

Cambridge Waste Water Treatment Plant Relocation Project



Preliminary Environmental Information
Preliminary Modelling A14/Horningsea Road
February 2022

Preliminary Modelling - A14/Horningsea Road

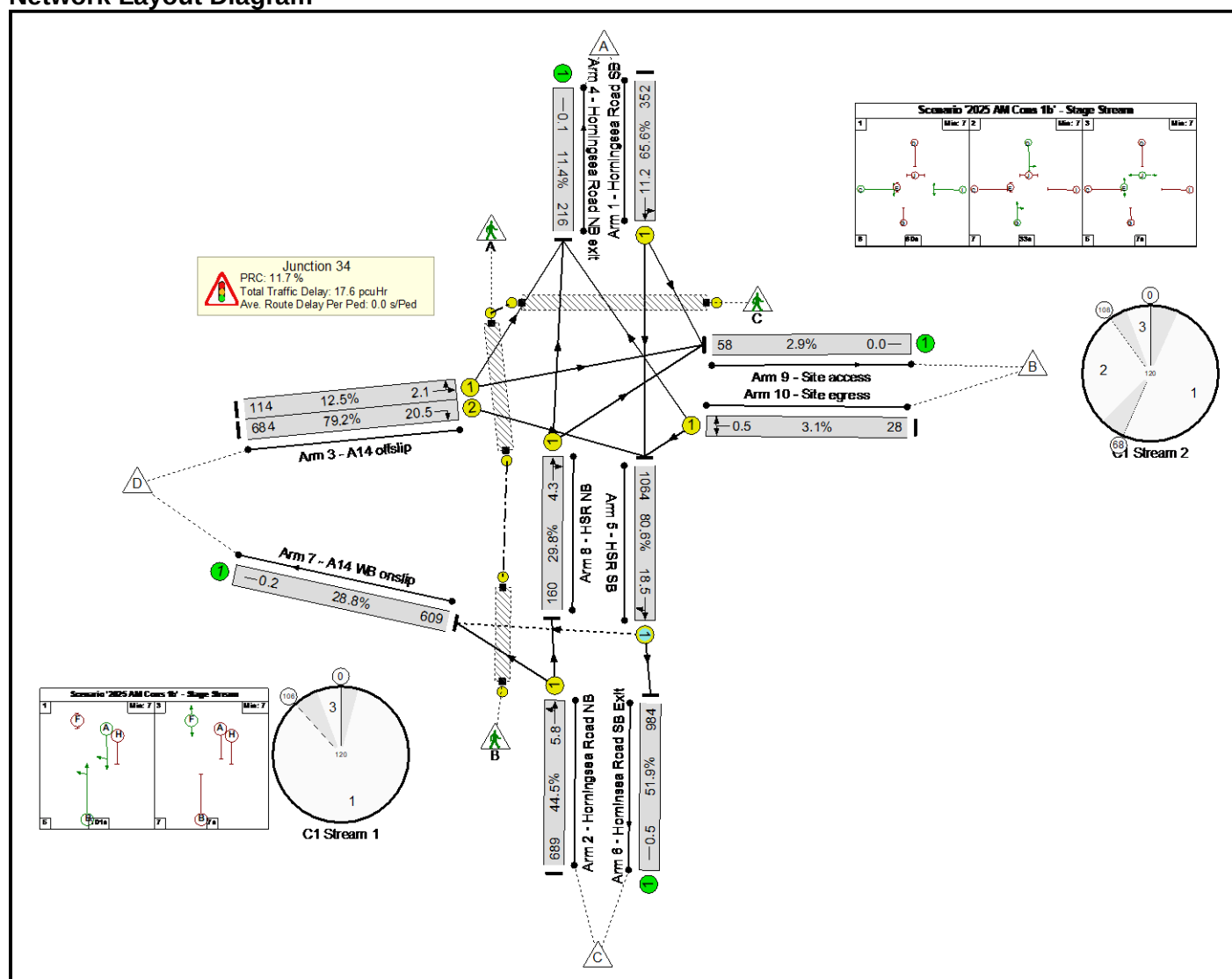
Basic Results Summary

User and Project Details

Project:	100102041 - CWWTPR
Title:	Option 1b Preliminary Modelling
File name:	Junction 34 Fen Ditton Junction (4-arm) - TF update_v0.2.lsg3x
Company:	Mott MacDonald

Scenario 7: '2025 AM Cons 1b' (FG7: '2025 AM Cons 1b', Plan 1: 'Network Control Plan 1')

