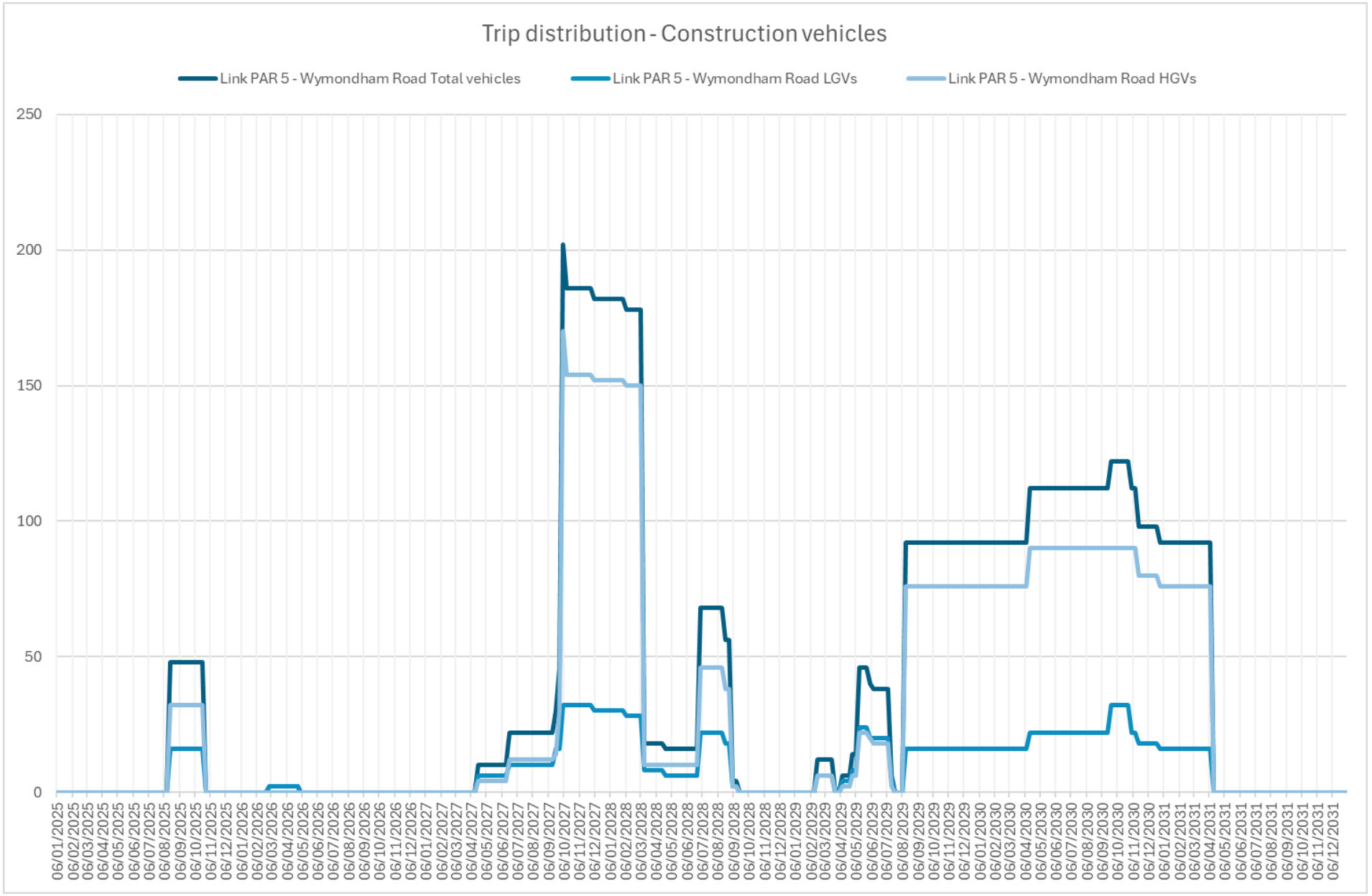


Image A16.4.6 Construction vehicles daily trip distribution of Fundenhall Road (Link PAR 6)

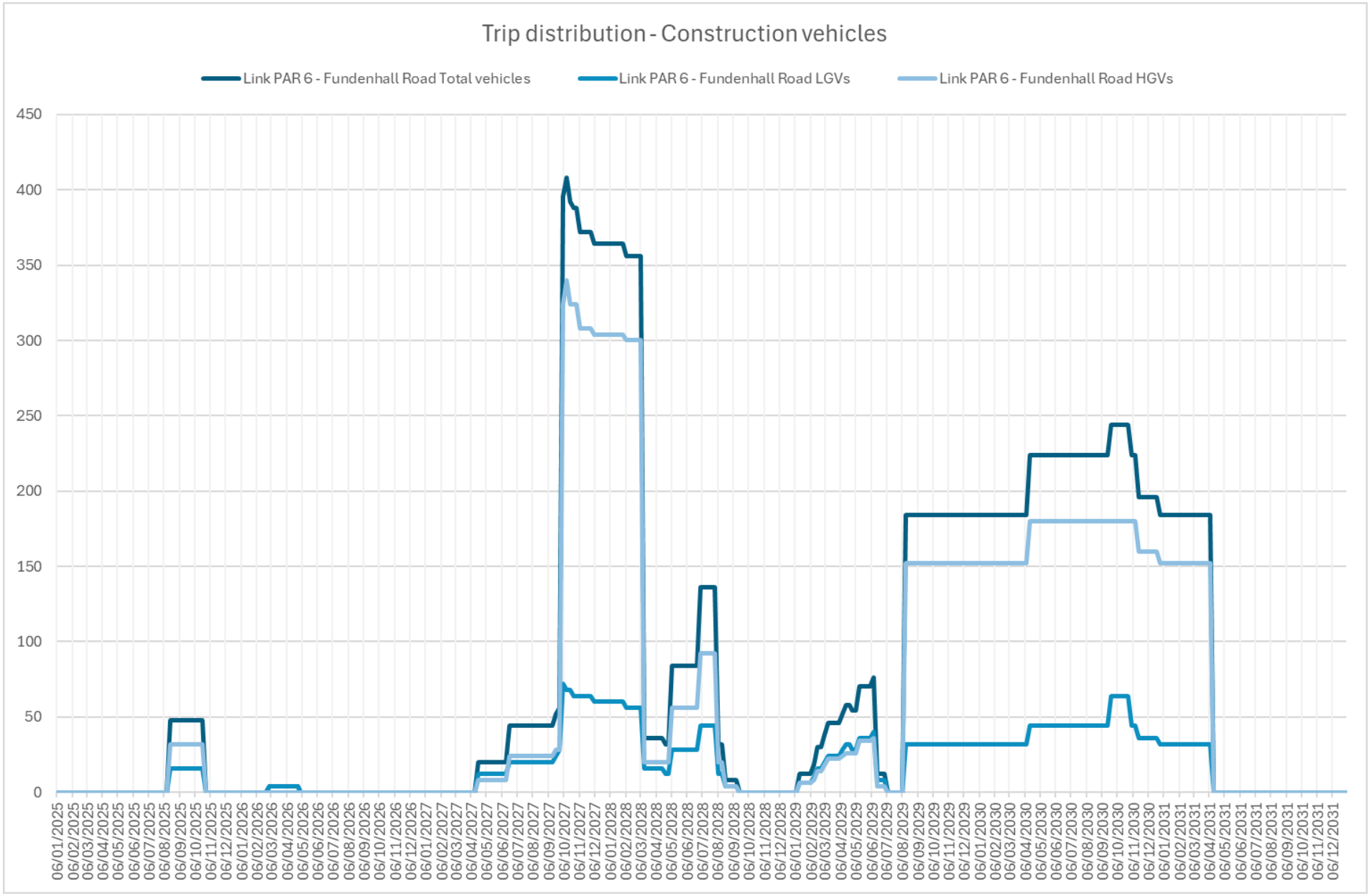


Image A16.4.7 Construction vehicles daily trip distribution of B1134 Station Road/B1134 Long Row (Link PAR 7)

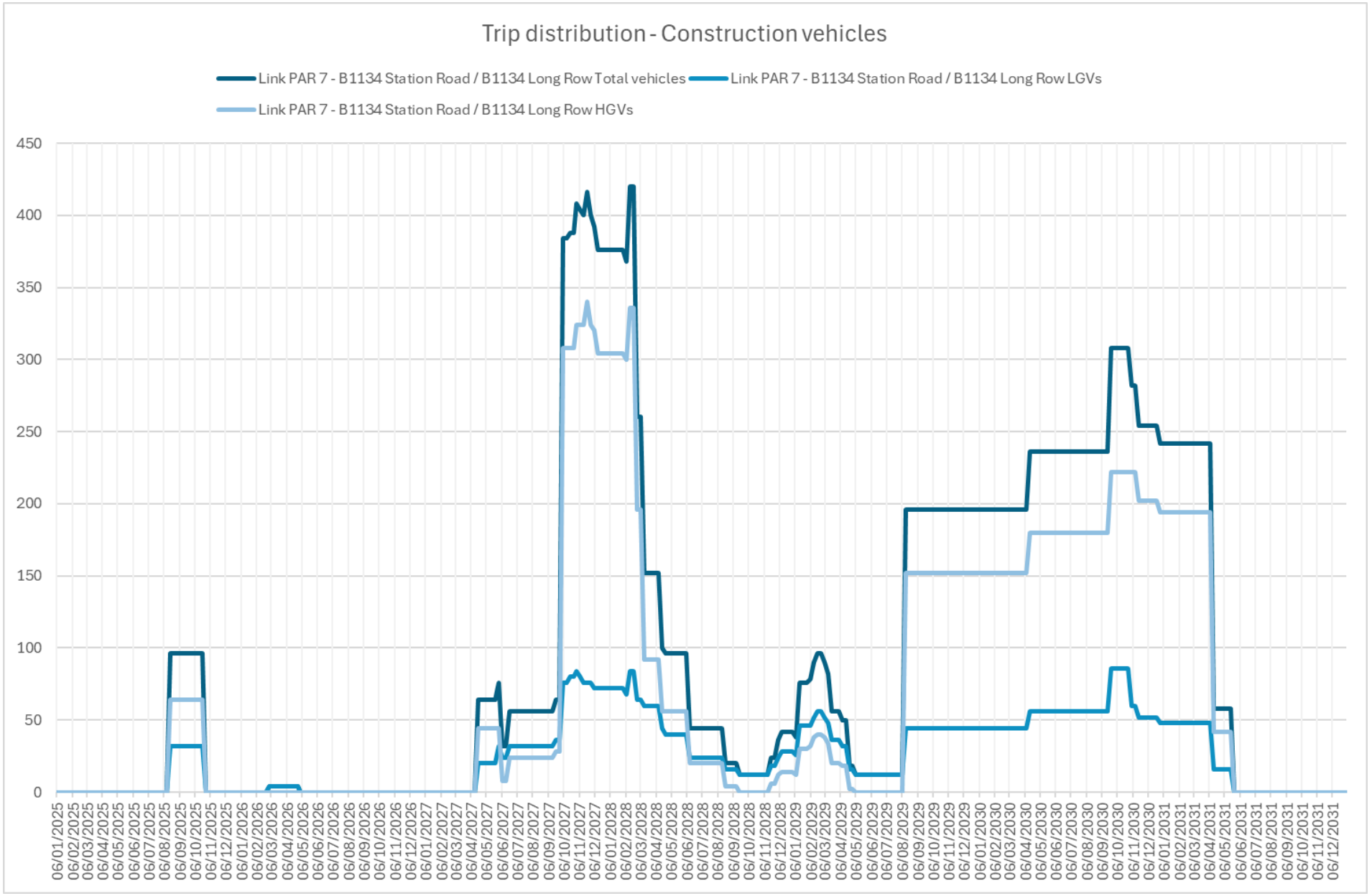


Image A16.4.8 Construction vehicles daily trip distribution of A1066/A1066 Victoria Rd/A1066 High Rd (Link PAR 8)

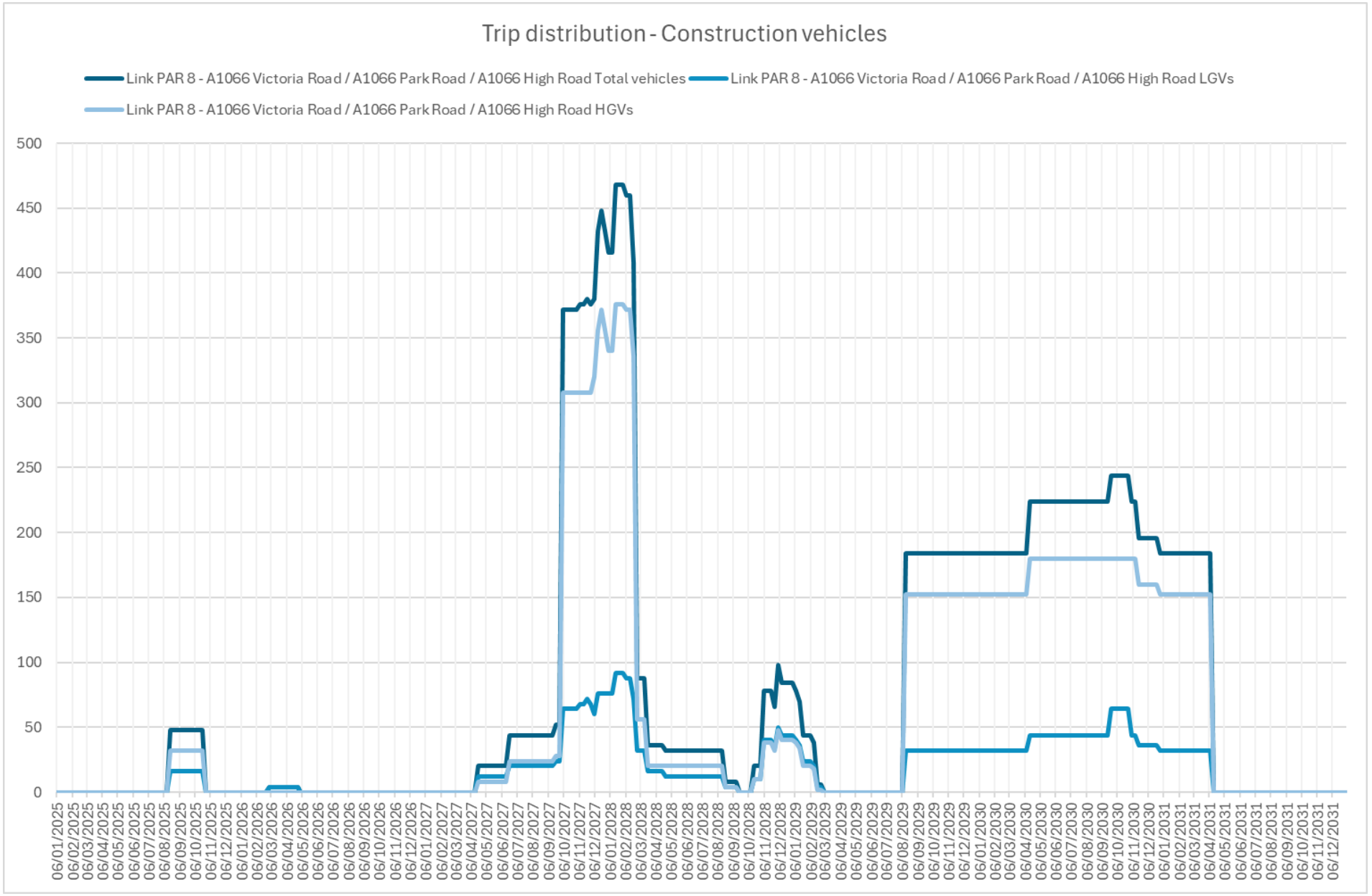


Image A16.4.9 Construction vehicles daily trip distribution of A1066 High Rd/A1066 Mundford Road (Link PAR 9)

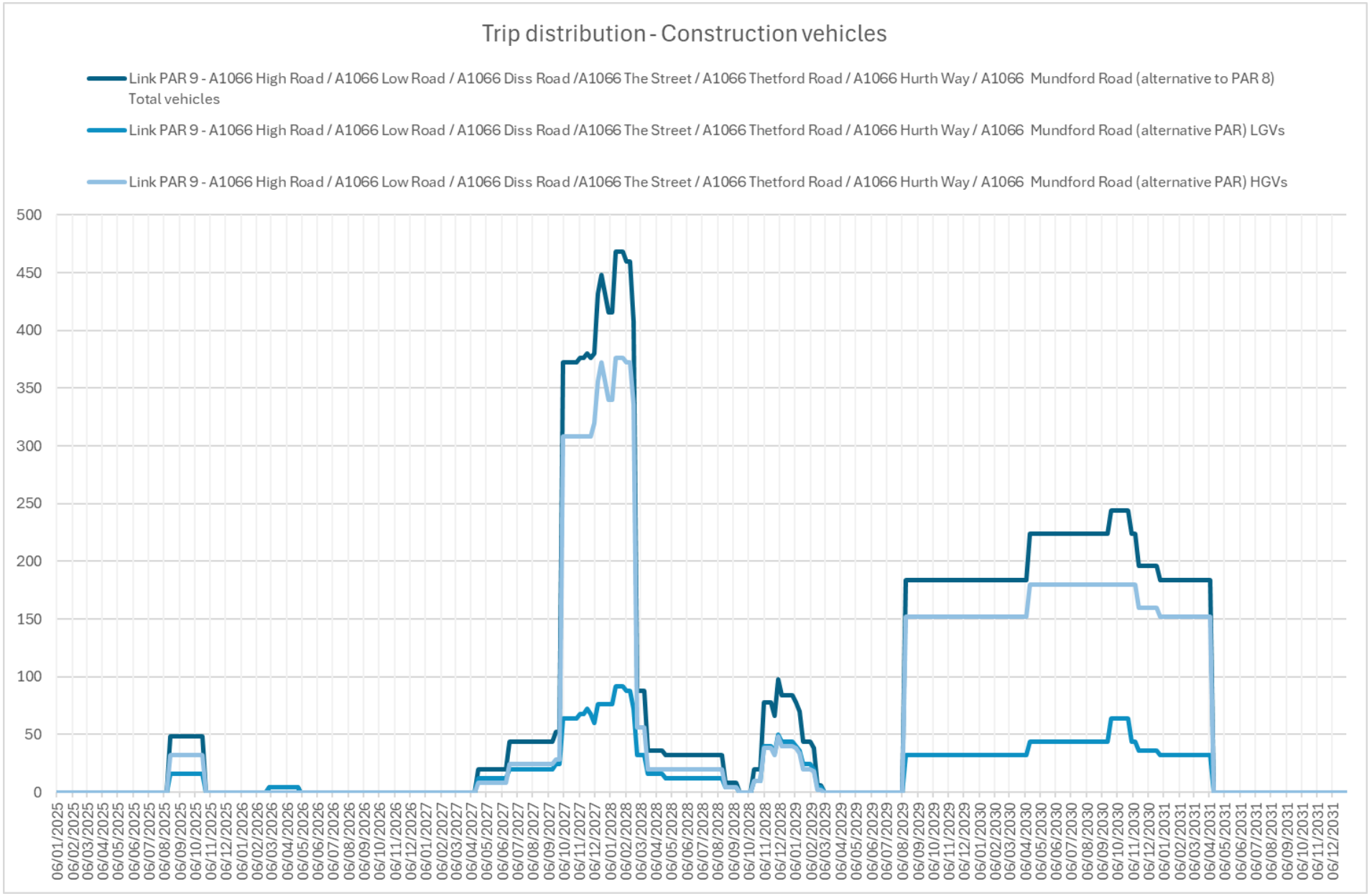


Image A16.4.10 Construction vehicles daily trip distribution of A143 Old Bury Road (Link PAR 10)

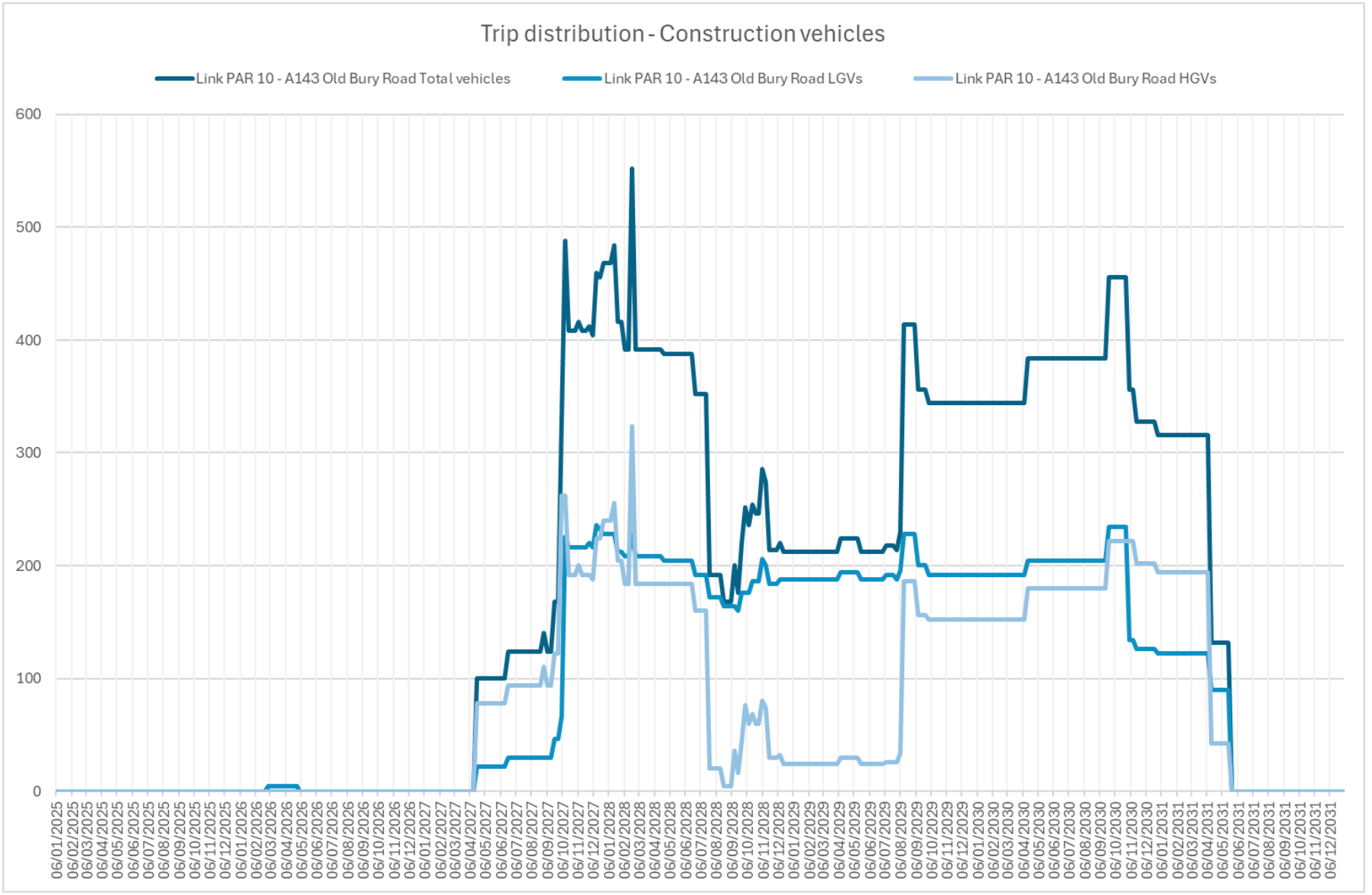


Image A16.4.11 Construction vehicles daily trip distribution of Lion Road (Link PAR 11)

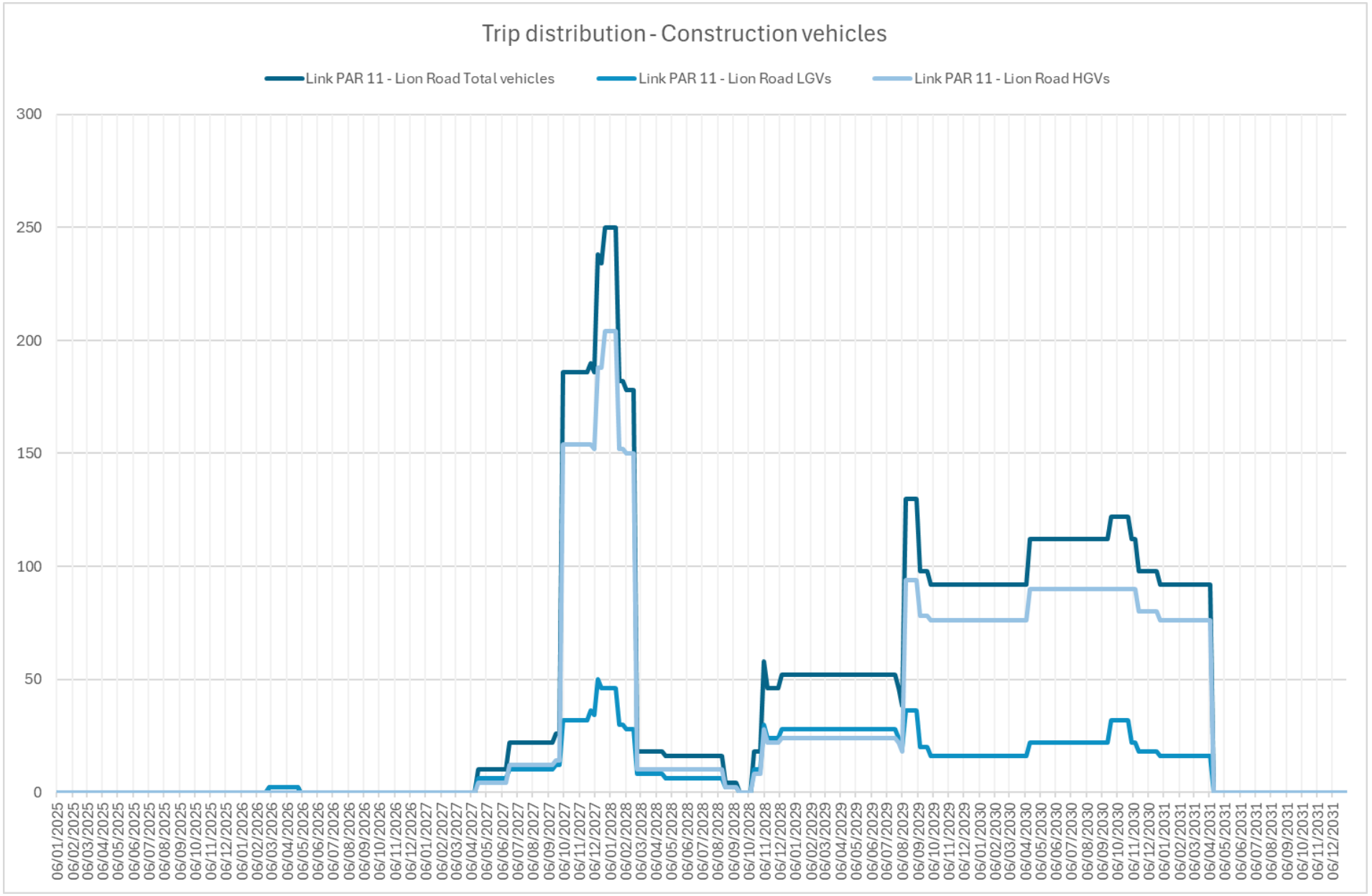


Image A16.4.12 Construction vehicles daily trip distribution of B1113 Finningham Road/B1113 Walsham Road (Link PAR 12)

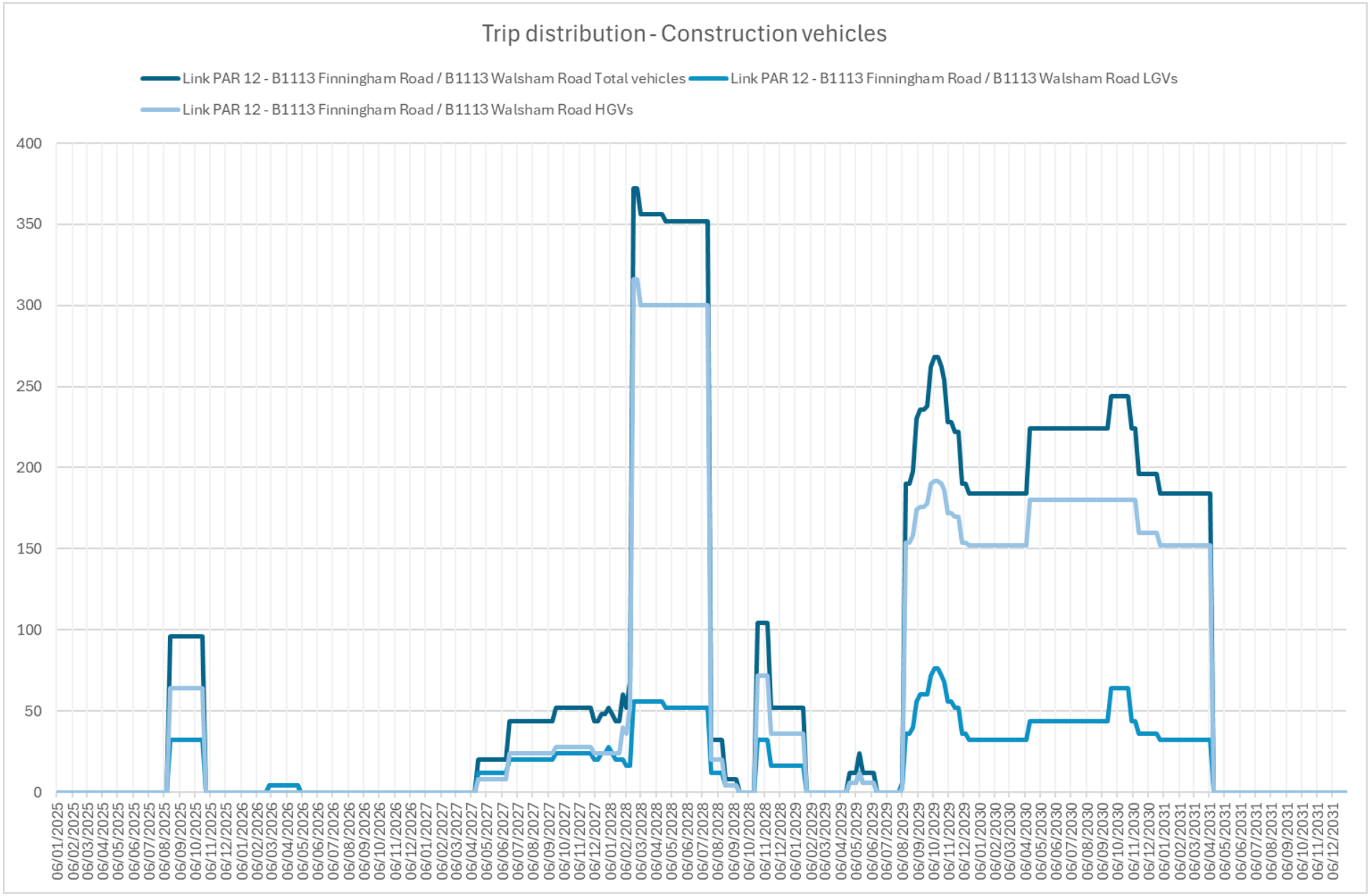


Image A16.4.13 Construction vehicles daily trip distribution of Wickham Road (Link PAR 13)

