



Ollerton Roundabout

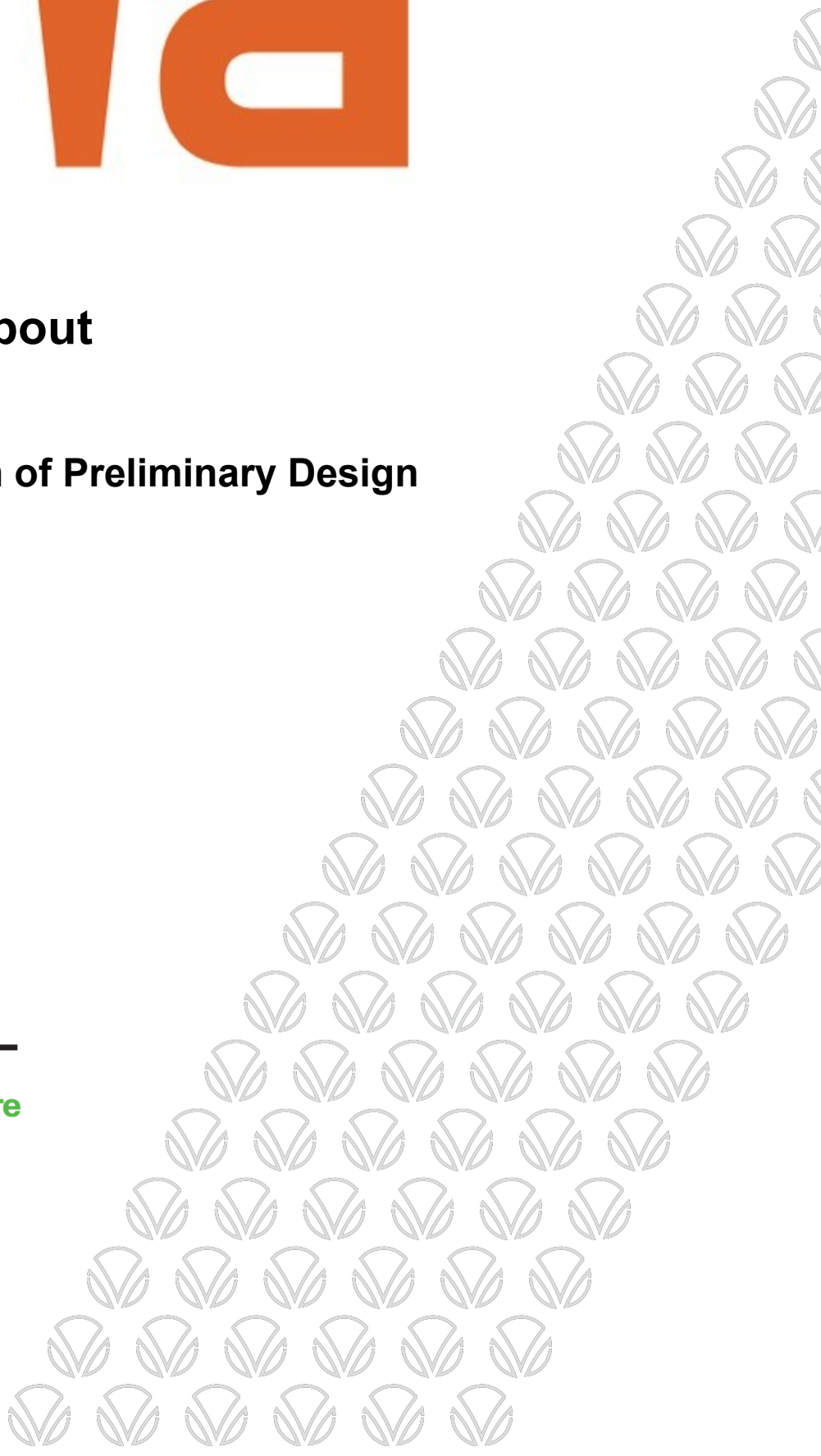
Road Safety Audit Stage 1 - Completion of Preliminary Design

in partnership with



**Nottinghamshire
County Council**

SA2166A
March 2018



Ollerton Roundabout

Stage 1 Road Safety Audit

Prepared for:

Atul Patel
Highways Design
Via East Midlands Ltd.

