



Castlefields Way – Traffic Signal & Road Safety Review

Public Consultation Brief



NM16-1114/PC
August 2018



1.0 Background

Concerns have been raised with regard to the speed of vehicles travelling along Castlefields Way near Aqueduct Primary School north of Castlefields Roundabout, to Madeley Academy south of Castlefields Roundabout. Vehicle speeds are currently restricted to 40mph on Castlefields Way in the vicinity of both Aqueduct Primary and Madeley Academy.

In conjunction with this, attention has been drawn to the number of road traffic collisions at the Castlefields Way / Willow Bank junction and concerns have been raised with regard to the safety of school children in the vicinity of the signalised junction of Castlefields Way / Woodside Avenue.

A route study of Castlefields Way has been undertaken to assist in the consideration of engineering measures that would best support a scheme to reduce vehicle speed, improve pedestrian safety and review the current operation the traffic signals at the junction with Woodside Avenue.

This note refers to the length of Castlefields Way shown in Figure 1.0 Review Extents, below;



Figure 1.0 Review Extents

1.1 Work undertaken so far

Work has previously been undertaken during 2017 at the junction of Castlefields Way / Woodside Avenue to improve pedestrian safety whilst a long term solution was investigated.

These changes comprised of;

- Alterations to the road markings to remove an overtaking lane and increase the distance between the running lane and edge of carriageway at the pedestrian crossing point.
- Introduction of an advisory 20mph speed limit during school related peak periods.



2.0 What changes are proposed?

2.1 30mph Speed Limit

It is proposed to introduce a 30mph speed limit, the extent of which is shown in figure 4-1 below.

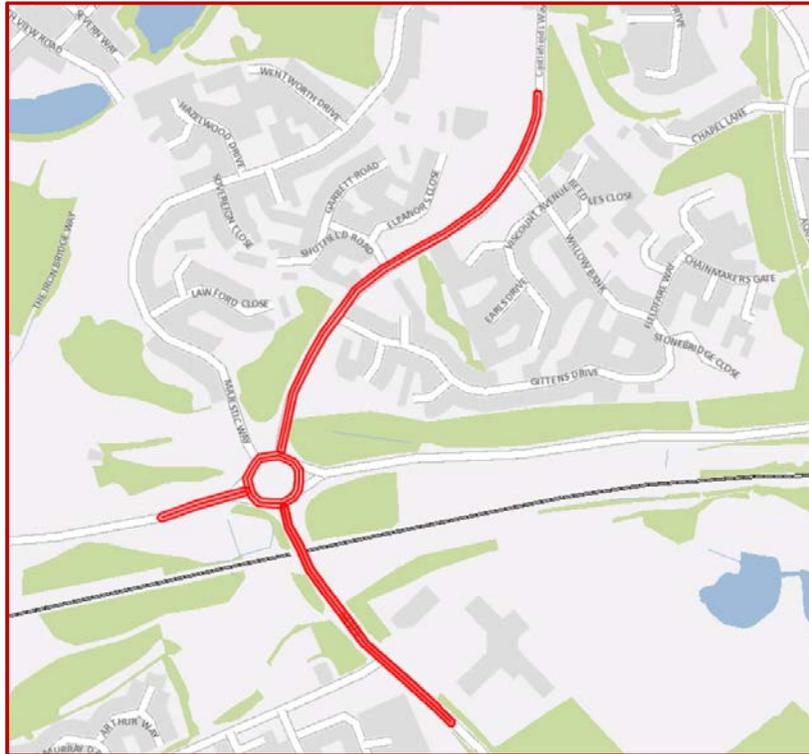


Figure 4-1 – Proposed Speed Limit Extents

This proposed limit will tie into existing 30mph speed limits on Majestic Way, Aqueduct and the adjoining roads, Gittens Drive/Willow Bank, Aqueduct and the adjoining roads and Woodside Avenue, Woodside and the adjoining roads. The new speed limit would also incorporate Castlefields Roundabout due to the majority of approaches being subject to 30mph speed limit as part of these proposals.

Advantages	Disadvantages
<ul style="list-style-type: none"> • Reduced speed limit throughout the extents of the two schools • Low cost and ease of installation • Improved pedestrian safety as a result of lower speeds • Reduced likelihood of shunt type collisions with lower vehicle speeds 	<ul style="list-style-type: none"> • May not be supported by The Police due to current speeds being above the permitted thresholds • Will require high cost engineering measures to make this scheme permissible. • May set expectations high that this will receive enforcement once in force – however this may not be the case and the restriction should be self-regulating. • Speed limit repeater signs will not be permitted within the 30mph speed limit.



