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# Welcome To The Chelmsford North East Bypass Public Consultation

The purpose of this public consultation is to present the junction designs and local access proposals for the Chelmsford North East Bypass.

## What is this Public Consultation about ?

In 2006 the County Council held a consultation in which a number of route options for Chelmsford North East Bypass were displayed. A large number of people attended the exhibitions, completed questionnaires, posted comments in the visitors book and made representations to the Council. We would like to thank all those who responded.

In March 2007 the County Council selected a preferred route for the Chelmsford North East Bypass.

The 2006 exhibition did not indicate details of the junctions at each end of the bypass, nor did it explain how local roads, footpaths and bridleways that crossed the route would be treated.

Suitable designs for connecting the bypass to the A12 at Boreham, to the A131 Great Leigh's Bypass at Deres Bridge and to the local road network have now been progressed. Ways of mitigating the effect of the bypass on the local roads, footpaths and bridleways that cross the line of the bypass have been investigated.

The outcome of this work is presented here for you to comment on. Your comments will be used in the decision making process when a preferred junction strategy is chosen by the County Council.



2006 Consultation



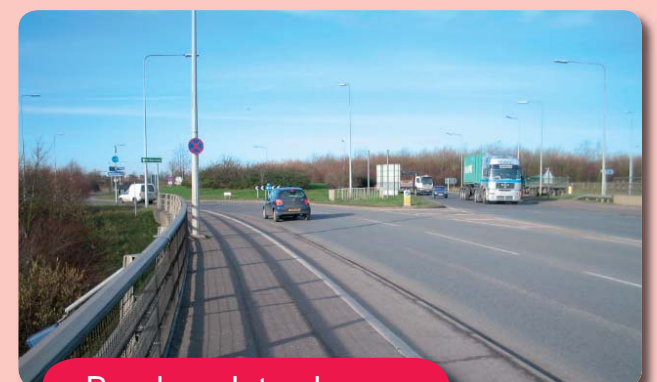
White Hart Lane



Deres Junction



Public Right of Way



Boreham Interchange





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# Background

This board shows the strategic land use and transportation proposals which have been developed through the Local Development Framework and the Chelmsford North East Study.

## Deres Junction

Capacity upgrade or conversion to Grade Separated junction.

## Bypass Route Corridor

As derived from route D shown at May 2006 Consultation.

## Park and Ride

For southbound traffic travelling into Chelmsford. Location to be determined in a separate study.

## Local Development

Area of development to be confirmed in Chelmsford Borough Council's LDF North Area Action Plan.

## Beaulieu Area

### Rapid Transit

High Quality bus link from Beaulieu Park and the development area to Town Centre is under investigation.

## Chelmsford NE Station

Proposed as part of Chelmsford Borough Council's Local Development Framework (LDF).

## Boreham

### Interchange

Capacity upgrade and connection to new bypass.

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# Improving the Network

Stansted Airport:  
Transport Innovation Fund  
opportunities under examination

New A120:  
Strategic Link to Stansted  
Airport -completed 2003/04

New A120:  
Preferred route announcement  
expected during 2006

Great Notley Bypass:  
Upgrade to Dual Carriageway  
due to start summer 2006

Great Leighs Bypass:  
Dual Carriageway completed  
in 2002

Proposed downgrading of  
A130 to a 'B' road now under  
consideration

A131/A130:  
Gap in the strategic road network  
and the subject of this consultation

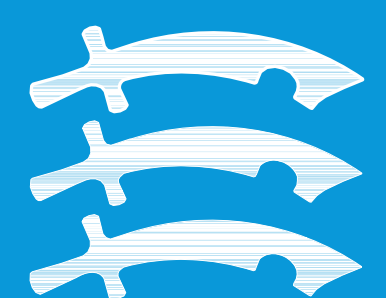
Existing A12:  
Chelmsford to Colchester  
Widening to 3 lanes to be  
developed by HA

Sandon Park and Ride:  
Opened March 2006

Existing A130:  
Connecting the south of  
Essex to the A12, A120 and  
Stansted Airport opened  
2002/2003

