



Feasibility Report

Peldon to Salcott
Traffic Management Improvements
June 2021

Document Control Sheet

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Executive Summary

This study investigates the possibilities of traffic management improvements along the route of Peldon to Salcott, along with an extension of the 30mph speed limit in Great Wigborough.

The existing route is a single carriageway with speed limits of 30mph and 60mph along the length, which passes through various villages. The road carries approximately 4500 to 6800 vehicles per day and there are various bus stops, residential accesses, farm accesses and junctions present on the road.

The existing 30mph speed limit extents comply with Essex County Council's speed management strategy and currently sees good compliance. However, a proposed extension would also comply, but is not recommended due to the current good compliance.

As part of the study recommendations, there are various road sign and road marking improvements suggested as per drawing numbers E09021G098-00-005, 006, 007, and 008 shown in the Appendices.

Introduction

The study was commissioned by the Local Highways Panel in the 2020/2021 financial year, after a request by the local County Councillor and several Parish Councils including Peldon, Great & Little Wigborough, Virley, and Salcott. These parties had raised concerns around the speed and volume of traffic from Peldon to Salcott. The Parish Council's are asking for traffic management improvements along the route, for the benefit of the local community.

Subsequent further requests were received to include Salcott junction in the feasibility study and the parish council also requested if the length of the Great Wigborough's 30mph limit could be extended.

The area of concern covers Peldon Road, Wigborough Road, Lower Road, and Mersea Road. The B1026 is a priority 2 route within the Essex Functional Route Hierarchy and has the benefit of speed limits between 30mph and 60mph.

Existing Site Conditions

Site Location/Layout



Site Location Plan

- Wigborough Road, Peldon Road, Maldon Road and Colchester Road (incl. B1026) are classified as PR2 routes according to Essex County Council's route hierarchy.
- The Carriageway width is approximately 6m and there are no footways present in most sections.
- There are various residential and farm access ways and junctions present
- The area does not feature street lighting
- The road is a bus route and there are various bus stops in the area
- There is a bridge (Harvey Bridge) present on the Wigborough Road and a section of Colchester Road (B1026) is a traffic sensitive street from 6:30 to 10:00 and from 15:00 to 19:00.
- There are trees and hedges present on either side of the road

Site Observations/Visit

A site assessment was undertaken on 20th April 2021 at around 1pm, a summary of the main findings are below:

- The above route is a busy road with various kinds of vehicles travelling to and from Colchester.
- The road surface is generally in good condition and includes bends in some sections.

- There are overhead electricity lines and British Telecom lines are also present in the work area. All underground utilities will need to be investigated at any detailed design of the scheme.
- A Utility Service Technician (UST) survey was not undertaken as part of the feasibility study, however it is recommended to undertake this survey as part of any detailed design
- Existing traffic signs are fit for purpose along the route, however, if funding is allocated a detailed design and renewal of the existing signs is recommended
- Most part of the existing road markings are worn. As part of any detailed design, all markings should be refreshed.

Existing TRO's/SLO's

The following 30mph speed limit orders are provided by traffic management team (see extract below) and there are not any other traffic regulation orders in the study area. The national (de-restricted) speed limit in the area is not enforced by a speed limit order.

25. Peldon

Lower Road, Peldon - For its entire length.

Mersea Road, Peldon - From its junction with Lower Road southeastwards for a distance of 235 metres.

Church Road, Peldon - For its entire length.

St Ives Road, Peldon - For its entire length.

Malting Road, Peldon - For its entire length.

Peldon Road, Peldon - From its junction with Malting Road northeastwards for a distance of 60 metres.

Land Ownership and Land Use

All works in the study area are within the highway boundary. It is recommended to undertake a highway boundary search during detail design of any scheme as necessary.

Data analysis

Collision History

There are 5 slight accidents and a serious accident recorded in the past 5 years (from 01/03/2016 to 28/02/2021) within the area of interest.



