

2.3 PROBLEM

Location: Southeast and southwest quadrant of circulatory carriageway.

Summary: Risk of sideswipe accidents.

The layout indicates a very narrow centre lane on the southeast quadrant and a risk of the nearside lane not being wide enough for the radius required to be traversed on the southwest quadrant from the A12 southern arm.

RECOMMENDATION

Carry out swept path analysis to ensure that all vehicles can travel within the intended lanes and make adjustments as required.

3 AUDIT STATEMENT

We certify that this audit has been carried out in accordance with HD 19/15.

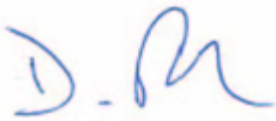
Signed:



S Hancock
Audit Team Leader
Safety Engineering Services Ltd

Date 13 September 2017

Signed:

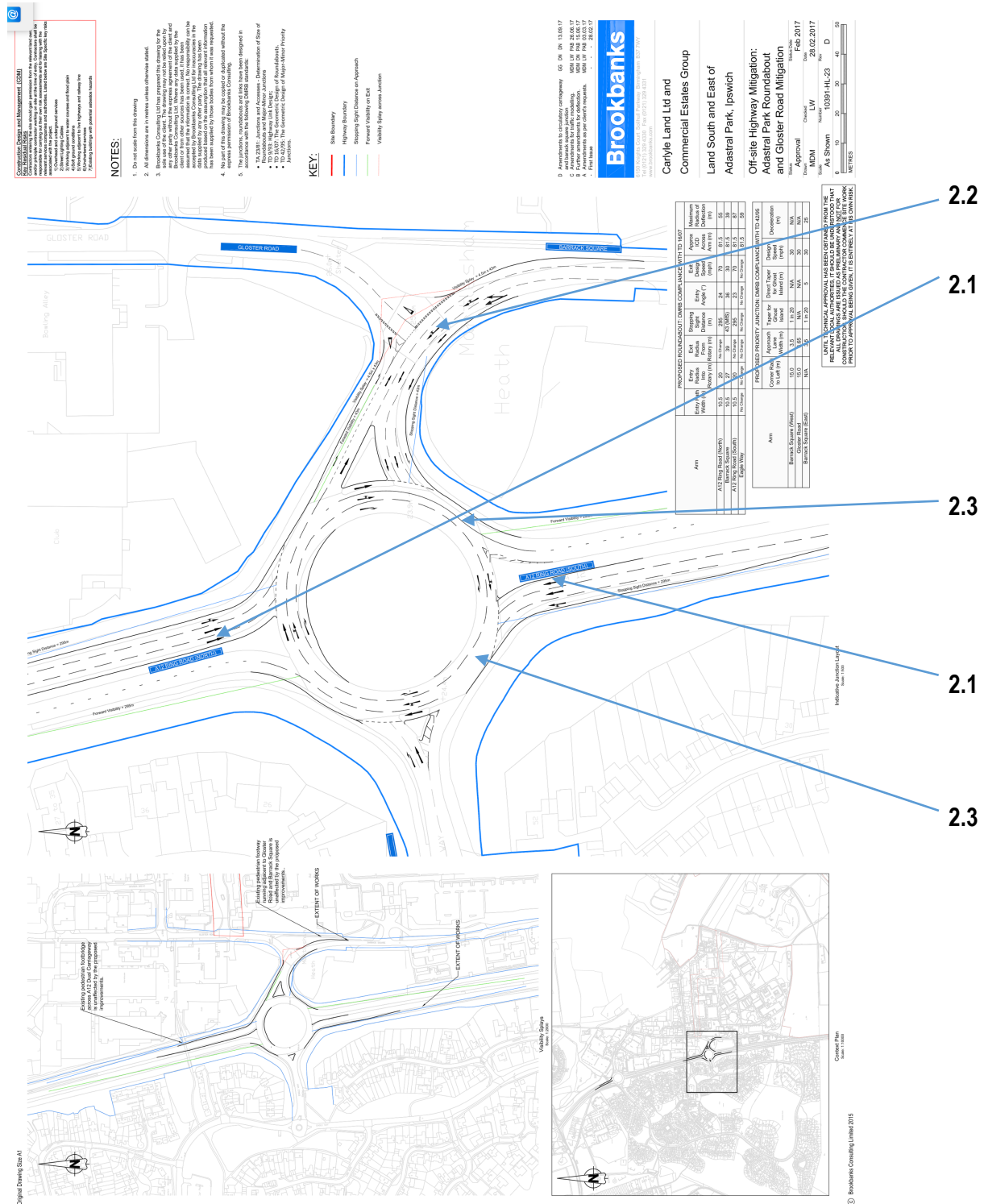


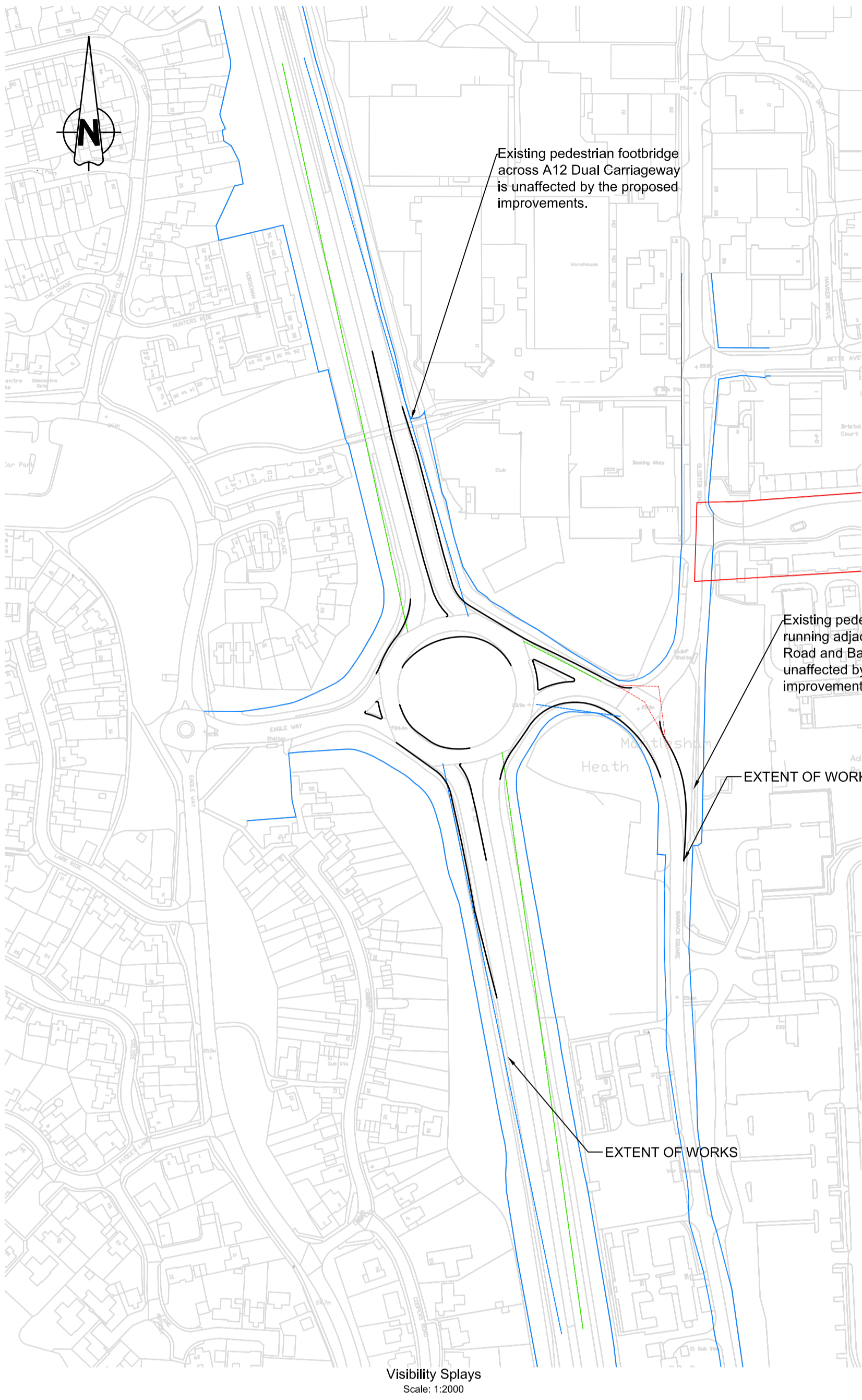
D Ramsden
Audit Team Member
Safety Engineering Services Ltd