Via East Midlands Ltd
Trent Bridge House, Fox Road, West Bridgford, Nottingham NG2 6BJ

1. Introduction

- 1.1** This report results from a Stage 1 Road Safety Audit carried out on the proposed upgrade of Ollerton Roundabout.
- 1.2** The Road Safety Audit has been carried out following a request received from Atul Patel of Highways Design, Via East Midlands Ltd. on 5th March 2018.
- 1.3** The Road Safety Audit Team membership approved by Sonya Hurt, Service Manager for Safer Highways at Via East Midlands, consisted of:
- Donna Biondi - Audit Team Leader, Via East Midlands
Simon Taylor - Audit Team Member, Via East Midlands
- 1.4** The Road Safety Audit comprised an examination of the following documents provided:
- HW1067/04-RSA1
- 1.5** The Road Safety Audit took place at Trent Bridge House, the Via East Midlands Ltd offices in West Bridgford, Nottingham between 20th March 2018 and 27th March 2018. The Audit Team visited the site of the proposed roundabout upgrade on 20th March 2018 at 12.15pm. During the site visit the weather was fine and the road surface was dry. Traffic conditions were normal, the roundabout was very busy.
- 1.6** The audit has been carried out in accordance with Nottinghamshire County Council's Road Safety Audit Policy, following the principles of DMRB HD19/15. The audit has been carried out with the sole purpose of identifying features of the scheme which could, in our view, lead to road safety problems. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.
- 1.7** All comments and recommendations are referenced to the design drawings and the locations are indicated on a plan within this report.

2. Items raised in previous road safety audit(s)

- 2.1** The Audit Team is not aware of any other Road Safety Audits having been carried out on this proposal.

3. Items raised at this Stage 1 Audit

3.1 Problem

Location: 3.1 – Ollerton Roundabout.

Summary: Increased number of entry and circulating lanes leading to an increase in conflicts and vehicular collisions.

Increasing the number of entry lanes and circulating lanes will lead to an increase in conflicts and an increase in collisions. The arms of the roundabout are very close to each other and drivers will have to make decisions very quickly about whether to enter the roundabout or not, while considering the movements of vehicles in two lanes of circulatory carriageway and 2 entry lanes. Entry versus circulating accidents are likely to occur, resulting in injury to vehicle occupants.

The current roundabout has a very good accident record considering the volume of traffic that uses it, these proposals are highly likely to worsen this record.

Recommendation

Enlarge the roundabout.

	Problem No. 3.1
Designer input	The scheme is promoted on capacity requirements, although it would be ideal to provide a roundabout larger than currently proposed this is not feasible at the current junction location due to land constraints. Whilst it is understood the junction has a very low accident history a do something scenario is needed here. To fully meet with design standards an alternative form of junction or a larger roundabout would need to be provided this would prove prohibitive due costs of either acquiring additional private land/buildings or relocating the junction away from its current location. Also see recommendation provided by Simon Taylor in response to the departures form standards request.
Client Input	Agree with designer's response.
Action	Progress current scheme
Approx. Cost of recommendation	No additional cost

3.2 Problem

Location: 3.2 – A6075/Entrance to The Big Fish.

Summary: Collisions between vehicles exiting The Big Fish and vehicles on the A6075

Collisions at the junction with The Big Fish may increase as there are now 2 lanes approaching the roundabout and a 2 to 1 lane merge on the exit from the roundabout.

Drivers turning right from The Big Fish will have to negotiate all these lanes, and may emerge into the path of an oncoming vehicle. Collisions could occur, resulting in injury to vehicle occupants.

Vehicles exiting the roundabout may be travelling fast, to get ahead of another vehicle at the merge. If a driver exiting the Big Fish pulled out into the path of a vehicle travelling at speed vehicle occupants may be seriously injured.

Recommendation

Alter the access arrangements to The Big Fish to prevent vehicles emerging from this access. The internal layout could be altered to allow vehicles to use the access on the A614.

	Problem No. 3.2
Designer input	Proposals are currently being considered to remove egress from the current location (entry permitted) and amending egress arrangements through the petrol station exit on to the A614. Client and PM to initiate negotiations with current property owners.
Client Input	In the event that the negotiations with adjoining landowners prove fruitless then consideration should be given to either relocating the Big Fish access / egress to the western boundary of the sites frontage to A6075 where there are fewer lanes for vehicles to cross/join, or provide a separate egress (left out only) from the property to the A614 on the limited frontage the site has with the A614. This would then allow all movements to be left in and left out and remove the safety issues associated with right turning traffic.
Action	Enter negotiations with property owners
Approx. Cost of recommendation	Currently precise cost not known, but estimate circa £50,000 construction costs

3.3 Problem

Location: 3.3 – A616 west of the roundabout and the A614 north of the roundabout.

Summary: Head on collisions due to lack of physical separation.

There is no physical separation between opposing lanes. Vehicles exiting the roundabout, that merge late, may cross into the opposing carriageway and collide head on with opposing vehicles, resulting in injury to vehicle occupants.