Collision History Plan (5 year)




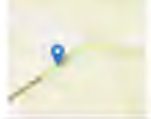
Accidents involving:

	Fatal	Serious	Slight	Total
Motor vehicles only (excluding 2-wheels)	0	1	3	4
2-wheeled motor vehicles	0	0	1	1
Pedal cycles	0	0	1	1
Horses & other	0	0	0	0
Total	0	1	5	6

Table W: Collision overview summary

Speed Surveys/Traffic Counts

As part of the scheme validation process, three Automatic Traffic Counts (ATCs) were obtained by Highways Liaison Officers (HLOs) in July 2019 for a week. See below for the summary of the data.

Automatic Traffic Counts							
Date	Location			Posted Speed Limit	Direction of Travel	Average Daily Speed	Average Daily Volume
Jul-19	Lower Road, Peldon	135m west of j/w Newpost Close		30mph	East	31.4mph	2224.9
					West	29.6mph	2210.4
Jul-19	Peldon Road, Little Wigborough	390m southwest of j/w Copt Hall Lane		60mph	East	41.8mph	2559.4
					West	39.4mph	2542.9
Jul-19	Maldon Road, Little Wigborough	165m southwest of j/w School Lane		30mph	East	33.7mph	2461.9
					West	33.3mph	2453.1
Jul-19	B1026 Maldon Road, Virley	100m southwest of Salcott-com-Virley village sign		60mph	Northeast	40.1mph	3414.7
					Southwest	41.0mph	3270.3

Design Methodology

Design References

The proposed road sign and marking improvements are to be implemented according to the Traffic Signs Regulations and General Directions (TSRGD) 2016 and Traffic Signs Manuals (TSM).

The speed limit assessments are carried out according to Essex County Council's (ECC) Speed Management Strategy.

Final Design or Option proposals

Refer to drawing E09021G098-00-005 – Proposed Layout – Sheet 1 of 4

At Malting Road it is proposed to install new wooden style village gateway signs with speed limits included, and also it is recommended to increase the size of the existing speed limit repeater signs and install carriageway roundels to highlight the speed limit.

In front of the nursery on Lower Road; install warning signs, speed roundels and slow markings. (A speed indicator device was also considered here, but the current traffic speeds did not meet the required criteria. Hence the proposed location is shown struck-through).

At other locations, replace the existing warning signs and provide new chevron signs as shown.

Refer to drawing E09021G098-00-006 – Proposed Layout – Sheet 2 of 4

In this section, it is proposed to extend the existing 30mph in Great Wigborough as shown. As part of any future detailed design stage, it is recommended to take new Automatic Traffic Counts (ATC's) at these locations to support the proposal.

The following extract from ECC's speed management strategy provides the criteria for 30mph in rural areas. However, this extension of the 30mph speed limit must be consulted upon as part of the TRO process with all stakeholders and residents.

4.1 Village speed limits

The County is moving towards a standard speed limit of 30mph in villages. TAL 01/04 **Village Speed Limits** defines a village as being 20 or more houses and a minimum length of 600 metres. Essex County Council has relaxed these requirements to the following:

- 11 or more properties to include houses, shops, a church or school, village hall or public house (traffic generators), etc.;
- Minimum length of 350 metres.

It is suggested that the terminal points of a village speed limit are sited to give a clear visual message to drivers that they are entering the village. For example, within sight of the first property or by using a gateway feature near to the start of the development (see signing of speed limits).

In this section of the study, there are various new warning signs and village gateway signs proposed as per the drawing.

The existing road width is greater than 5.5m in most of the locations at Great Wigborough, therefore removal of the existing centre line road markings is not recommended.

Refer to drawing E09021G098-00-007 – Proposed Layout – Sheet 3 of 4

In this section of study area, new bend warning signs and new layout of staggered chevron signs are proposed.

Refer to drawing E09021G098-00-008 – Proposed Layout – Sheet 4 of 4

In this area only one bend warning sign is proposed as part of the study.