Date: 13 September 2017

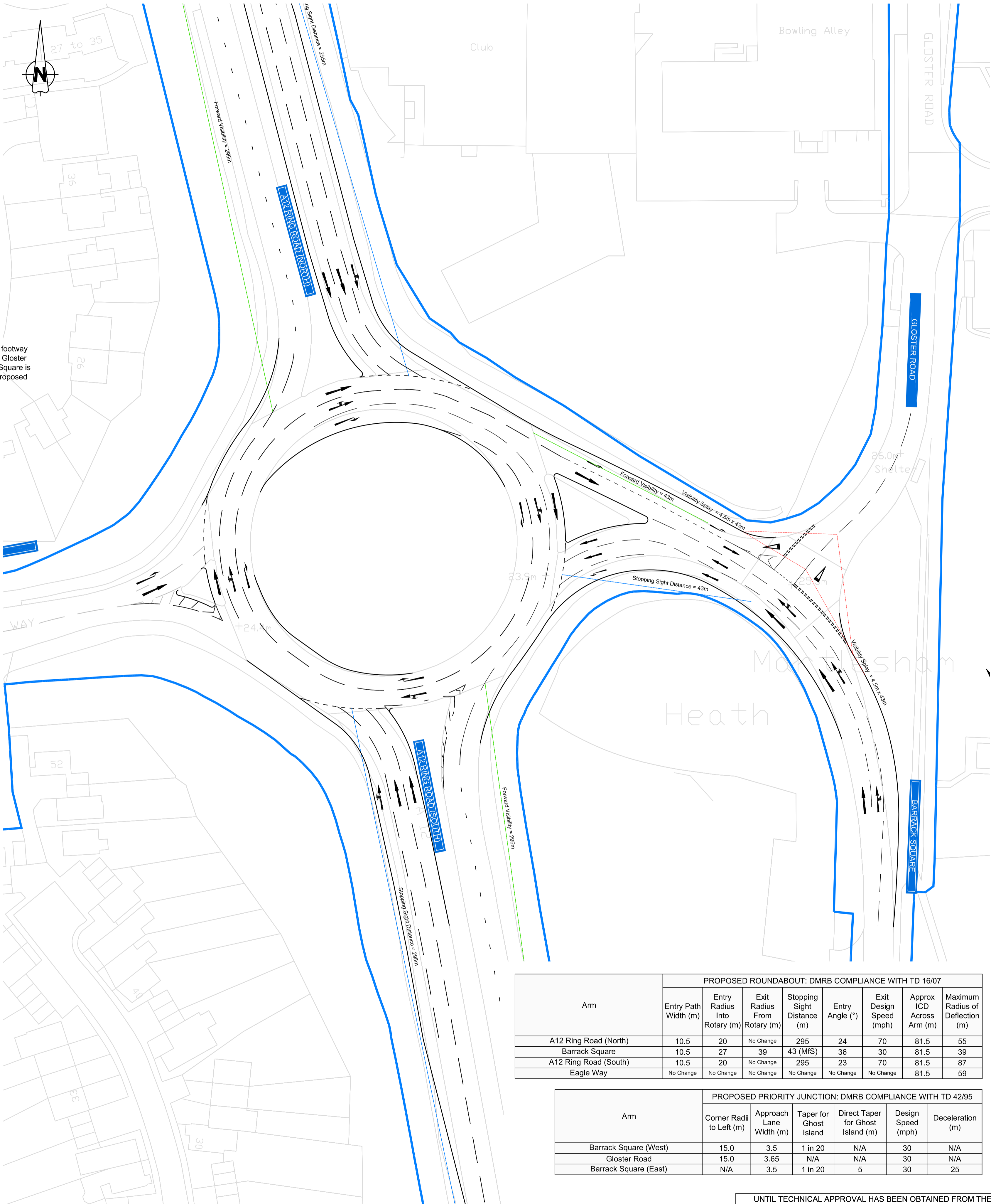
DRAWINGS AND DOCUMENTS PROVIDED FOR AUDIT