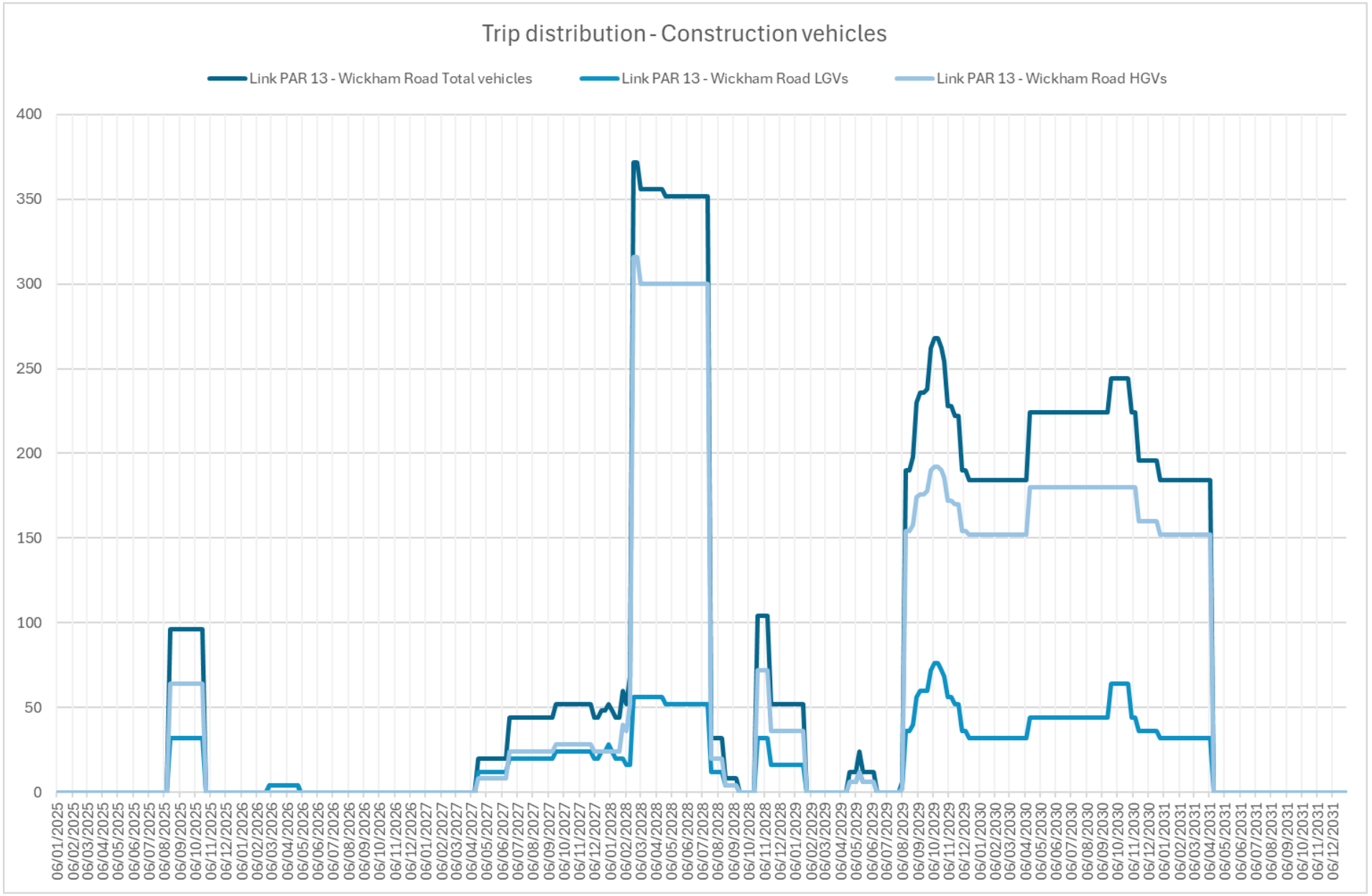


Image A16.4.14 Construction vehicles daily trip distribution of Eastland Lane (Link PAR 14)

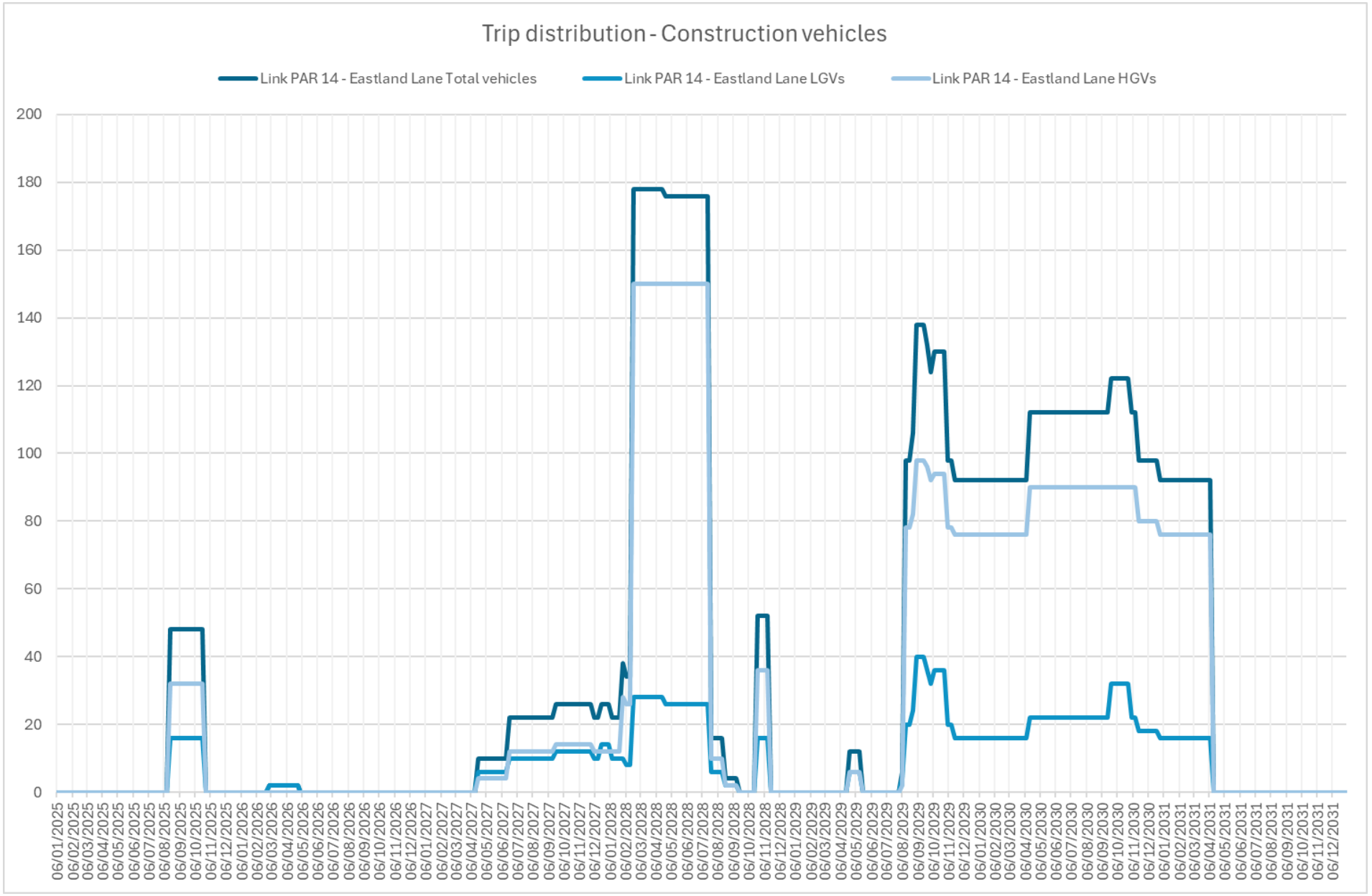


Image A16.4.15 Construction vehicles daily trip distribution of Thornham Road (Link PAR 15)

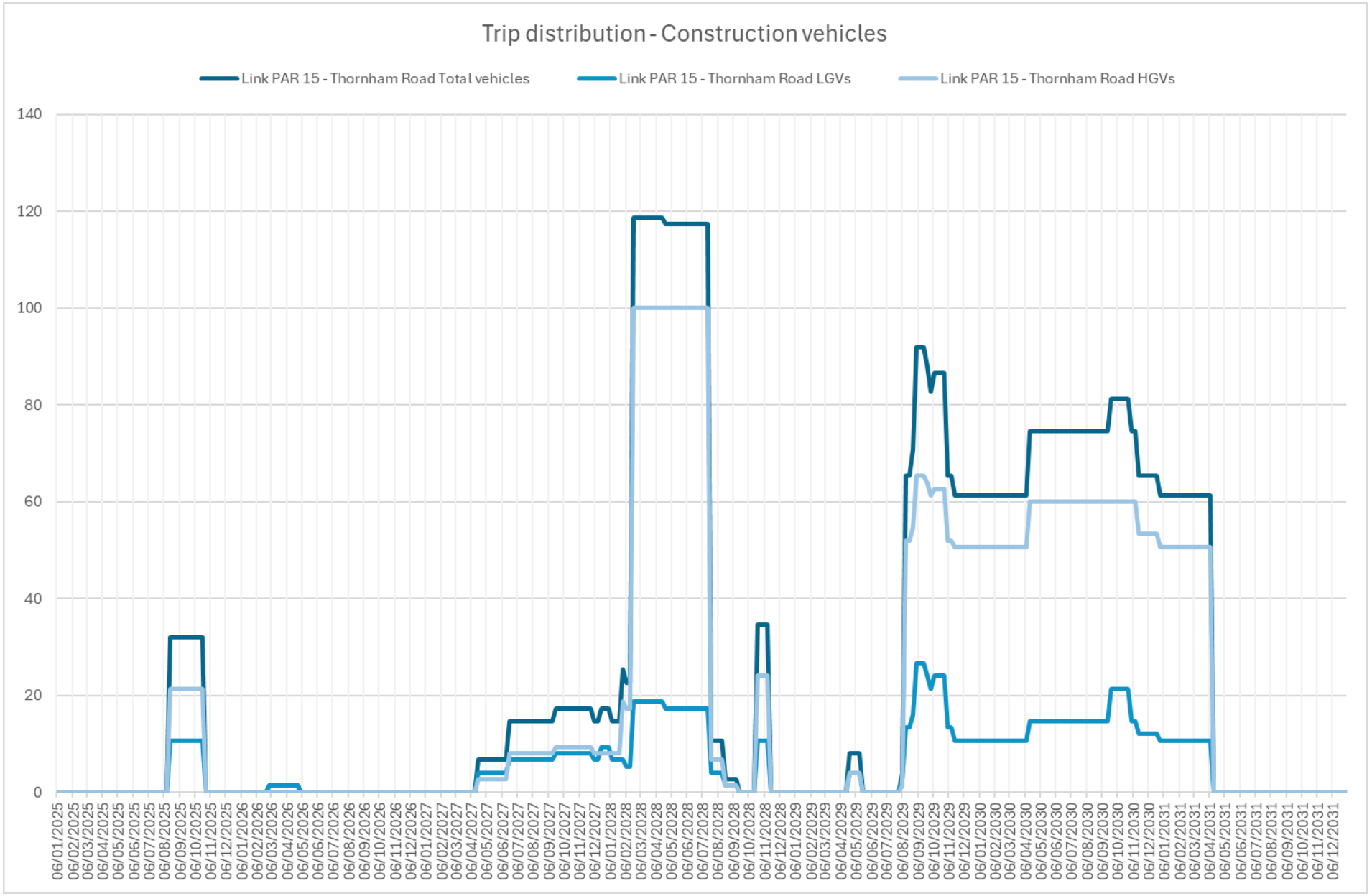


Image A16.4.16 Construction vehicles daily trip distribution of A1120 Church Road/A1120 Bell's Lane (Link PAR 16

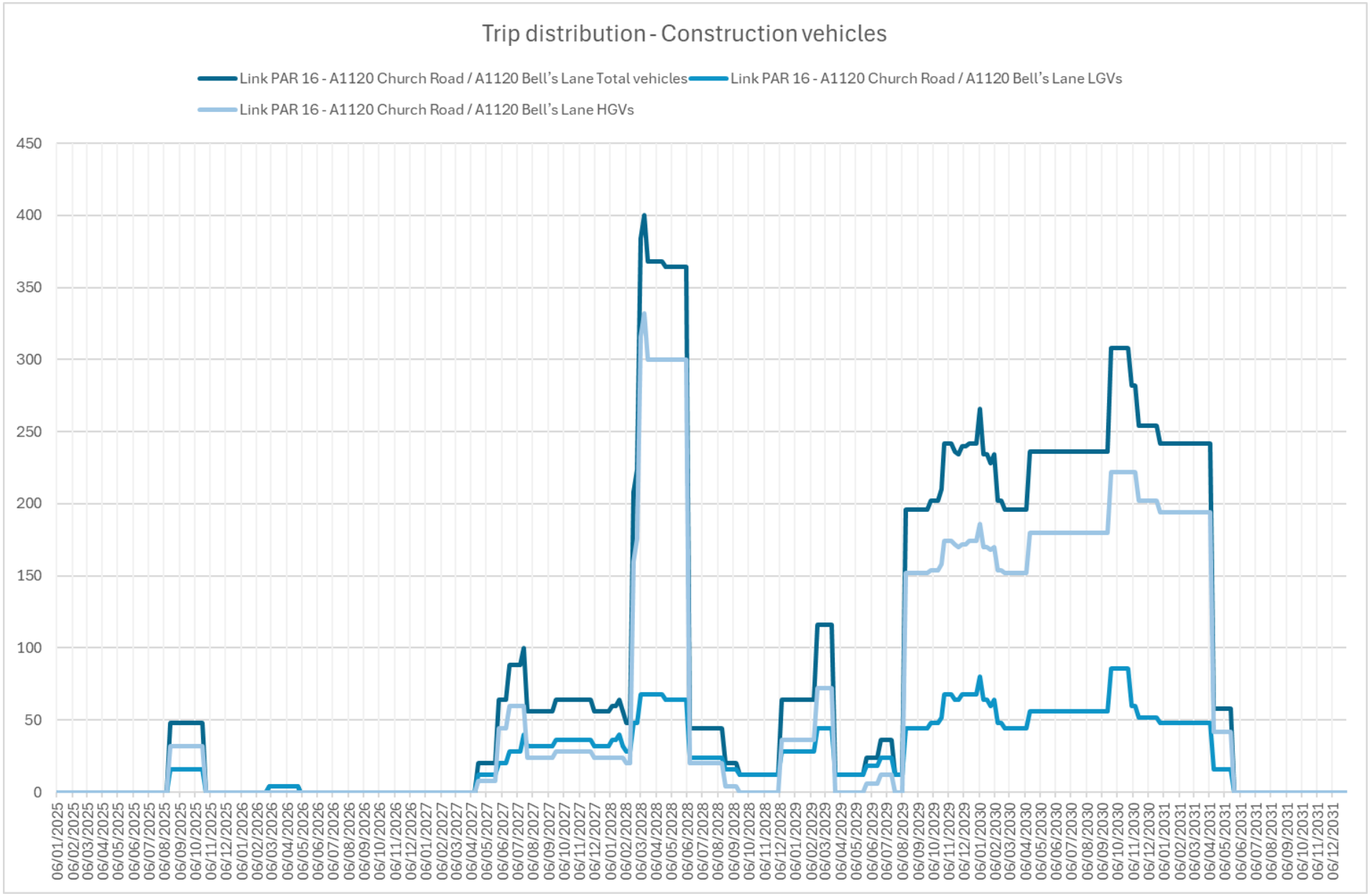


Image A16.4.17 Construction vehicles daily trip distribution of A1120 south of A14 J50 (Link PAR 17)

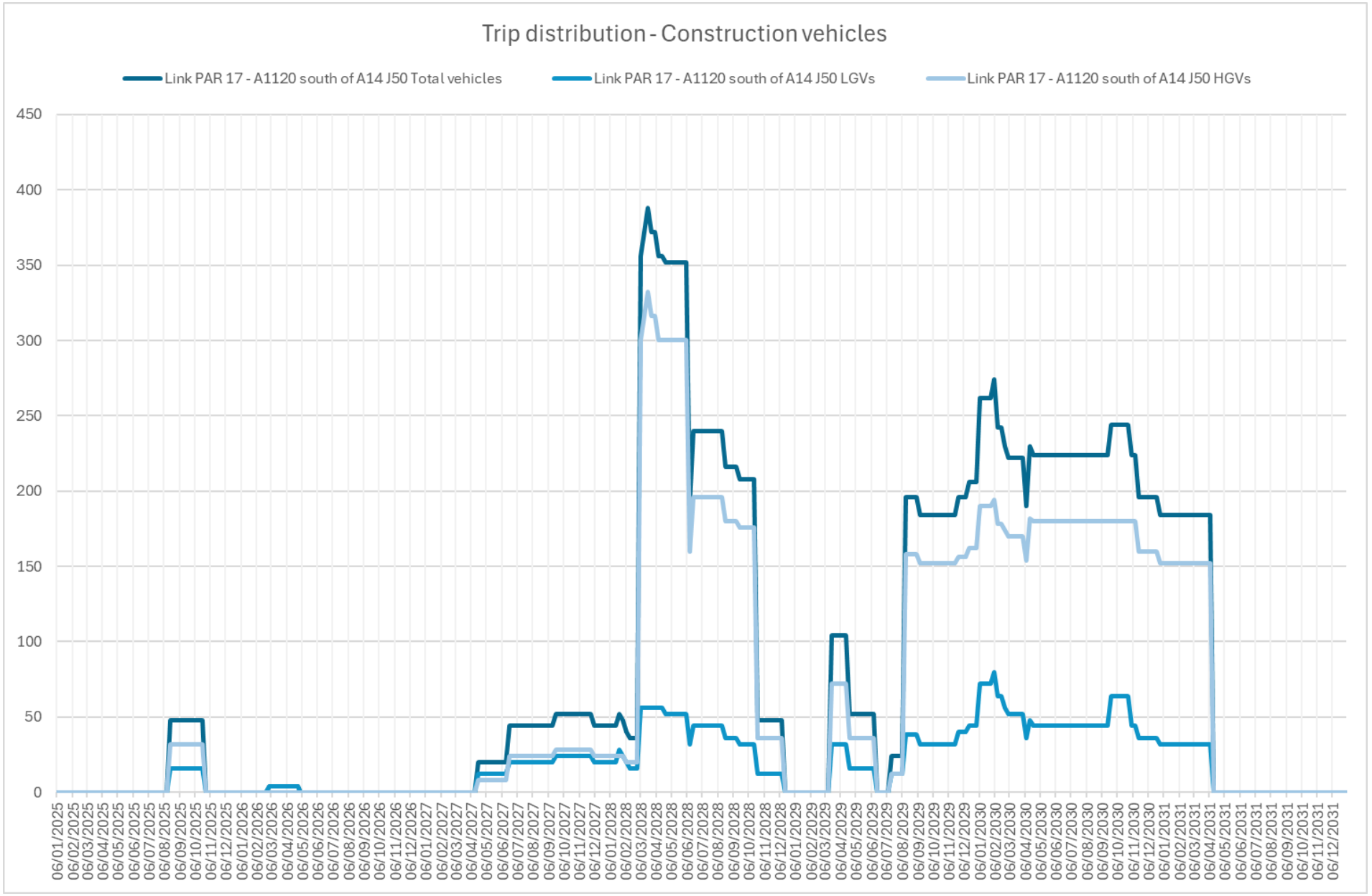


Image A16.4.18 Construction vehicles daily trip distribution of Mill Lane (Link PAR 18)

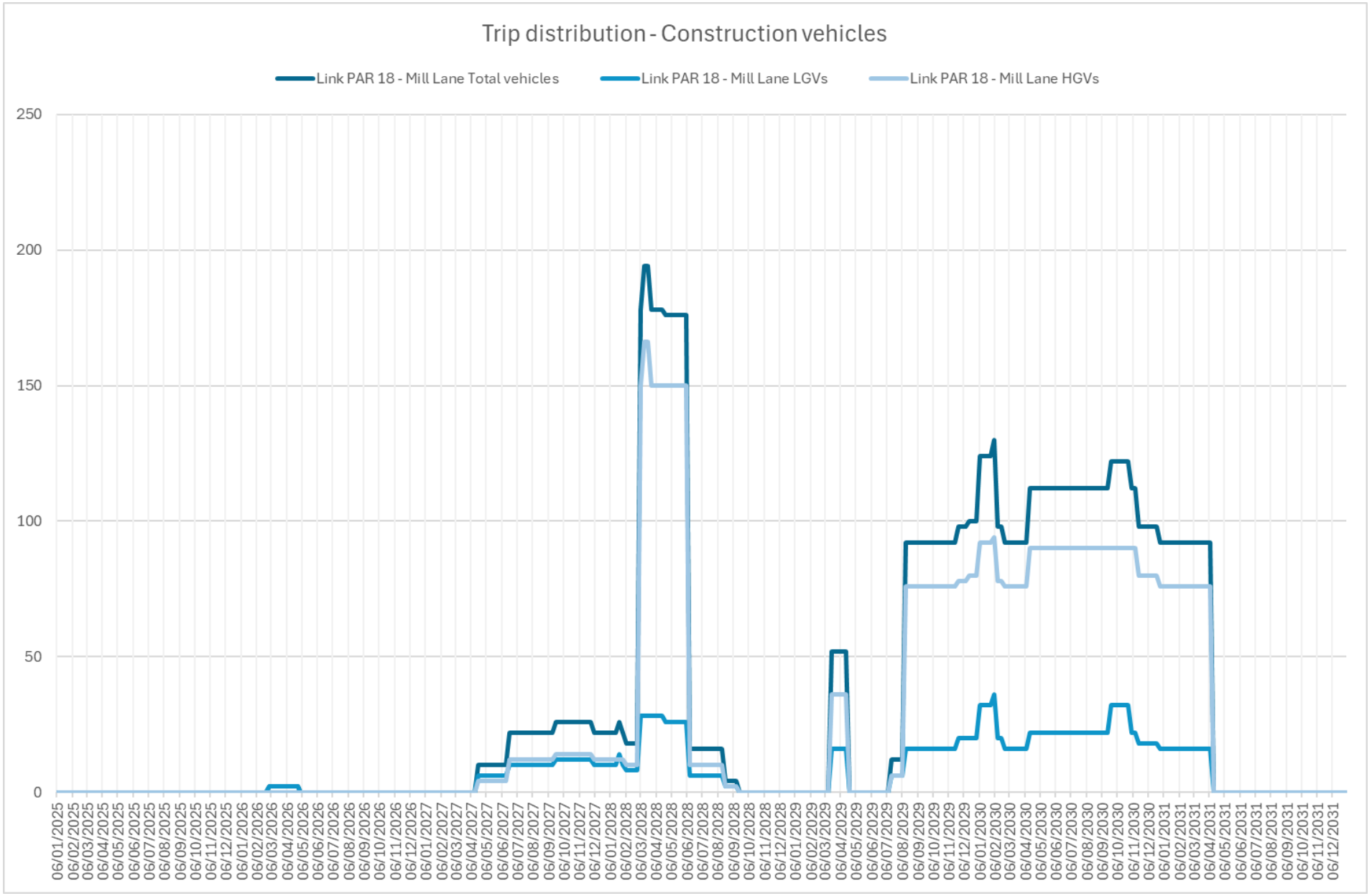


Image A16.4.19 Construction vehicles daily trip distribution of B1113 Needham Road/B1113 Stowmarket Road (Link PAR 19)

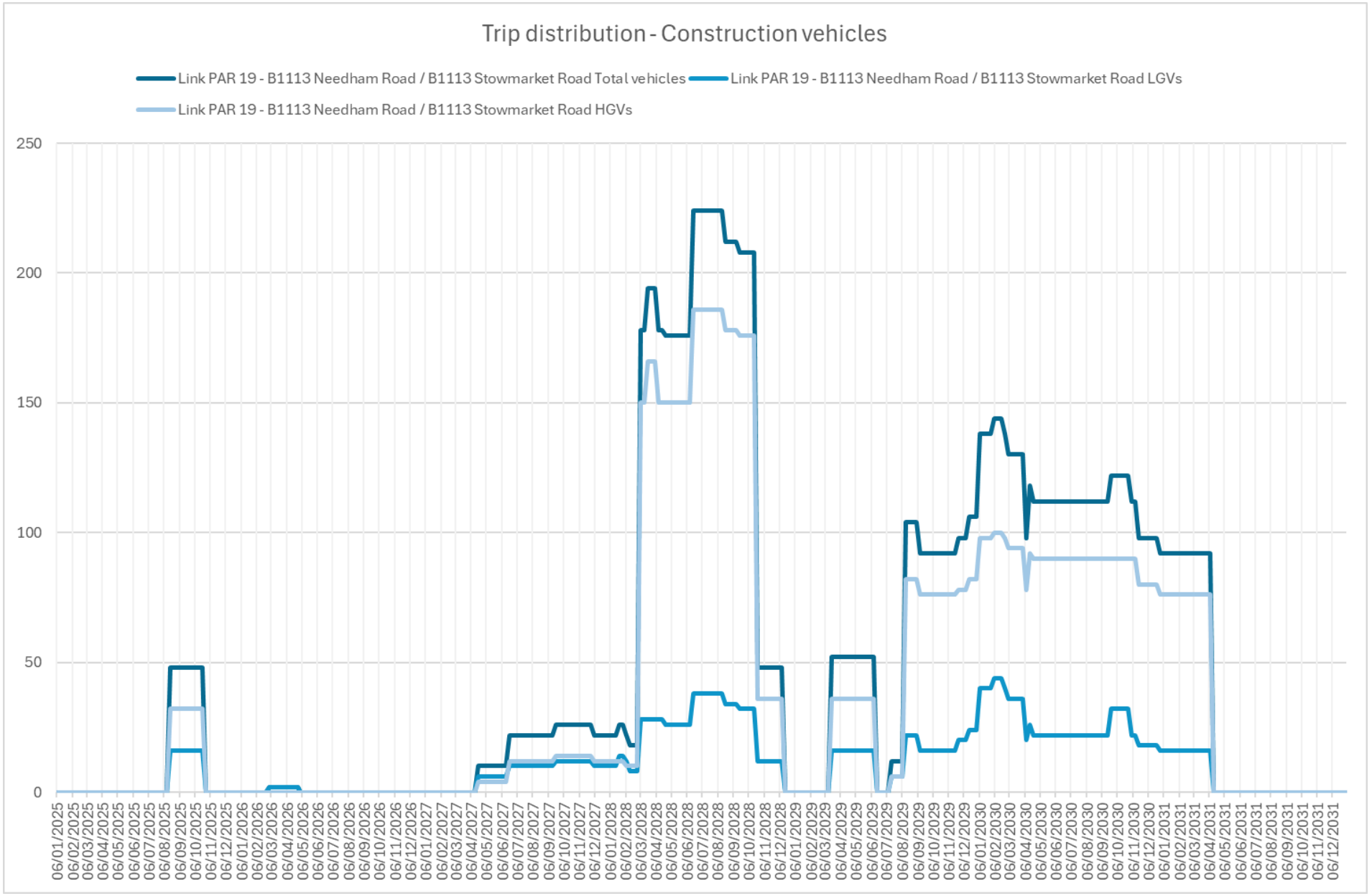


Image A16.4.20 Construction vehicles daily trip distribution of B1113 Bramford Road/B1113 Loraine Way (Link PAR 20)

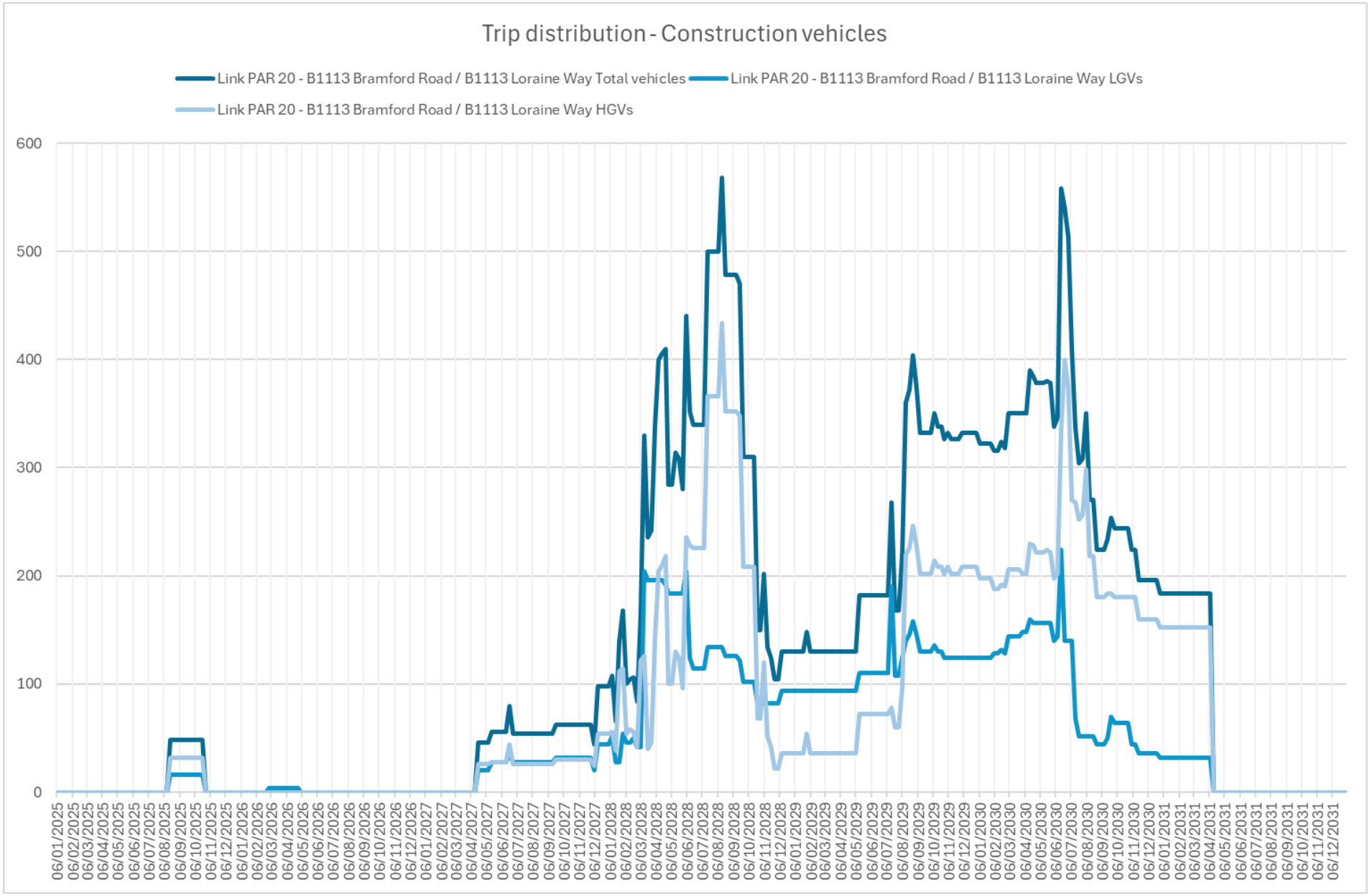


Image A16.4.21 Construction vehicles daily trip distribution of Bullen Lane (Link PAR 21)

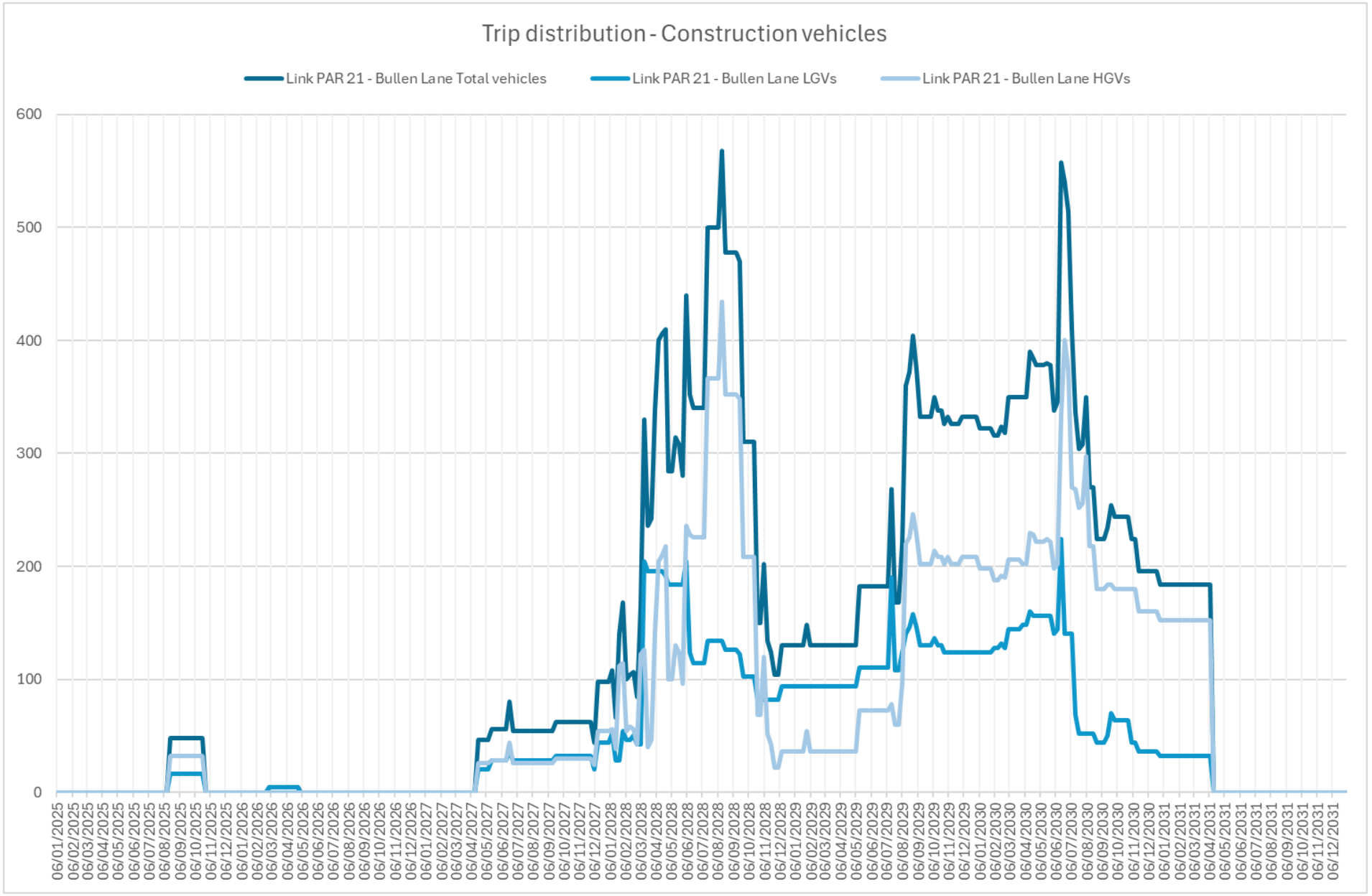


Image A16.4.22 Construction vehicles daily trip distribution of A1214 London Road (Link PAR 22)

