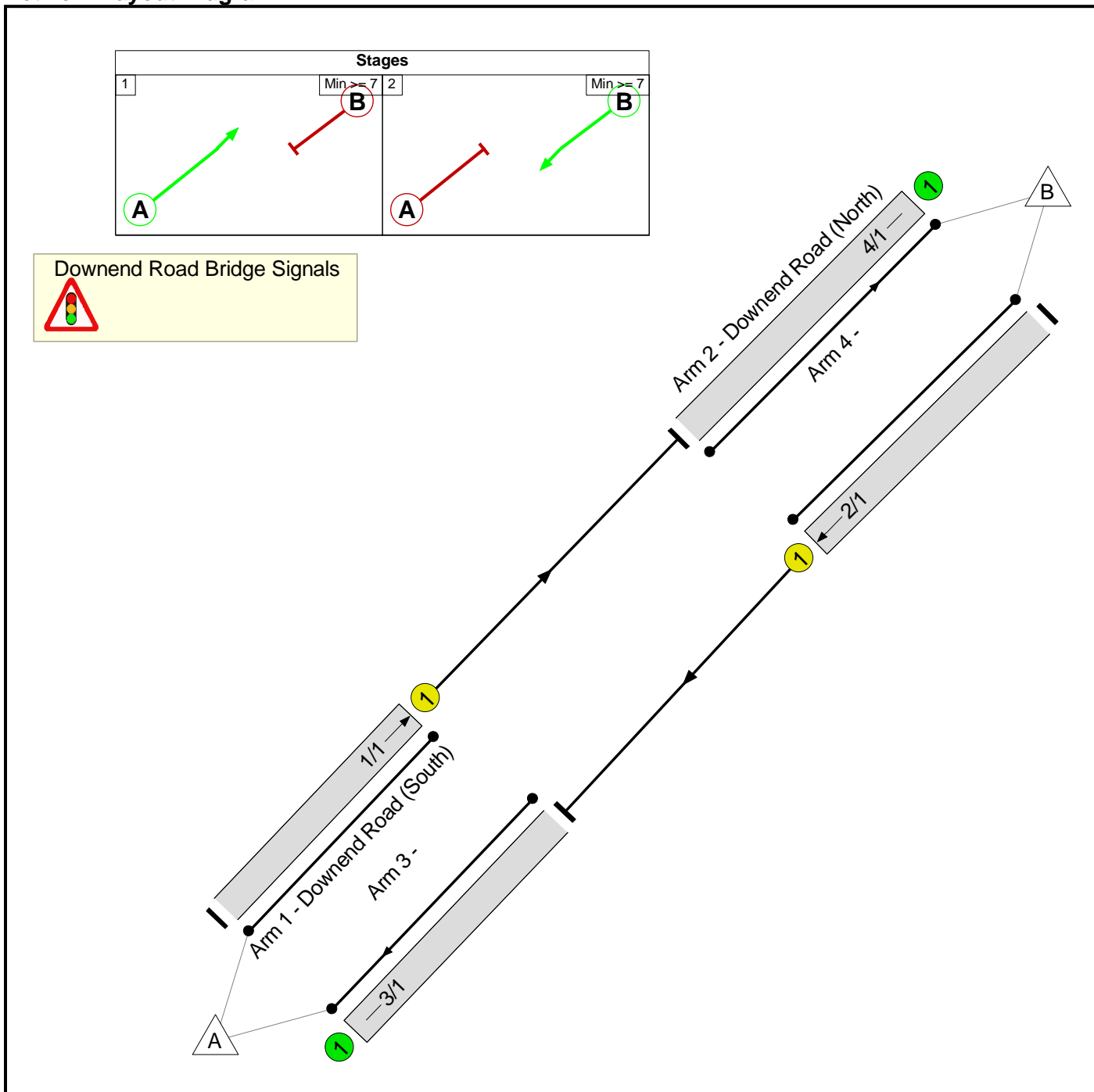


JCT Revised Submission Full Input Data And Results
JCT Revised Submission Full Input Data And Results