10391-H-23 Rev D	Offsite Highway Mitigation - Adastral Park Roundabout and Gloster Road Mitigation
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Context Plan
Scale: 1:10000



Indicative Junction Layout
Scale: 1:500

Arm	PROPOSED ROUNDABOUT: DMRB COMPLIANCE WITH TD 16/07							
	Entry Path Width (m)	Entry Radius Into Rotary (m)	Exit Radius From Rotary (m)	Stopping Sight Distance (m)	Entry Angle (°)	Exit Design Speed (mph)	Approx ICD Across Arm (m)	Maximum Radius of Deflection (m)
A12 Ring Road (North)	10.5	20	No Change	295	24	70	81.5	55
Barrack Square	10.5	27	39	43 (M/S)	36	30	81.5	39
A12 Ring Road (South)	10.5	20	No Change	295	23	70	81.5	87
Eagle Way	No Change	No Change	No Change	No Change	No Change	No Change	81.5	59

Arm	PROPOSED PRIORITY JUNCTION: DMRB COMPLIANCE WITH TD 42/95					
	Corner Radii to Left (m)	Approach Lane Width (m)	Taper for Ghost Island	Direct Taper for Ghost Island (m)	Design Speed (mph)	Deceleration (m)
Barrack Square (West)	15.0	3.5	1 in 20	N/A	30	N/A
Gloster Road	15.0	3.65	N/A	N/A	30	N/A
Barrack Square (East)	N/A	3.5	1 in 20	5	30	25

UNTIL TECHNICAL APPROVAL HAS BEEN OBTAINED FROM THE RELEVANT LOCAL AUTHORITIES, IT SHOULD BE UNDERSTOOD THAT ALL DRAWINGS ARE ISSUED AS PRELIMINARY AND NOT FOR CONSTRUCTION. SHOULD THE CONTRACTOR COMMENCE SITE WORK PRIOR TO APPROVAL BEING GIVEN, IT IS ENTIRELY AT HIS OWN RISK.

Construction Design and Management (CDM)
Key Residual Risks
Contractors entering the site should gain permission from the relevant land owners and/or principle contractor working on site at the time of entry. Contractors shall be responsible for carrying out their own risk assessments and for liaising with the relevant services companies and authorities. Listed below are Site Specific key risks associated with the project.
1) Overhead and underground services
2) Street Lighting Cables
3) Working adjacent to water courses and flood plain
4) Soft ground conditions
5) Working adjacent to live highways and railway line
6) Unchartered services
7) Existing buildings with potential asbestos hazards

NOTES:

- Do not scale from this drawing
- All dimensions are in metres unless otherwise stated.
- Brookbanks Consulting Ltd has prepared this drawing for the sole use of the client. The drawing may not be relied upon by any other party without the express agreement of the client and Brookbanks Consulting Ltd. Where any data supplied by the client or from other sources has been used, it has been assumed that the information is correct. No responsibility can be accepted by Brookbanks Consulting Ltd for inaccuracies in the data supplied by any other party. The drawing has been produced based on the assumption that all relevant information has been supplied by those bodies from whom it was requested.
- No part of this drawing may be copied or duplicated without the express permission of Brookbanks Consulting.
- The junctions, roundabouts and links have been designed in accordance with the following DMRB standards:
 - TA 23/81: Junctions and Accesses - Determination of Size of Roundabouts and Major-Minor Junctions
 - TD 9/93: Highway Link Design;
 - TD 16/07: The Geometric Design of Roundabouts.
 - TD 42/95: The Geometric Design of Major-Minor Priority Junctions.