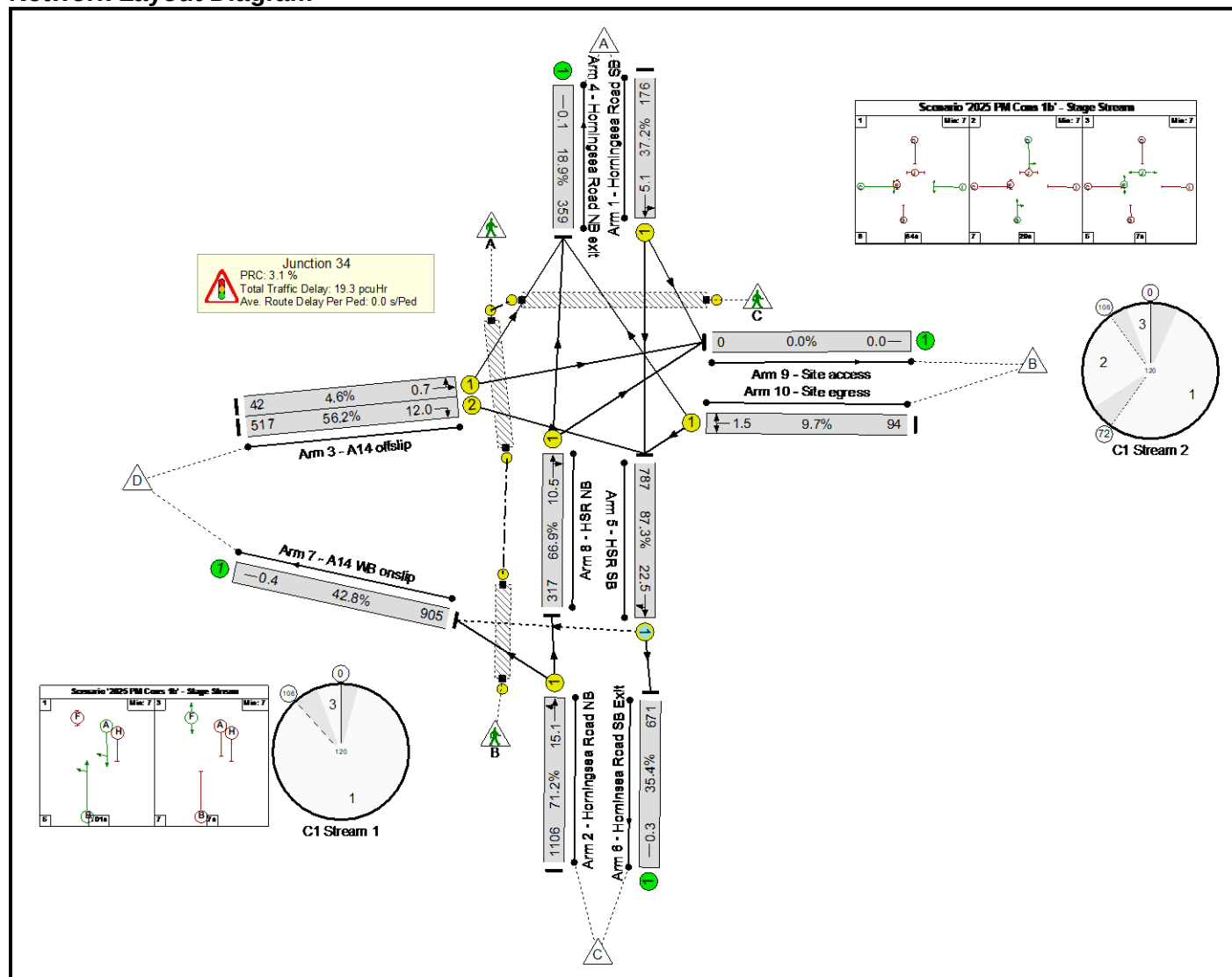
Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	80.6%	75	5	0	17.6	-	-
Junction 34	-	-	-		-	-	-	-	-	-	80.6%	75	5	0	17.6	-	-
1/1	Horningsea Road SB Ahead Left	U	D		1	33	-	352	1895	537	65.6%	-	-	-	4.6	47.5	11.2
2/1	Horningsea Road NB Left Ahead	U	B		1	101	-	689	1823	1550	44.5%	-	-	-	0.8	4.3	5.8
3/1	A14 offslip Left Ahead	U	C		1	60	-	114	1793	911	12.5%	-	-	-	0.6	17.7	2.1
3/2	A14 offslip Right	U	C		1	60	-	684	1699	864	79.2%	-	-	-	6.5	34.1	20.5
4/1	Horningsea Road NB exit	U	-		-	-	-	216	1895	1895	11.4%	-	-	-	0.1	1.1	0.1
5/1	HSR SB Ahead Right	O	A	H	1	101	0	1064	1874	1320	80.6%	75	5	0	2.6	8.7	18.5
6/1	Horninsea Road SB Exit	U	-		-	-	-	984	1895	1895	51.9%	-	-	-	0.5	2.0	0.5
7/1	A14 WB onslip	U	-		-	-	-	609	2115	2115	28.8%	-	-	-	0.2	1.2	0.2
8/1	HSR NB Ahead Right	U	G		1	33	-	160	1895	537	29.8%	-	-	-	1.6	36.3	4.3
9/1	Site access	U	-		-	-	-	58	1975	1975	2.9%	-	-	-	0.0	0.9	0.0
10/1	Site egress Right Left	U	I		1	61	-	28	1756	907	3.1%	-	-	-	0.1	16.3	0.5
Ped Link: P1	Offslip crossing	-	E		1	12	-	0	-	7200	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Onslip crossing	-	F		1	7	-	0	-	4200	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P3	Unnamed Ped Link	-	J		1	7	-	0	-	4200	0.0%	-	-	-	0.0	0.0	0.0
					C1	Stream: 1 PRC for Signalled Lanes (%):		11.7	Total Delay for Signalled Lanes (pcuHr):			3.39	Cycle Time (s): 120				
					C1	Stream: 2 PRC for Signalled Lanes (%):		13.6	Total Delay for Signalled Lanes (pcuHr):			13.42	Cycle Time (s): 120				
						PRC Over All Lanes (%):		11.7	Total Delay Over All Lanes(pcuHr):			17.64					