Existing A12:  
M25 to Chelmsford  
Widening to 3 lanes to be  
developed by HA

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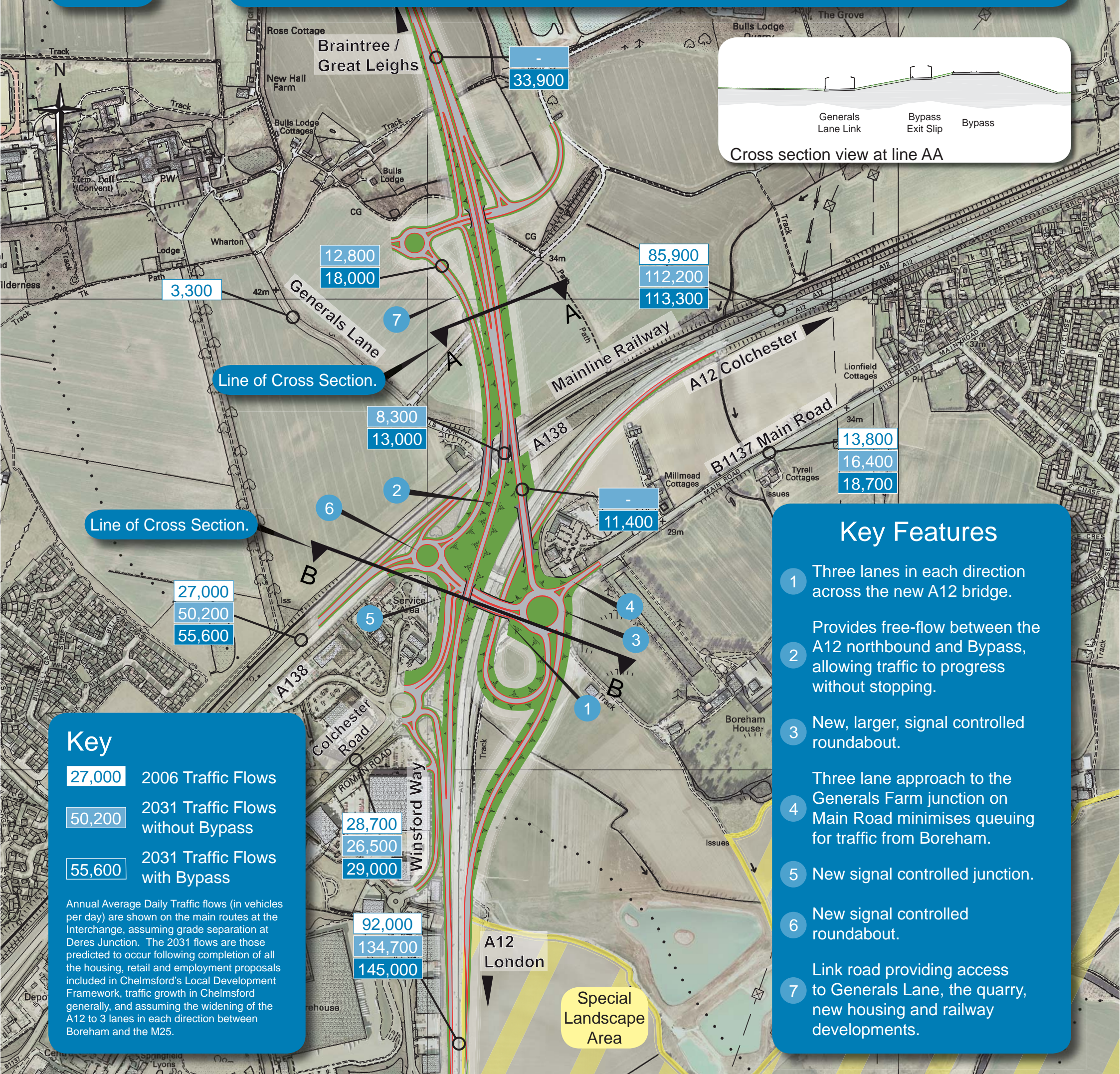