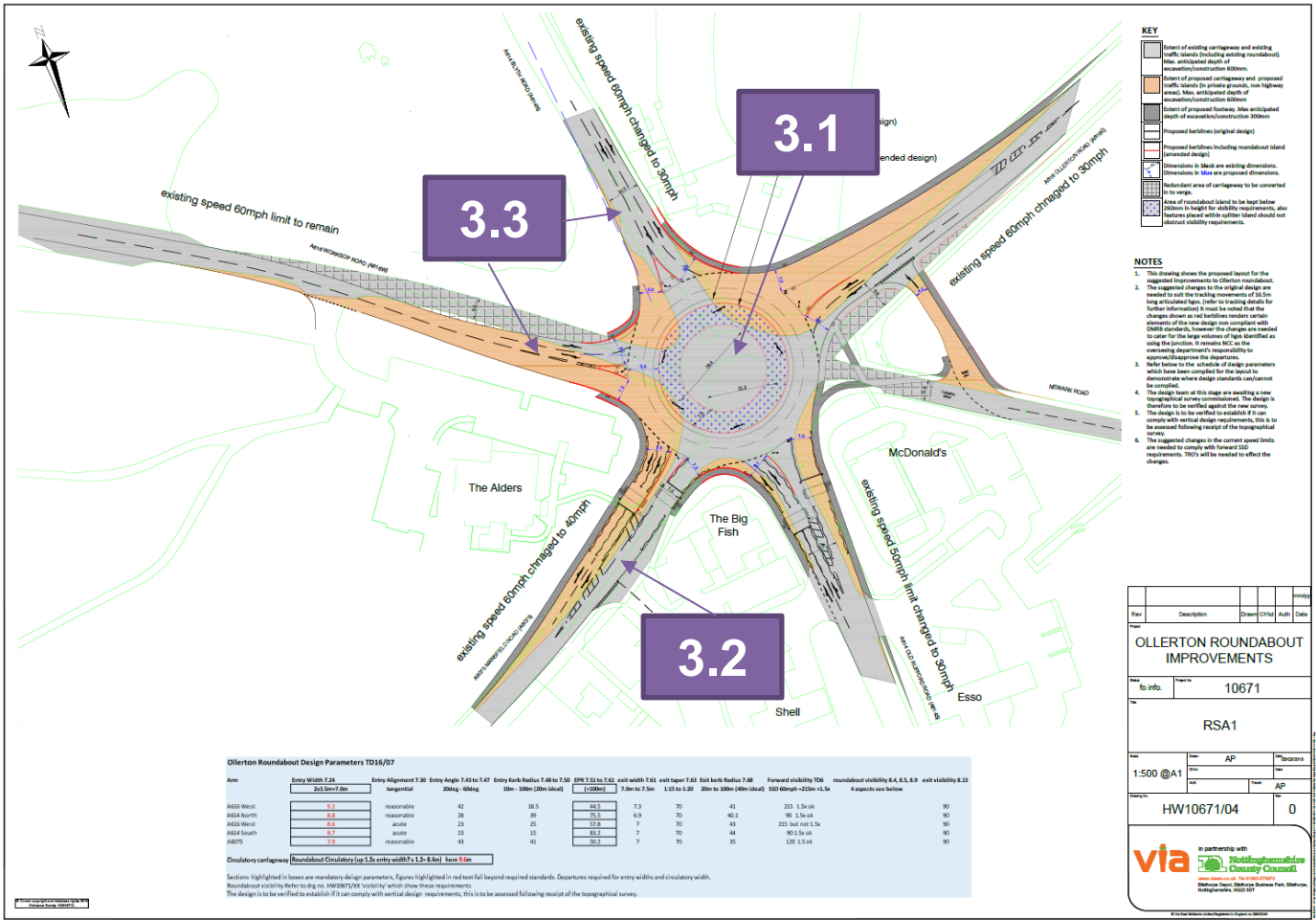
Recommendation

Lengthen the proposed splitter islands or provide small satellite islands.

	Problem No. 3.3
Designer input	Recommendation incorporated in current design layout dgr.no. HW 10671/06 rev A
Client Input	Recommendation already taken on board
Action	N/A

Approx. Cost of recommendation	Included in overall estimate
--------------------------------	------------------------------

4. Reference Locations



5. Audit Team Statement

We certify that this Road Safety Audit has been carried out in accordance with Nottinghamshire County Council policy.

Road Safety Audit Team Leader



Donna Biondi
Crash Site Investigator / Safety Auditor
Via East Midlands Ltd
County Hall (TBH F9)
Loughborough Road
West Bridgford
Nottingham
NG2 7QP

Road Safety Audit Team Member



Simon Taylor
Casualty Reduction Manager
Via East Midlands Ltd
County Hall (TBH F9)
Loughborough Road
West Bridgford
Nottingham
NG2 7QP