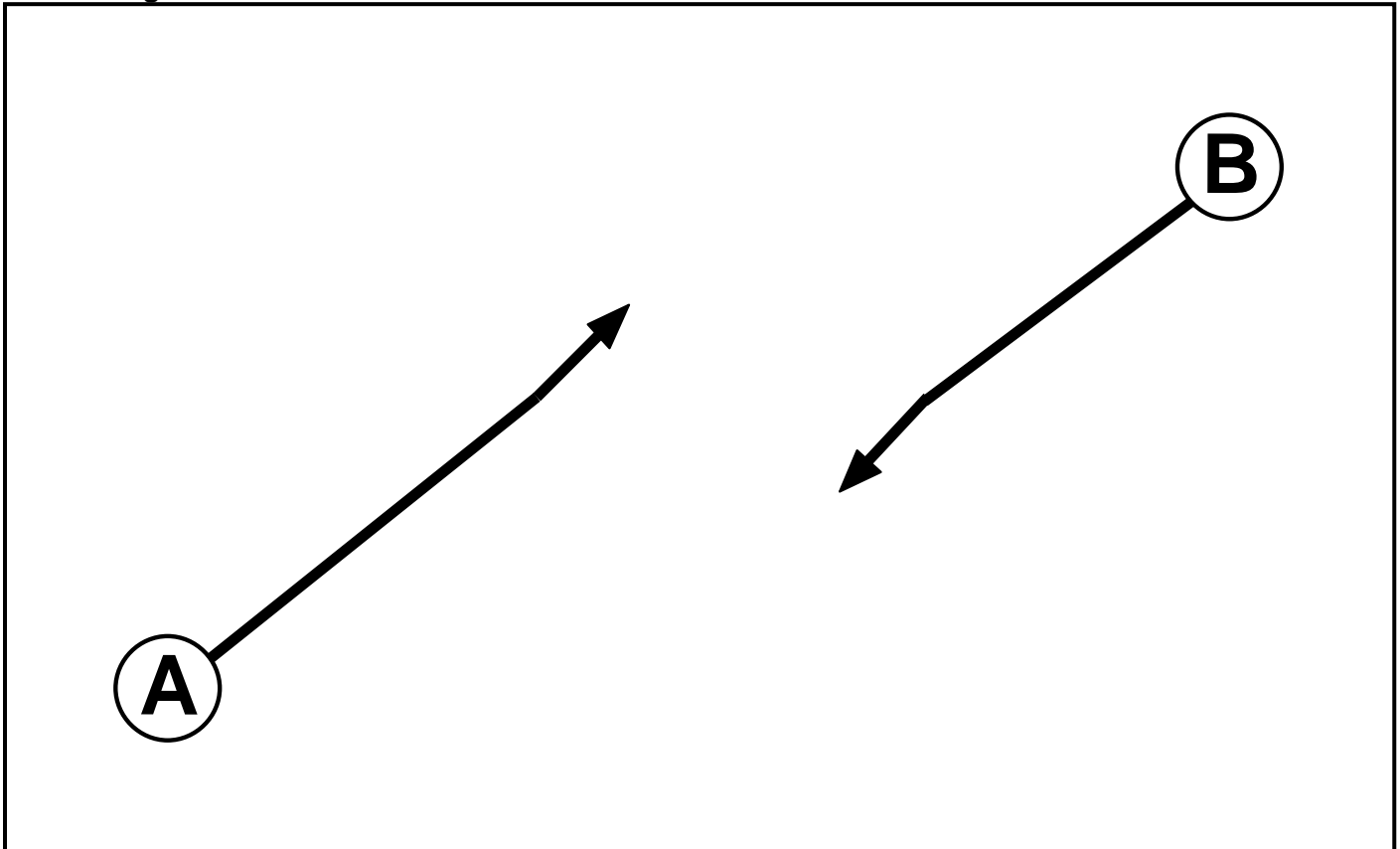
User and Project Details

Project:	Downend Bridge
Title:	Revised Submission
Location:	Fareham
Client:	i-Transport
Design Layout Ref:	ITB12212-GA-051 Rev D
Date Started:	27/11/20
Date Completed:	27/11/20
Model Assumptions:	Model adapted to reflect revised southbound stop line position (Drawing ITB12212-GA-051D) Traffic flow profile for the 07:30 - 08:30 used as higher than the 7am-8am or the 8am-9am flows Intergreen period of 10 seconds used in accordance with Traffic Signs Manual Chapter 6 Cycle times of both 50 secs and 60 secs tested.
Checked By:	Tim Wall
Checked By Date:	27/11/20
Additional detail:	
File name:	Downend Bridge RS JCT - PCU Check.lsg3x
Author:	Andrew Lillington
Company:	i-Transport
Address:	Grove House, Lutyens Close, Chineham Court, Basingstoke RG24 8AG

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7

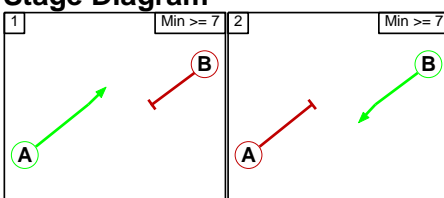
Phase Intergreens Matrix

		Starting Phase	
Terminating Phase		A	B
	A		10
	B	10	

Phases in Stage

Stage No.	Phases in Stage
1	A
2	B

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

		To Stage	
		1	2
From Stage	1		10
	2	10	

Give-Way Lane Input Data

Junction: Downend Road Bridge Signals

There are no Opposed Lanes in this Junction

Lane Input Data

Junction: Downend Road Bridge Signals												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Downend Road (South))	U	A	2	3	60.0	Geom	-	3.00	5.00	Y	Arm 4 Ahead	Inf
2/1 (Downend Road (North))	U	B	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 3 Ahead	Inf
3/1	U		2	3	60.0	Inf	-	-	-	-	-	-
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2026 with Dev AM 07:30-08:30'	07:30	08:30	01:00	