Essex County Council



04

# Boreham Interchange Proposals





## 05

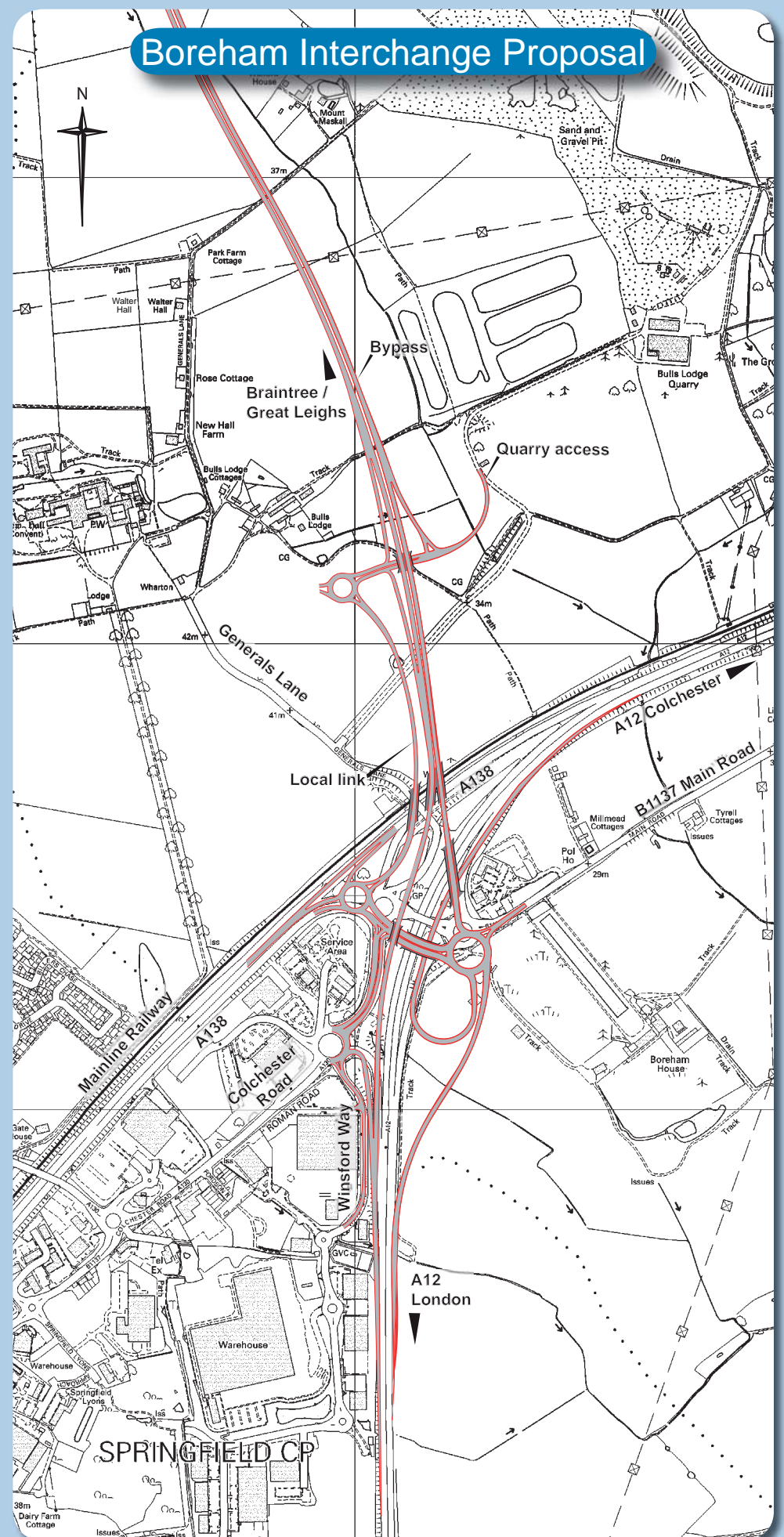
## Boreham Interchange Summary

## Engineering Considerations

- New bypass bridges over the Railway.
- Link roads pass over the A12 and Boreham Interchange.
- Generals Lane is replaced by a link over the railway.
- Maximum height is approximately 7 metres (22 feet) above the existing junction.
- Bridging over the railway and A12 results in structures that are relatively simple and economical to build.
- Options which would involve the new road passing under the railway were considered but dismissed on a combination of cost and technical grounds.

## Environmental Considerations

- Improvements in congestion on local roads may lead to a reduction in journey times and increased fuel efficiency.
- The higher level structure and substantial embankment to the north of the railway:
  - Will increase visual intrusion and affect landscape.
  - May increase traffic noise.
  - May affect the settings of listed buildings and residential property.
- A combination of brownfield and greenfield/Grade 3 agricultural land will be required which may affect:
  - protected species.
  - archaeological areas.
  - the floodplain.
  - landscape and views.
- During future stages of the scheme mitigation measures will be developed to reduce environmental impacts. These could include:
  - Use of noise reducing road surfacing and provision of noise insulation to properties.
  - Careful landscape design including planting to break up the profile of the embankment.
  - Habitat enhancement and or creation, installation of wildlife passages and barrier fencing.