Road Safety Audit/Comments

A Road Safety Assessment was undertaken in May 2021 (reference number 1112) and is included in the Appendices of this report. As part of this request, Draft proposed layout drawings were submitted for review.

The main findings of the Safety Assessment were as follows:

No real issues were identified with the proposed signage alterations. However, some of the proposed signs were recommended to be altered to slightly different versions, to reflect the road geometry more accurately along the route.

One comment from the Safety Assessment in regard to the proposed extension to the 30mph speed limit, was to consider making the new location of the limit terminals more conspicuous (e.g. yellow backed sign boards and additional road markings). Some form of surface contrast may also enhance compliance.

Cost Estimate

The following ball-park cost estimates are based on previous target costs for similar construction schemes and are provided as a guide only. There are a number of factors that could increase/decrease the estimates, and they should not be used as an actual cost.

Installation of traffic signs and road markings as per drawings E09021G098-00-005, 006, 007, and 008 = £10,000.

Detailed design only for above = £4,000

Total £14,000

Recommendation

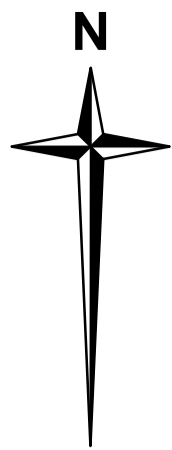
Whilst it is physically possible to extend the 30mph speed limit extents and no recommendations against doing so were received from the Road Safety Assessment; there is good compliance with the existing 30mph restriction currently, so the recommendation of this report is to retain the limits as they are.

It should also be noted that any new road surface contrasting material (as suggested by the Road Safety Engineering Team), would be an ongoing maintenance liability, and would be unlikely to be replaced if any carriageway repairs or resurfacing work was undertaken.

It is suggested to undertake road sign improvements as recommended in the drawings E09021G098-00-005, 006, 007, and 008, along with refreshing all the existing road markings along the route.

Appendices

Drawings E09021G098-00-005, 006, 007 & 008 – Proposed Layouts
Road Safety Assessment – Reference 1112



Notes

1. Do not scale.

Rev.	Date	Description of revision	Drawn	Checked	Review'd	Approv'd

DRAWING STATUS **FOR FEASIBILITY**



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SCHEME TITLE
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DRAWING TITLE
Proposed Layout (Sheet 1 of 4)