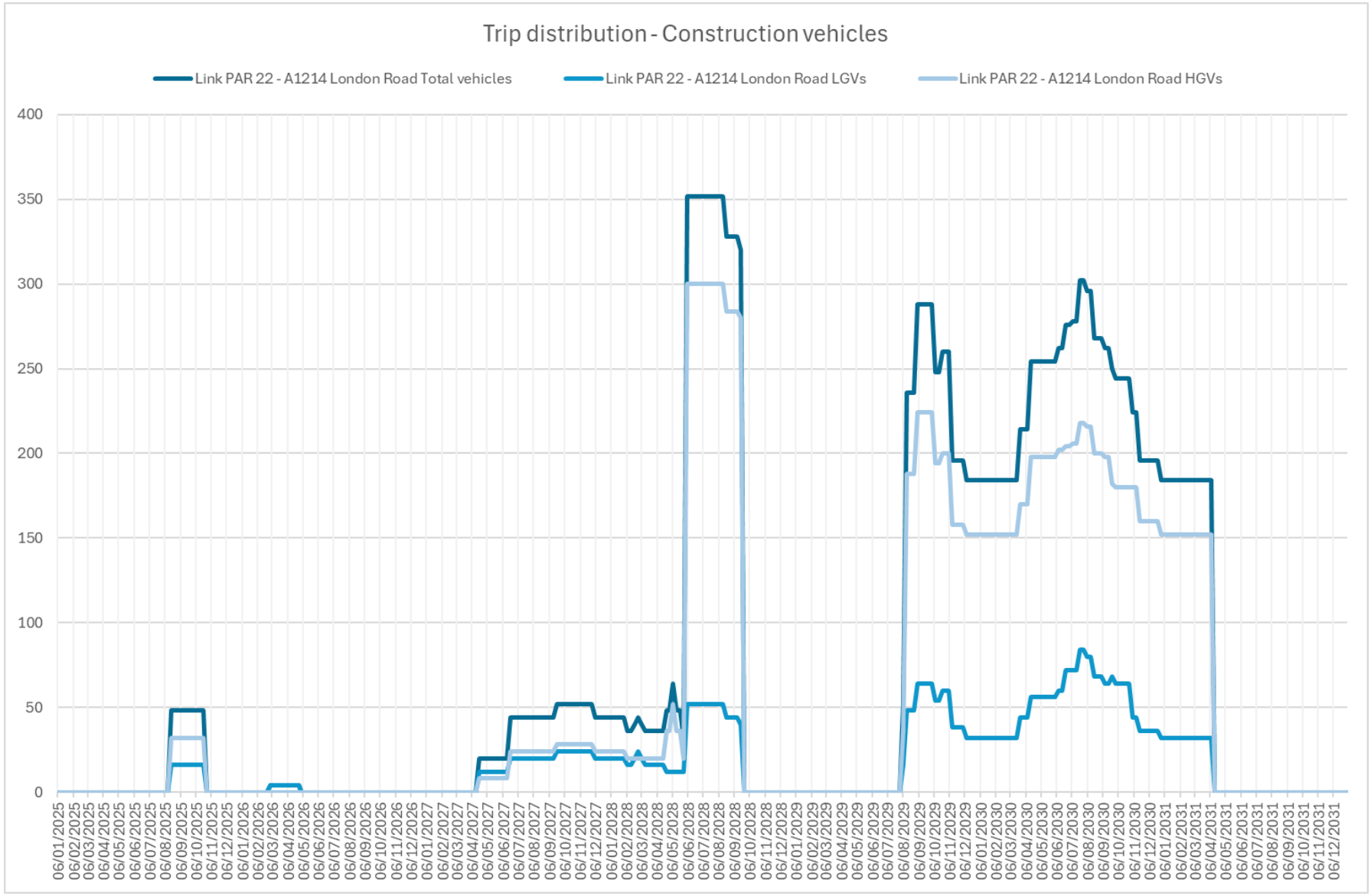


Image A16.4.23 Construction vehicles daily trip distribution of A1071 (Link PAR 23)

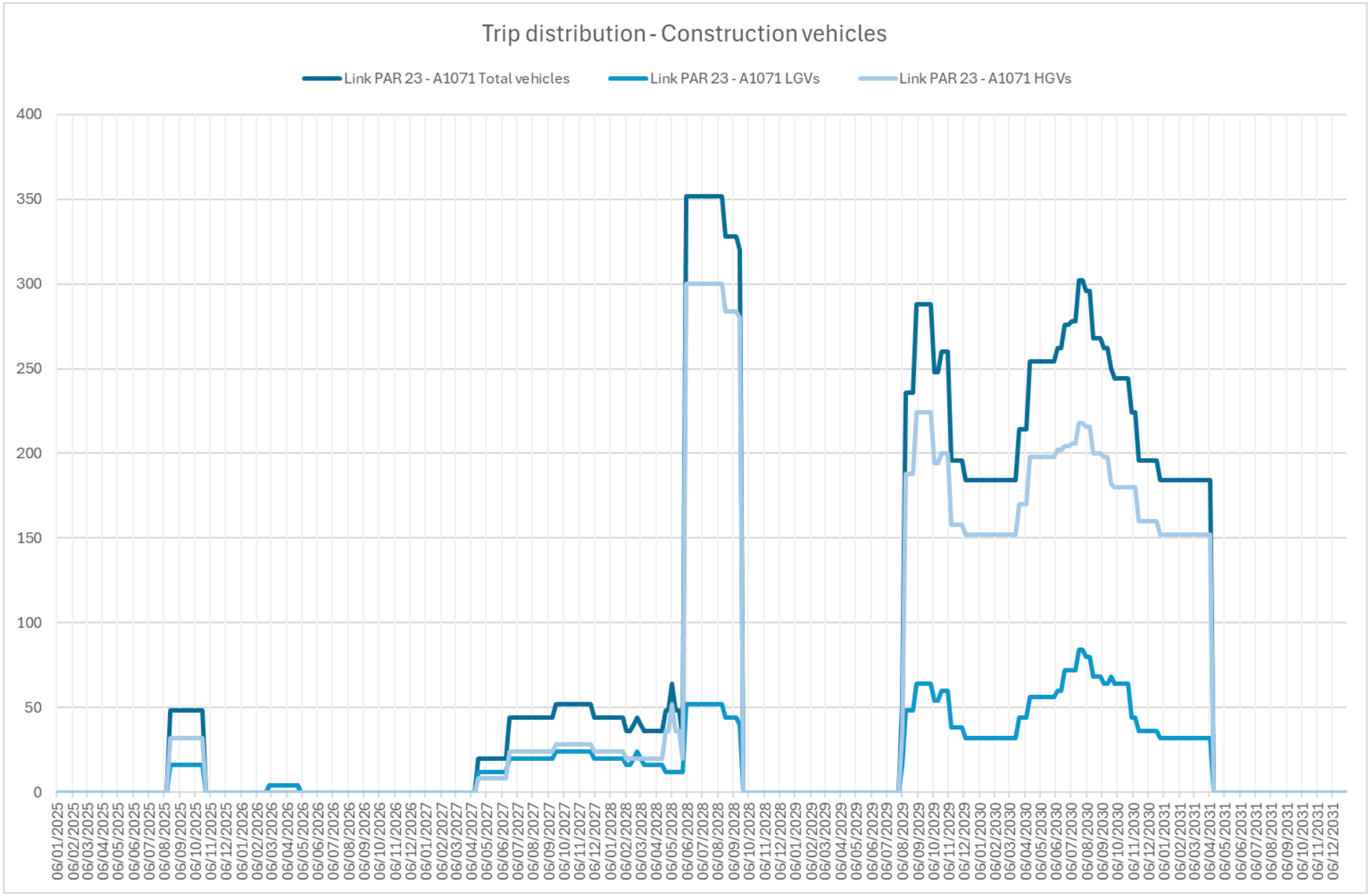


Image A16.4.24 Construction vehicles daily trip distribution of B1070 (A12 access) (Link PAR 24)

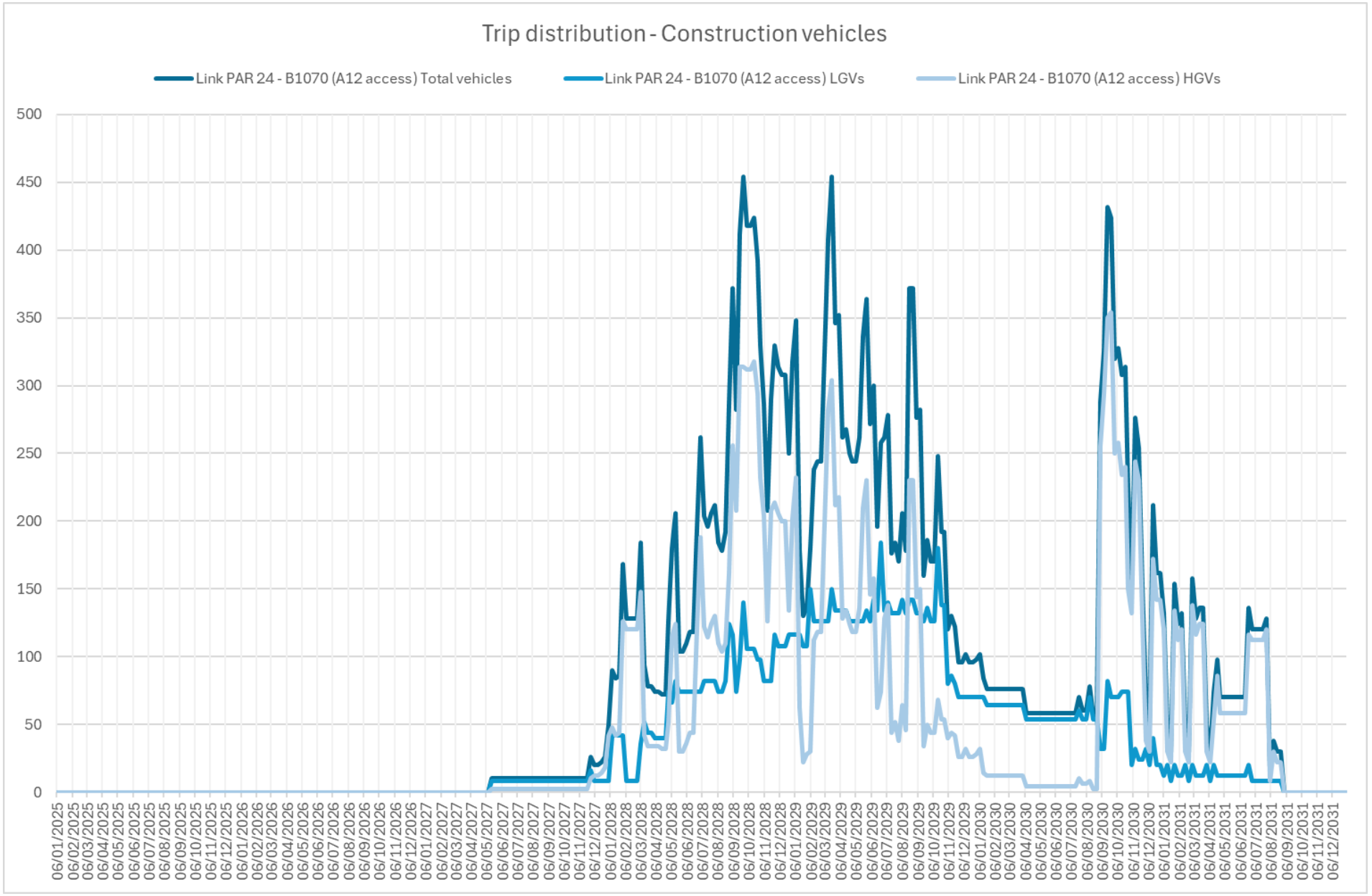


Image A16.4.25 Construction vehicles daily trip distribution of B1070 Hadleigh Road (Link PAR 25)

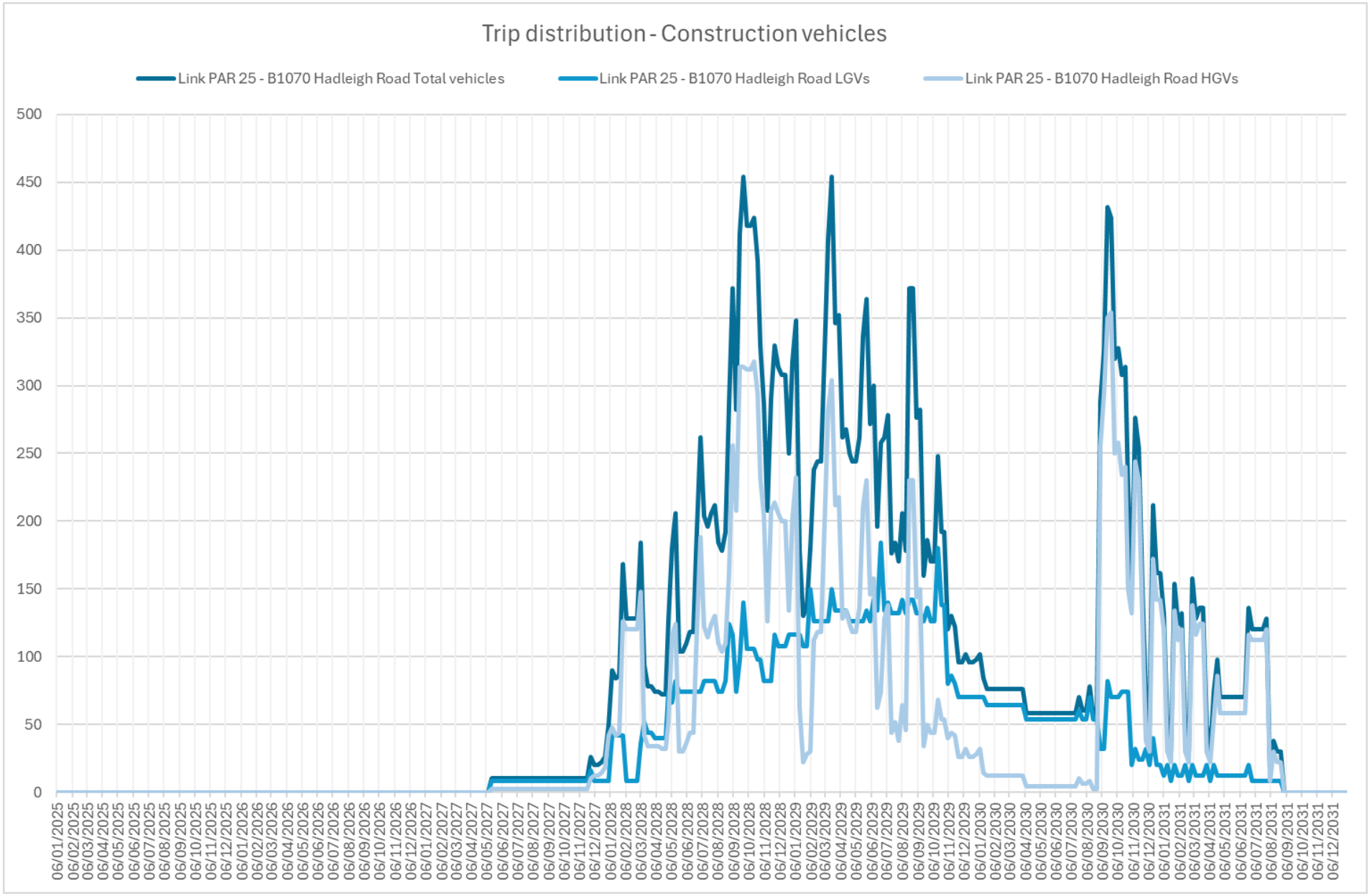


Image A16.4.26 Construction vehicles daily trip distribution of Ipswich Road (Link PAR 26)

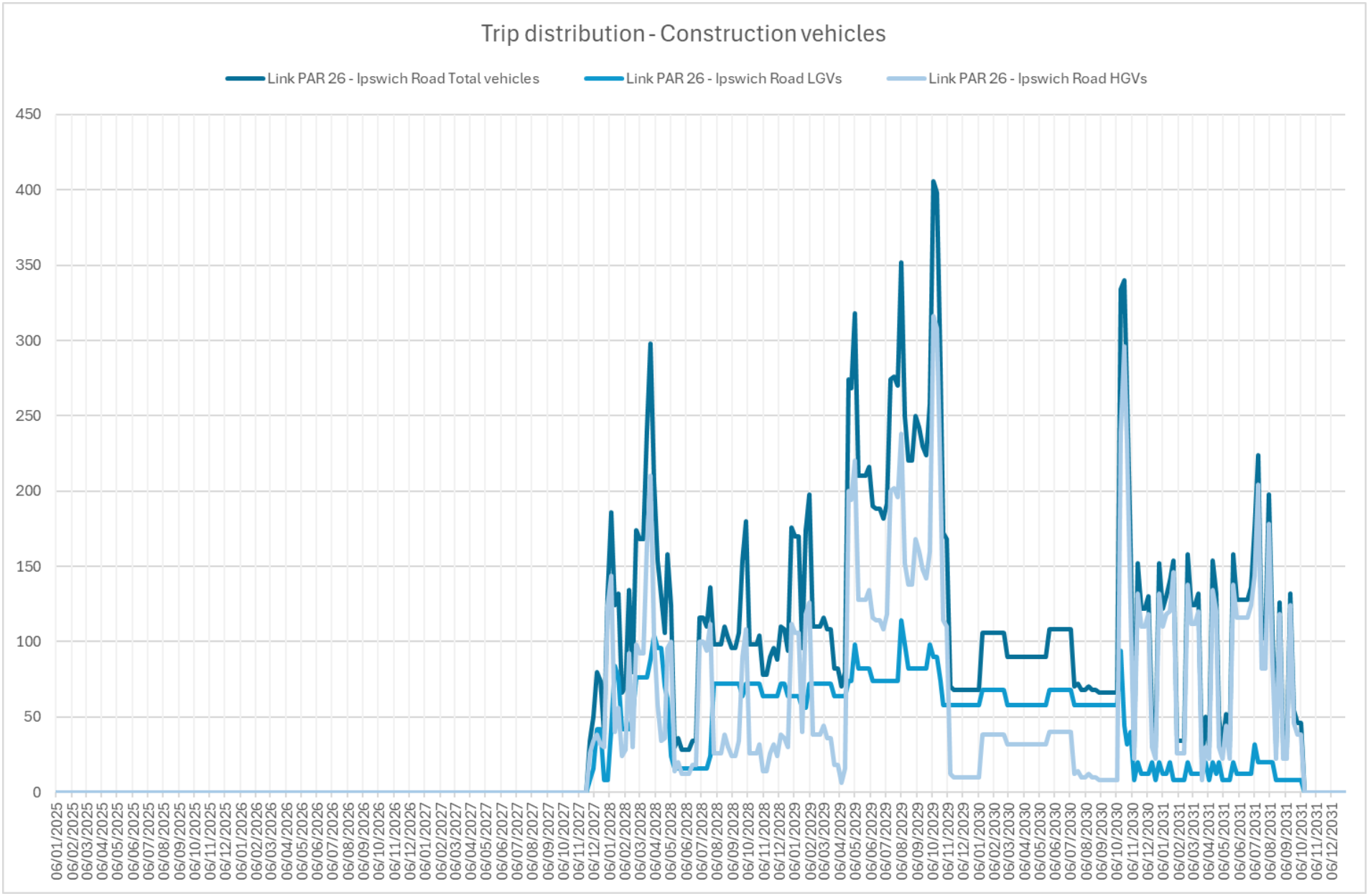


Image A16.4.27 Construction vehicles daily trip distribution of Birchwood Road (Link PAR 27)

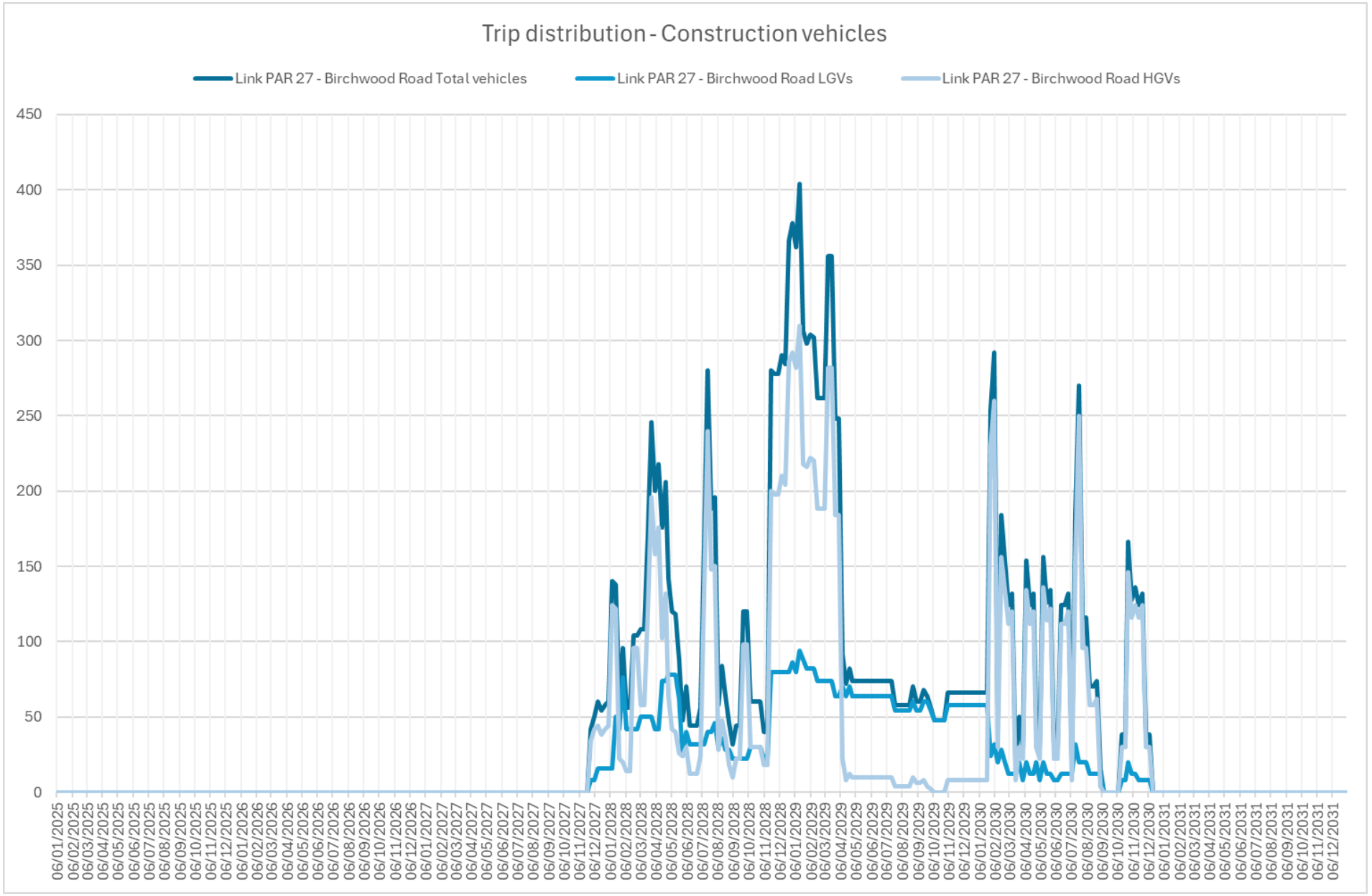


Image A16.4.28 Construction vehicles daily trip distribution of Assessment of Wick Road/Grove Hill (Link PAR 28)

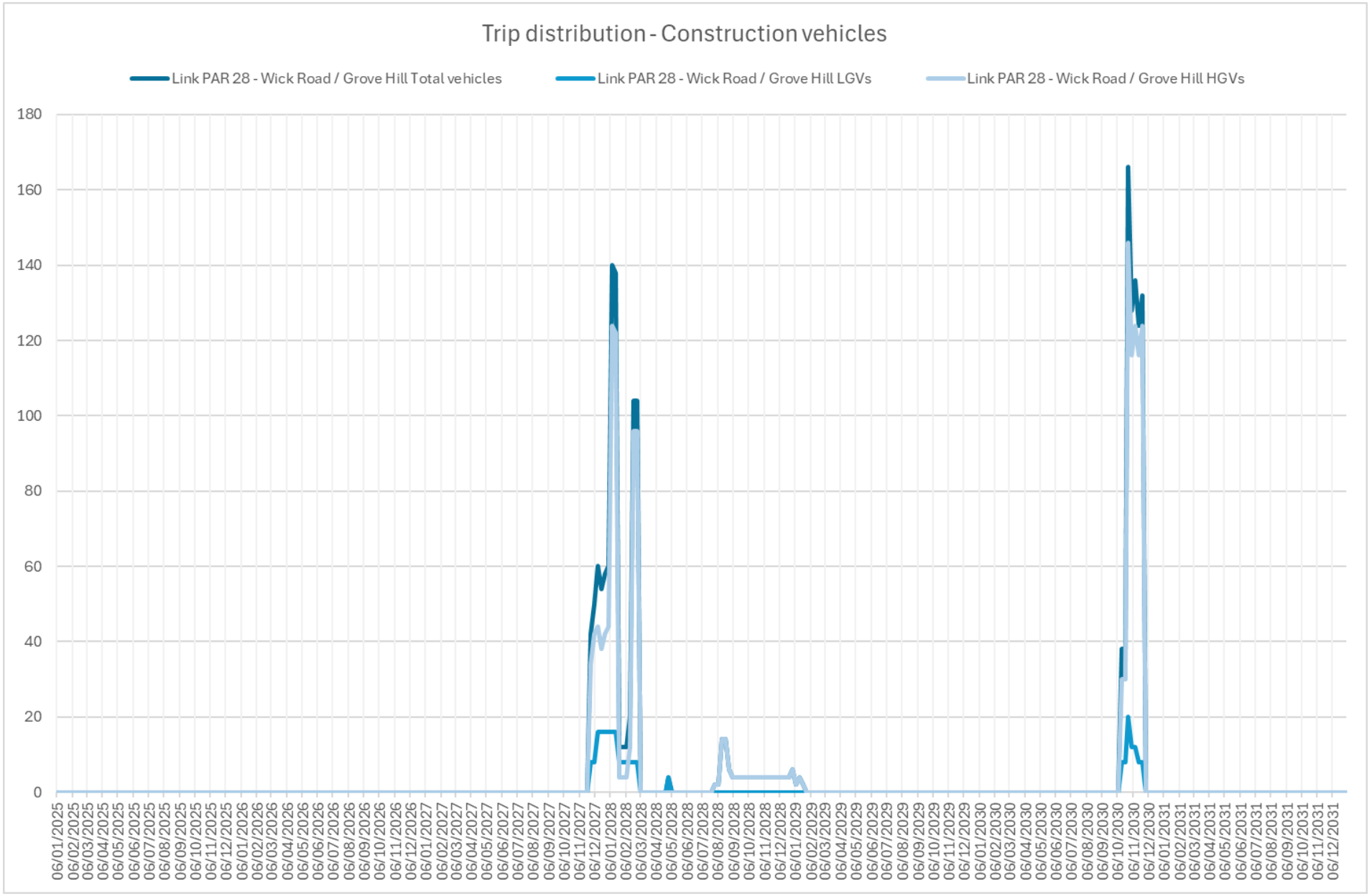


Image A16.4.29 Construction vehicles daily trip distribution of Perry Lane (Link PAR 29)

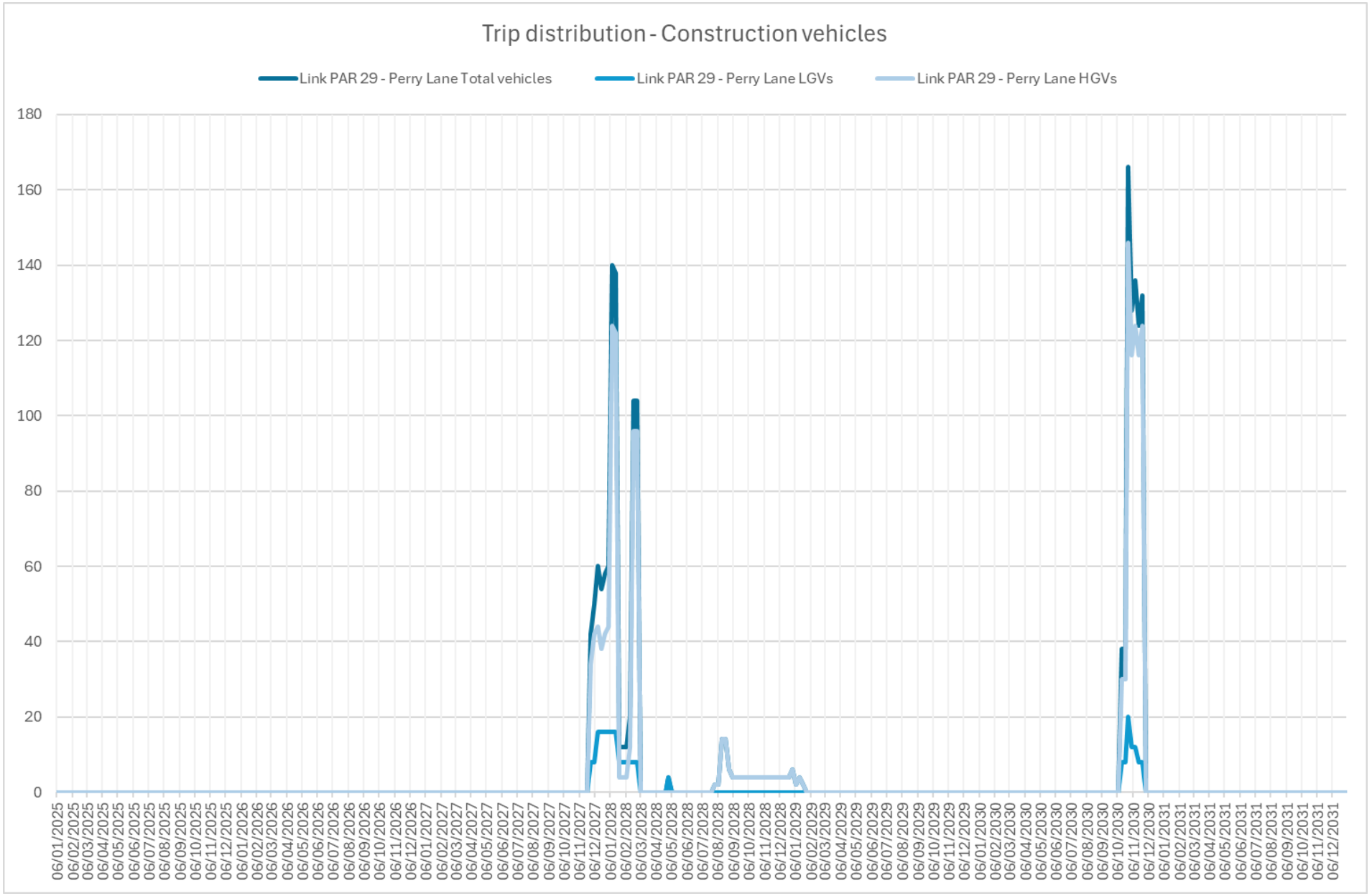


Image A16.4.30 Construction vehicles daily trip distribution of Bentley Road (Link PAR 30)

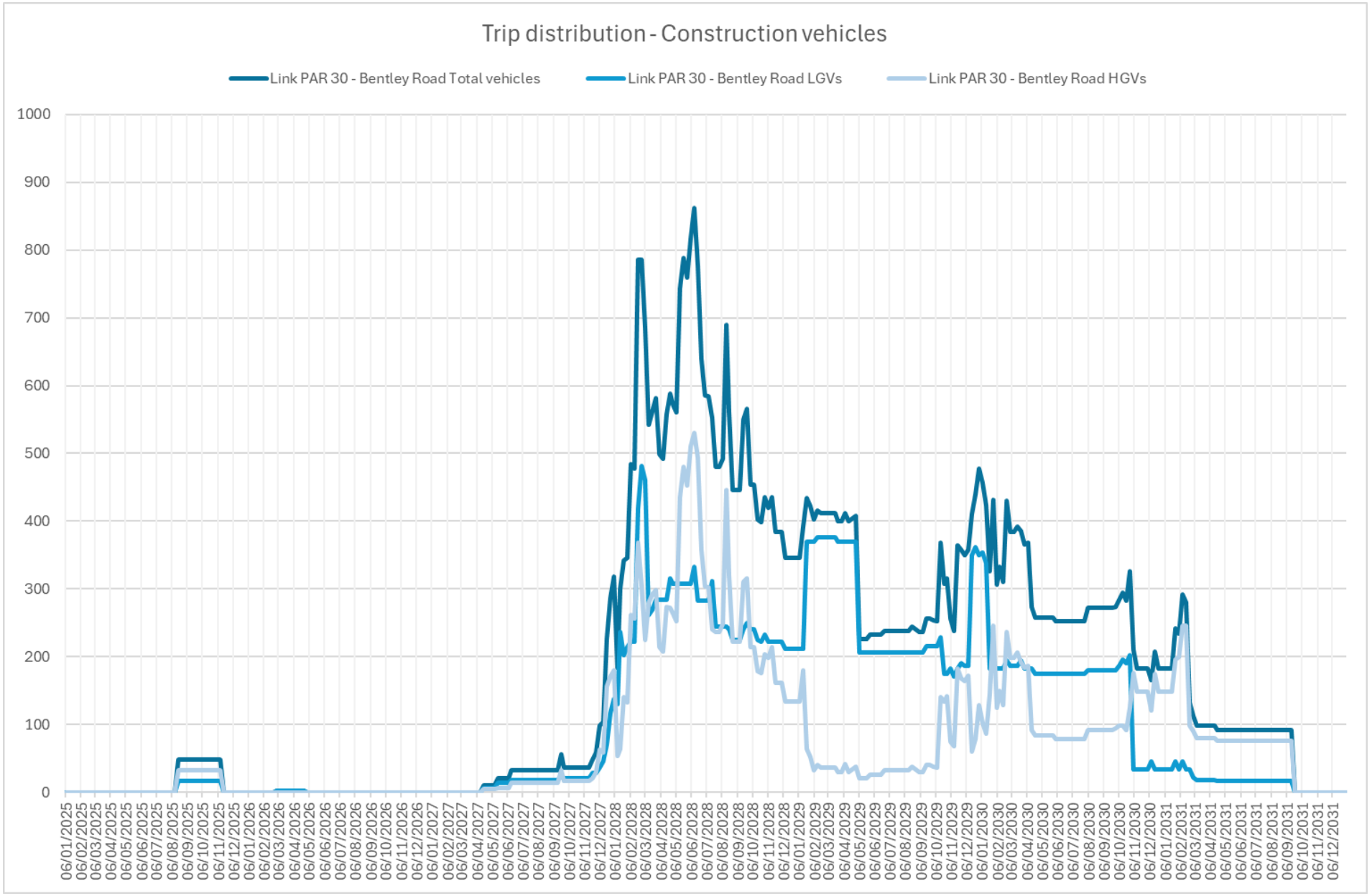


Image A16.4.31 Construction vehicles daily trip distribution of Ardleigh Road/Little Bromley Road (Link PAR 31)

