Document Reference LCC33



# Scheme Suggested by Inspector Double LILO at Hawthorn Road with NMU Bridge

1. The Lincolnshire County Council (A15 Lincoln Eastern Bypass) (Classified Road) (Side Roads) Order 2014.

2. The Lincolnshire County Council (A15 Lincoln Eastern Bypass) Compulsory Purchase Order 2014.

3. Application In Relation To Proposed Compulsory Purchase Of Land Held By The Canal & River Trust.

Department for Transport Reference: NATTRAN/EM/LAO/0084

This Suggestion Has Not Been Advertised As An Alternative

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Appendix – Plan Showing Suggestion

## 1. Introduction

During the Inquiry proceedings the Inspector has sought comments on the suitability of amending access provision at Hawthorn Road.

The suggestion seeks to provide a left in left out (LILO) junction to the western side of the bypass whilst retaining the LILO on the eastern side. No direct vehicular access across the bypass for vehicular traffic is provided. The existing NMU provision is maintained via a bridge across the bypass.

The County Council has carried out a desktop assessment of the suggestion but has not undertaken a detailed engineering design, or environmental assessment. The time available within the Inquiry would make such detailed work unfeasible and the cost of a fully detailed assessment would not be justified in the County Council's view.

This note records the results of the desktop study assessment.

## 2. Engineering and Buildability

Extensive additional earthworks would be required for the suggestion as the bypass is in cut at this location. Although to a lower design speed than the eastern LILO, as it leaves a designated 30 mph road, the extent is still likely to be significant due to the existing vertical alignment on Hawthorn Road.

This length of earthworks cut would impact on existing properties on both sides of Hawthorn Road, including St Barnabas Hospice and private residences. Land would also be required from the Public Open Space to the north of Hawthorn Road.

In addition the junction of Hawthorn and St Augustine Road would require amendment to allow for the lowering of Hawthorn Road of approximately 180m.

On the assumption that it remains in approximately the same location, there would be an increase in span of the NMU bridge to carry it over the diverge lane for the junction. The tie in from the NMU route to the existing NMU would need relocating further west, outside of the current CPO and planning boundary.

The current noise mitigation to properties to the west of the bypass would need to be amended.

The lowering of Hawthorn Road to the west of the LEB would require additional positive drainage.

There would also be an increased impact on the statutory undertakers diversions over and above those required by the Scheme.

## 3. Environmental Impacts

There would be a moderate visual impact over and above that of the current scheme due to the increased earthworks and the revised span of the NMU bridge.

The suggestion would introduce more road noise and pollution in the Carlton Estate and on Hawthorn Road than the Scheme due to the increase in traffic flows resulting from providing left in left out access from the bypass.

The impacts on existing properties along Hawthorn Road would include acquiring land to accommodate the lowered level of Hawthorn Road.

# 4. Impacts on Travel Distances and Times

Travel distances and modelled journey times have been calculated for the Scheme (ie with an east facing LILO only) and for the suggestion with a double LILO.

In order to provide direct comparisons, distances and times have been considered between the junction of Hawthorn Road and Kennel Lane in the east and the junction of Outer Circle Road and Carlton Boulevard in the west.

The fixed routing has been introduced in order to reflect the Inspector's suggestion that trips would U turn at Wragby Road and Greetwell Road roundabouts in order to use LEB as much as possible. It is therefore not comparable to the analysis in Dr Billington's proof which allows trips to select a free choice of the most appropriate route.

# 4.1 Route Options Considered

The route options are as follows:

- Westbound 1 (East facing LILO only) via Hawthorn Road, LEB (south bound), Greetwell Road and Outer Cir Road
- Westbound 2 (East and West facing LILOs) via Hawthorn Road, LEB (south bound), U-turn to LEB (north bound), St Augustine Road and Carlton Boulevard
- Eastbound 1 (East Facing LILO only)- via Outer Cir Road, Wragby Road, LEB (south bound) and Hawthorn Road
- Eastbound 2 (East and West facing LILOs) via Carlton Boulevard, St Augustine Road, LEB (north bound), U-turn to LEB (south bound) and Hawthorn Road

# 4.2 Impacts on journey distances

The distances for making equivalent journeys using the routes described above would be as follows:

Distance (kilometres)						
Direction	East Facing LILO only	East and West facing LILOs				
Westbound	5.3	6.4				
Eastbound	4.2	4.6				

It can be seen that the routes using just the eastern LILO would be shorter than those using both LILOs. This is due to the extra distance required travelling north and south bound on LEB in order to make U turns at the Wragby Road and Greetwell Road Roundabouts.

# 4.3 Impacts on Journey Times

The opening year (2018) journey times for the route options described above are set out in the table below.

	Time (seconds)							
	AM Peak		Inter Peak		PM Peak			
Direction	East Facing LILO only	East and West facing LILOs	East Facing LILO only	East and West facing LILOs	East Facing LILO only	East and West facing LILOs		
Westbound	760	790	349	404	376	424		
Eastbound	336	327	337	316	519	554		

It can be seen that depending on direction and time period, in some cases the journey would be quicker with only the East facing LILO, but in others it would be quicker with both east and west facing LILOs.

However, in all cases the time differences are quite small with the largest difference being 48 seconds in favour of the East facing LILO only (westbound in the PM Peak).

# 5. Traffic, Safety and Economics

This alternative will also attract additional traffic through the Carlton Estate, increasing traffic flows on Hawthorn Road to the west of LEB, St Augustine Road and Carlton Boulevard. This will have a negative impact on residents of the Carlton Estate in terms of air quality, noise and safety.

A table summarising the 2018 flows on the western slip roads, applied in the core model is included below.

Direction	AM Peak Hour	Inter Peak Hour	PM Peak Hour
Off Slip	66	59	48
On Slip	90	276	389
Comment	Low flows, primarily	High flows from Carlton	High flow from Carlton
	from Bunkers Hill	Blvd St Augustine Rd.	Blvd St Augustine Rd.
		Rat running	Rat running

## 6. Land Requirements

The suggestion requires land that falls outside of the highway boundary for which Planning Permission exists for both the permanent works and the temporary works areas required to construct the suggestion. Some of the additional land is within Public Open Space which is outside of the extent of land within the published CPO before the Inquiry. As noted for the alternatives, the acquisition of such land would require the consideration of the need to go through the special parliamentary procedure to acquire the land in accordance with Section 19 of the Land Acquisition Act 1981 which would have cost and delay implications and will need approval from the Secretary of State.

To accommodate the lowering of Hawthorn Road, land would potentially be required from residential properties and the Hospice.

As the proposal will require additional land it will need new Compulsory Purchase Orders. A change to the Side Roads Order will also be required to include the additional LILO junction.

## 7. Planning Considerations

A new Planning Permission would be required to accommodate the new junction and the revised NMU bridge. Given that this would include changes to traffic flows a Transport Assessment would be required.

## 8. Cost\Funding

The net additional cost of providing the northbound LILO including the changes to the Hawthorn Road\St Augustine Road junction and extended NMU bridge is in the region of approximately £1.5m.

The change would require additional funding and would potentially require a resubmission of a new Business Case for the scheme to DfT as a result of the changes to the costs and benefits of the scheme.

## 9. Programme

Programme would be delayed because of the new planning application and CPO\SRO.

## **10.** Conclusion

The suggestion, when compared with the Scheme with planning permission does not provide any advantages that justify investigating it any further.

There are no significant traffic benefits introduced by the inclusion of the double LILO.

The alteration would introduce additional cost, require a new planning permission and Orders and would delay the current programme.