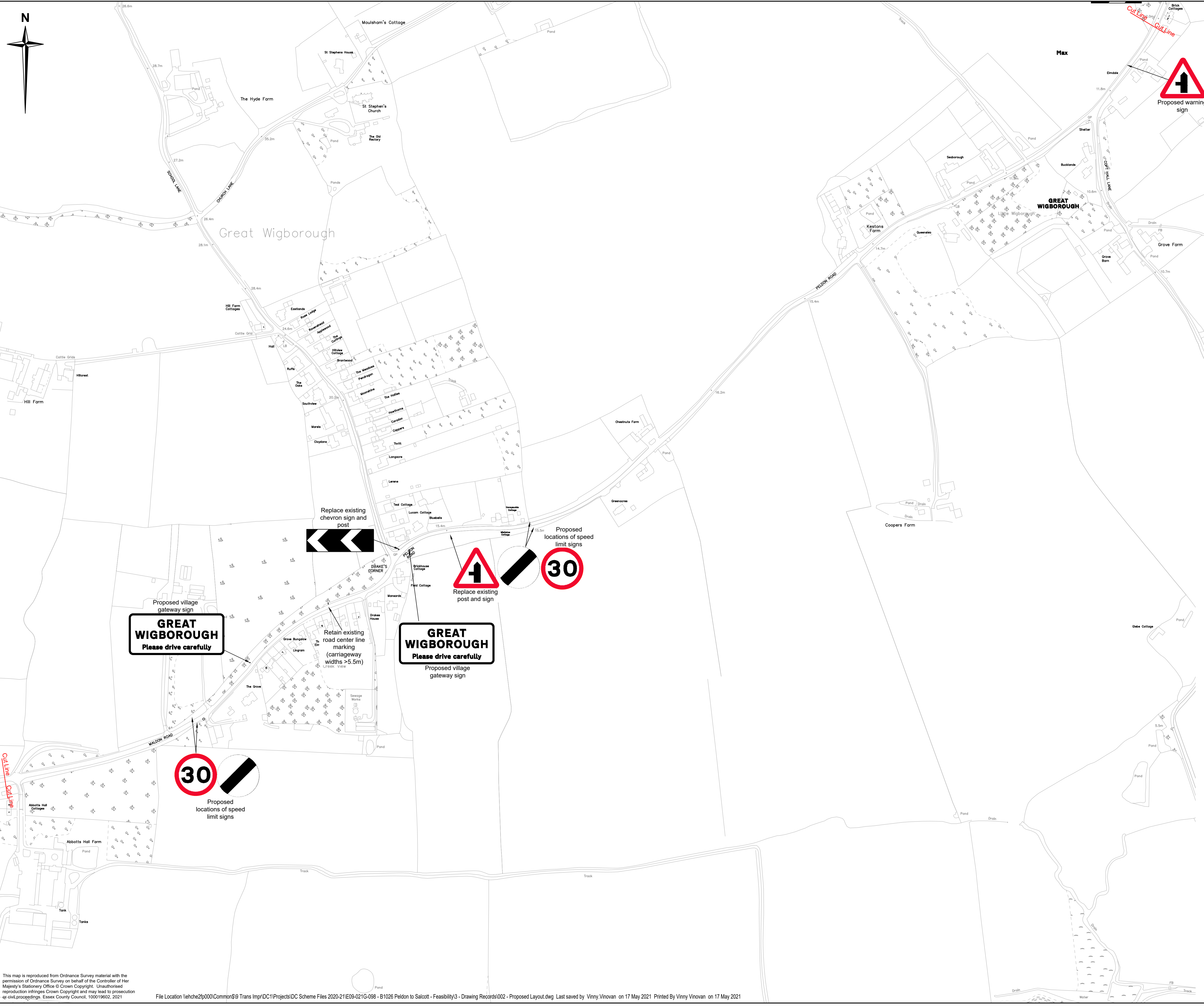
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VV	VV		VV	SW
DATE APR 21	DATE APR 21	DATE	DATE MAY 21	DATE MAY 21

DRAWING UNITS U.N.O. DIMENSIONS IN MILLIMETRES LEVELS IN METRES SCALE AT A1 (841X594mm) NTS

DRAWING No. **E09021G098-00-005** REV. -



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Proposed Layout (Sheet 2 of 4)

