

Barberry
Land at Former Perton Court Farm, Perton
Highways and Transportation Representation Report
Local Plan Preferred Options
CTP-19-723
December 2021

1. Introduction

- 1.1 This Highways and Transportation Representation Report (HTRR) has been prepared in response to the public consultation being held by South Staffordshire Council on the Local Plan Preferred Options dated November 2021.
- 1.2 This report presents an initial high-level appraisal of the transport related issues identified in the Housing Site Selection Topic Paper 2021 and Infrastructure Delivery Plan 2021 for the Land at Former Perton Court Farm, at Perton in South Staffordshire for Barberry. An indicative site location plan is provided at **Appendix A**.
- 1.3 The Local Plan Preferred Options (2021) report considers the response to the 2019 Spatial Housing Strategy and Infrastructure Delivery consultation and has refined the preferred spatial housing strategy to reflect some of the issues raised. One of the key changes is limiting new residential land allocations at Perton to the existing safeguarded land due to the lack of a finalised junction improvement scheme at the A41 Holyhead Road / Wrottesley Park Road / Heath House Lane junction.

2. Potential Improvements to A41 Holyhead Road Signalised Junction

- 2.1 A review of potential mitigation options has been undertaken to determine whether additional capacity could be provided at the junction of the A41 Holyhead Road Wrottesley Park Road / Heath House Lane junction to accommodate additional residential land allocation at Land at Former Perton Court Farm.
- 2.2 A site visit was undertaken on the 26th November 2021 to observe the junction during the AM network peak hour (08:00-09:00). During the site visit queuing was observed on the A41 Holyhead Road east and west arms along with the Wrottesley Park Road arm.



2.3 Two potential feasibility options for mitigation at the junction of the A41 Holyhead Road Wrottesley Park Road / Heath House Lane junction have been explored that are discussed in greater detail below.

Option 1

2.4 Option 1 proposes minor geometric alterations to the existing traffic islands.

2.5 The existing stop lines on approach to the signals of the A41 Holyhead Road (north-west and south-east arms) are set some way back from the arms of Wrottesley Park Road and Heath House Lane. There is opportunity to relocate the existing islands and stop lines on A41 Holyhead Road arms forward towards the junction which would allow a further reduction of the intergreen times to the signals and improve inter-visibility between the arms of the junction to the signal heads.

2.6 An initial feasibility drawing has been prepared and is attached at **Appendix B** demonstrating the improvements for consideration. It is considered that these improvements would improve the existing capacity of the junction.

Option 2

2.7 Option 2 proposes significant geometric alterations to the junction that are summarised below:

- A41 Holyhead Road Western Arm Approach – Re-alignment of the existing kerb line on the northern side, existing stop lines and island moved forward approximately 3.5m to improve inter-visibility and intergreen times.
- A41 Holyhead Road Western Arm Exit – Re-alignment of the southern kerblines to accommodate a two lane exit arrangement provided for 100m to a merge point.
- A41 Holyhead Road Eastern Arm Approach – Entry approach reallocated to provide ahead movement from both lanes, removing the current island and alterations to the existing pedestrian crossing facilities.
- Wrottesley Park Road Approach – Re-alignment of the western side kerblines to accommodate a new island, retaining a 1m verge for street furniture.



- Wrottesley Park Road Exit – Re-alignment of the eastern kerblineline to accommodate a two lane arrangement downstream for 45m to the merge point, retaining a 2m footway.
- Heath House Lane Approach – Entry approach reallocated to provide ahead movement from both approach lanes.

- 2.8 An initial feasibility drawing has been prepared and is attached at **Appendix C** demonstrating the improvements for consideration.
- 2.9 Vehicle swept paths have been undertaken for both left and right turns for a 16.5m articulated HGV to ensure that the largest vehicle can be accommodated within the geometric amendments to the junction.
- 2.10 The proposed geometric changes to the junction are considered to provide greater capacity when compared to Option 1 and improve the overall performance of the junction.