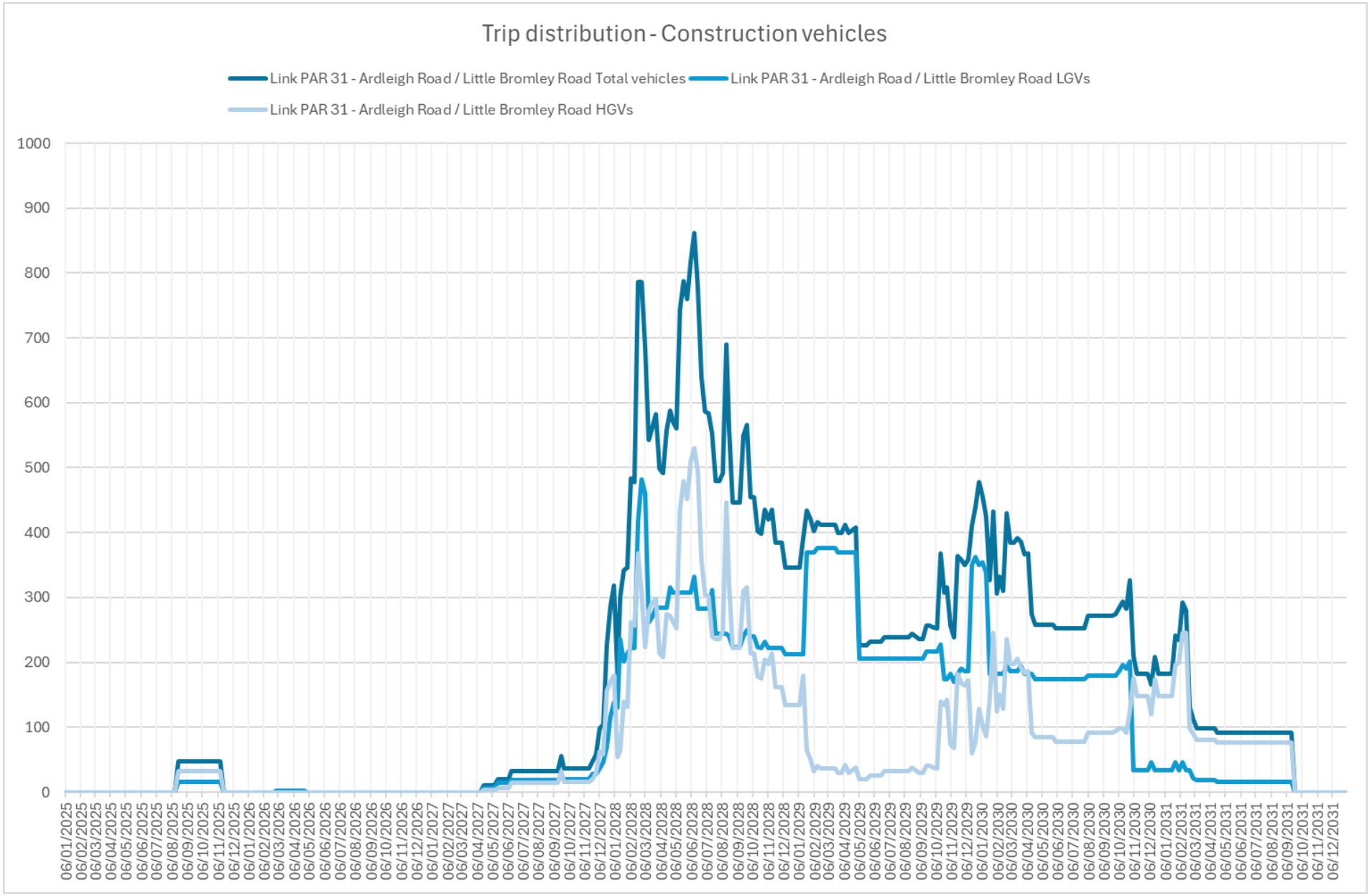


Image A16.4.32 Construction vehicles daily trip distribution of Wick Lane (Link PAR 32)

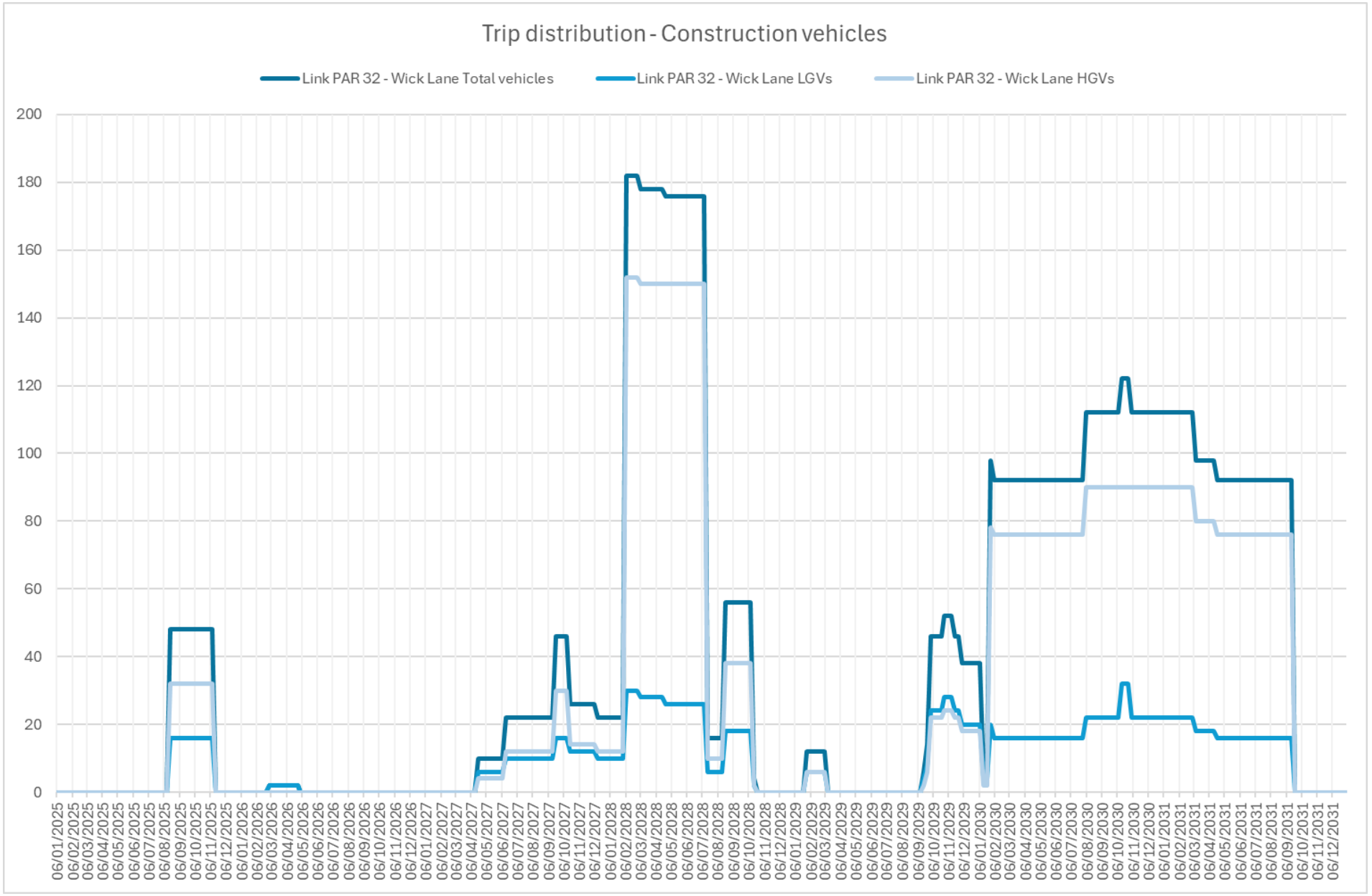


Image A16.4.33 Construction vehicles daily trip distribution of Old Ipswich Road (Link PAR 33)

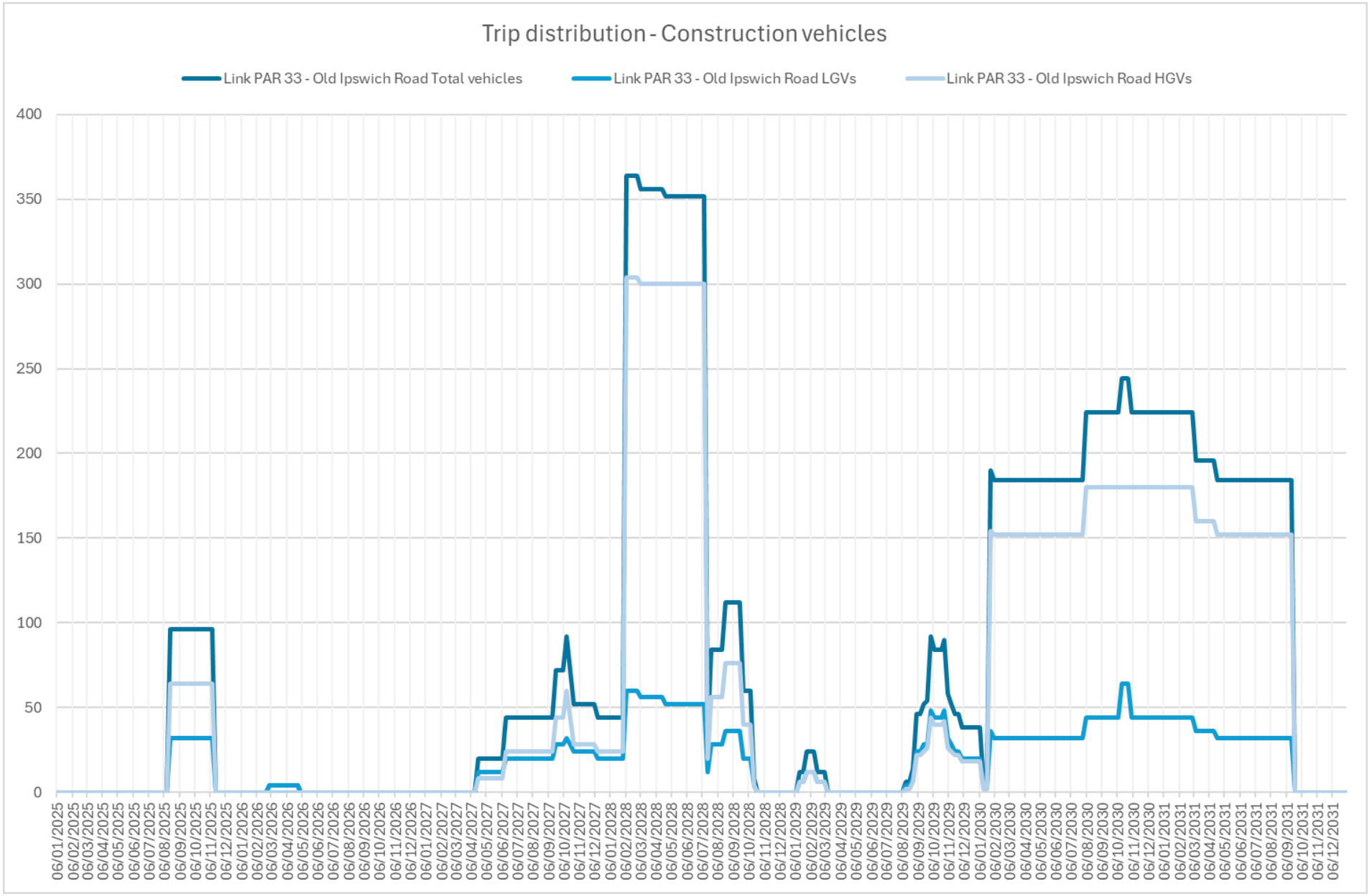


Image A16.4.34 Construction vehicles daily trip distribution of Turnpike Close (Link PAR 34)

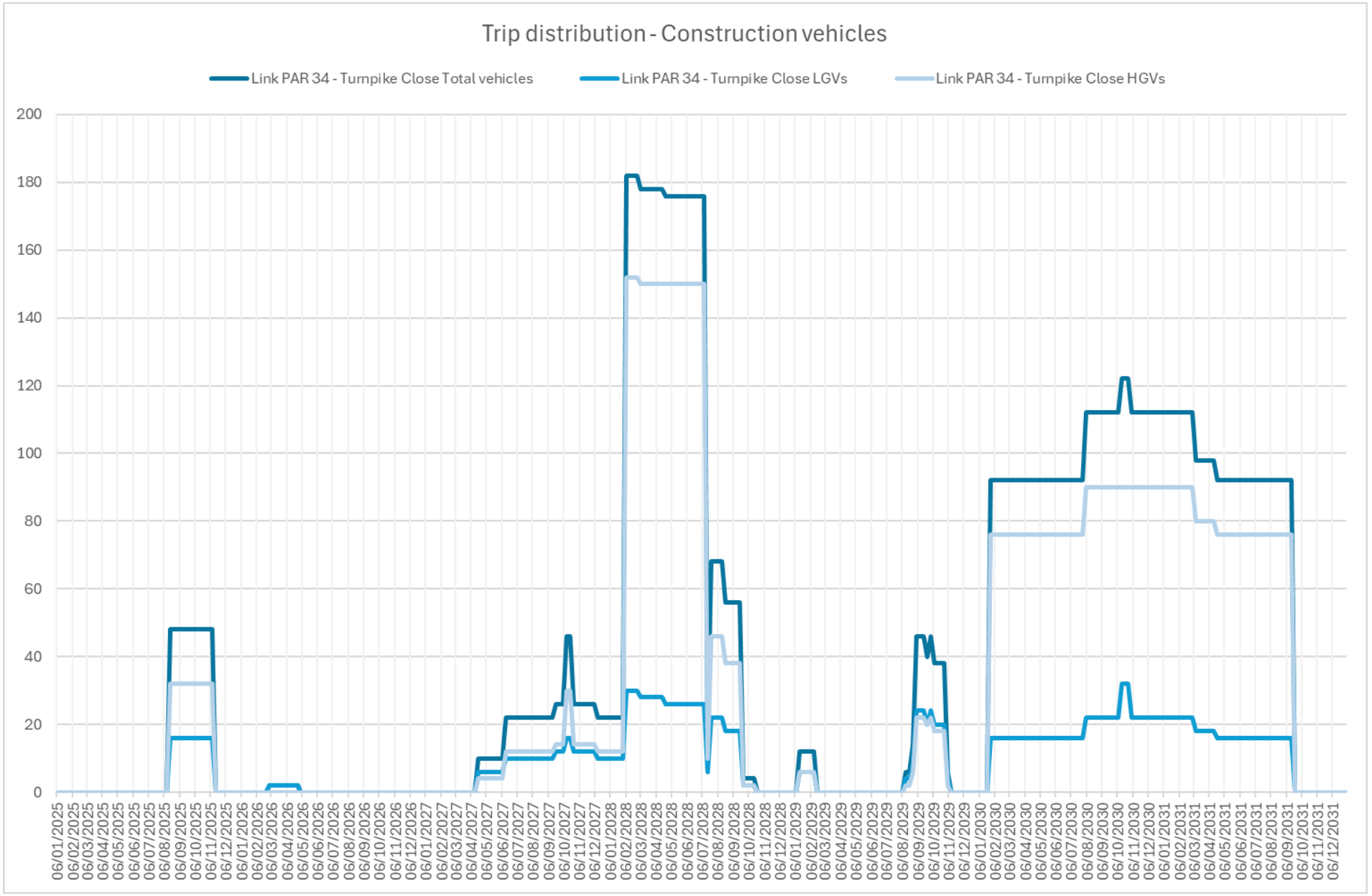


Image A16.4.35 Construction vehicles daily trip distribution of A1341 Via Urbis Romanae (Link PAR 35)

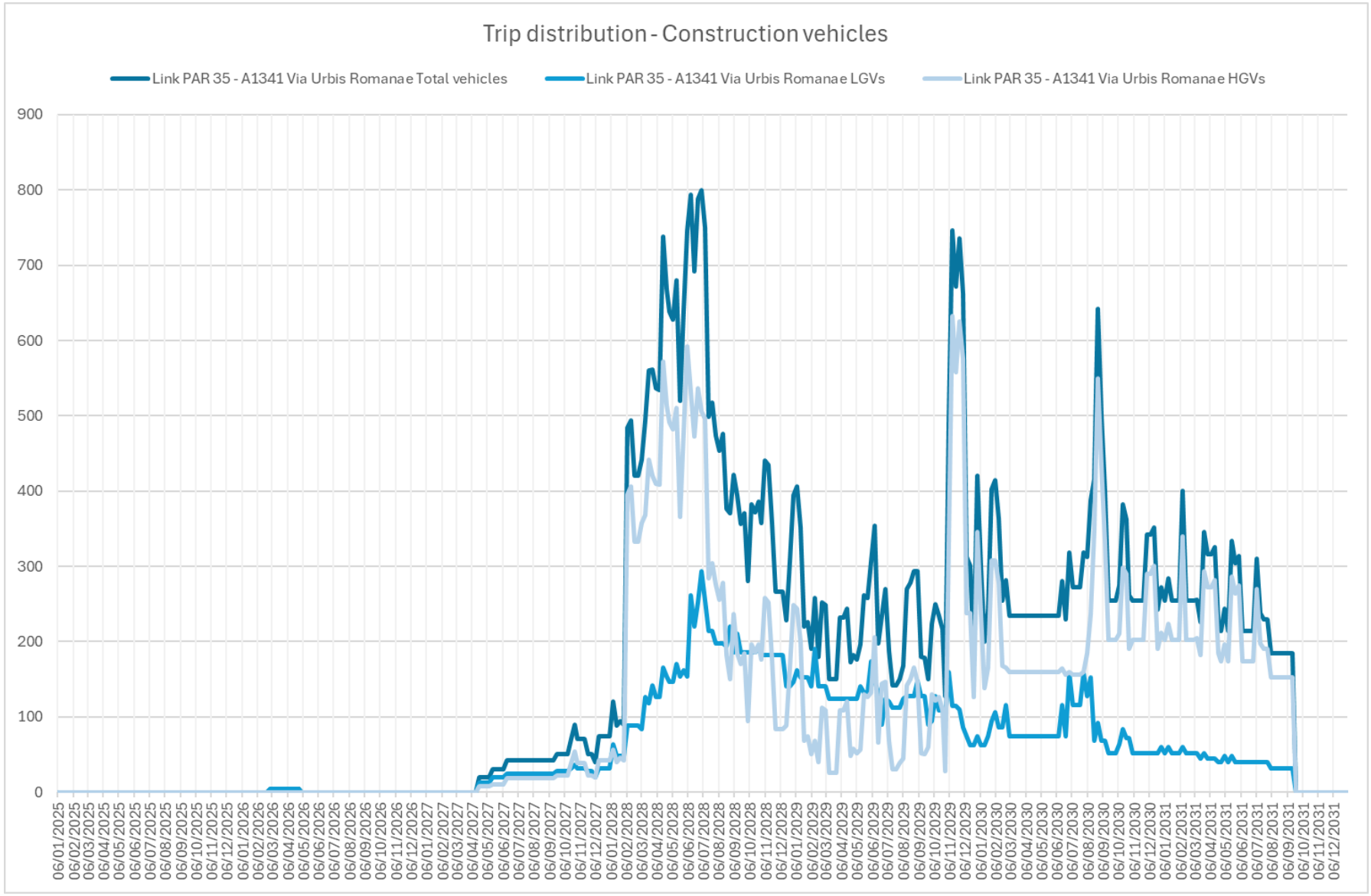


Image A16.4.36 Construction vehicles daily trip distribution of A134 Northern Approach Rd/A134 The Causeway (Link PAR 36)

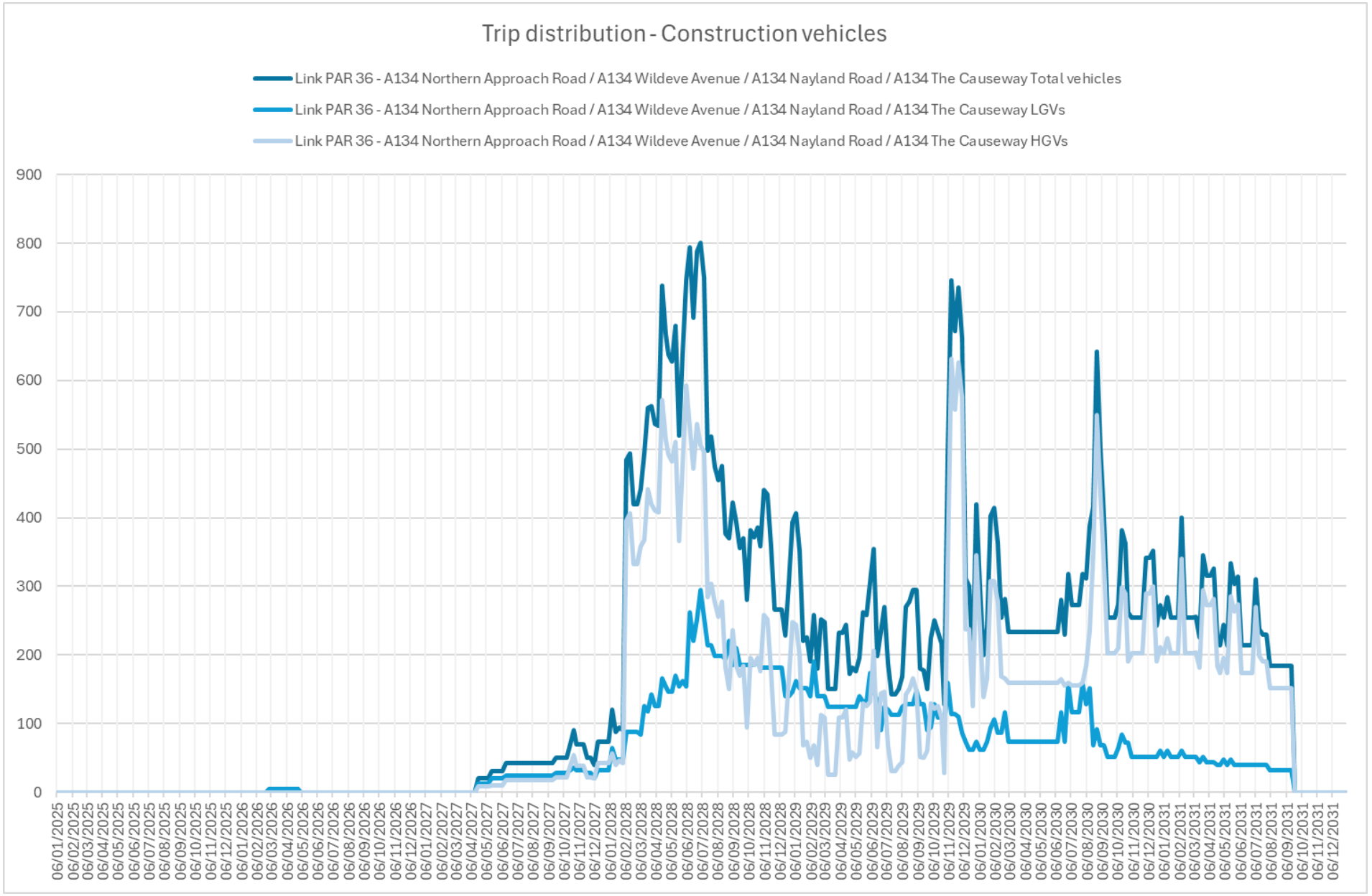


Image A16.4.37 Construction vehicles daily trip distribution of A1124 Halsted Road (Link PAR 37)

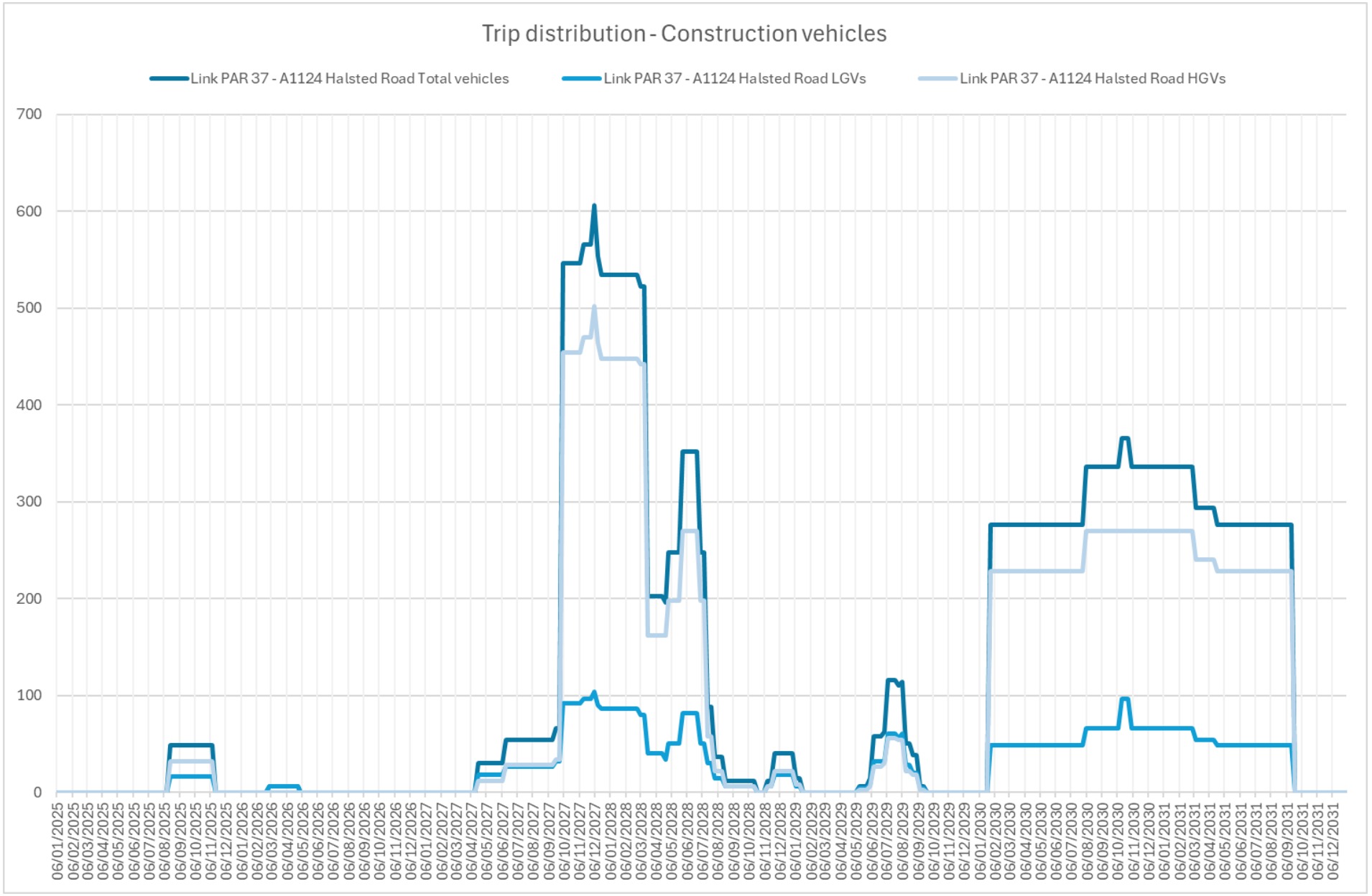


Image A16.4.38 Construction vehicles daily trip distribution of Mill Road (Link PAR 38)

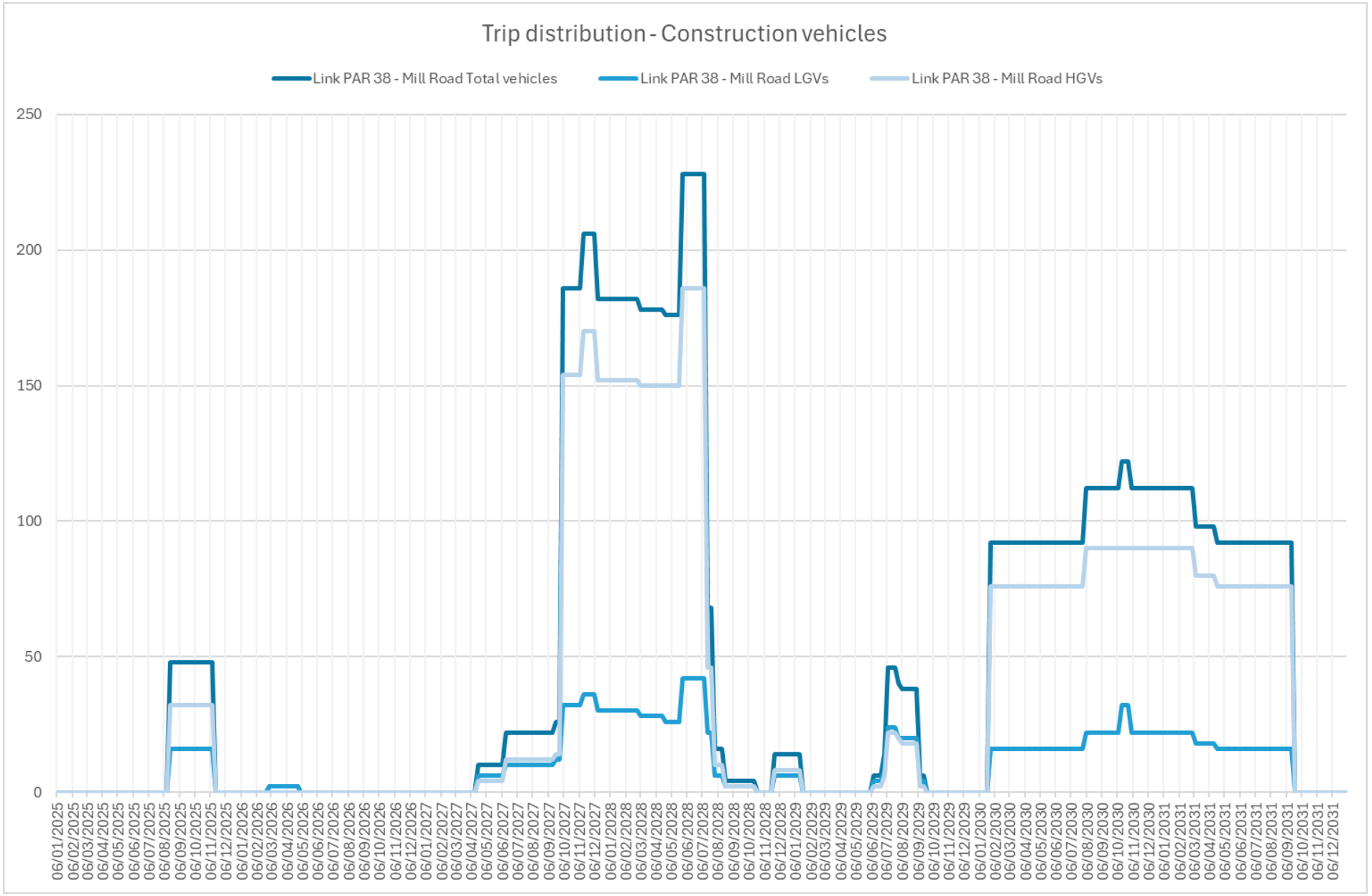


Image A16.4.39 Construction vehicles daily trip distribution of Great Tey Road (Link PAR 39)

