Hughes, Martha

From: Fiona Bennett <fiona.bennett@highgatetransportation.co.uk>
Sent: 06 August 2020 19:15
To: Taylor, Mike; Heywood, Robert
Cc: 'Dave Tighe (dave.tighe@highgatetransportation.co.uk)'; Colin Griffiths; Wright, Colin; Pendergast, John; Lu, Tao; Coupe, Gavin D; Laverick, Benjamin
Subject: Peel Hall VISSIM Package
Attachments: 1901 27 A49 Cromwell Avenue SLW Potential Mitigation.pdf

Dear Mike and Rob,

Please find below the link for the VISSIM package (inclusive of future year modelling and spreadsheets etc):

https://link.modelling.group/fl7

From this modelling it can be seen that the combination of committed and proposed mitigation measures creates a network able to absorb the projected Peel Hall development traffic whilst maintaining a relative network wide performance in both tested peaks in 2022 and 2032. There are some relatively minor, steady increases to journey times and delay as a result of the growth in both background traffic and specific development related traffic. However, there are two noticeable areas where higher levels of delay are apparent; at the A49/Cromwell Avenue/Sandy Lane West and A49/A50 Long Lane/Hawleys Lane junctions.
The results show that improvements to the signal control are possible with a better junction control i.e. MOVA updates at the A49/A50 Long Lane/Hawleys Lane junction. It is quite apparent in the modelling that with the addition of the committed and proposed mitigation measures, the impact on the network is considerable in terms of unlocking capacity. However, the advantages of increased capacity at those locations with mitigation result in a subsequent impact on the A49/Cromwell Avenue/Sandy Lane West junction, which as you are aware acts as a bottleneck for the corridor, even at present.
From studying the updated VISSIM it would appear that increasing the left turn filter lane from the A49 northbound arm to Cromwell Avenue from one to two lanes, and extending the length of these filter lanes, would ensure that a reduction in green time could be given to this arm to free up green time for the other movements, such as the right-turn from A49 southbound and movements from Sandy Lane West, thereby balancing the junction more effectively. It is also apparent that the length of the bus lane on the A49 southbound reduces the queue stacking capacity at this junction, which may also need to be investigated further. A sketch of this conceptual mitigation for is provided for discussion.

Kind regards,
Fiona

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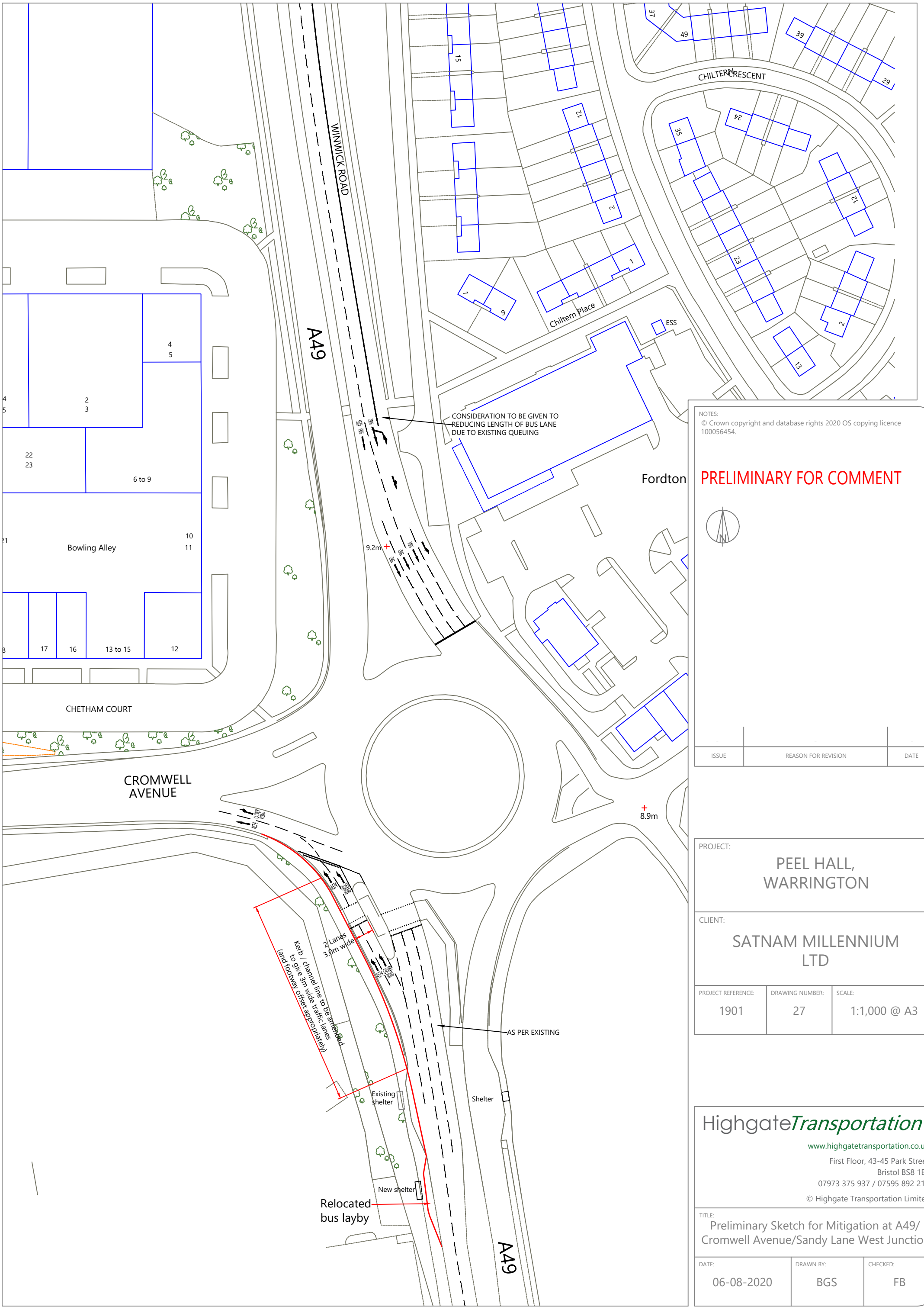

PRELIMINARY FOR COMMENT

ISSUE	REASON FOR REVISION	DATE
-	-	-

PROJECT:
PEEL HALL, WARRINGTON

CLIENT:
SATNAM MILLENNIUM LTD

PROJECT REFERENCE:	DRAWING NUMBER:	SCALE:
1901	27	1:1,000 @ A3

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TITLE:
Preliminary Sketch for Mitigation at A49/ Cromwell Avenue/Sandy Lane West Junction

DATE:	DRAWN BY:	CHECKED:
06-08-2020	BGS	FB