Summary

- 2.11 Whilst it is recognised that a full topographical survey and highway boundary would need to be obtained with a detailed drawing prepared to ensure deliverability, it is considered that either of these options would be deliverable within the existing highway boundary. Traffic surveys in the form of manual traffic counts and queue length surveys would also be required to undertake junction capacity assessments and test the proposed mitigation and it is considered that there are deliverable improvements that could be undertaken in terms of the geometric arrangement of the junction to improve capacity.
- 2.12 An option of a roundabout was also considered but unfortunately this could not be delivered within the existing extent of highway although a 'lozenge type' roundabout could be explored as an additional potential mitigation option should in principle support be given to a more unconventional junction arrangement.

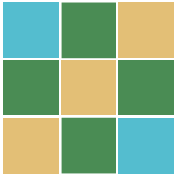
3. Conclusion

- 3.1 It is recognised that the A41 Holyhead Road / Wrottesley Park Road / Heath House Lane junction is constrained but there are options to provide significant improvements to the junction within the existing highway boundary. It is considered that the presented mitigation at Option 1 or 2 would provide the opportunity to improve



capacity at the junction of the A41 Holyhead Road / Wrottesley Park Road / Heath House Lane junction.

- 3.2 However, it is also noted that there have been significant changes in travel behaviour since the Covid Pandemic and reduced traffic growth when compared against historic traffic forecasts that should also be taken into consideration in any future junction capacity assessments. In addition, particular care is needed in respect of trip rates, and sensitivity testing may be appropriate as TRICS are also currently collecting additional data throughout 2021 and reference should be made to the TRICS 'Decide and Provide' Guidance Note which accounts for current uncertainties as far as possible. A review of peak hours should also be undertaken as peak periods and hours may have also changed since before the pandemic.
- 3.3 It is recognised that there would be a further, more detailed assessment required to demonstrate that the development at Land at Former Perton Court Farm could be accommodated on the transport network without a severe impact occurring and this would be addressed in a Transport Assessment and Travel Plan.
- 3.4 This HTRR has provided an initial assessment of the potential capacity improvements that could be delivered within the extent of the existing highway, subject to a more detailed assessment as part of a planning application.