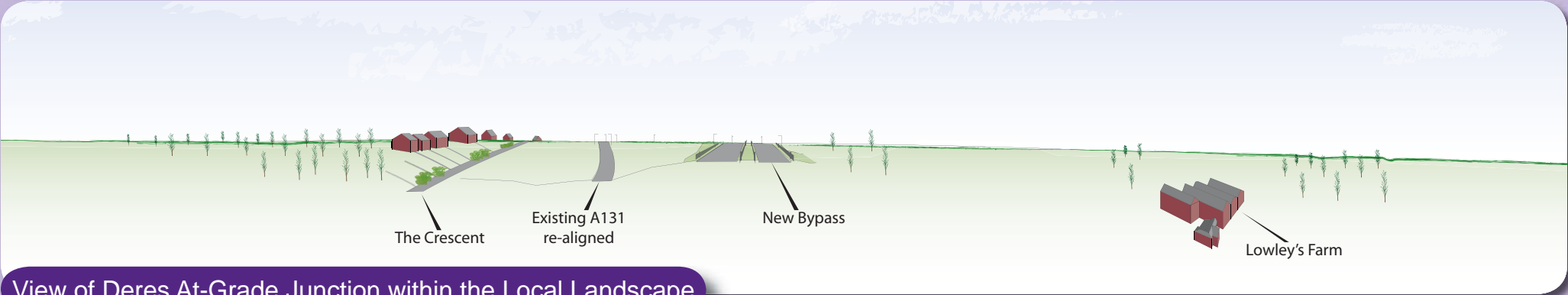
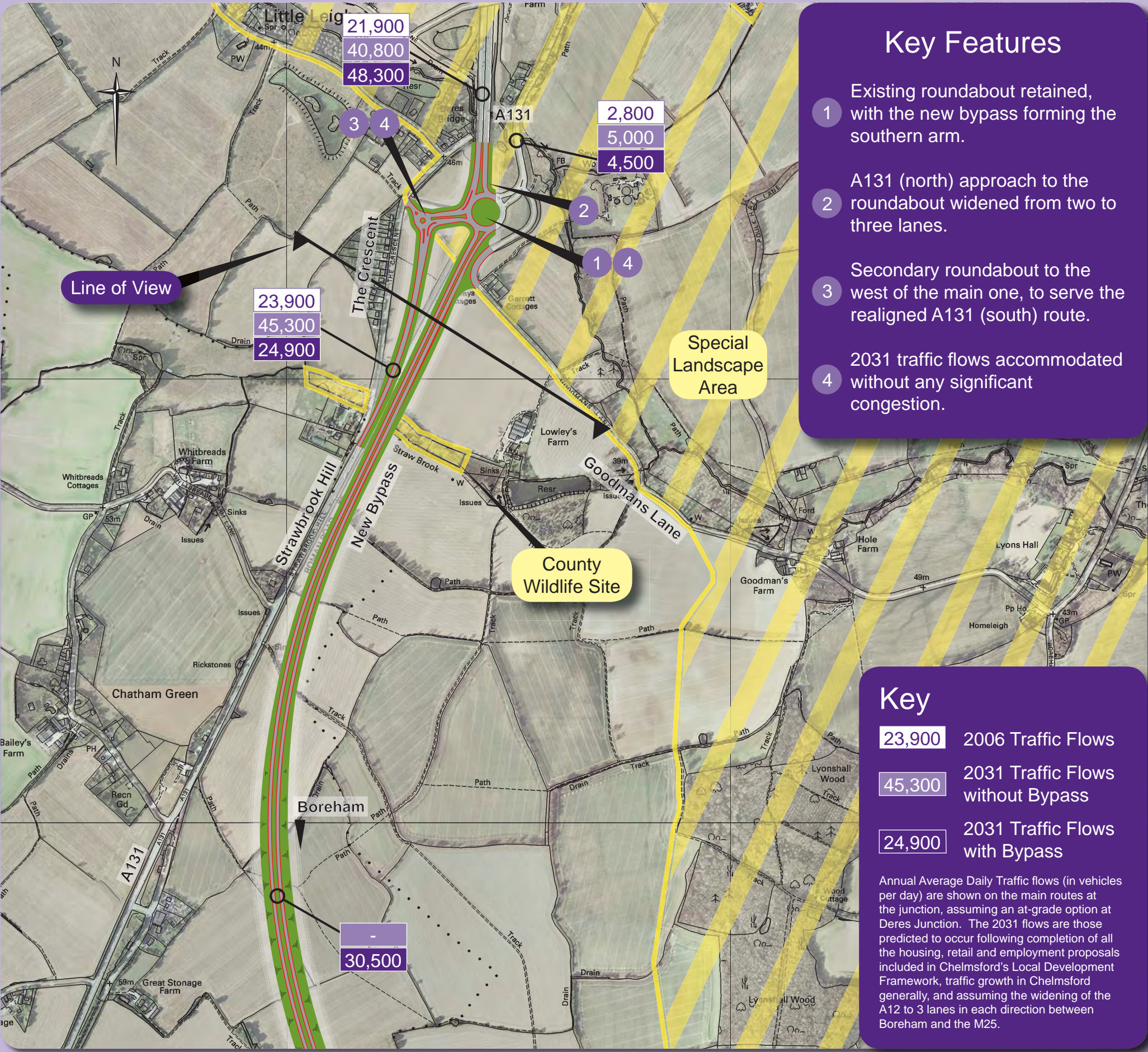