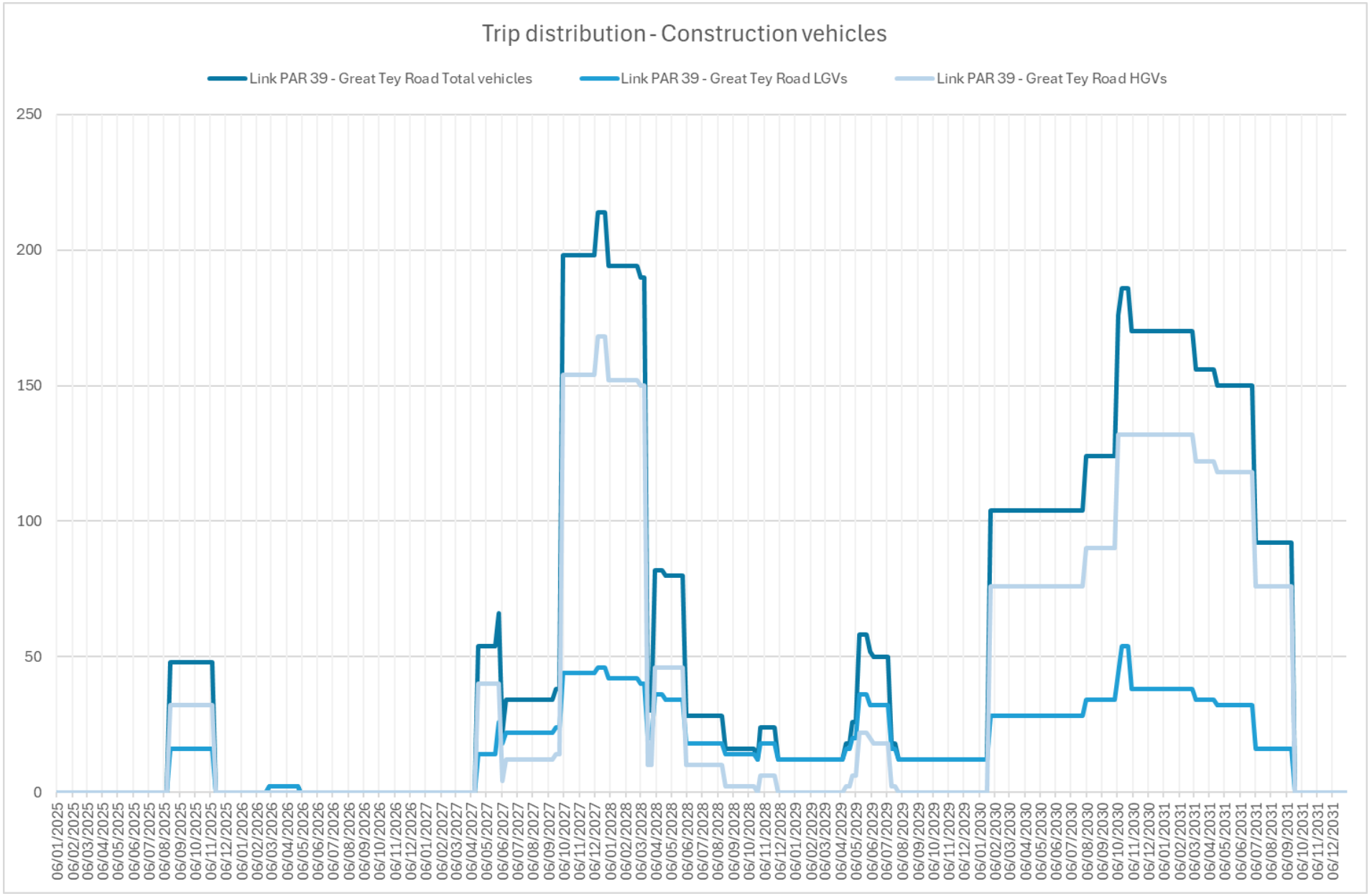


Image A16.4.40 Construction vehicles daily trip distribution of A120 Colchester Road (Link PAR 40)

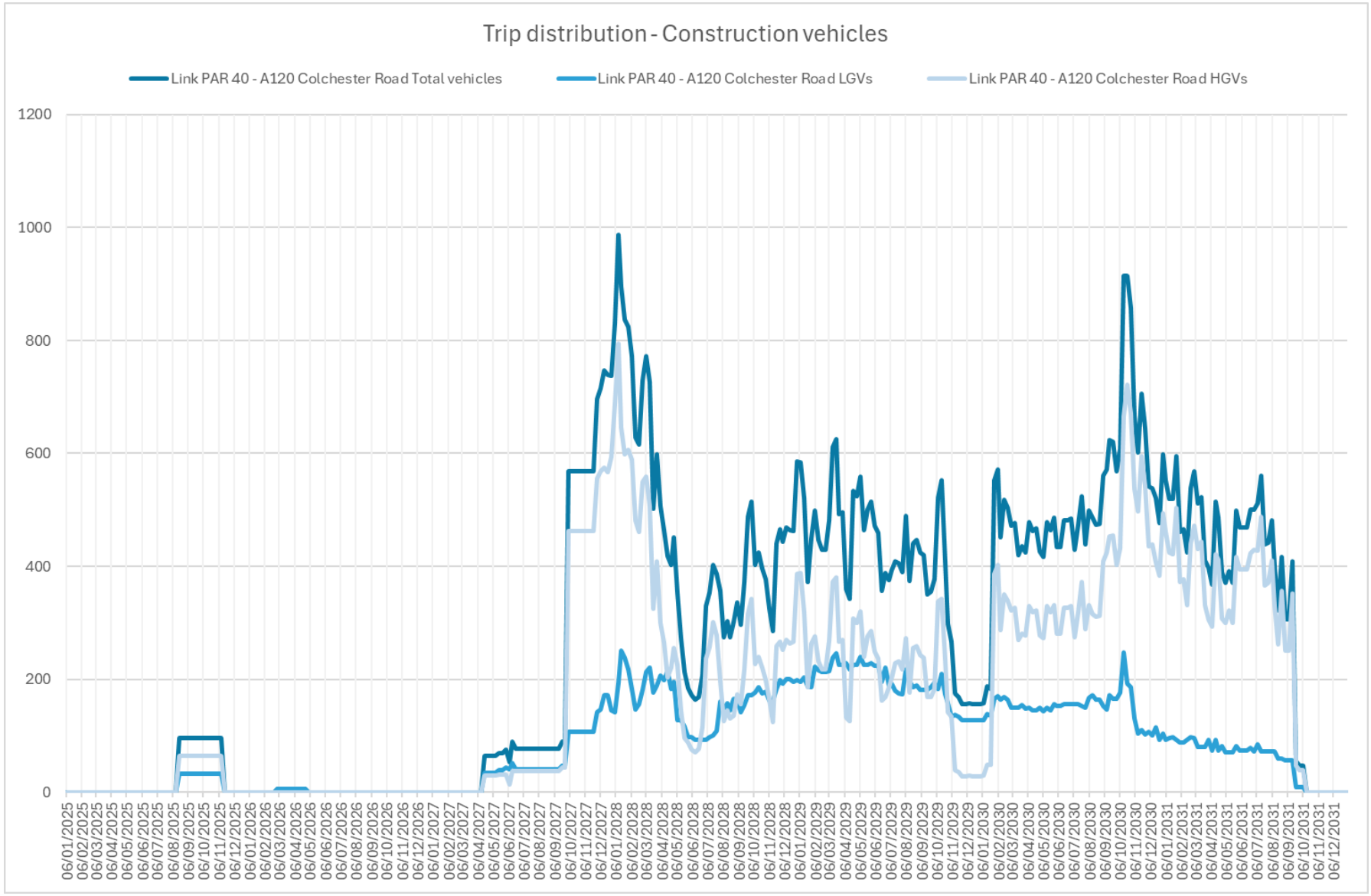


Image A16.4.41 Construction vehicles daily trip distribution of B1018 Braintree Road/B1018 Witham Road (Link PAR 41)

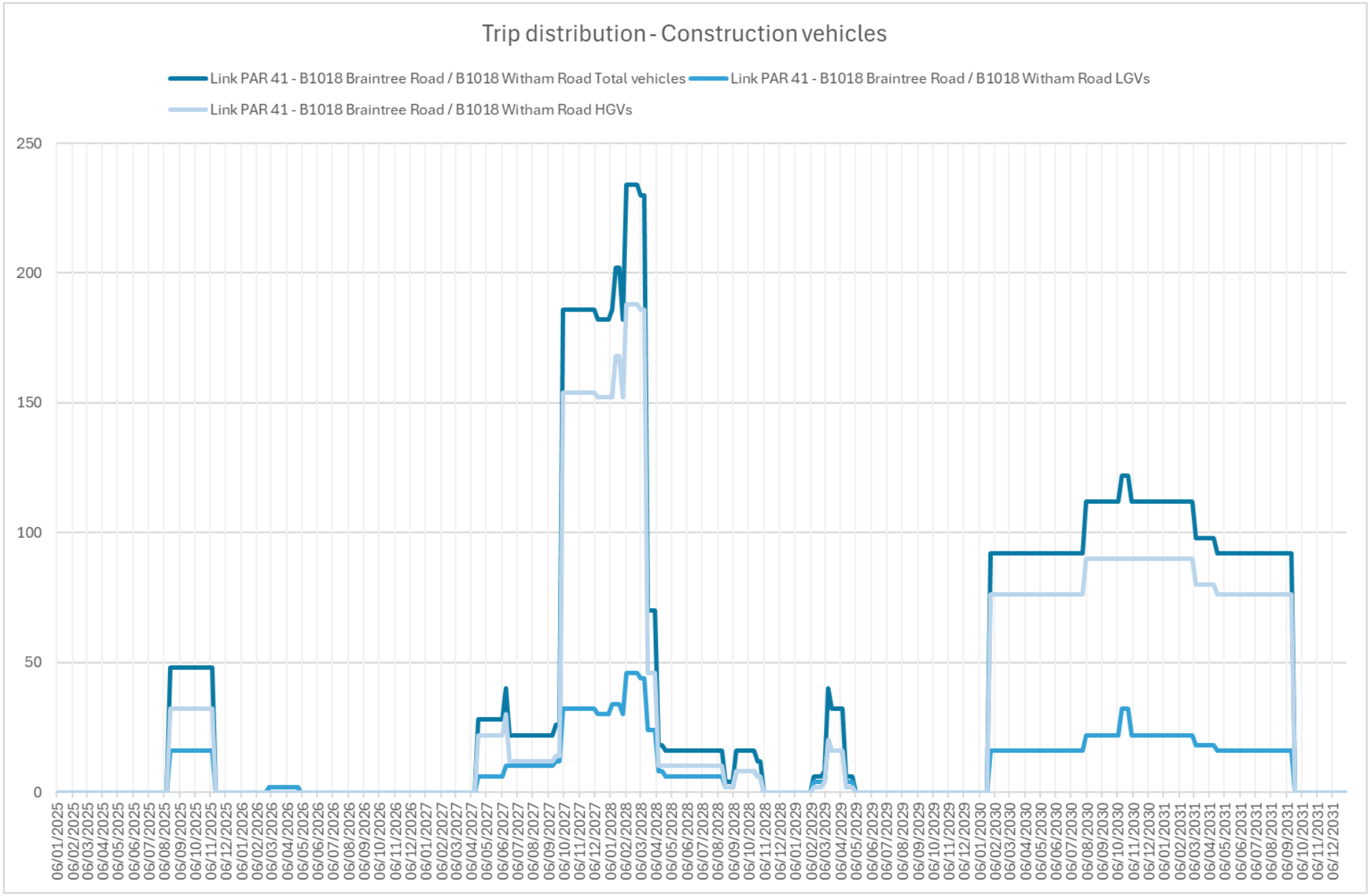


Image A16.4.42 Construction vehicles daily trip distribution of B1389 Hatfield Road (Link PAR 42)

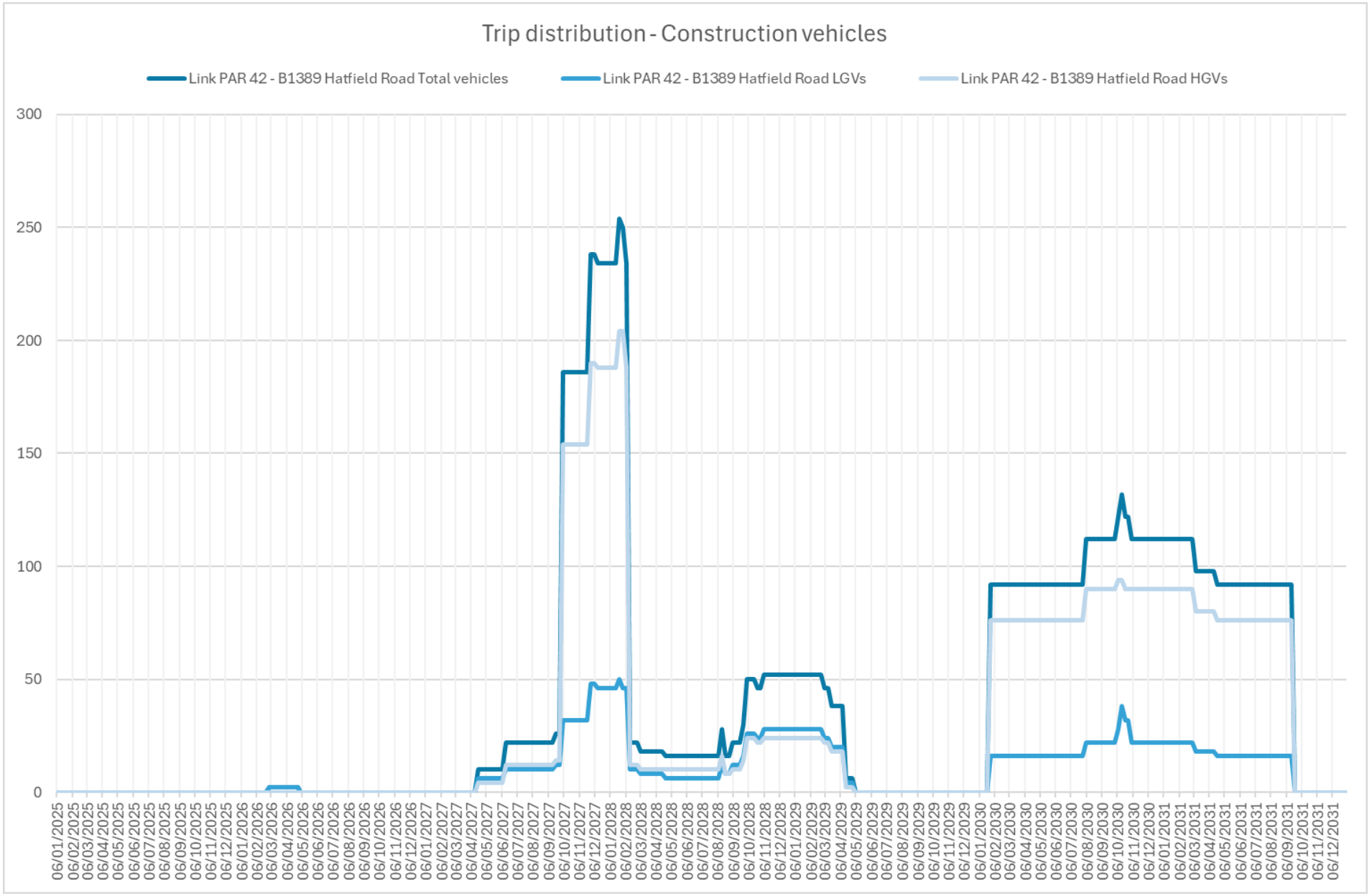


Image A16.4.43 Construction vehicles daily trip distribution of Spinks Ln/Highfields Rd/Faulkbourne Rd (Link PAR 43)

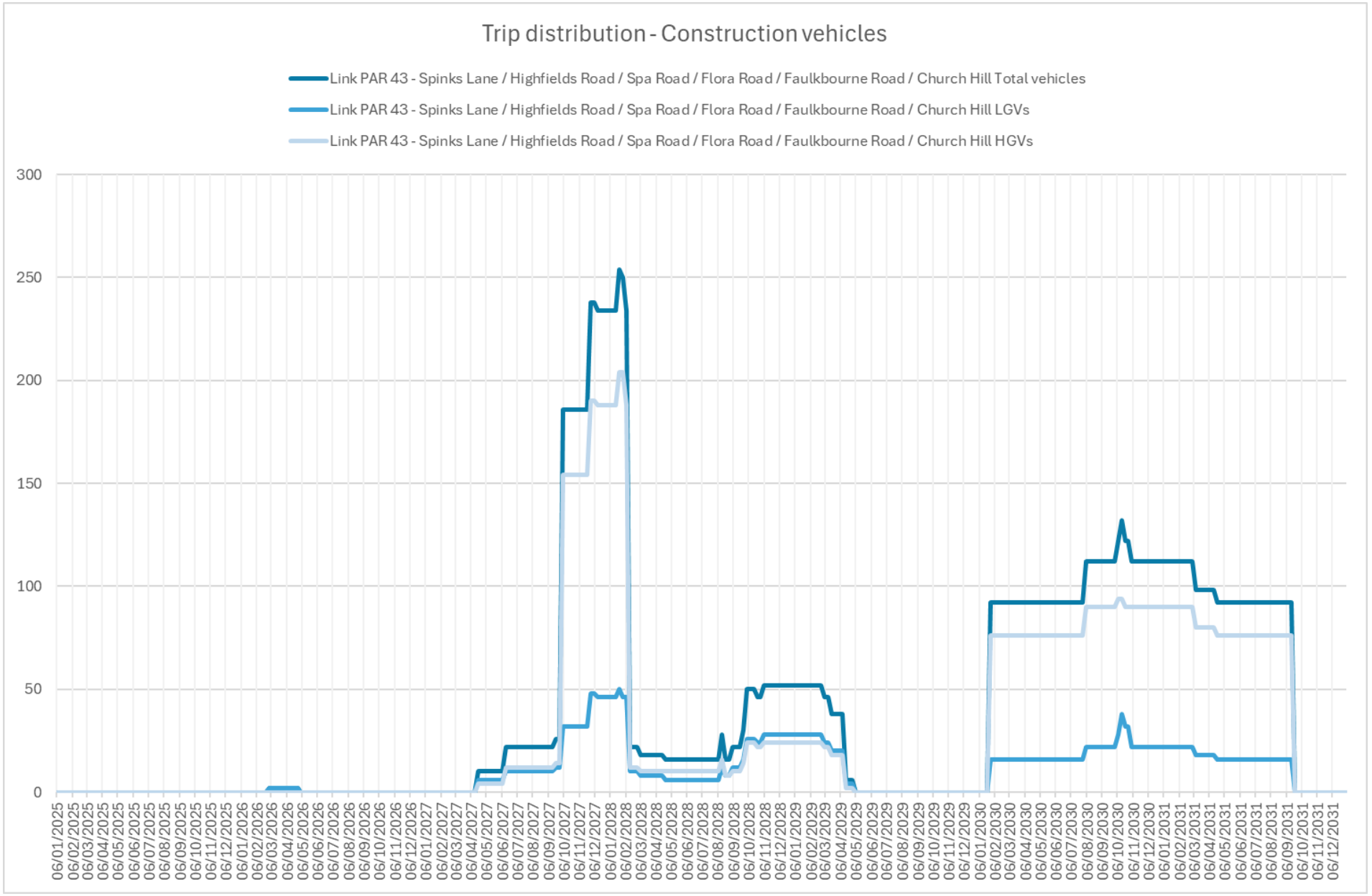


Image A16.4.44 Construction vehicles daily trip distribution of A131 Great Notley Bypass/A131 Braintree Road (Link PAR 44)

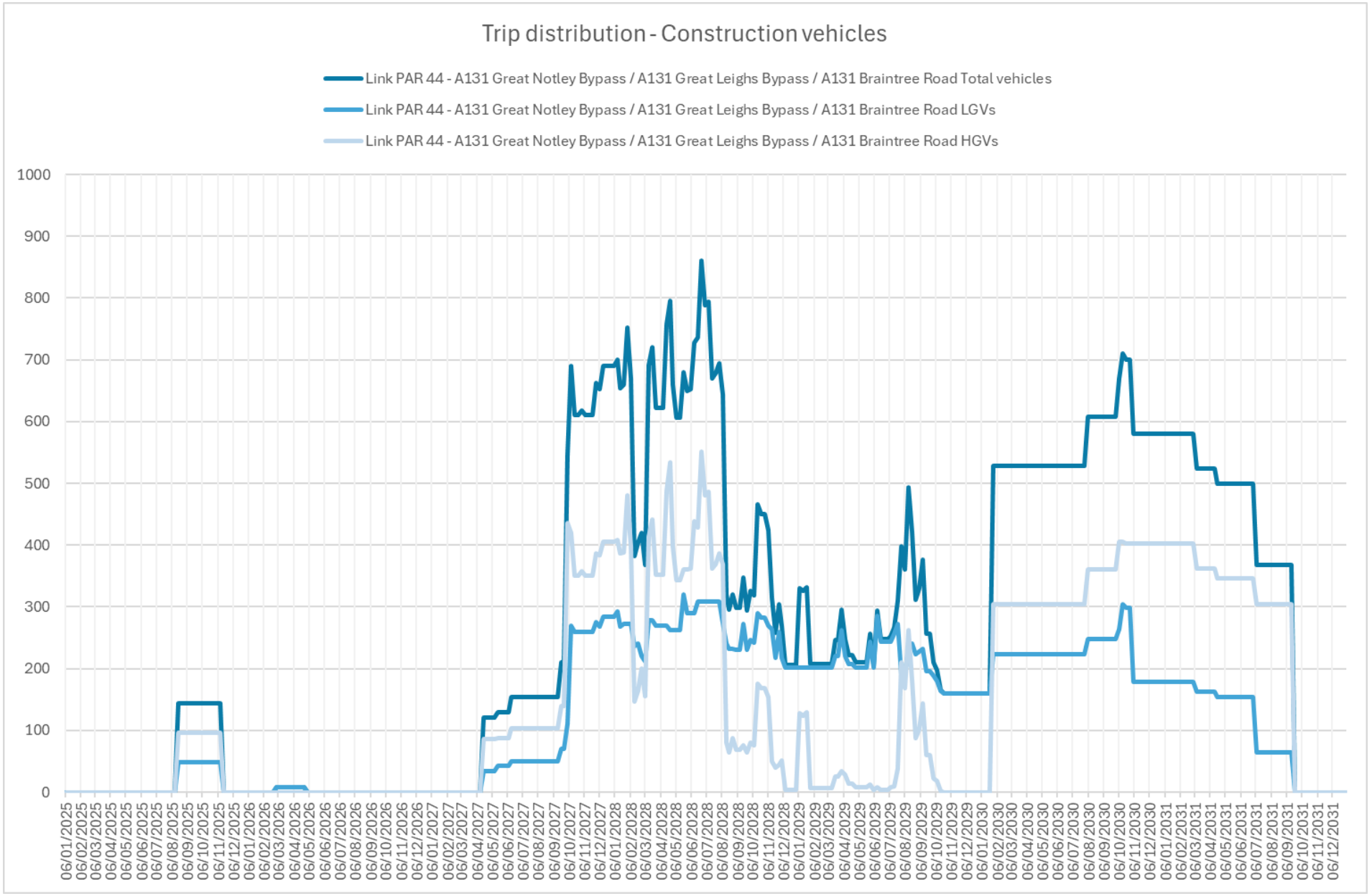


Image A16.4.45 Construction vehicles daily trip distribution of B1008 Essex Regiment Way (Link PAR 45)

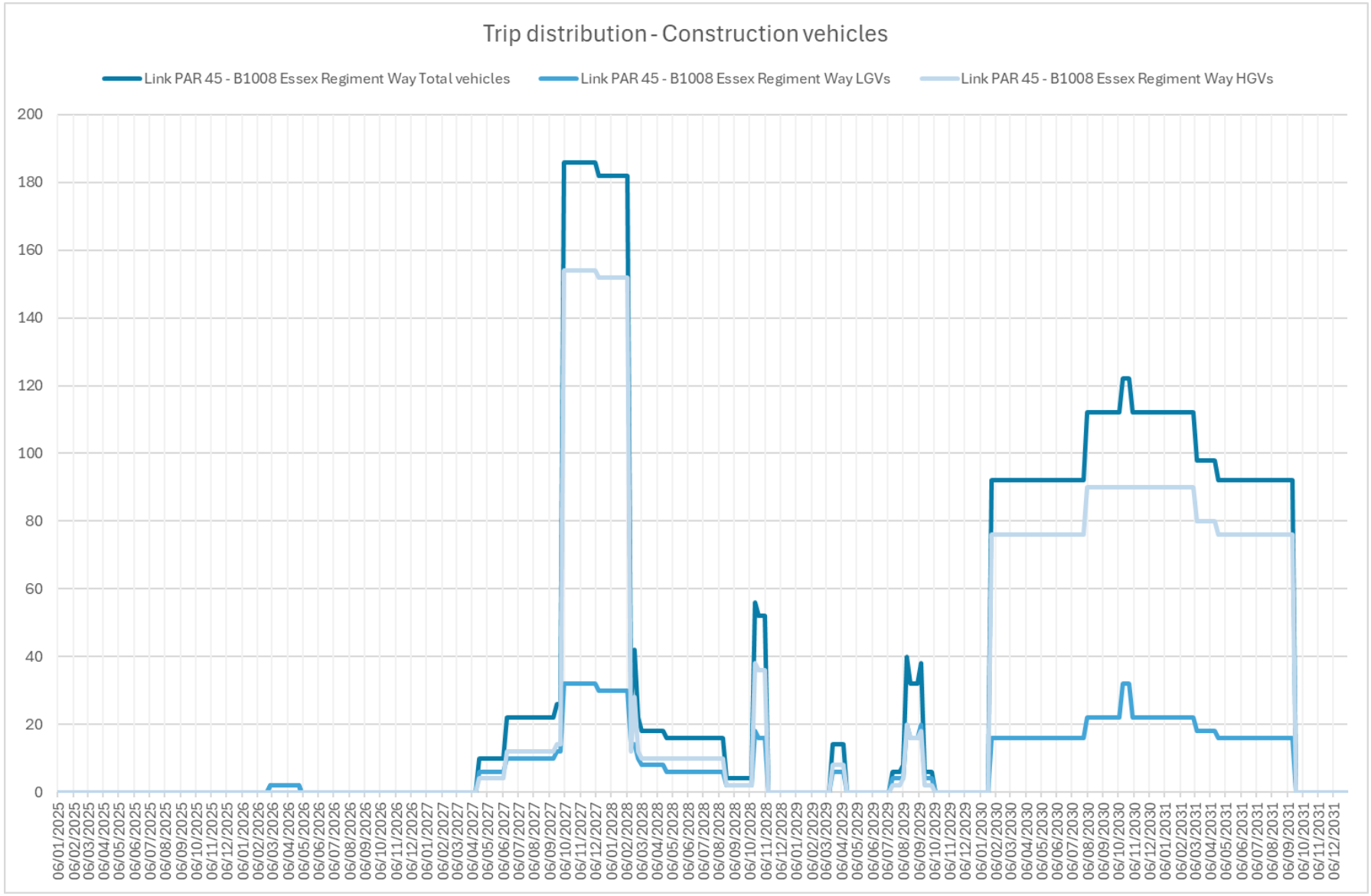


Image A16.4.46 Construction vehicles daily trip distribution of B1008 Braintree Road/B1008 Main Road (Link PAR 46)

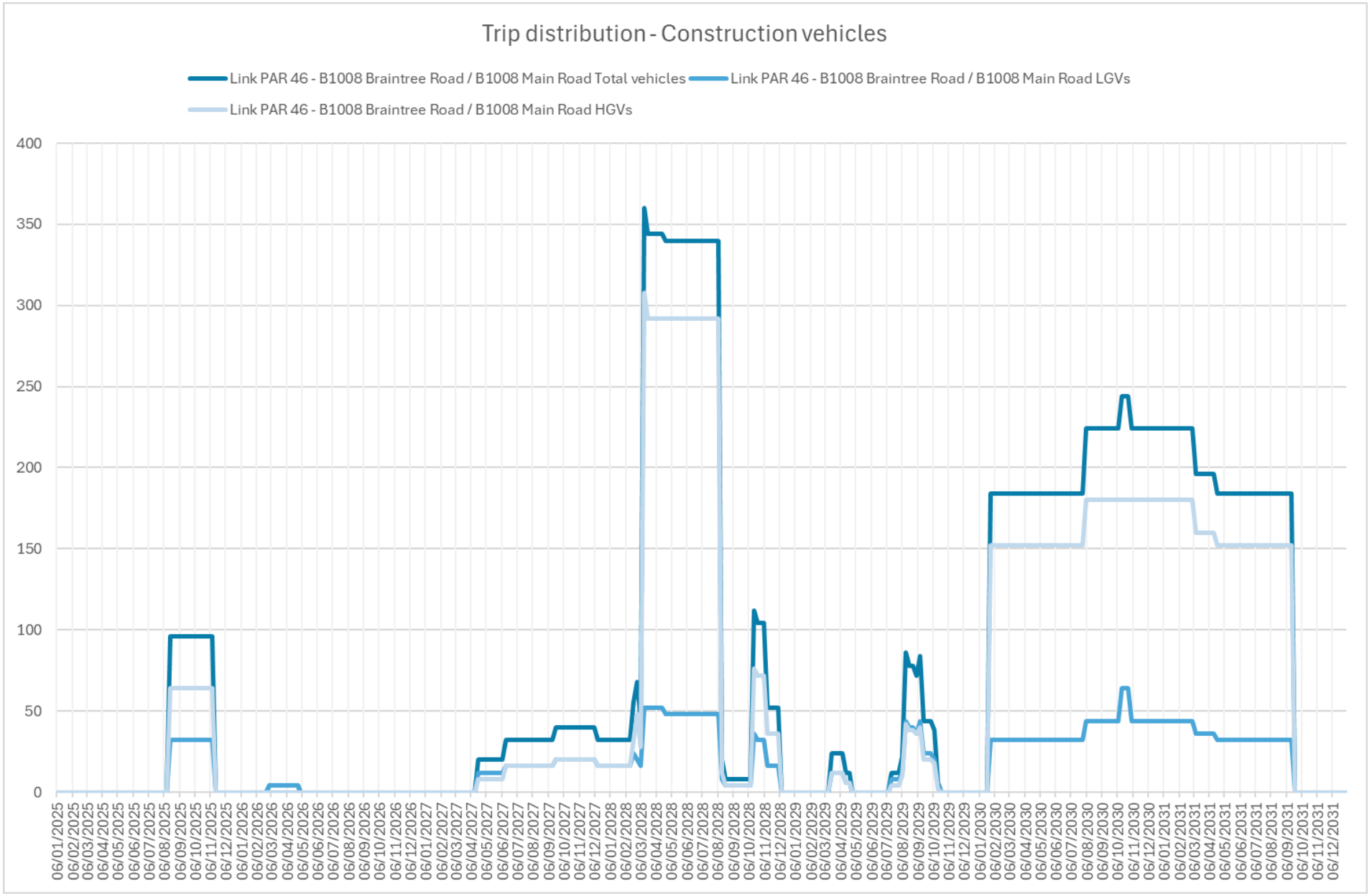


Image A16.4.47 Construction vehicles daily trip distribution of Chatham Hall Lane (Link PAR 47)

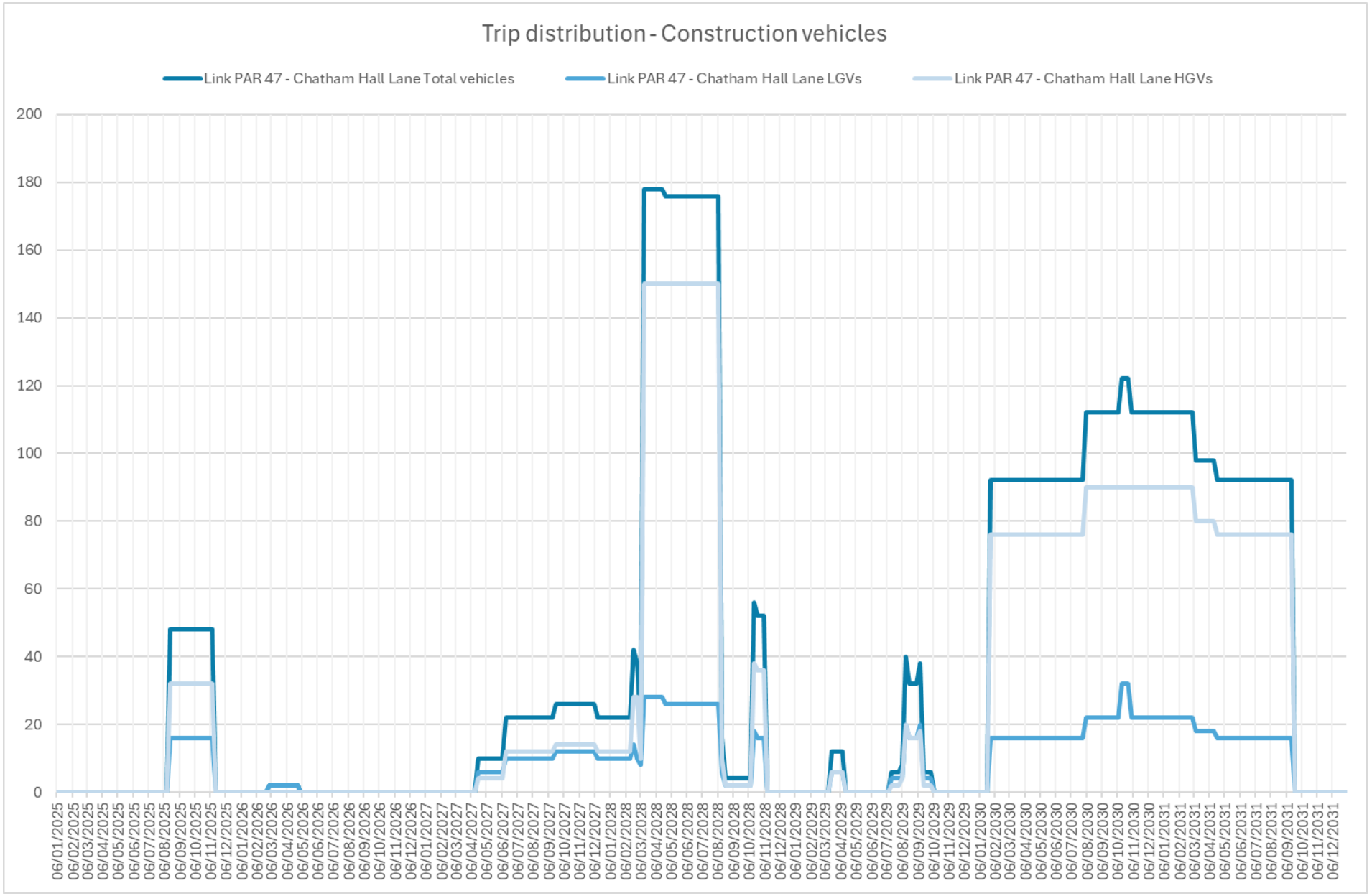


Image A16.4.48 Construction vehicles daily trip distribution of Chelmsford Road (Link PAR 48)