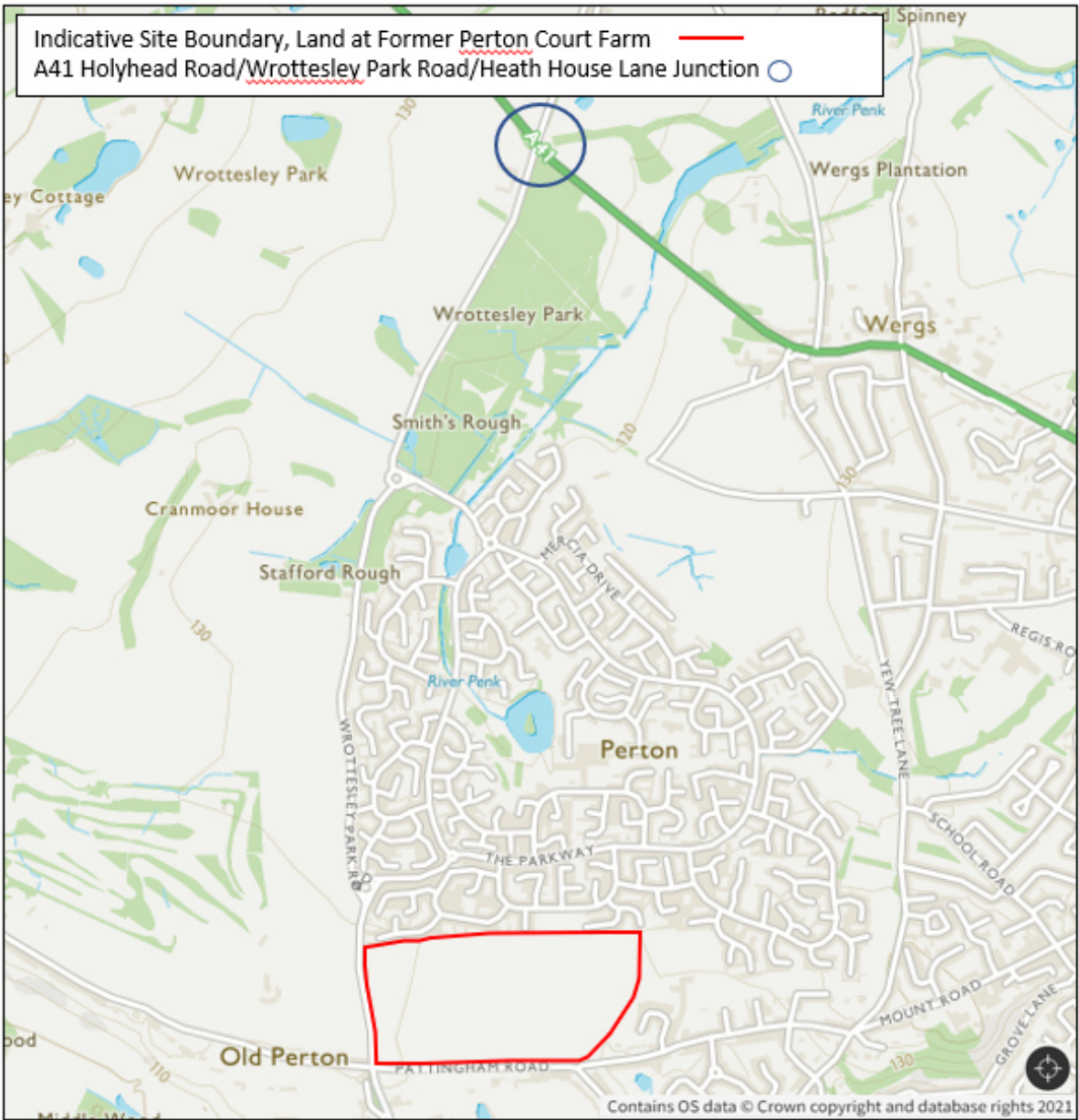


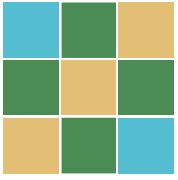
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Appendix A

Indicative Site Location Plan

Indicative Site Boundary, Land at Former Perton Court Farm ————
A41 Holyhead Road/Wrottesley Park Road/Heath House Lane Junction ○





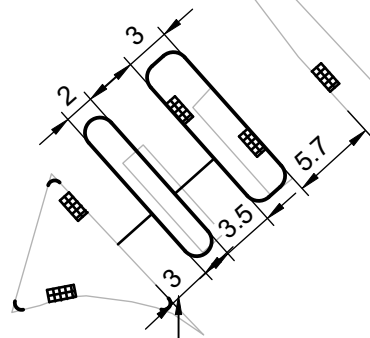
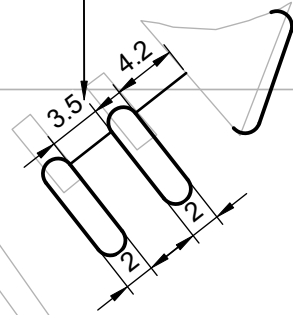
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Appendix B

Potential Mitigation Option I

123.011

Existing stop lines and islands moved forward approx. 3.5m to improve inter-visibility and intergreen times



Existing stop lines and islands moved forward approx. 3.5m to improve inter-visibility and intergreen times

Notes:

1. Do not scale from this drawing. All dimensions are in metres, unless stated otherwise.
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3. All dimensions are indicative and subject to topographical survey.

Rev	Date	Details	Drawn by	Checked by



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CLIENT: **Barberry**

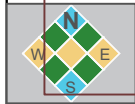
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Perton**