## Junction Costs

The estimated junction cost is £116m

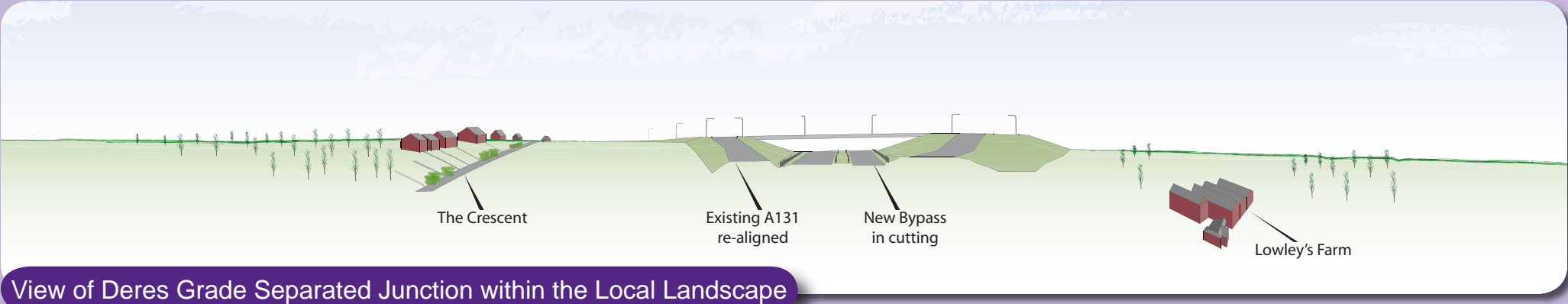
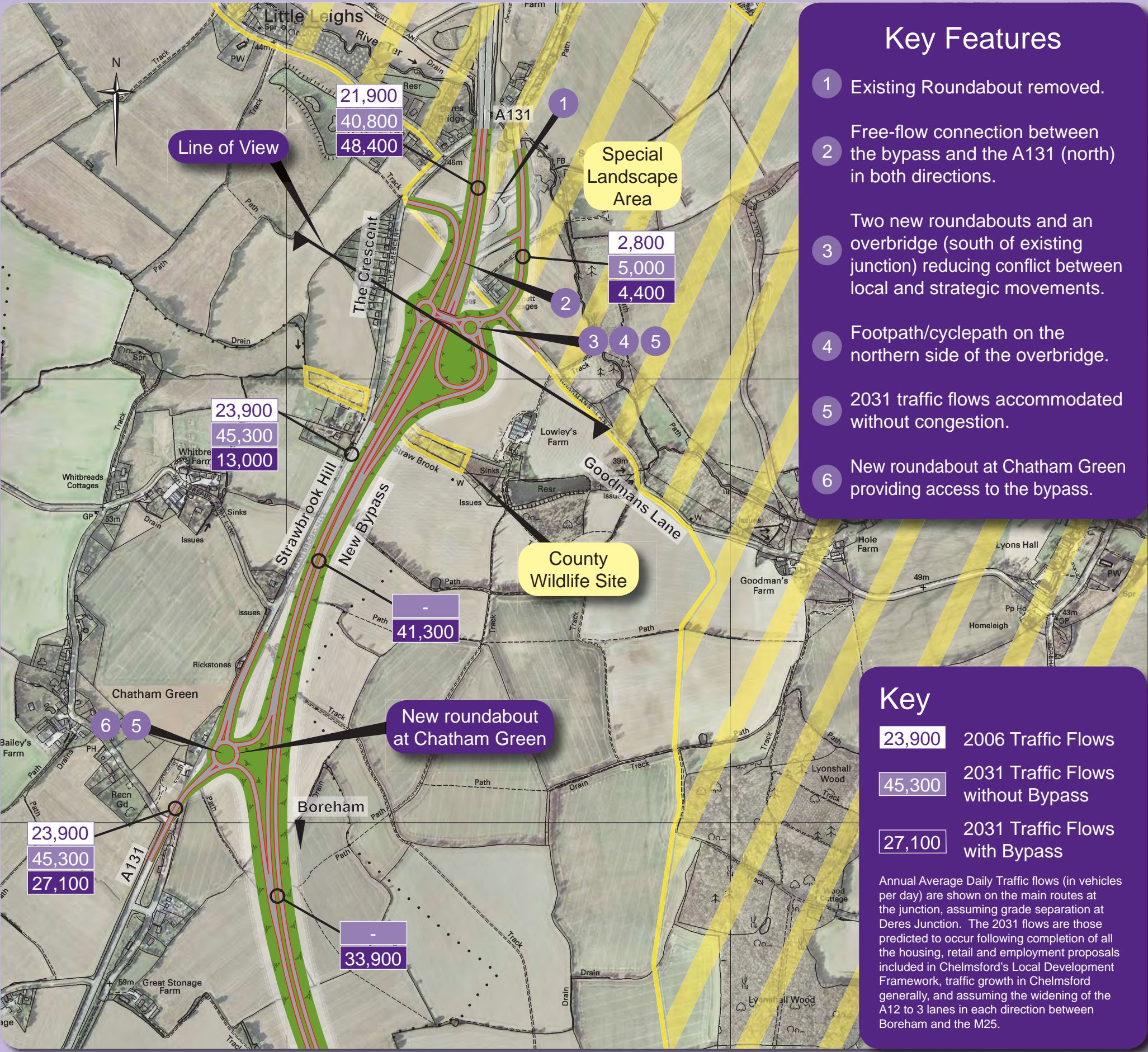






