

Appendix 11.3

Construction Stage Vehicle Movement Calculations

Road Link	Road	Description	Reason why traffic flow is required for this road	Average Speeds (mph)	2019 Verification Year (DfT) or 2023 Observed Flows (Kincardine Road and Brunswick Street)		Proposed Development								OPERATIONAL CUMULATIVE																CONSTRUCTION CUMULATIVE							
															WITHOUT PAG/Moda (no HDV available)								WITH PAG/Moda															
							Demolition/Construction		Construction stage - increase		Opening Year, With Development in Operation		Operation stage - Increase		Proposed Development			101664/FO/2013/N2 - Brunswick Neighbourhood (note 5+6)			2019 + Cumulative Dev (no PAG/Moda)	Cumulative Impact	% increase	PAG/Moda Flows (note 1)		Cumulative Dev (note 2)		With Development		% increase		PAG/Moda Flows (Note 7)		Cumulative Dev: PAG/Moda + Proposed Development		% Increase		
					24 hr AADT flow	HDV flow	ALL (note 3)	HDV flow (note 4)	ALL	HDV	24 hr AADT flow	HDV flow	24 hr AADT flow	HDV flow	AM	PM	AADT	AM	PM	AADT				24 hr AADT flow	HDV flow	24 hr AADT flow	HDV flow	24 hr AADT flow	HDV flow	24 hr AADT flow	HDV flow	24 hr AADT flow	HDV flow	24 hr AADT flow	HDV flow	24 hr AADT flow	HDV flow	
1	A34 Upper Brook Street	DfT count: 56493	Site suitability assessment		18883	132	43	18	0.23%	13.70%	18891	132	0.04%	0.00%				8	10	4	64	18955	72	0.38%	202	4	308	5	19191	137	1.63%	3.79%	109	40	153	58	0.81%	44.00%
2	A6 Ardwick Green South	DfT count: 26157	Model verification		19425	505	25	0	0.13%	0.00%	19431	505	0.03%	0.00%				6	1	1	9	19440	15	0.08%	31	1	-275	0	19150	505	-1.42%	0.00%	69	0	95	0	0.49%	0.00%
3	A57 Hyde Road	DfT count: 16544	Model verification		16736	574	43	18	0.26%	3.15%	16754	574	0.11%	0.00%				18	11	11	100	16855	119	0.71%	53.5	3.5	196	4.5	16932	578.5	1.17%	0.78%	109	40	153	58	0.91%	10.12%
4	A6 Stockport Road	DfT count: 56136	Model verification		10520	143	25	0	0.24%	0.00%	10526	143	0.05%	0.00%				6	7	3	46	10571	51	0.49%	53.5	3.5	196	4.5	10716	147.5	1.86%	3.15%	69	0	95	0	0.90%	0.00%
	Kincardine Road	At junction with Whitekirk Close			1352	14	0	0	0.00%	0.00%	1375	15	1.67%	5.97%				23	0	0	0	1375	23	1.67%	107	7	100	7	1452	21	7.40%	50.00%	277	120	277	120	20.49%	857.14%
	Brunswick Street	Junction with Kincardine Road			9542	175	43	18	0.45%	10.33%	9607	176	0.68%	0.48%				65	39	28	306	9912	370	3.88%	143	7	1072	16	10614	191	11.23%	9.14%	109	40	153	58	1.60%	33.19%

Notes

- 1 Taken from Figure 8.3b of PAG/Moda Living ES Chapter. Assume all traffic along A34 south of dev comes via 56493. 50% of development which reaches the Kincardine Road approach of the KR/Whitekirk Close junction has come via 16544 and 50% via 56136. All traffic which arrives from Grosvenor Street approach to GS/Kincardine Road junction has come via 26157.
- 2 Needed to use PAG/Moda Living cumulative flows as they have re-routed our development as per changes to highways, but they have used a different base, so to get change in flows when compared to our baseline of DfT 2019 counts, we subtracted Figure 8.1b from 8.5b
- 3 Staff travel to work by car/van distributed equally to all four count points
- 4 HGV trips distributed to the three routes provided by Buro Four, noting that only one route passes through any of the DfT count points being considered
- 5 From figure 5.4 in TA for Brunswick development
- 6 Assume the unnamed road on the figure is not Kincardine Road as it shows two-way traffic at the south end of the road, which has not been permitted since at least 2008
- 7 PAG/Moda Living construction traffic taken from Appendix TA4 of the PAG/Moda Living TA and distributed as per Proposed Development except that it ends at Kincardine Road

Info from Burofour on construction traffic on 13/06/2023 and
16/06/2023 by email

HGV	
50	trips to site per day in peak peak
100	daily trips in peak peak
25	trips to site in late phase peak
50	daily trips in late phase peak
75	average over peak periods
22	working days per month
264	working days per year
365	days per year
54	AADT of HGVs
Staff travel	
175	150 workforce average (250 at peak) + 25 mgrs per day
40%	assumed car driver mode share
70	staff driving to work per day
140	daily trips
22	working days per month
264	working days per year
365	days per year
101	AADT of staff travel
All vehicle types	
156	Total AADT all vehicle types

Info provided by Focus Transport about Upper Brook Street
Masterplan - PAG/Moda Living Demolition and Construction Phase

HGV	
	trips to site per day in peak peak
	daily trips in peak peak
	trips to site in late phase peak
	daily trips in late phase peak
	average over peak periods
	working days per month
	working days per year
	days per year
120	AADT of HGVs
Staff travel	
	150 workforce average (250 at peak) + 25 mgrs per day
	assumed car driver mode share
	staff driving to work per day
	daily trips
	working days per month
	working days per year
	days per year
277	AADT of staff travel
All vehicle types	
397	Total AADT all vehicle types