TITLE: **A41 / Wrottesley Park Road
/ Heath House Lane
Junction Improvements**

STATUS: **PRELIMINARY**

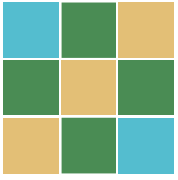
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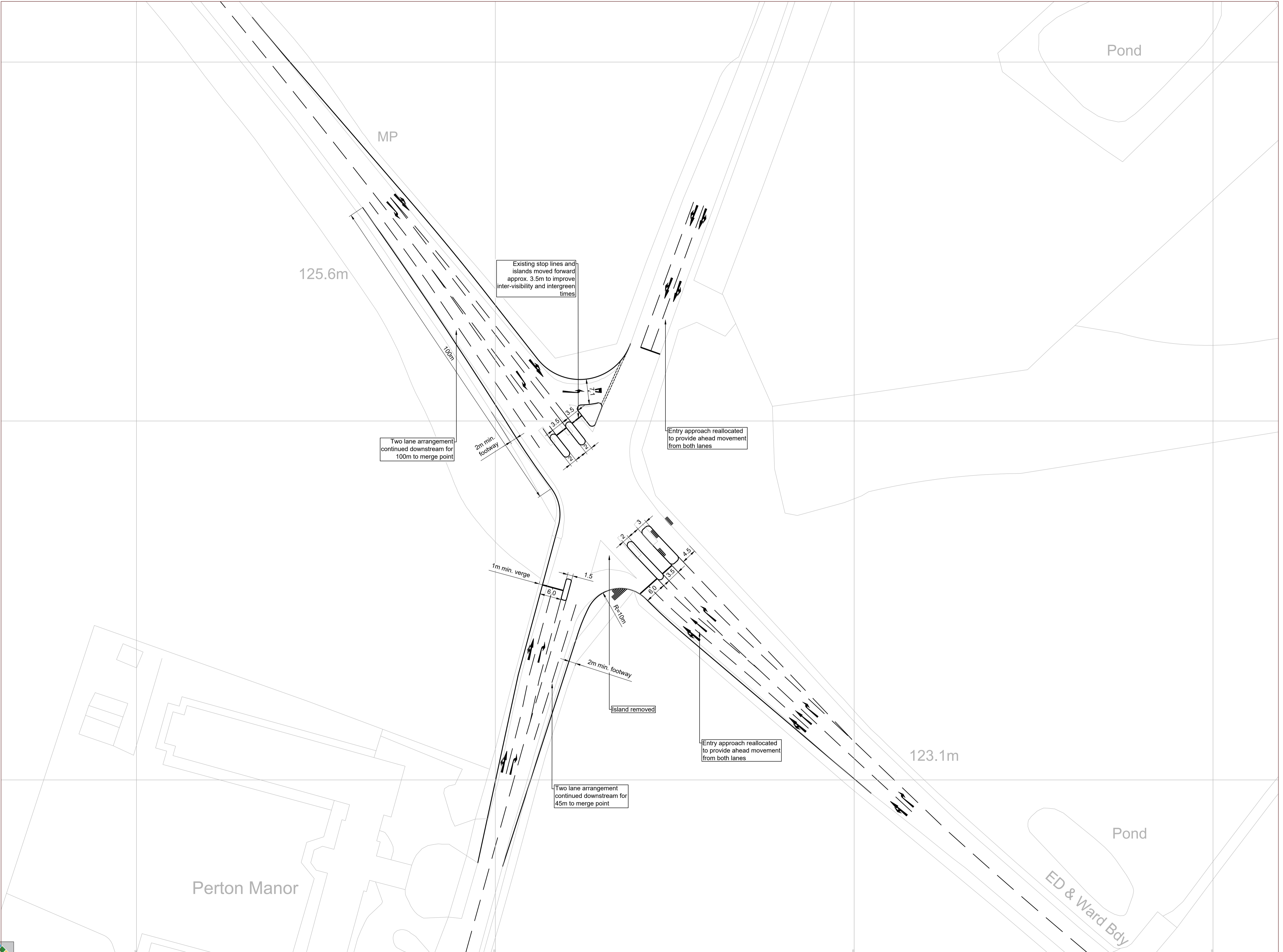
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Appendix C

Potential Mitigation Option 2



- Notes:**
1. Do not scale from this drawing. All dimensions are in metres, unless stated otherwise.
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 3. Layout shown is for concept design only based on OS data. Actual available dimensions may vary and further design work should be undertaken on a topographical survey to confirm.

Rev	Date	Drawn By	Checked By



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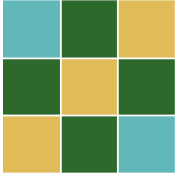
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TITLE: **A41 / Wrottesley Park Road/ Heath House Lane Junction Potential Improvements Opt 2**

STATUS: **INFORMATION**

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JOB NO:	DRAWING NO:	REVISION:		
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