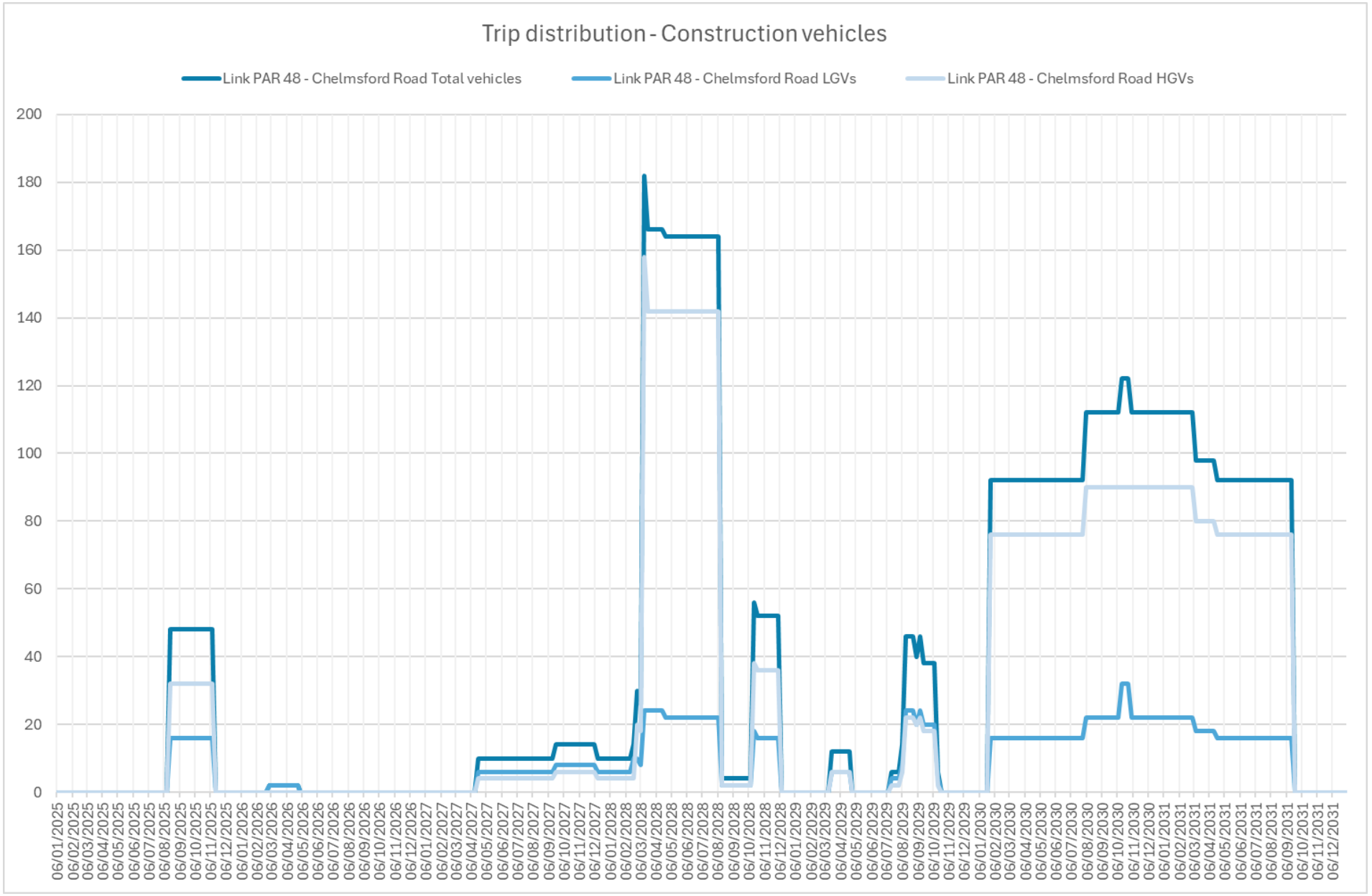


Image A16.4.49 Construction vehicles daily trip distribution of A414 Three Mile Hill/A1114 London Road (Link PAR 49)

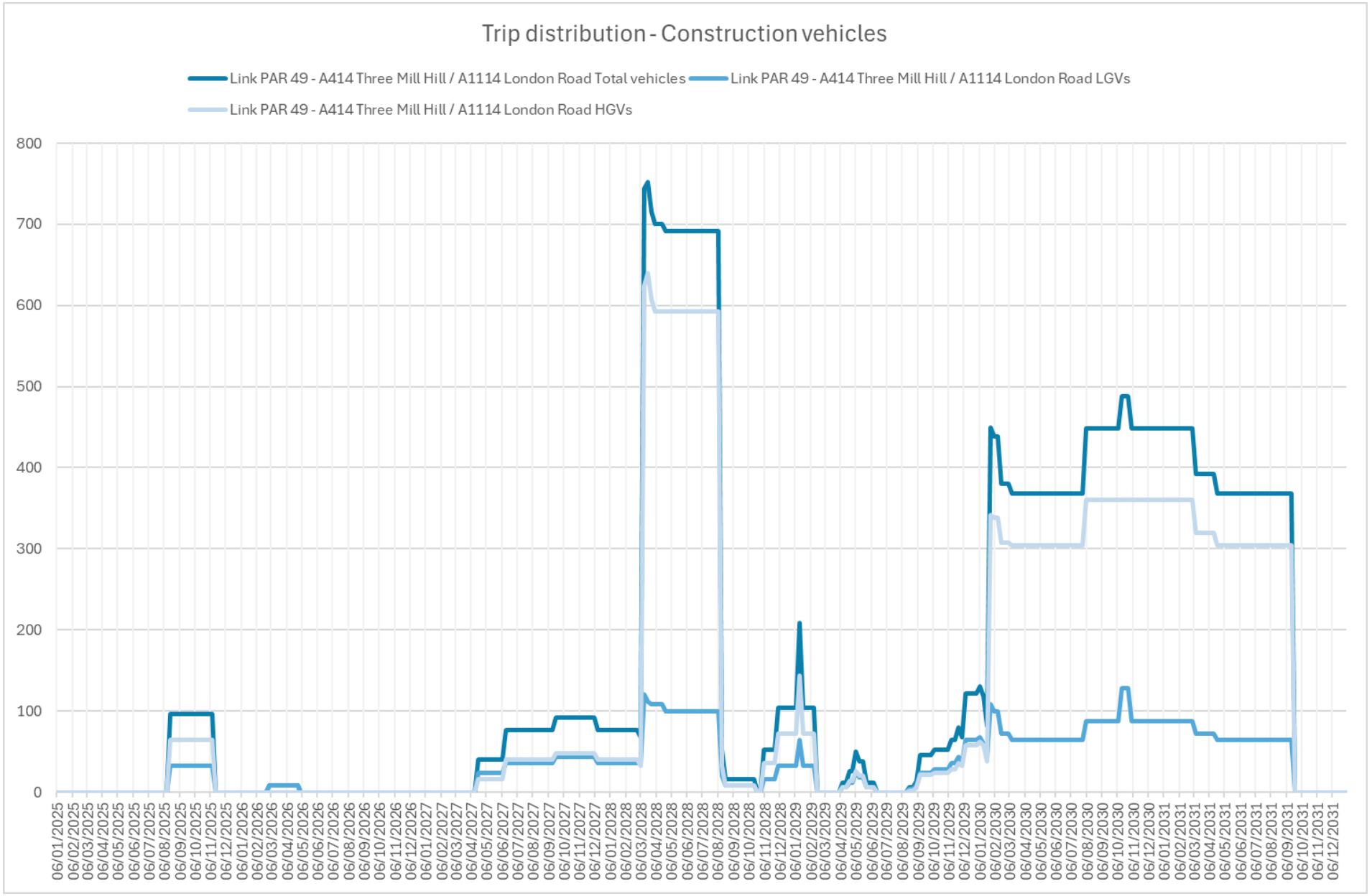


Image A16.4.50 Construction vehicles daily trip distribution of A1016 Waterhouse Lane/A1016 Rainsford Lane (Link PAR 50)

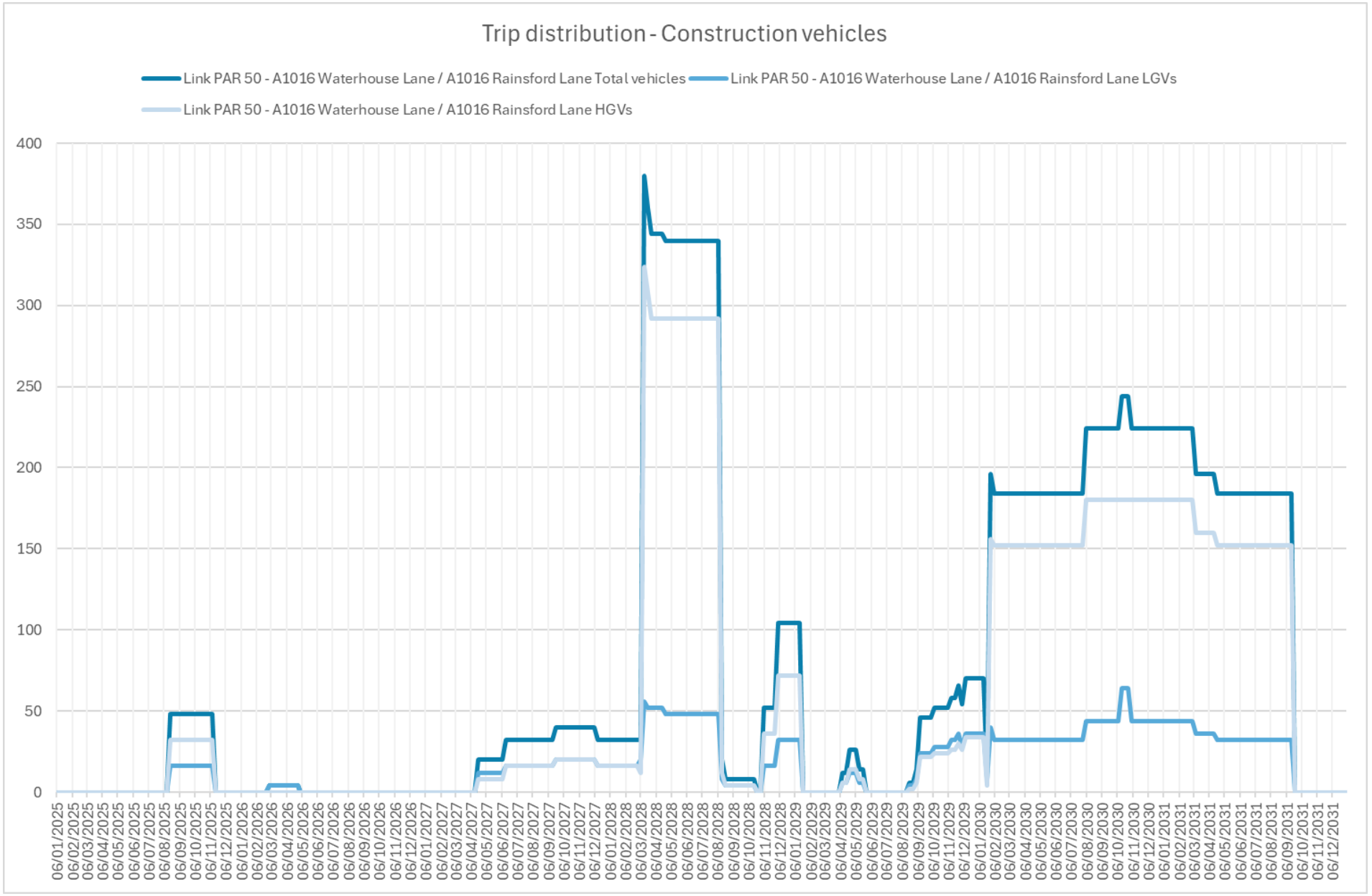


Image A16.4.51 Construction vehicles daily trip distribution of A1060 Rainsford Road/A1060 Roxwell Road (Link PAR 51)

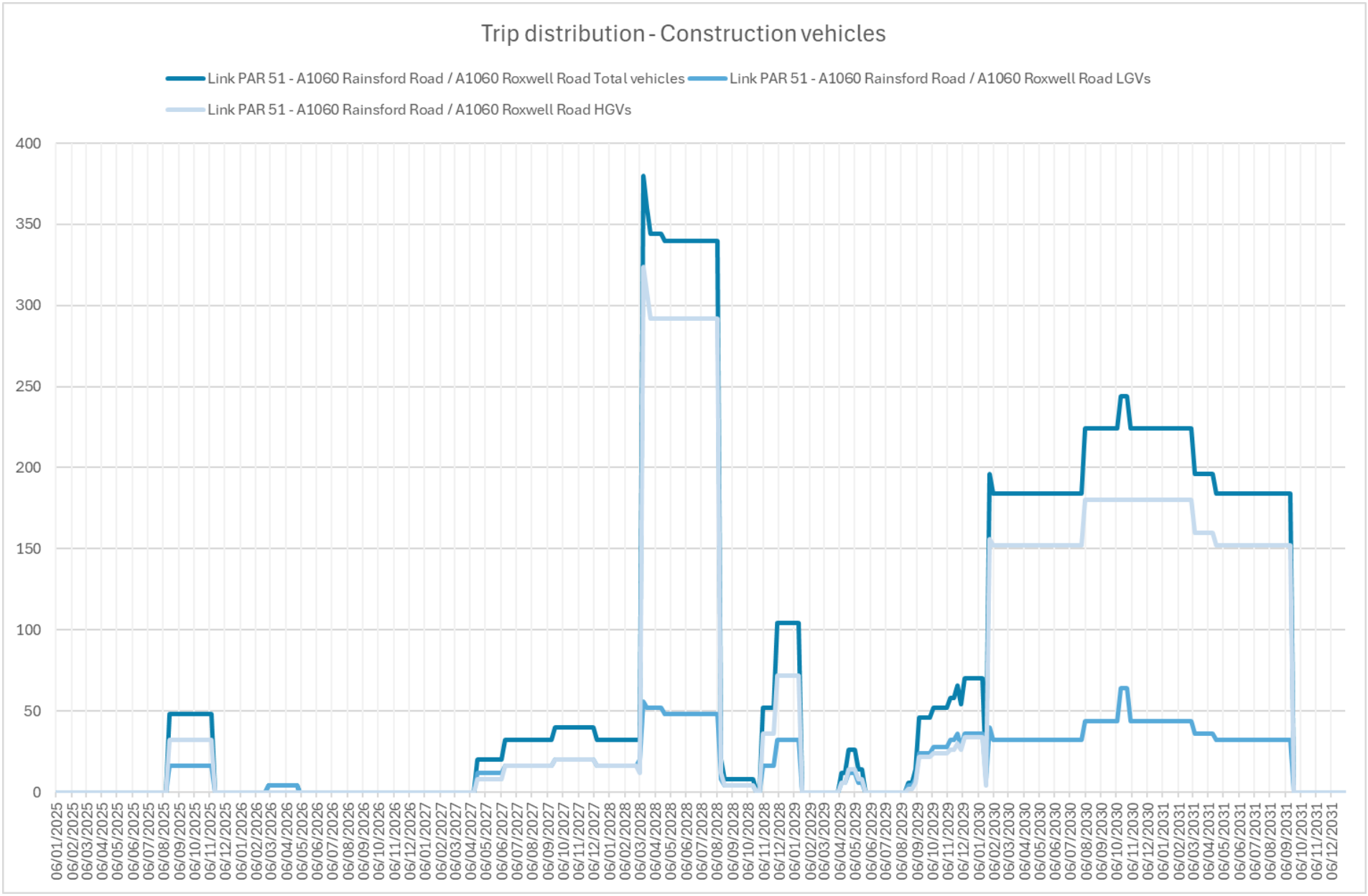


Image A16.4.52 Construction vehicles daily trip distribution of Vicarage Road (Link PAR 52)

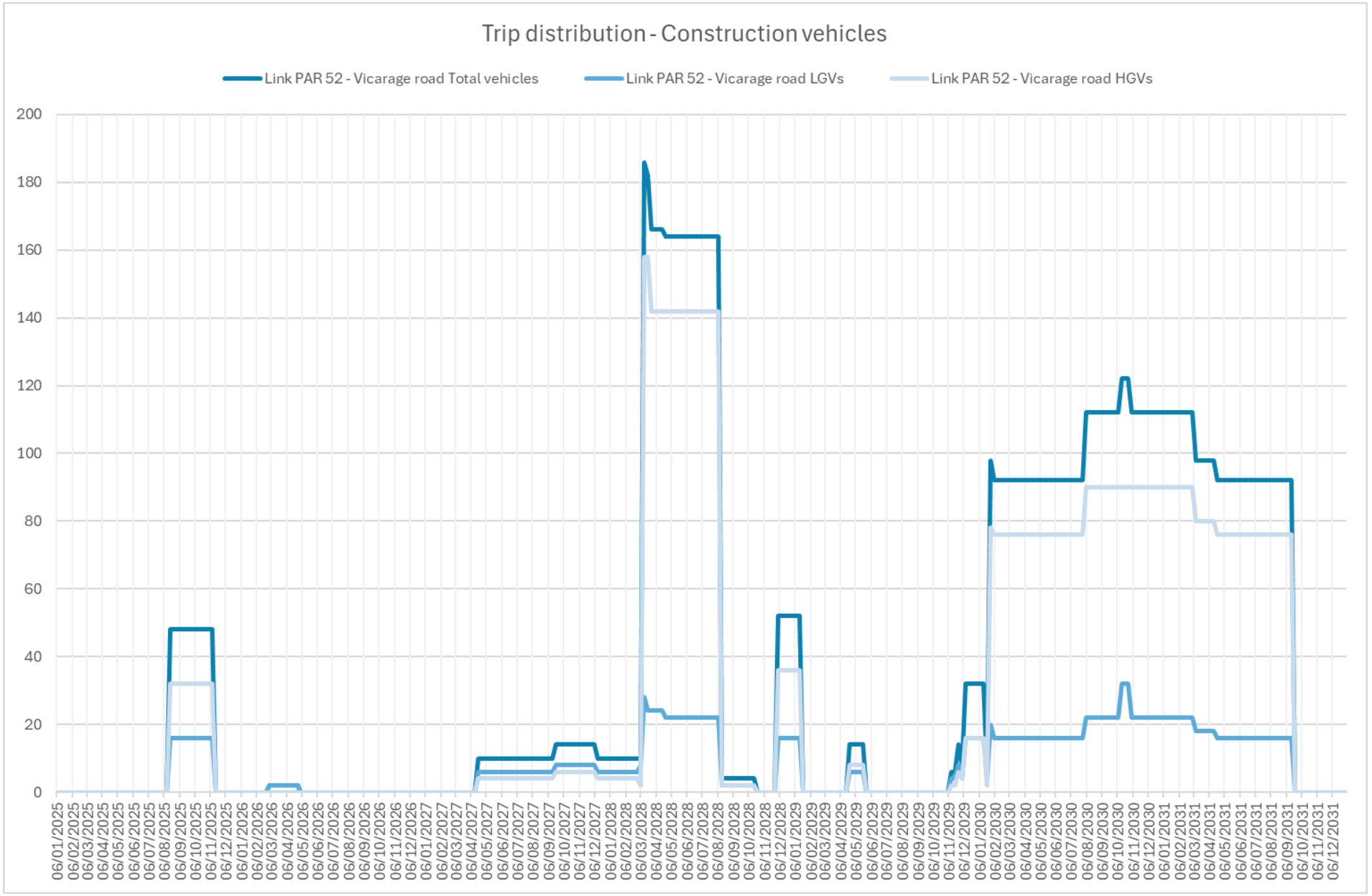


Image A16.4.53 Construction vehicles daily trip distribution of A414 Greenbury Way (Link PAR 53)

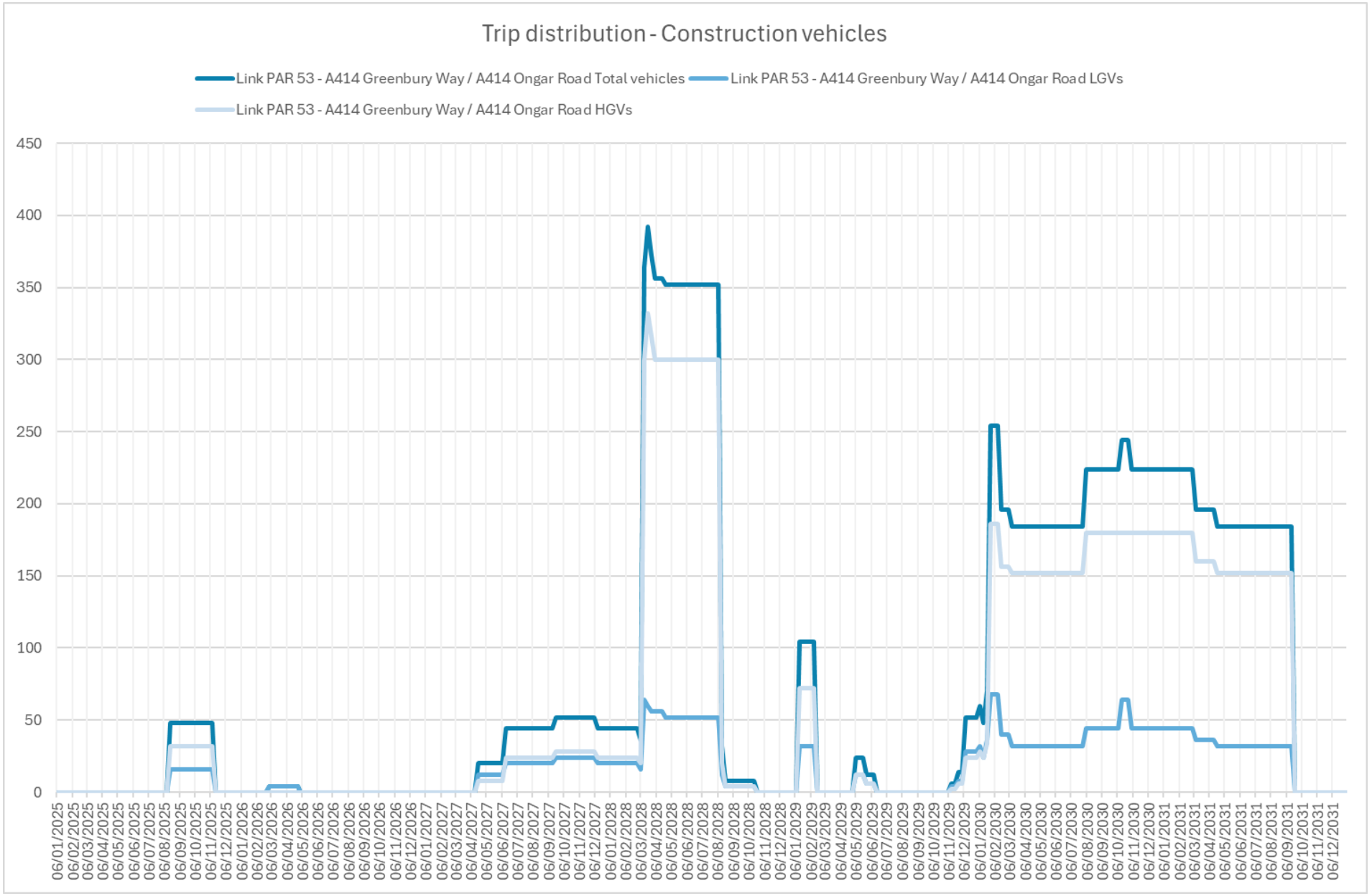


Image A16.4.54 Construction vehicles daily trip distribution of B1002 Main Road (Link PAR 54)

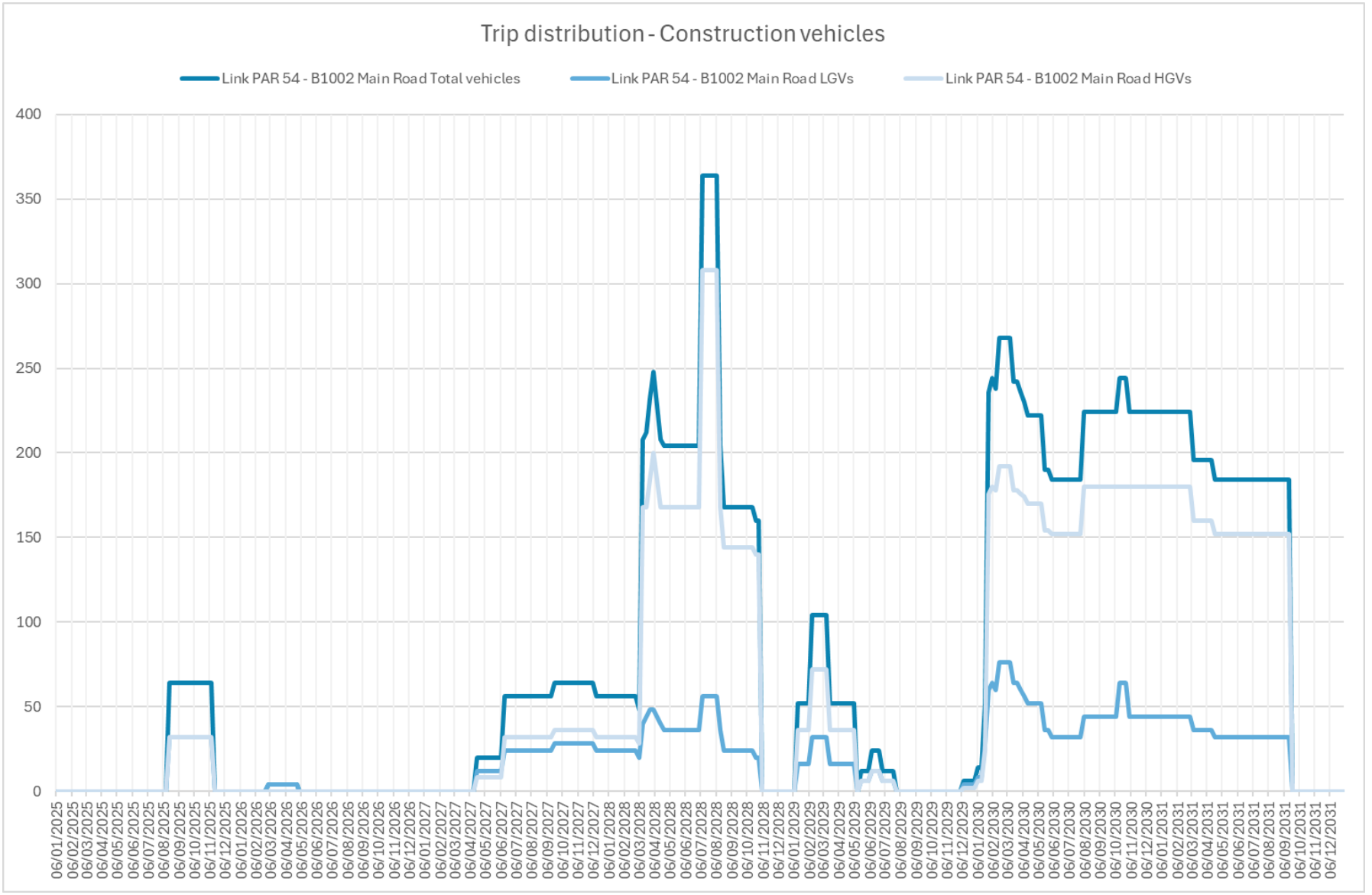


Image A16.4.55 Construction vehicles daily trip distribution of Wantz Road (Link PAR 55)

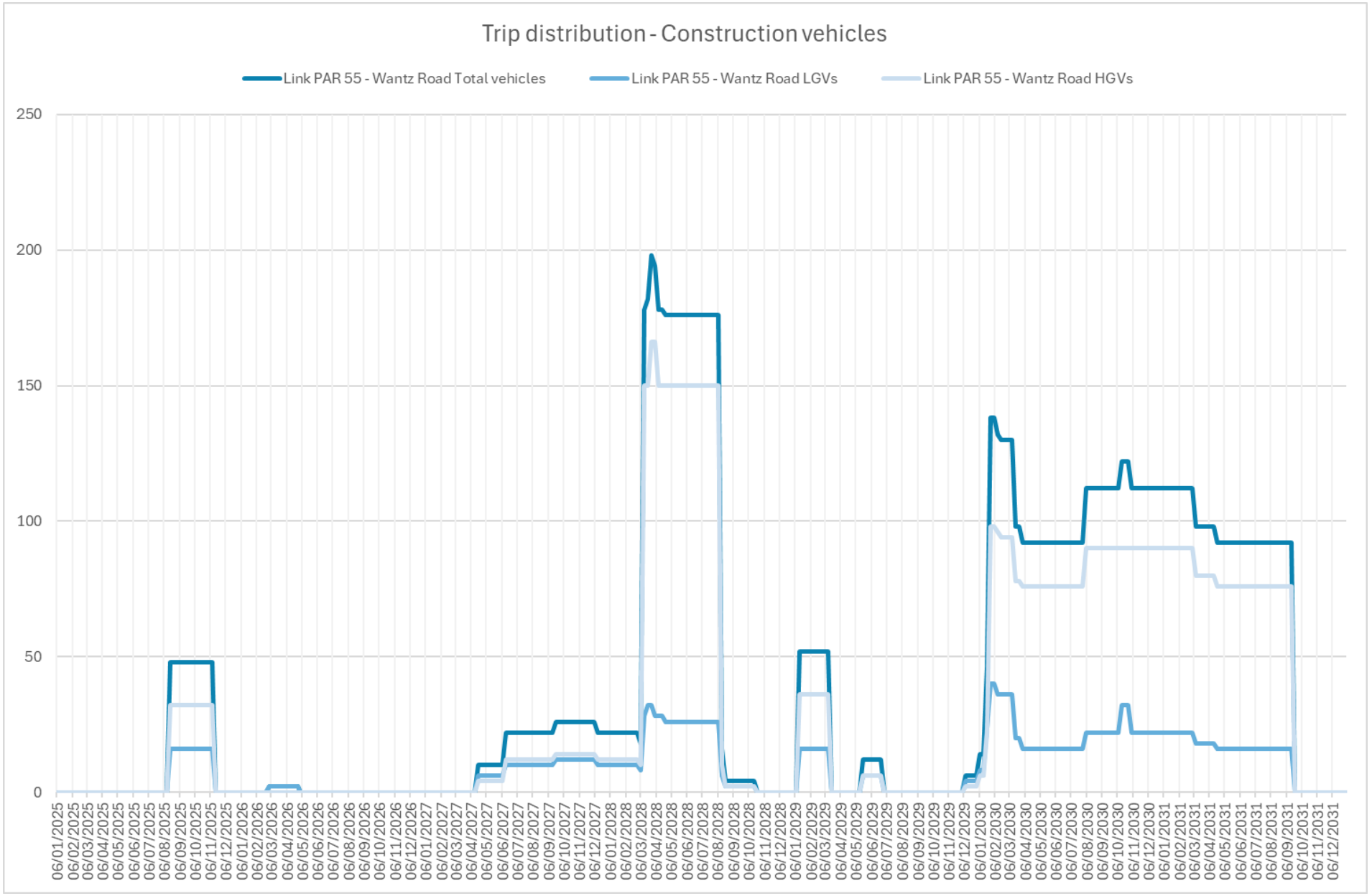


Image A16.4.56 Construction vehicles daily trip distribution of Ivy Barns Lane (Link PAR 56)