Scenario 8: '2025 PM Cons 1b' (FG8: '2025 PM Cons 1b', Plan 1: 'Network Control Plan 1')
Network Layout Diagram



CWWTPR Preliminary Environmental Information – Traffic and transport

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	87.3%	114	2	0	19.3	-	-
Junction 34	-	-	-		-	-	-	-	-	-	87.3%	114	2	0	19.3	-	-
1/1	Horningsea Road SB Ahead Left	U	D		1	29	-	176	1895	474	37.2%	-	-	-	2.1	43.2	5.1
2/1	Horningsea Road NB Left Ahead	U	B		1	101	-	1106	1828	1554	71.2%	-	-	-	2.3	7.4	15.1
3/1	A14 offslip Left Ahead	U	C		1	64	-	42	1699	920	4.6%	-	-	-	0.2	15.0	0.7
3/2	A14 offslip Right	U	C		1	64	-	517	1699	920	56.2%	-	-	-	3.2	22.6	12.0
4/1	Horningsea Road NB exit	U	-		-	-	-	359	1895	1895	18.9%	-	-	-	0.1	1.2	0.1
5/1	HSR SB Ahead Right	O	A	H	1	101	0	787	1854	902	87.3%	114	2	0	6.0	27.6	22.5
6/1	Horninsea Road SB Exit	U	-		-	-	-	671	1895	1895	35.4%	-	-	-	0.3	1.5	0.3
7/1	A14 WB onslip	U	-		-	-	-	905	2115	2115	42.8%	-	-	-	0.4	1.5	0.4
8/1	HSR NB Ahead Right	U	G		1	29	-	317	1895	474	66.9%	-	-	-	4.3	48.5	10.5
9/1	Site access	U	-		-	-	-	0	1975	1975	0.0%	-	-	-	0.0	0.0	0.0
10/1	Site egress Right Left	U	I		1	65	-	94	1756	966	9.7%	-	-	-	0.4	14.9	1.5
Ped Link: P1	Offslip crossing	-	E		1	12	-	0	-	7200	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Onslip crossing	-	F		1	7	-	0	-	4200	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P3	Unnamed Ped Link	-	J		1	7	-	0	-	4200	0.0%	-	-	-	0.0	0.0	0.0
C1 Stream: 1 PRC for Signalled Lanes (%):								3.1	Total Delay for Signalled Lanes (pcuHr):				8.32	Cycle Time (s): 120			
C1 Stream: 2 PRC for Signalled Lanes (%):								34.5	Total Delay for Signalled Lanes (pcuHr):				10.19	Cycle Time (s): 120			
PRC Over All Lanes (%):								3.1	Total Delay Over All Lanes(pcuHr):				19.27				