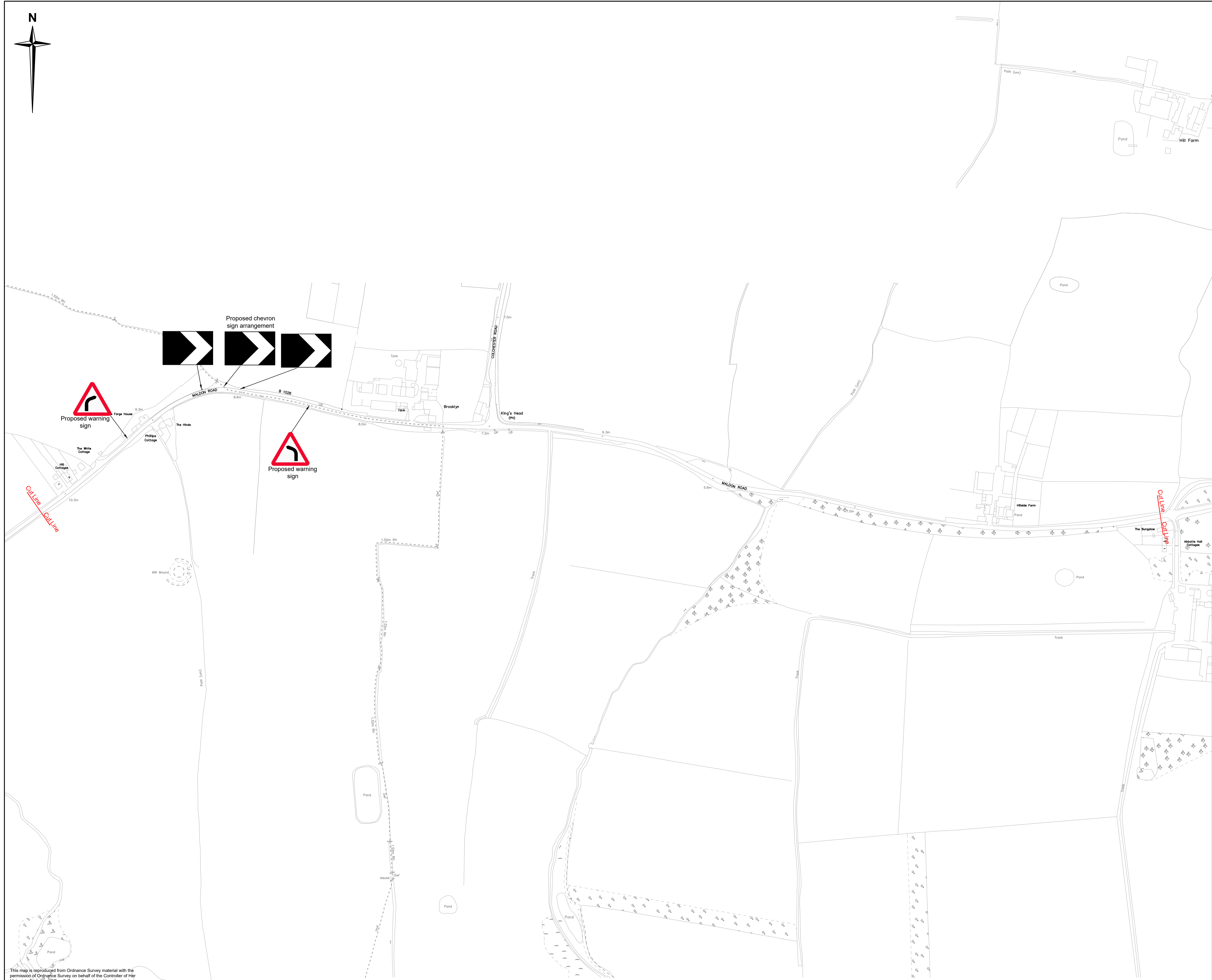
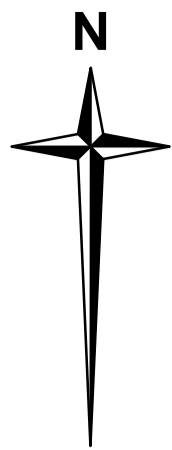
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VV	VV		VV	SW
DATE APR 21	DATE APR 21	DATE	DATE MAY 21	DATE MAY 21

DRAWING UNITS U.N.O.
DIMENSIONS IN MILLIMETRES
LEVELS IN METRES

SCALE AT A1 (841X594mm)
NTS

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DRAWING TITLE
**Proposed Layout
(Sheet 3 of 4)**

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VV	VV		VV	SW
DATE APR 21	DATE APR 21	DATE	DATE MAY 21	DATE MAY 21

DRAWING UNITS U.N.O.
DIMENSIONS IN MILLIMETRES
LEVELS IN METRES

SCALE AT A1 (841X594mm)
NTS

DRAWING No. **E09021G098-00-007** REV. **-**



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Proposed warning sign & remove existing warning sign

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SCHEME TITLE
Traffic Management Improvements Peldon to Salcott (E09-021G-098)

DRAWING TITLE
Proposed Layout (Sheet 4 of 4)

DESIGNED	DRAWN	CHECKED	REVIEWED	APPROVED
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