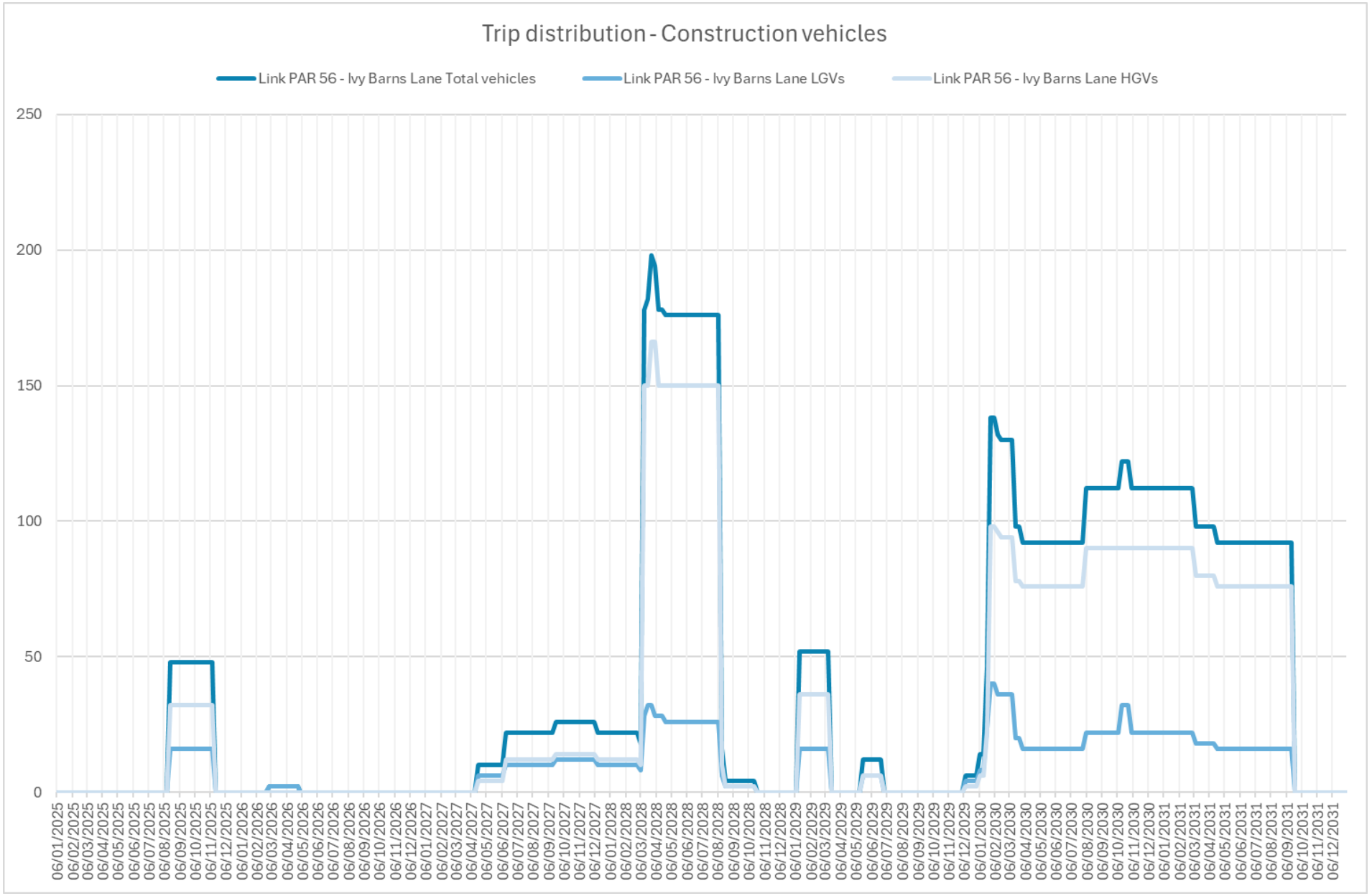


Image A16.4.57 Construction vehicles daily trip distribution of Church Lane (Link PAR 57)

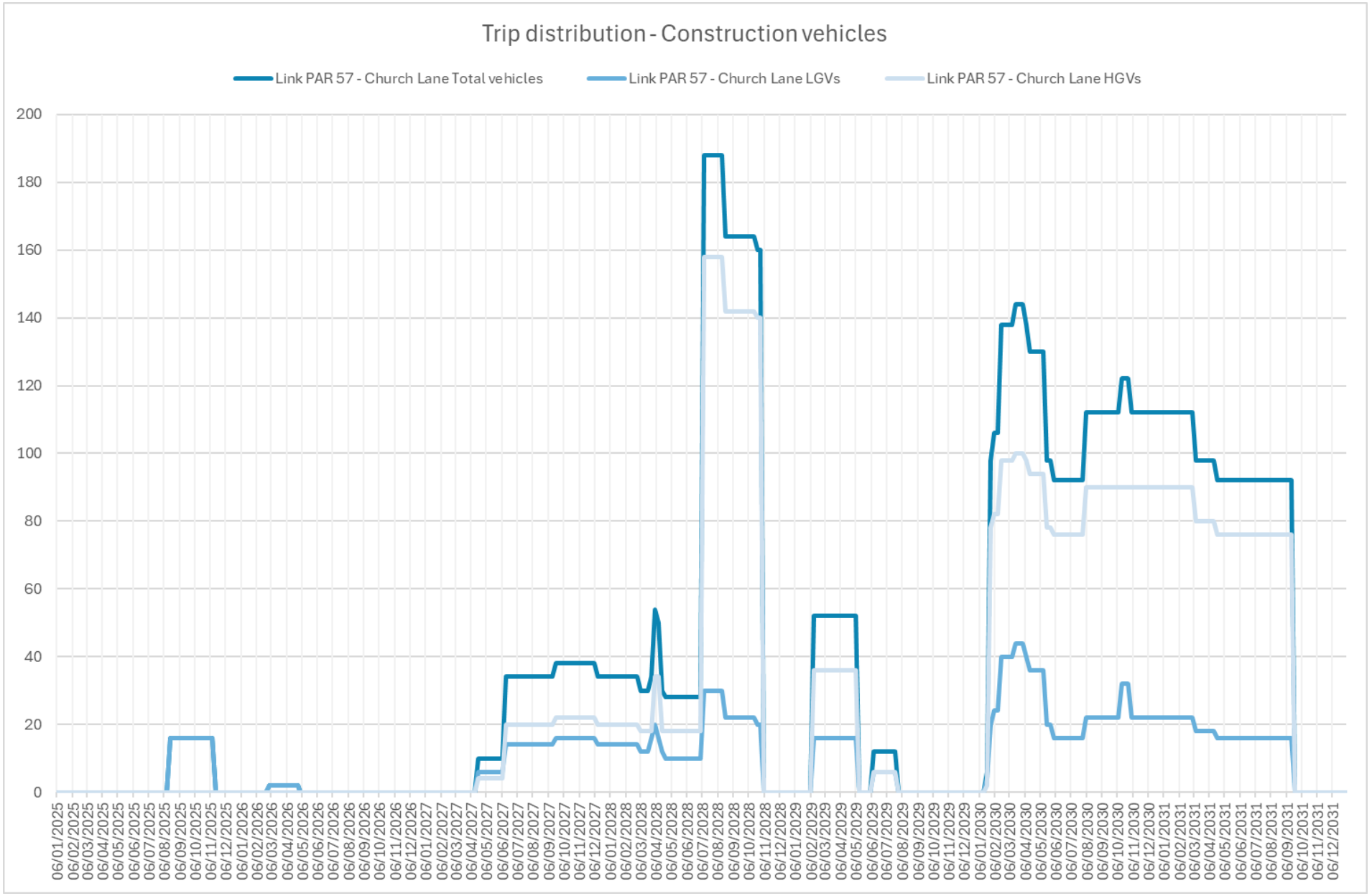


Image A16.4.58 Construction vehicles daily trip distribution of A176 Noak Hill Rd/A129 Southend Rd (Link PAR 58)

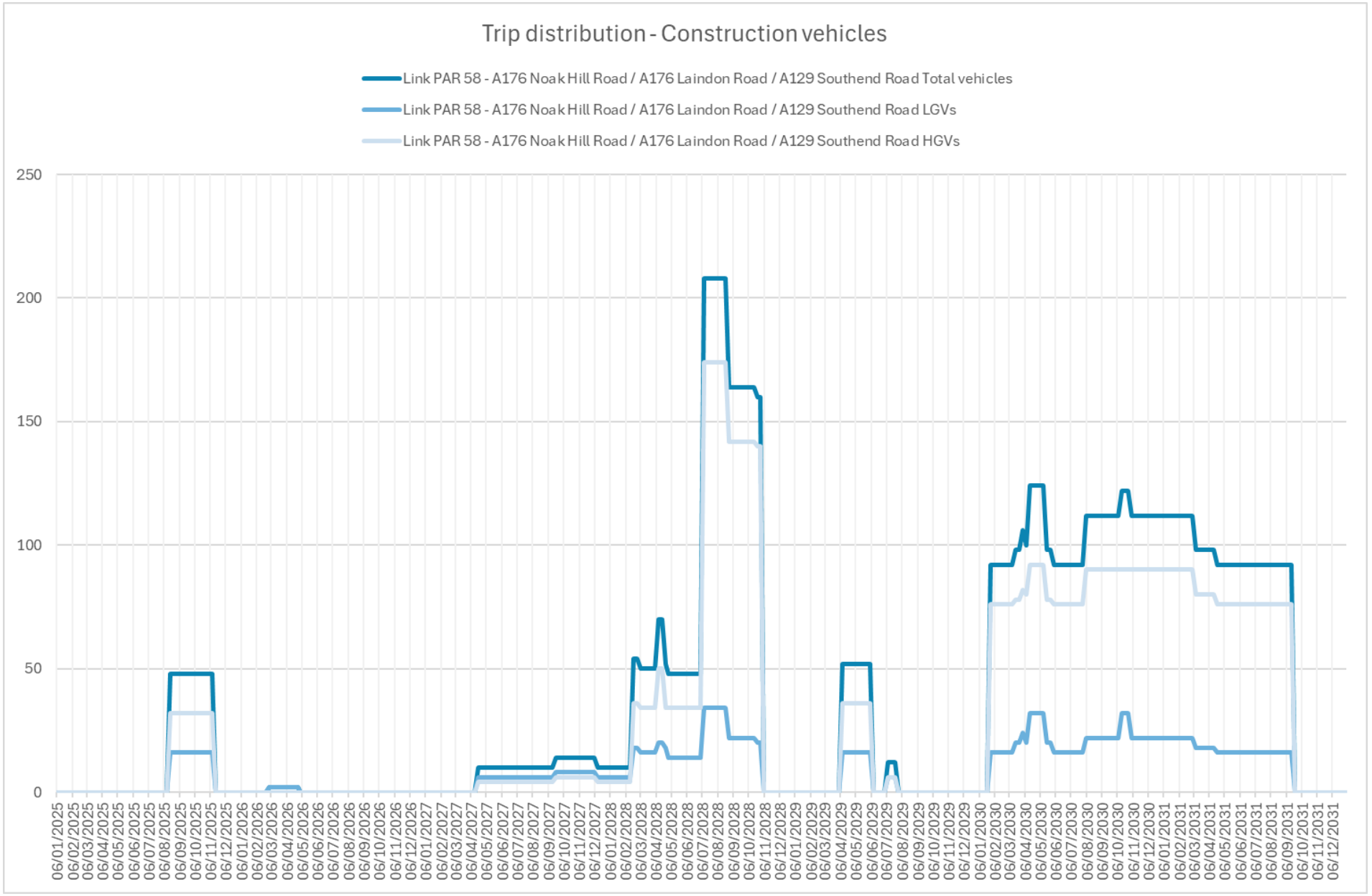


Image A16.4.59 Construction vehicles daily trip distribution of A129 Sun St/A129 London Rd/A129 Rayleigh Rd (Link PAR 59)

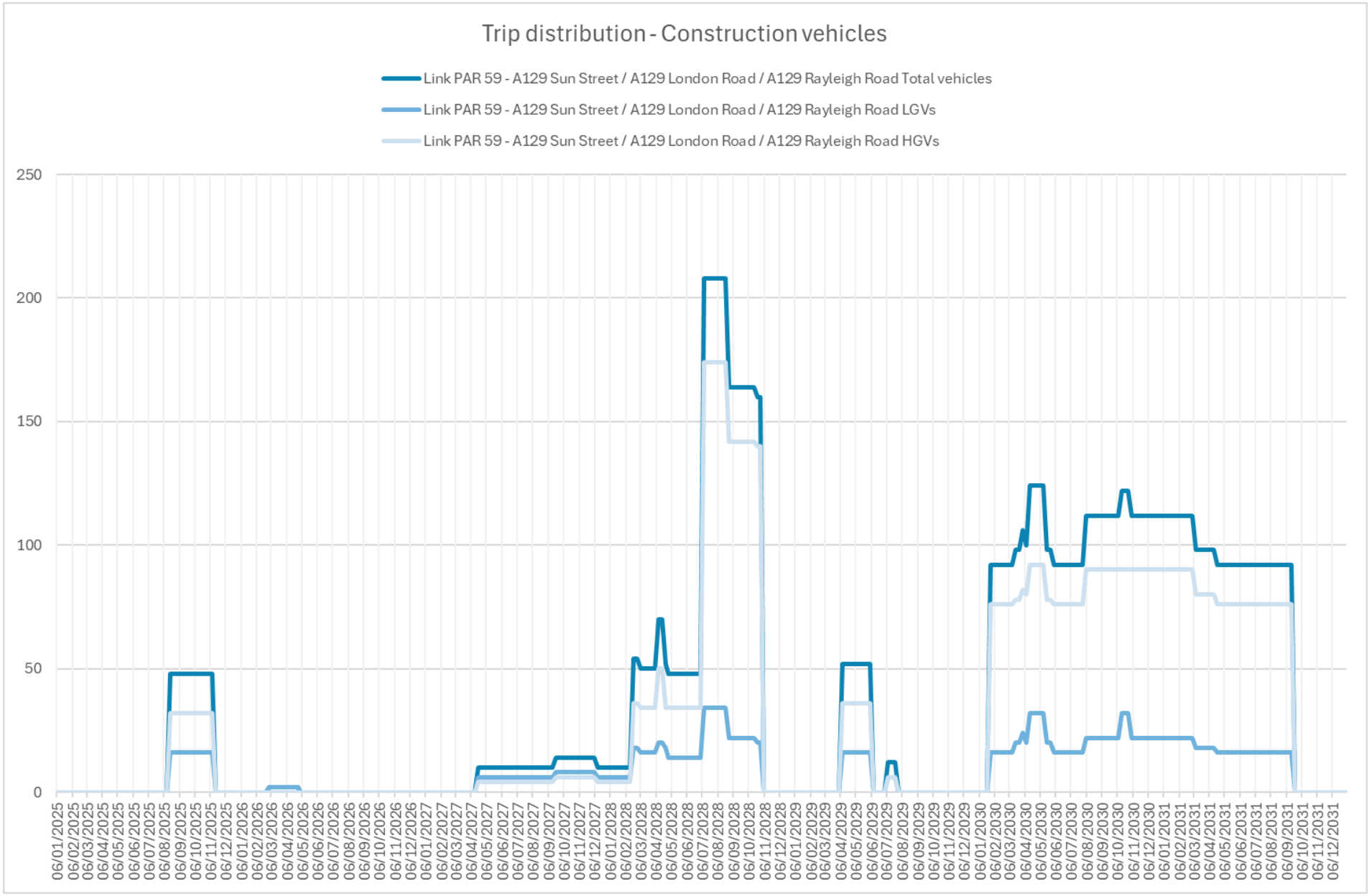


Image A16.4.60 Construction vehicles daily trip distribution of Dunton Road/Brentwood Road (Link PAR 60)

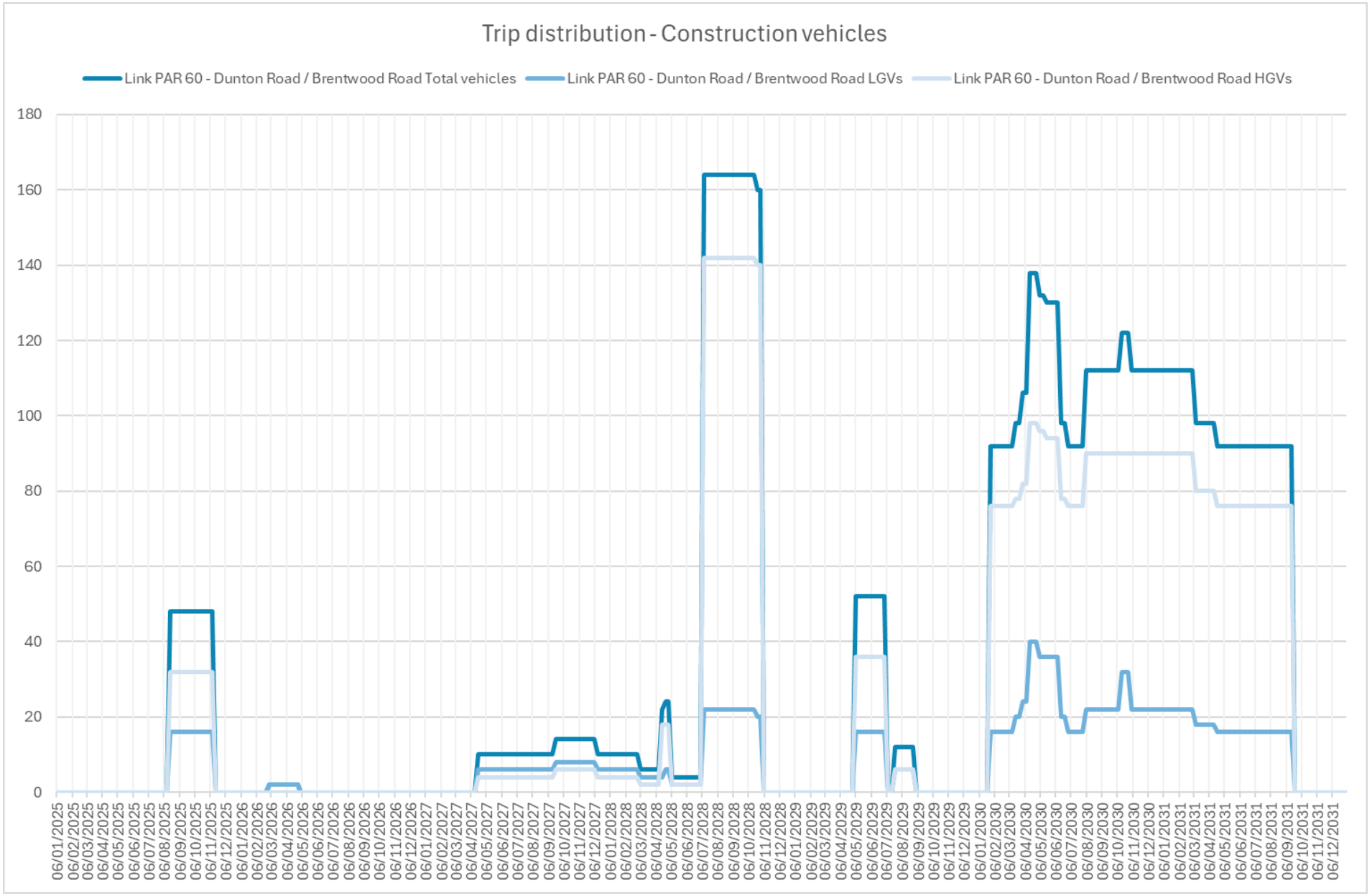


Image A16.4.61 Construction vehicles daily trip distribution of B148 West Mayne (Link PAR 61)

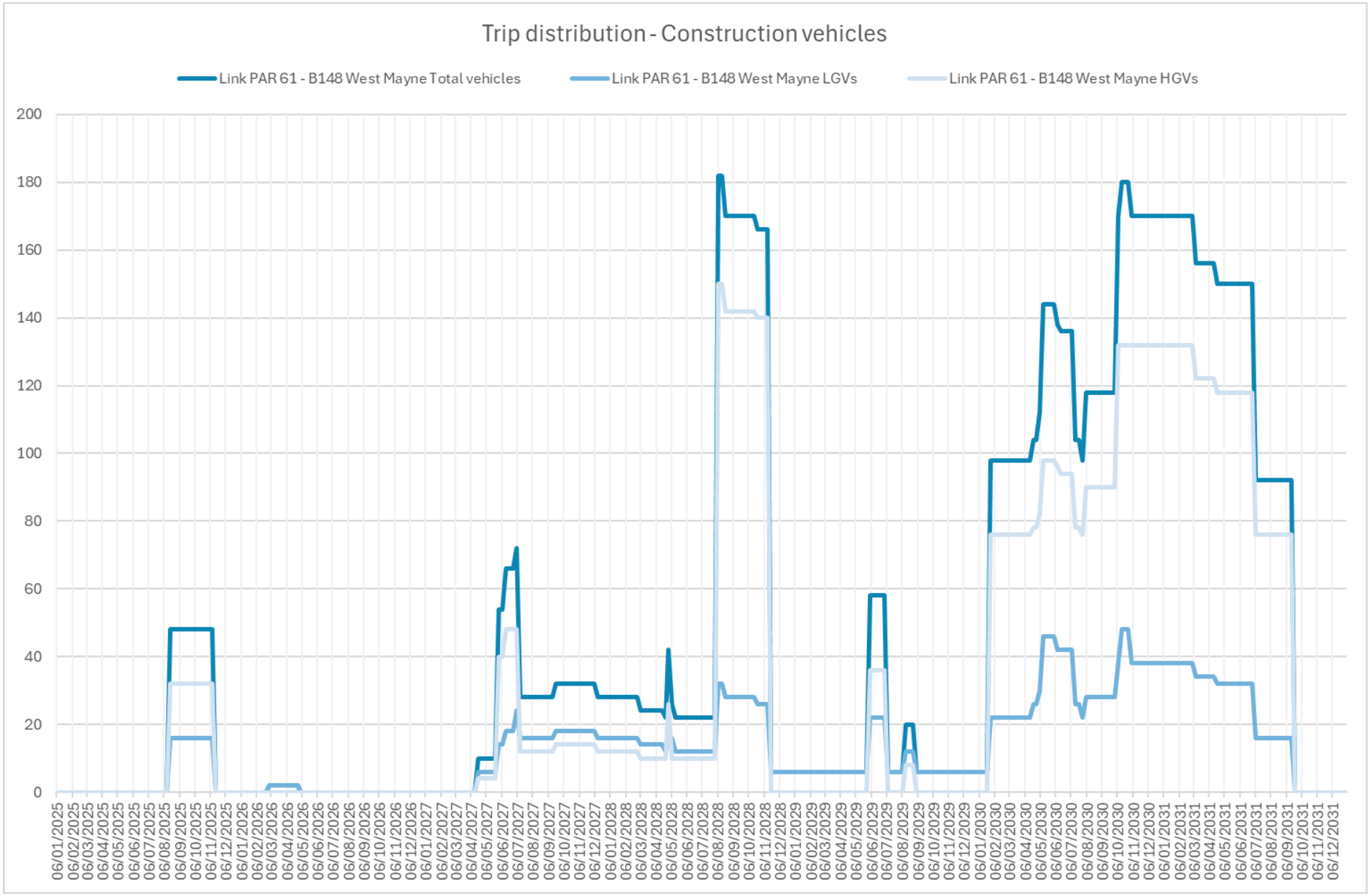


Image A16.4.62 Construction vehicles daily trip distribution of Lower Dunton Road (Link PAR 62)

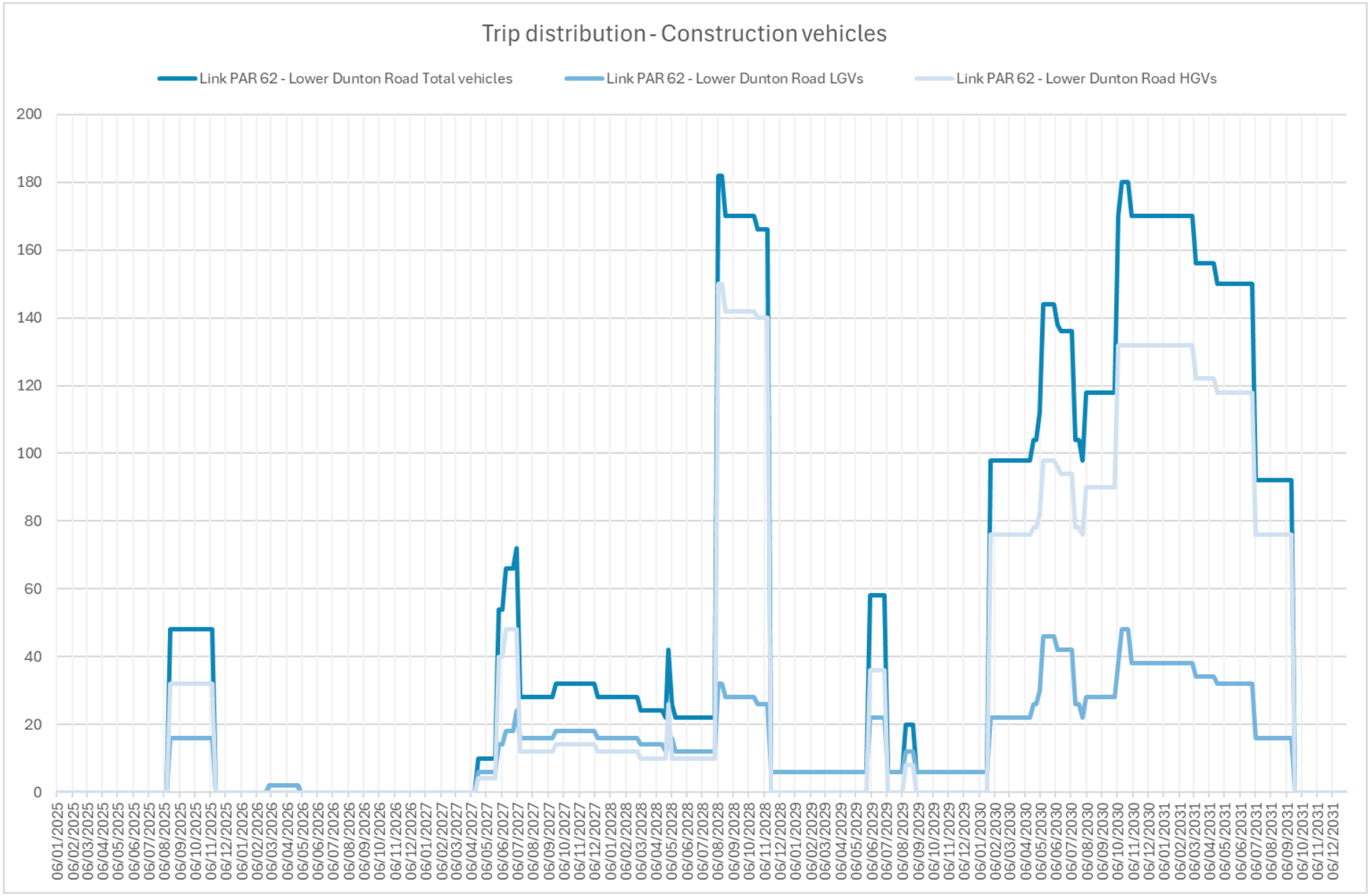


Image A16.4.63 Construction vehicles daily trip distribution of A128 Brentwood Road (Link PAR 63)

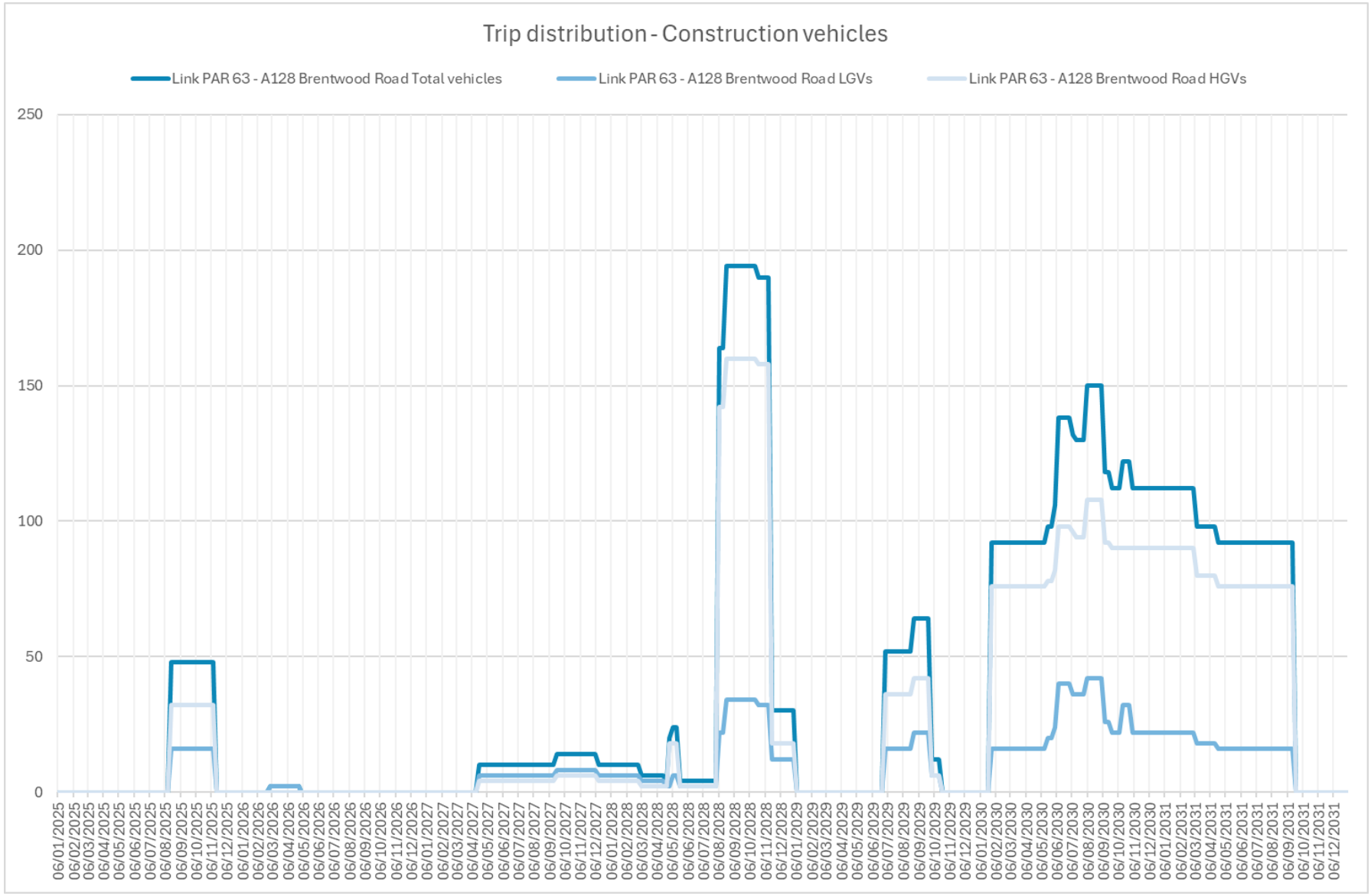


Image A16.4.64 Construction vehicles daily trip distribution of A1013 Stanford Road east of Orsett Cock Roundabout (Link PAR 64)

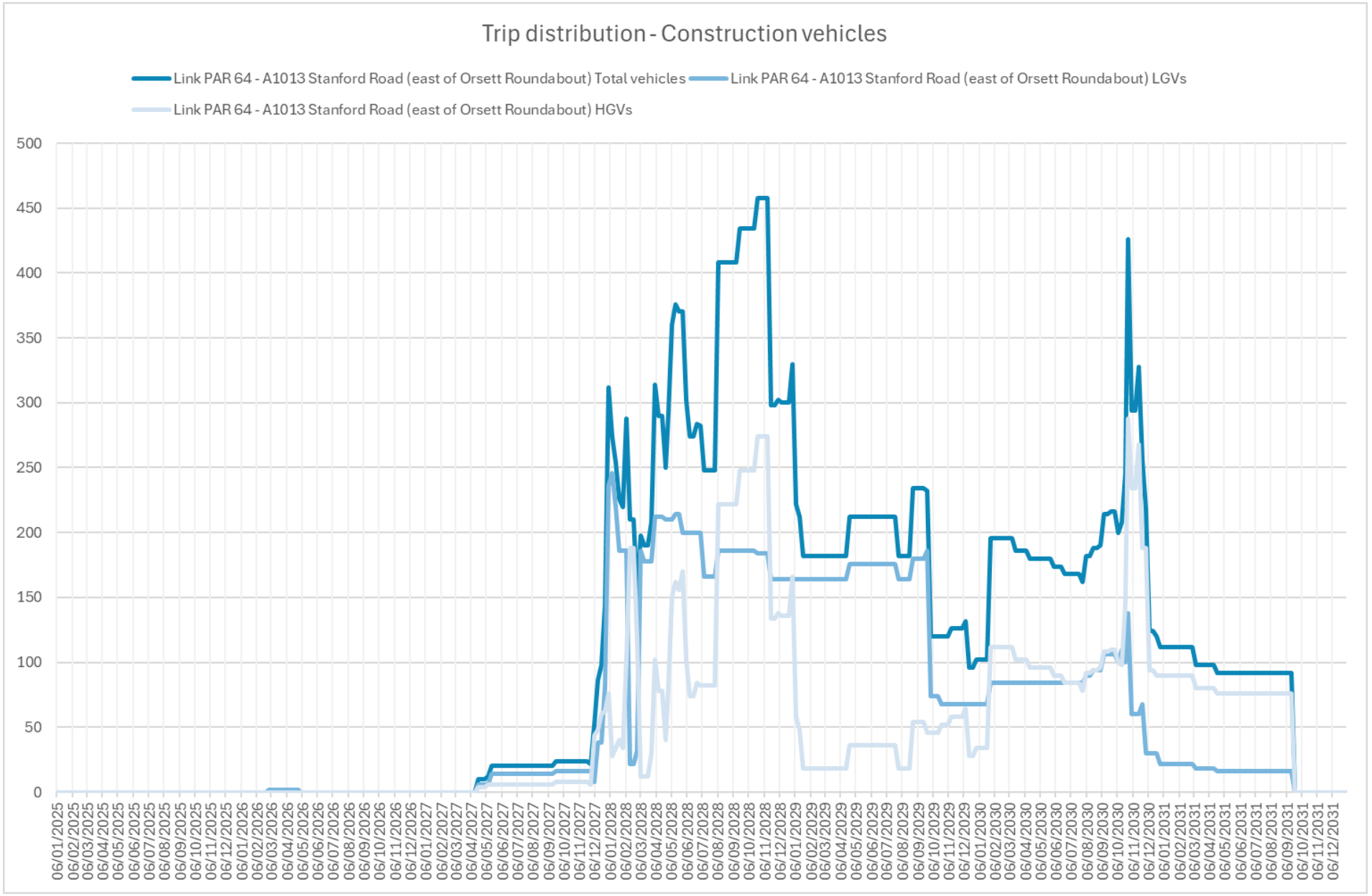


Image A16.4.65 Construction vehicles daily trip distribution of Buckingham Hill Road (Link PAR 65)