Scenario 1: 'AM Peak CT60' (FG1: '2026 with Dev AM 07:30-08:30', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination			
	A	B	Tot.	
Origin	A	0	498	498
	B	410	0	410
	Tot.	410	498	908

Traffic Lane Flows

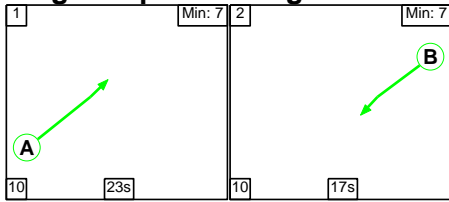
Lane	Scenario 1: AM Peak CT60
Junction: Downend Road Bridge Signals	
1/1	498
2/1	410
3/1	410
4/1	498

Lane Saturation Flows

Junction: Downend Road Bridge Signals								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Downend Road (South))	3.00	5.00	Y	Arm 4 Ahead	Inf	100.0 %	1705	1705
2/1 (Downend Road (North))	3.00	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1915	1915
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: 'AM Peak CT60' (FG1: '2026 with Dev AM 07:30-08:30', Plan 1: 'Network Control Plan 1')

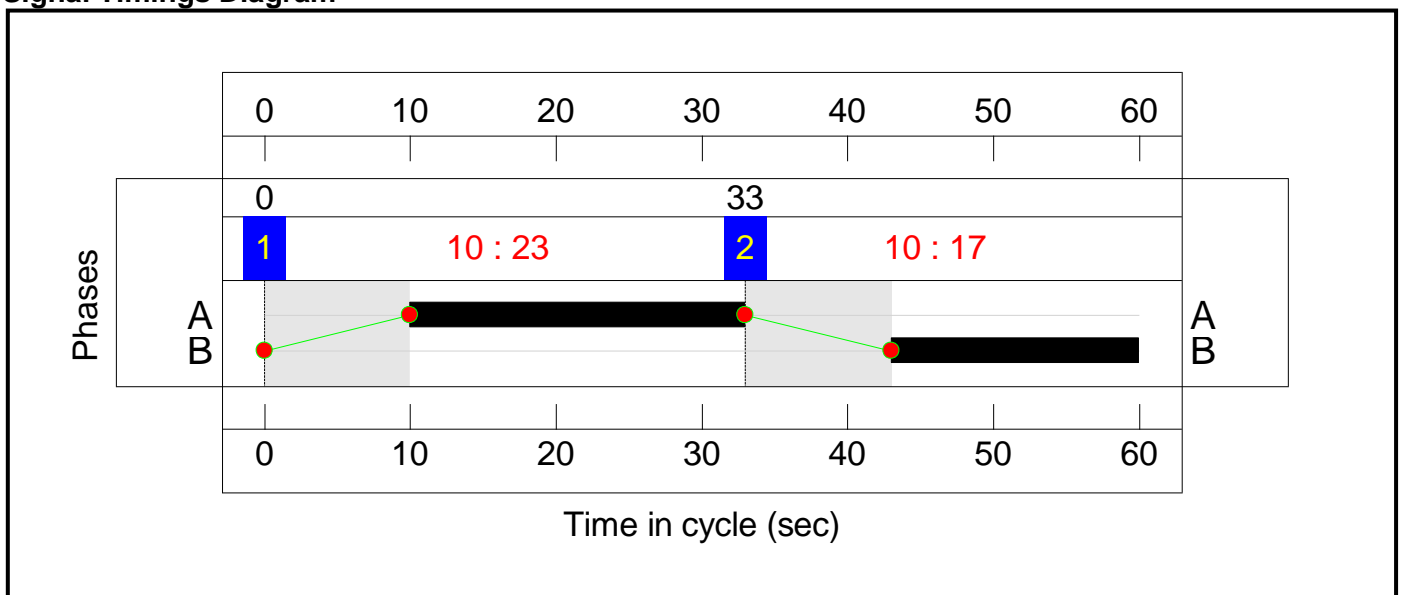
Stage Sequence Diagram



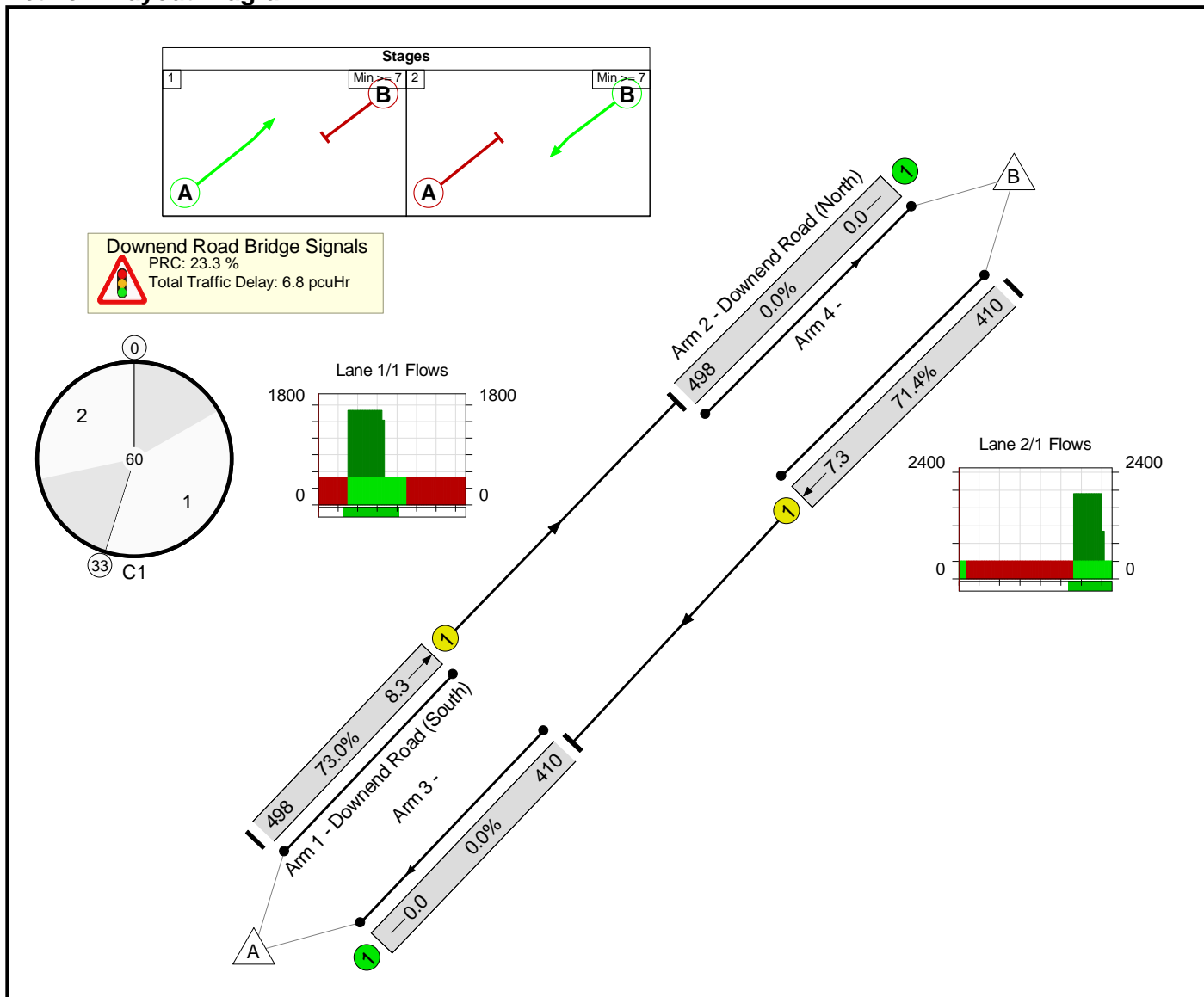
Stage Timings

Stage	1	2
Duration	23	17
Change Point	0	33

Signal Timings Diagram



Network Layout Diagram



JCT Revised Submission Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Revised Submission	-	-	N/A	-	-		-	-	-	-	-	-	73.0%
Downend Road Bridge Signals	-	-	N/A	-	-		-	-	-	-	-	-	73.0%
1/1	Downend Road (South) Ahead	U	N/A	N/A	A		1	23	-	498	1705	682	73.0%
2/1	Downend Road (North) Ahead	U	N/A	N/A	B		1	17	-	410	1915	574	71.4%
3/1		U	N/A	N/A	-		-	-	-	410	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	498	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Revised Submission	-	-	0	0	0	4.2	2.6	0.0	6.8	-	-	-	-
Downend Road Bridge Signals	-	-	0	0	0	4.2	2.6	0.0	6.8	-	-	-	-
1/1	498	498	-	-	-	2.1	1.3	-	3.4	24.9	6.9	1.3	8.3
2/1	410	410	-	-	-	2.1	1.2	-	3.4	29.5	6.0	1.2	7.3
3/1	410	410	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	498	498	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%): 23.3		Total Delay for Signalled Lanes (pcuHr): 6.80		PRC Over All Lanes (%): 23.3		Total Delay Over All Lanes(pcuHr): 6.80		Cycle Time (s): 60		