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View of Deres Grade Separated Junction within the Local Landscape

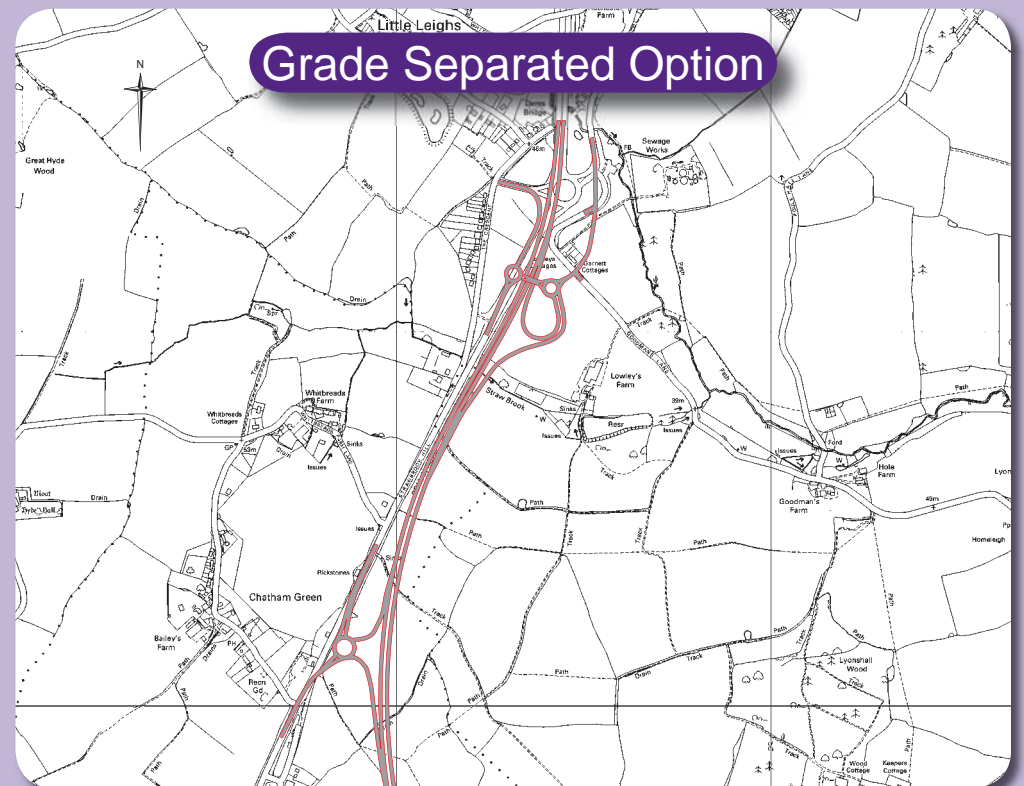
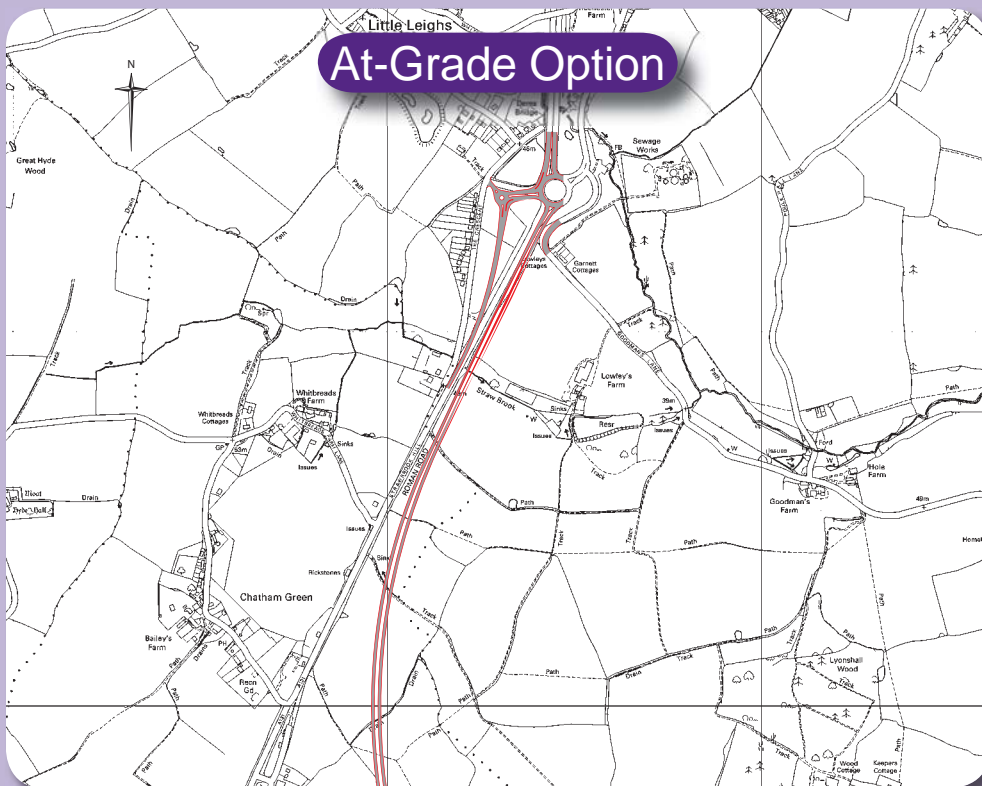
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## 08