Speed limits should be self-enforcing and so your consideration is required with regard to the proposals identified in drawing NM16-114/PC/1 and explained below.

2.2 Build Outs and Carriageway Narrowing

Localised narrowing's at various points along the route introducing refuges/islands in a chicane type layout. This will narrow the existing carriageway width and will encourage slower speeds through the chicanes complementing the existing central hatching and central refuges/islands provided along the route.

Advantages	Disadvantages
<ul style="list-style-type: none">• Do not cause any vehicle passenger discomfort (in comparison to vertical treatments)• Can be removed and replaced before and after highway maintenance should bolt down versions be used.• Appropriate for the traffic flows of the route.• May discourage some drivers from using this route and transfer these trips on to the higher category roads (A442 / A5223 / A4169).	<ul style="list-style-type: none">• Vulnerable to damage by vehicles• In isolation these are not as effective as vertical features such as speed cushions• May be more difficult to implement on some sections of Castlefields Way.



2.3 Rubber Bolt Down Speed Cushions

Install rubber bolt down cushions with associated signage and lining for the extent of the proposed 30mph speed limit shown in figure 4-1. This option would match the traffic calming that is already in place north of this scheme along Springhill Road / Finger Road.

Advantages	Disadvantages
<ul style="list-style-type: none"> • More effective than horizontal treatments at reducing speed • Made from rubber so reduced noise pollution for residents. • Quick Installation • Easy to maintain due to the modular construction of the cushions • Cushions are removable if required in the future. • Emergency vehicles can drive over the cushions without hindrance. • Can be avoided by cyclists • Drainage should not be affected • May deter drivers using residential estates to avoid busier roads • Reduction in public anxiety 	<ul style="list-style-type: none"> • Some residents may not want speed cushions installed in the vicinity of properties due to the potential for noise pollution. Rubber bolt down cushions would mitigate this issue to an extent. • The installation of cushions is subject to a statutory consultation process. • Higher cost than softer engineering measures. • Speed cushions are effective at reducing motor vehicle speeds, however they are not as effective as speed tables or speed humps.



2.4 Traffic Signal Improvements

Introduce pedestrian count down timers at the traffic signals junction Castlefields Way / Woodside Avenue. In conjunction with this it is proposed to introduce a mode of control called MOVA at the signals. The pedestrian countdown timers will reduce capacity at the junction due to the need for fixed time pedestrian times. MOVA is an intelligent adaptive mode of control that will provide improved vehicle green efficiency to compensate for the efficiency lost in pedestrian times and also reduce some of the queuing traffic that currently takes place during the morning and afternoon peak as a result of the traffic signals at this junction.

Advantages	Disadvantages
<ul style="list-style-type: none"> • Pedestrians feel less rushed when crossing as they have clear indication on crossing time remaining • Gives more confidence to mobility impaired pedestrians, who may cross more slowly • Pedestrians who didn't see a green man signal can decide if they have enough time to cross the road • Some installations can allow a small reduction in delay to motorised vehicle traffic • Will maximise benefit for pedestrians, traffic and collision reduction. 	<ul style="list-style-type: none"> • Cannot be used with near-sided pedestrian equipment • High cost to implement • Possibly less tangible benefits compared to some of the more visible options proposed.

2.5 Revised Parking Restrictions – Eleanors Close

Narrowing of the carriageway along Castlefields Way enables the provision of on street parking that should alleviate parking issues experienced in Eleanors Close during school related peak times.

As provision for parking along Castlefields Way has been considered it is proposed to review the existing parking restrictions in Eleanors Close as indicated in NM16-114/PC/1.

The proposal is to keep the “No Waiting at Any Time” Traffic Regulation Order and associated double yellow lines as they are, and to extend the No Waiting between 8.00 – 9.30 and 2.30 – 4.00 order.



3.0 What will happen next?

It is considered that the public consultation will be a direct test of public support for one or a combination of the options presented before proceeding to detailed design. The outcome of the public consultation will be reviewed in detail and a decision will be made based on the content of the comments received in the context of the wider transport network.

Factors that will be taken into account will include, but not necessarily be limited to:

- Road safety
- Network operation
- Level of support
- Detail of any objections

Proposals 2.1, 2.3 and 2.5 will be subject to statutory consultation prior to implementation. This will allow any formal objections to the proposals to be submitted for consideration.

What will happen if the proposals are not supported?

The content of any objection will be considered and responded to accordingly. Should the proposals receive a high level of objection, it is unlikely that the proposal will be taken forward and an alternative option may be considered. The format of any alternative proposal would be based on the content of any objection. Any alternative scheme would then be put forward as part of the future capital programme and would need to be prioritised alongside other similar schemes.