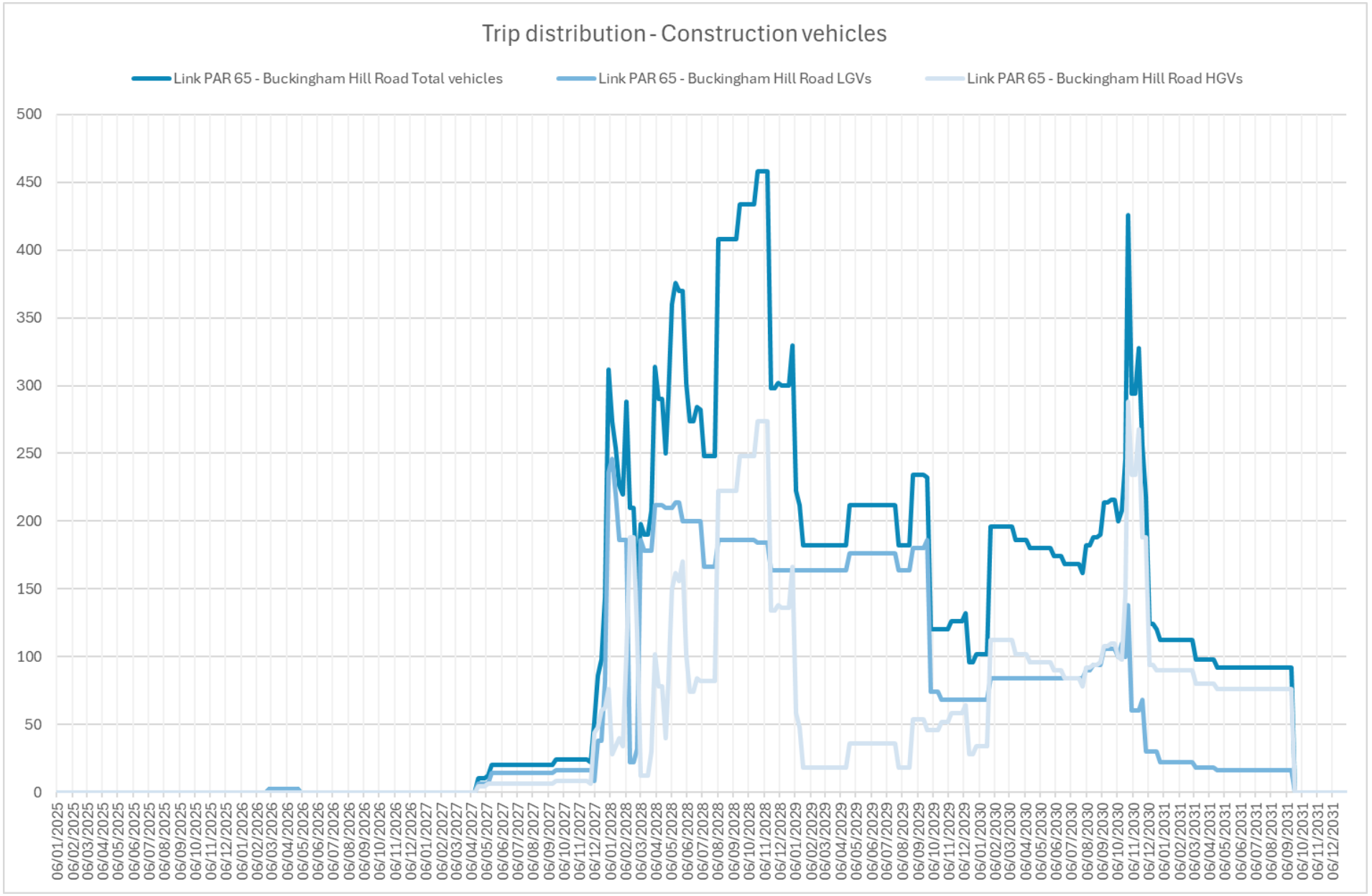


Image A16.4.66 Construction vehicles daily trip distribution of Brentwood Road (Link PAR 66)

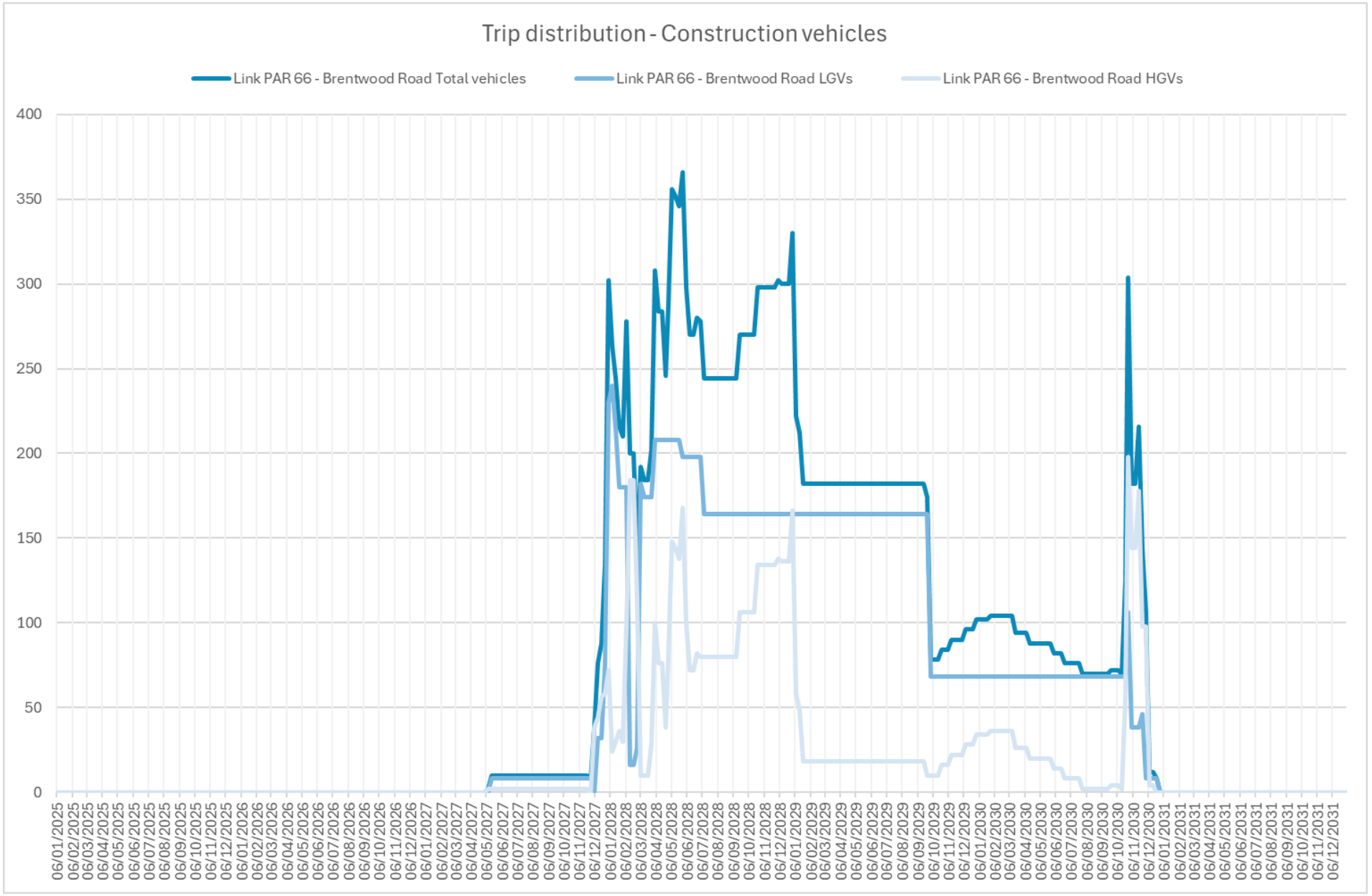


Image A16.4.67 Construction vehicles daily trip distribution of A1013 Stanford Road west of Orsett Cock Roundabout (Link PAR 67)

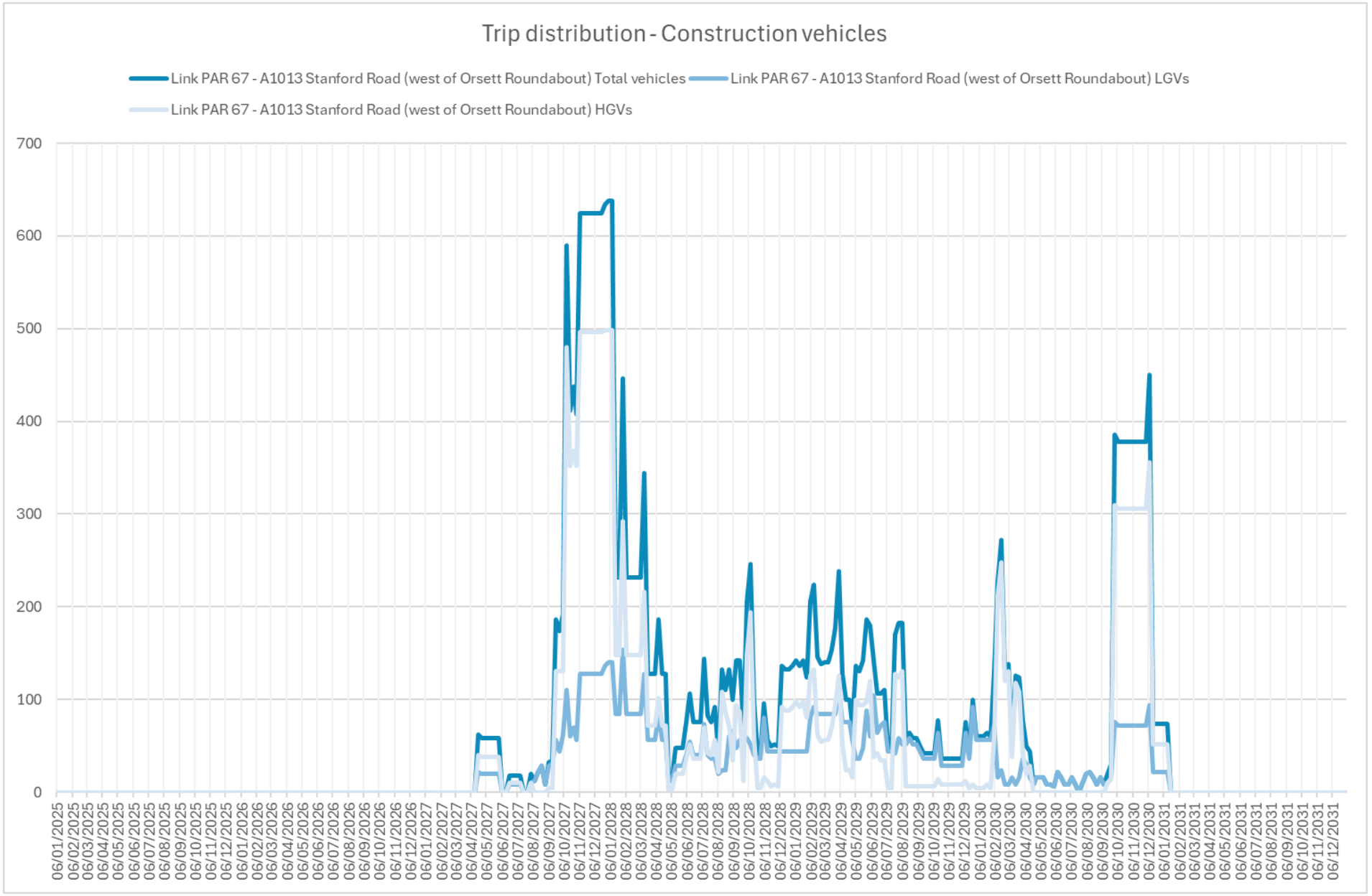


Image A16.4.68 Construction vehicles daily trip distribution of Heath Road (Link PAR 68)

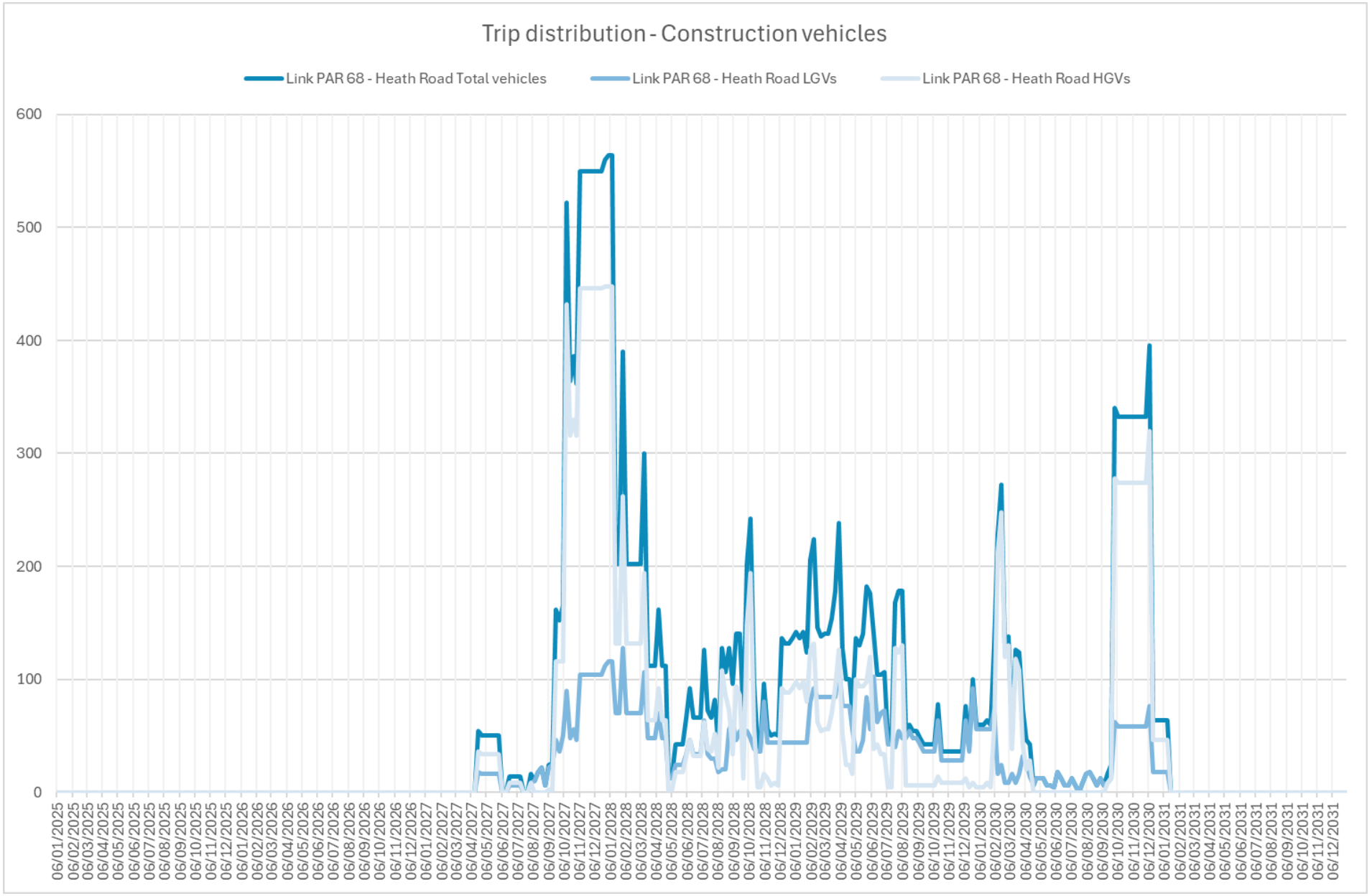


Image A16.4.69 Construction vehicles daily trip distribution of Chadwell Hill (Link PAR 69)

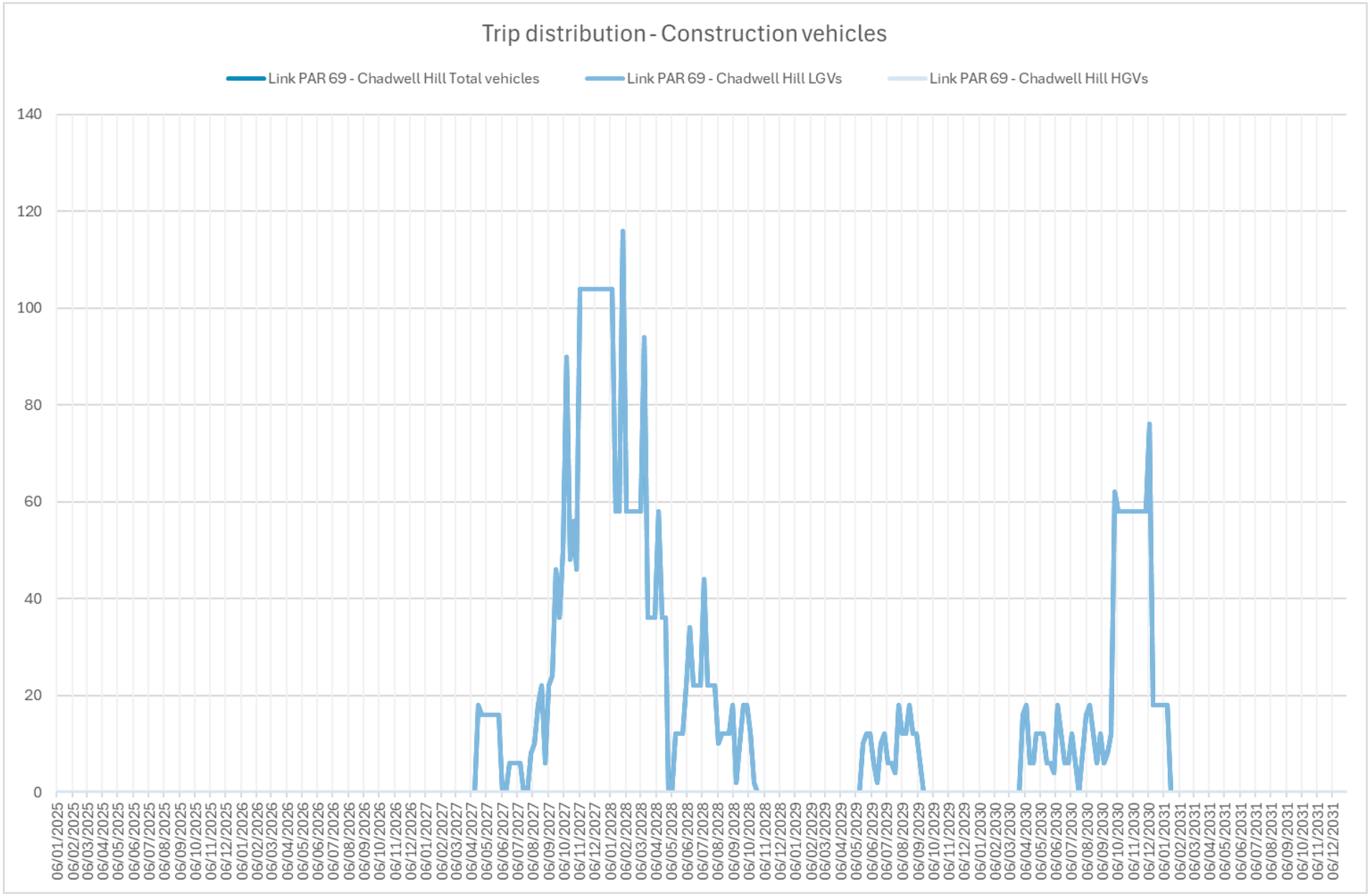


Image A16.4.70 Construction vehicles daily trip distribution of Linford Road (Link PAR 70)

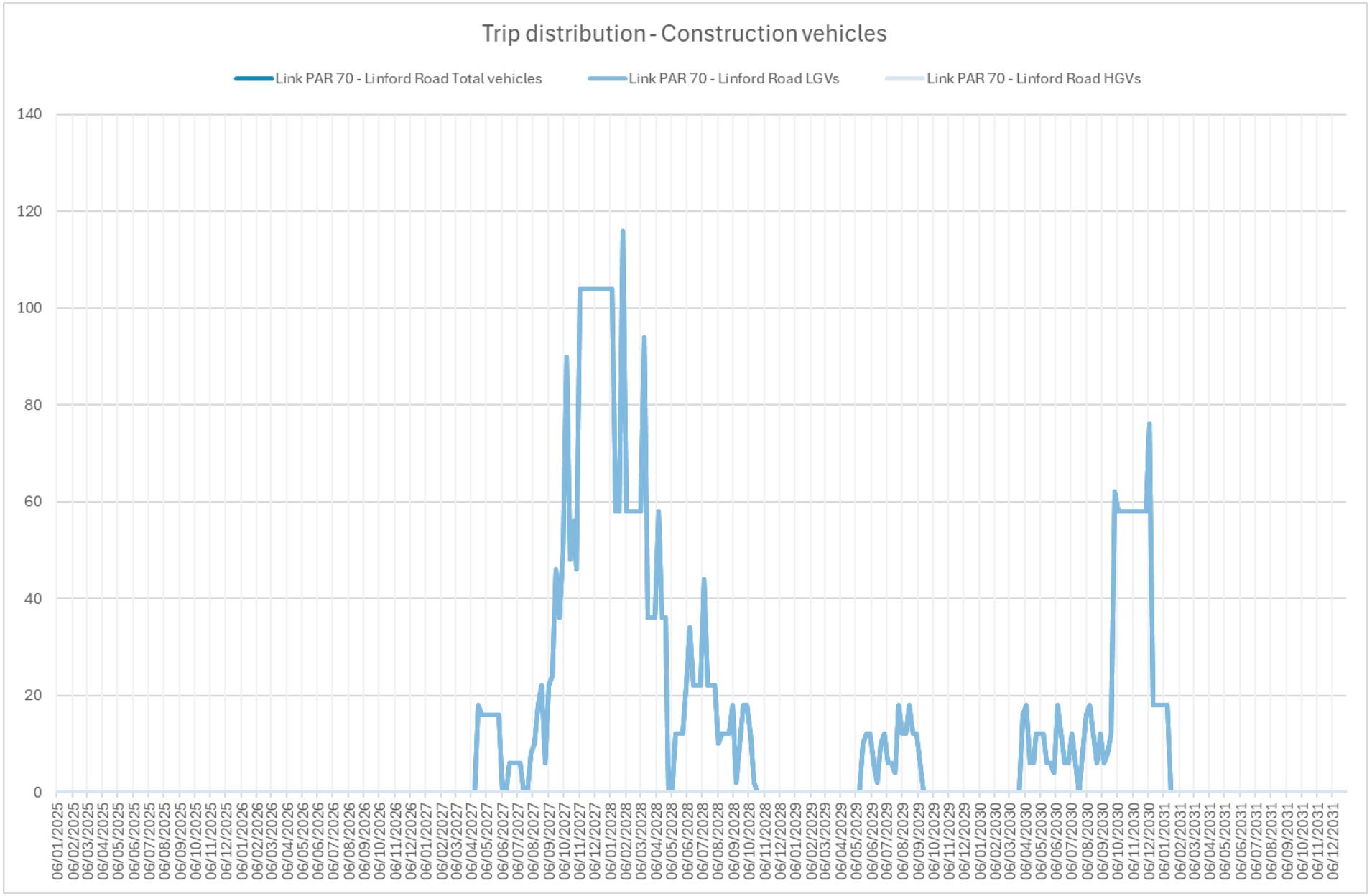
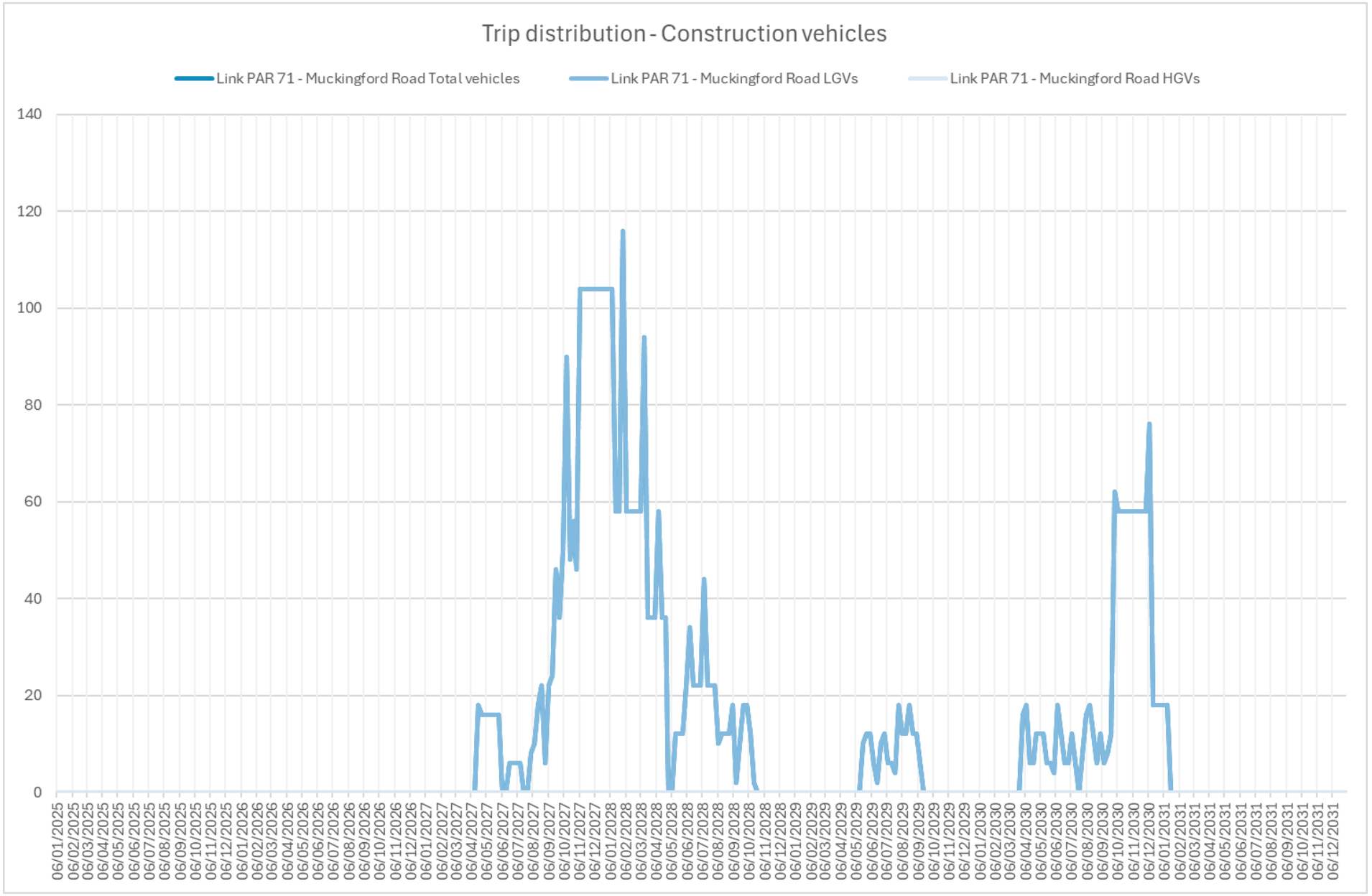


Image A16.4.71 Construction vehicles daily trip distribution of Muckingford Road (Link PAR 71)



Abbreviations

Abbreviation	Full Reference
AIL	Abnormal Indivisible Load
CTMP	Construction Traffic Management Plan
DCO	Development Consent Order
DMRB	Design Manual for Roads and Bridges
ES	Environmental Statement
HGV	Heavy Goods Vehicle
hr	Hour
IEMA	Institute of Environmental Management and Assessment
m	Metre
mph	Miles per hour
NCN	National Cycle Network
P&R	Park and Ride
PAR	Primary Access Routes
PRoW	Public Right of Way
SAP	Site Access Point

Glossary

Term	Definition
Abnormal indivisible load	A large load which cannot 'without undue expense or risk of damage' be divided into two or more smaller loads for the purposes of being transported by road, and which exceeds limits set out in terms of weight (>44 tonnes), length (>18.65 m), and width (>2.9 m).
Bellmouth	A flared vehicular access point connecting a construction site to the public highway, designed to accommodate turning movements by large vehicles.
Committed Development	A development that has full or outline planning permission, or is allocated in an adopted development plan.
Construction Traffic Management Plan	Plan detailing the procedures, requirements and standards necessary for managing the traffic effects during construction of the Project so that safe, adequate and convenient facilities for local movements by all transport modes are maintained throughout the construction process.
Development Consent Order	A statutory instrument which grants consents and other rights to build a Nationally Significant Infrastructure Project, as defined by the Planning Act 2008.
Duration Peak	Period of time when construction flows are at their greatest on any one day (7 am – 7 pm)
Embedded design measures	Mitigation measures are those that are intrinsic to and built into the design of the Project.
Environmental Statement (ES)	The main output from the EIA process, an ES is the report required to accompany an application for development consent (under the Infrastructure Planning (EIA) Regulations 2017) to inform public and stakeholder consultation and the decision on whether a project should be allowed to proceed. The EIA Regulations set out specific requirements for the contents of an ES for Nationally Significant Infrastructure Projects.
Future Baseline	Refers to the situation in future years without the proposed development
Heavy Goods Vehicle	Goods vehicles weighing more than 3,500 kg
Light Goods Vehicle	Goods vehicle weighing 3,500 kg or less
Local Planning Authority	The public authority whose duty it is to carry out specific planning functions for a particular area.
Magnitude of Impact (change)	A term that combines judgements about the size and scale off the effect, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short or long term in duration

Term	Definition
Mitigation	The action of reducing the severity and magnitude of change (impact) to the environment. Measures to avoid, reduce, remedy or compensate for significant adverse effects.
National Cycle Network	A series of traffic-free paths and quiet, on-road cycling and walking routes that connect to every major town and city. These routes are promoted for both recreational and active travel purposes.
Order Limits	The maximum extent of land within which the authorised development may take place.
Primary Access Routes	These are the roads on the local road network that would be used by construction vehicles between the strategic road network and the access points within the Order Limits.
Project Section	Geographical 'sections' have been identified that break the Project down into smaller units for ease of description within the documentation. These Project Sections are broken down into eight sections based largely on Local Planning Authority boundaries.
Public Right of Way	A footpath, bridleway or byway accessible to all members of the public.
Receptor	Population groups that may be sensitive to changes in traffic conditions such as residents, workers, pedestrians (sensitive groups such as children, elderly and disabled), cyclists and equestrians using the highway.
Sensitivity	A term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change or development proposed and the value associated to that receptor
Site access points	A location connecting a construction site to the public highway
Significance	A measure of the importance of the environmental effect, defined by criteria specific to the environmental aspect.
Significant Effects	It is a requirement of the EIA Regulations to determine the likely significant effects of the development on the environment which should relate to the level of an effect and the type of effect. Where possible significant effects should be mitigated. The significance of an effect gives an indication as to the degree of importance (based on the magnitude of the effect and the sensitivity of the receptor) that should be attached to the impact described. Whether or not an effect should be considered significant is not absolute and requires the Application of professional judgement. Significant – 'noteworthy, of considerable amount or effect or importance, not insignificant or negligible'.
Trip Distribution	The assignment of the movement of trips (made by construction vehicles) between different geographic locations

Bibliography

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National Grid plc
National Grid House,
Warwick Technology Park,
Gallows Hill, Warwick.
CV34 6DA United Kingdom

Registered in England and Wales
No. 4031152
nationalgrid.com