## Deres Junction Comparison



## Engineering Considerations

- Low cost.
- May complicate future upgrade to a grade separated junction.
- Uses existing roundabout.
- Accident rates may be higher.

## Environmental Considerations

- Junction within a Special Landscape Area.
- Passes through an archaeological area of interest.
- Habitats identified with the potential to support protected species (e.g. bats, badgers, great crested newts).
- Requires new crossing of Strawbrook County Wildlife Site.
- Mitigation measures for this option will be developed as the scheme progresses.

## Traffic Effects

- Some delay for traffic heading between the bypass and the A131 (north) in both directions.
- Small delay for the other main and local traffic movements.
- Queuing at the two roundabout junctions would be minimal.
- Local traffic heading from one side of Great Leighs to the other would have to negotiate all major traffic flows.
- An average vehicle passing through the At-Grade Deres Junction in 2031 would experience 25% less delay in the AM peak hour and 11% less delay in the PM peak hour than they would if the existing junction were in place.

## Junction costs

- The estimated junction cost is £7m.

## Engineering Considerations

- Higher cost.
- More land required.
- Requires a bridge over the new bypass.
- Accident rates may be lower.

## Environmental Considerations

- Results in a significant reduction in vehicles braking, accelerating and queuing at the junction.
- Reduction in traffic on Strawbrook Hill.
- Additional roundabout and junction near Chatham Green.
- Requires raised carriageways and roundabouts which would be more visually intrusive.
- Affects a small part of a Special Landscape Area.
- Passes through an archaeological area of interest.
- Habitats identified with the potential to support protected species (e.g. bats, badgers, great crested newts).
- Requires 2 new crossings of Strawbrook County Wildlife Site
- Mitigation measures for this option will be developed as the scheme progresses.

## Traffic Effects

- No delay for traffic heading between the bypass and the A131 (north).
- Small delay for the other main and local traffic movements.
- The additional roundabout to the south would reduce the number of conflicting traffic movements, thus allowing traffic to flow more easily.
- An average vehicle passing through the Grade Separated Deres Junction in 2031 would experience 41% less delay in the AM peak hour and 30% less delay in the PM peak hour than they would if the existing junction were in place.

## Junction costs

- The estimated junction cost is £40m.





# Chelmsford North East Bypass

With the selection of appropriate junction designs at Boreham and at the A131 Deres Bridge, a complete Chelmsford North East Bypass Scheme will be achievable.

## Scheme Costs

The overall scheme cost is estimated to be between £229m and £262m.

## Value For Money

The performance of highway schemes can be assessed by comparing the overall cost of the scheme with the economic benefits that will accrue over its lifetime.

The results of this assessment can be expressed as a Benefit to Cost Ratio (BCR).

The overall BCR for;

- Whole scheme with Deres At-Grade Option = 4.5
- Whole scheme with Deres Grade Separated Option = 4.2

Highway schemes can normally be said to provide 'High' value for money, if they have a BCR of over 2. High value for money schemes are more likely to receive funding from central Government.

