

**Modelling Highway Impacts of Local Plan Developments in Malton, Norton and Pickering
Addendum to August 2016 Report. (July 2017)**

Following the completion of the study in 2016, further modelling was undertaken in 2017 to run two further revised development scenarios at Pickering to take account of the fact the junction currently has a MOVA system in operation.

The further development scenarios included in this work are as follows:

Scenario 5

- Land to south of Firthland Road (300 dwellings)
- Land to west of Malton Road (110 dwellings)
- Land to East of Whitby Road (224 dwellings)
- Land to south of Thornton Road Industrial Estate (circa 11,120 m² B2 and 5,990 m² B1)

Scenario 6

- Land to south of Firthland Road (50 dwellings)
- Land to west of Malton Road (110 dwellings)
- Land to East of Whitby Road (224 dwellings)
- Land to south of Thornton Road (circa 11,120 m² B2 and 5,990 m² B1)

The further modelling work used the same trip assumptions as those in the earlier modelling and a 17% reduction for non-car use. The results of this further modelling are attached and they are an addendum to section 6.12 of the main report.

Observed Green Times and Cycle Time

Arm	Flows	Observed Flows	Baseline	LP Scen 1	LP Scen 2	LP Scen 3	LP Scen 4	LP Scen 5
	Timings	Average Observed	Average Observed	Average Observed	Average Observed	Average Observed	Average Observed	Average Observed
	Cycle Time	92	92	92	92	92	92	92
The Ropery		0.44	0.61	0.74	0.73	0.73	0.74	0.84
A170 Hungate		0.82	1.01	2.33	2.33	2.33	2.33	0.89
Vivis Lane		0.77	0.93	0.93	0.93	0.93	0.93	1.44
Southgate		0.66	0.81	0.96	0.95	1.00	1.01	0.74

MOVA Green Times and Observed Cycle Time

Arm	Flows	Observed Flows	Baseline	LP Scen 1	LP Scen 2	LP Scen 3	LP Scen 4	LP Scen 5
	Timings	Optimised for MOVA	Optimised for MOVA	Optimised for MOVA	Optimised for MOVA	Optimised for MOVA	Optimised for MOVA	Optimised for MOVA
	Cycle Time	92	92	92	92	92	92	92
The Ropery		0.44	0.74	0.93	0.92	0.92	0.93	0.84
A170 Hungate		0.82	0.92	1.26	1.24	1.32	1.36	1.04
Vivis Lane		0.77	0.88	1.21	1.21	1.35	1.35	0.96
Southgate		0.66	0.73	0.84	0.83	0.86	0.86	0.82

MOVA Green Times with Optimal Cycle Time

Arm	Flows	Observed Flows	Baseline	LP Scen 1	LP Scen 2	LP Scen 3	LP Scen 4	LP Scen 5
	Timings	Optimised for MOVA	Optimised for MOVA	Optimised for MOVA	Optimised for MOVA	Optimised for MOVA	Optimised for MOVA	Optimised for MOVA
	Cycle Time	92	104	132	132	132	132	116
The Ropery		0.44	0.86	0.89	0.88	0.88	0.89	0.85
A170 Hungate		0.82	0.87	0.89	0.88	0.94	0.97	0.87
Vivis Lane		0.77	0.86	0.87	0.87	0.92	0.92	0.86
Southgate		0.66	0.70	0.87	0.73	0.75	0.76	0.71