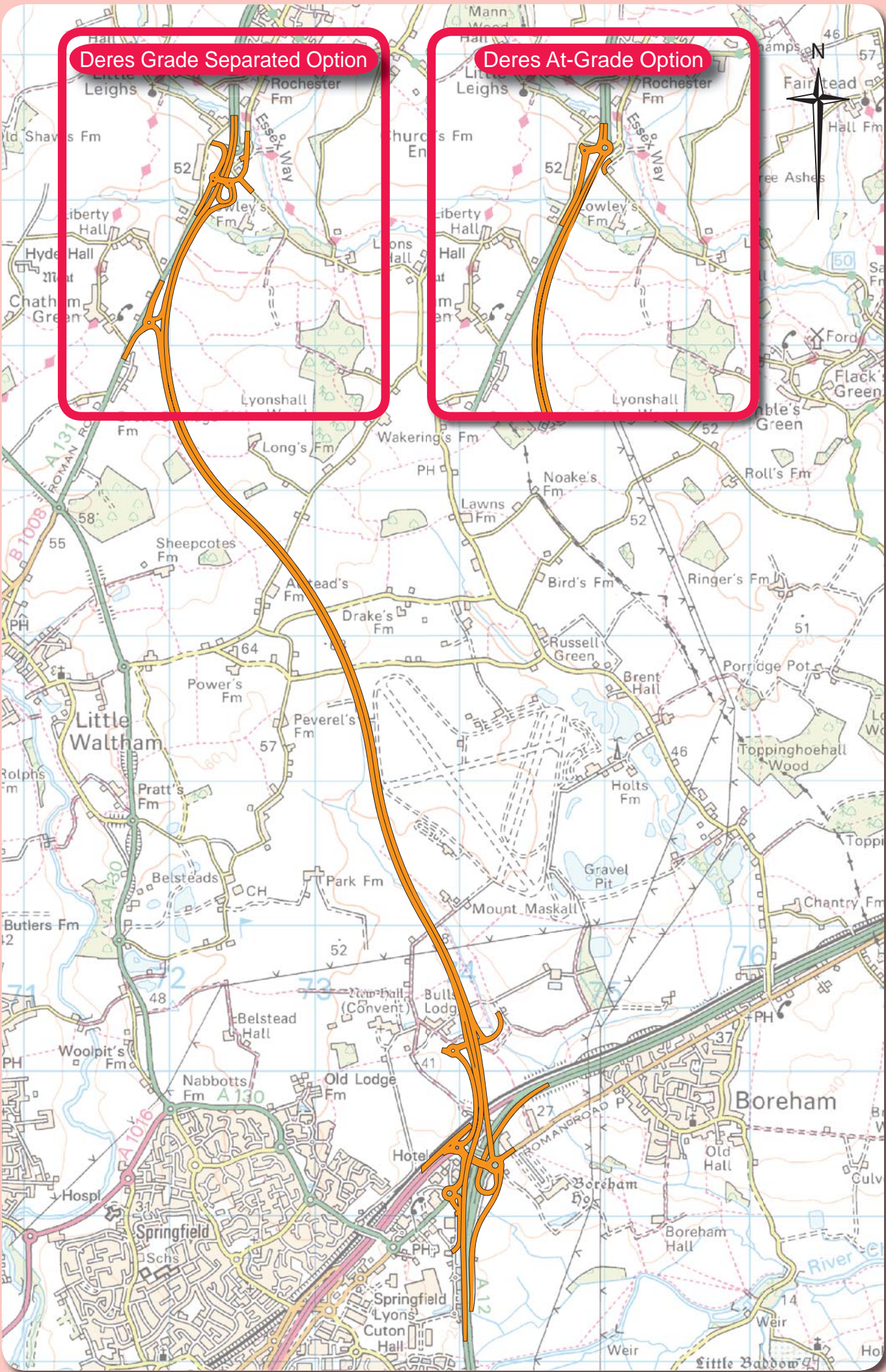
## Traffic Effects

The Bypass will provide a much faster route for traffic heading between the A12 and the A131/A120.

The following table compares expected average journey times, between the A12 at Boreham and the A131 north of Deres junction in 2031, with and without the Bypass in place:

Average Peak Hour Journey Times between A12 and A131 in 2031

Without Bypass	21 mins
With Bypass (At-Grade Deres option)	6 mins
With Bypass (Grade Separated Deres option)	5 1/2 mins



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## Side Roads, Footpaths &amp; Bridleways

The construction of the bypass will sever a number of local roads, footpaths and bridleways. The initial proposals indicate provision of structures to cross the new road at the majority of severed routes. The costs of providing structures across a dual carriageway would be considerable. When detail design of the new road is developed, ways of reducing the number of crossings may be explored in conjunction with the provision of alternative mitigation measures.

The selection criteria will be based on construction costs, agricultural access, road safety and amenity benefits.

Closure of either Drakes Lane or Cranham Road is proposed.

8 Consideration will be given to providing access across the bypass to non motorised traffic only at the location of the closed road.

10 Creation of a link between Generals Lane and Drakes Lane as part of long term plan for local Rights of Way network.

11 Footpath 7: To be diverted alongside bypass.

12 Generals Lane and Footpath 8: Bridge, with bridleway provision, over (or under) new route to be provided.

13 Footpath 16: To be closed.

14 Bridleway 23: Bridge under new route to be provided.

15 Boreham Interchange: Provision for pedestrians, cyclists and horse riders to be made.

1 Bridleway 42: Provide East-West link over (or under) bypass and existing A131.

2 Footpath 43: Stop up and divert via Bridleway 42.

3 Footpath 52: Divert via FP 8 & Bridleway 42.

4 Footpath 8: Crossing area to be provided on verge and through central reserve.

5 Footpath 14: Bridge over (or under) new route to be provided – possibly in conjunction with farm crossing.

6 Footpath 15: To be diverted Via Leighs Road.

7 Leighs Road: Bridge over new route to be provided.

- Footpath
- Bridleway
- Route Maintained
- Route Diverted
- Route Closed