KEY:

- Site Boundary
- Highway Boundary
- Stopping Sight Distance on Approach
- Forward Visibility on Exit
- Visibility Splay across Junction


D Amendments to circulatory carriageway and barack square junction	GG	DN	DN	13.09.17
C Amendments for traffic modelling.	MDM	LW	PAB	26.06.17
B Further amendments for deflection.	MDM	DN	PAB	15.06.17
A Amendments as per client's requests.	MDM	LW	PAB	03.03.17
- First Issue	-	-	-	28.02.17

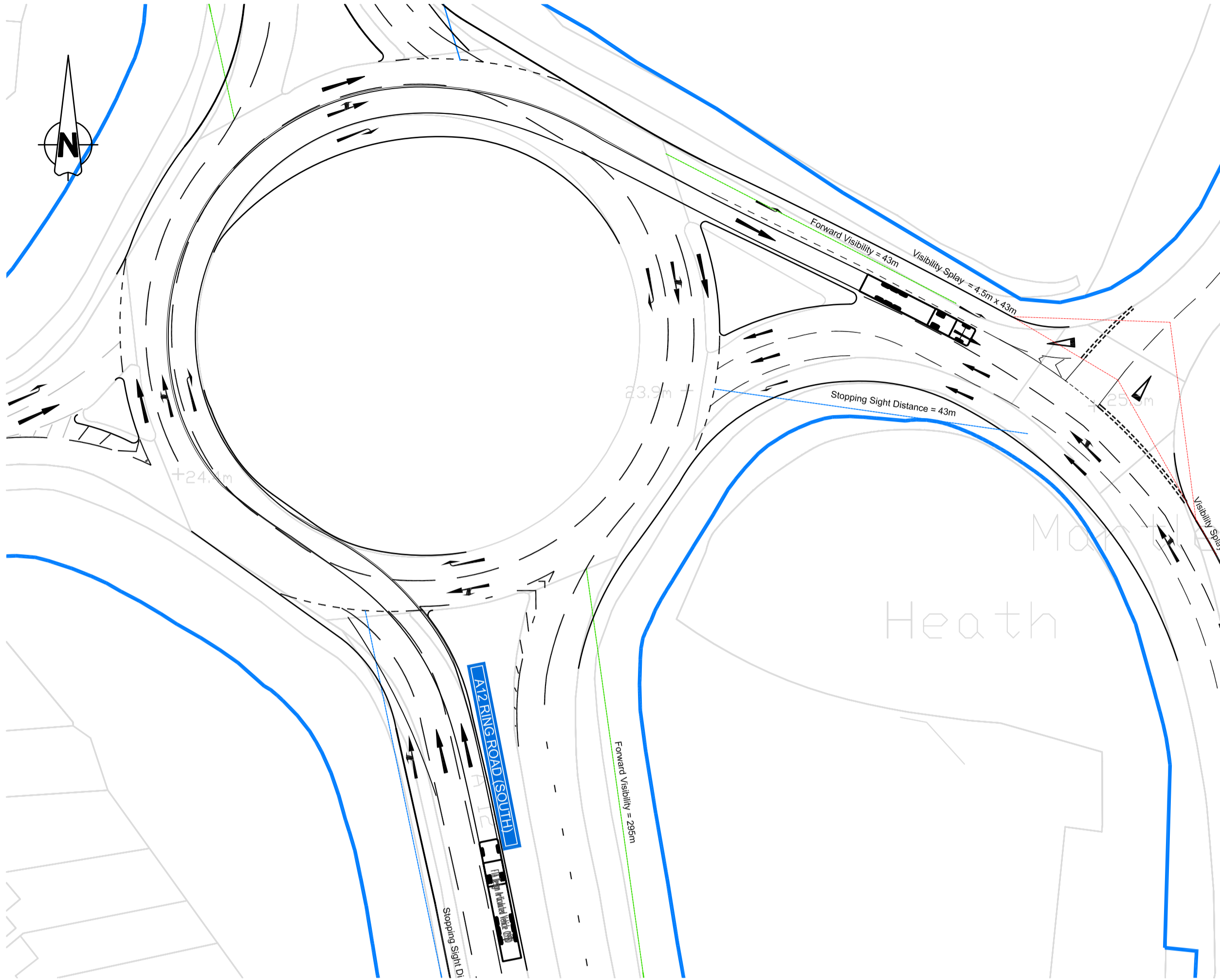
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Commercial Estates Group

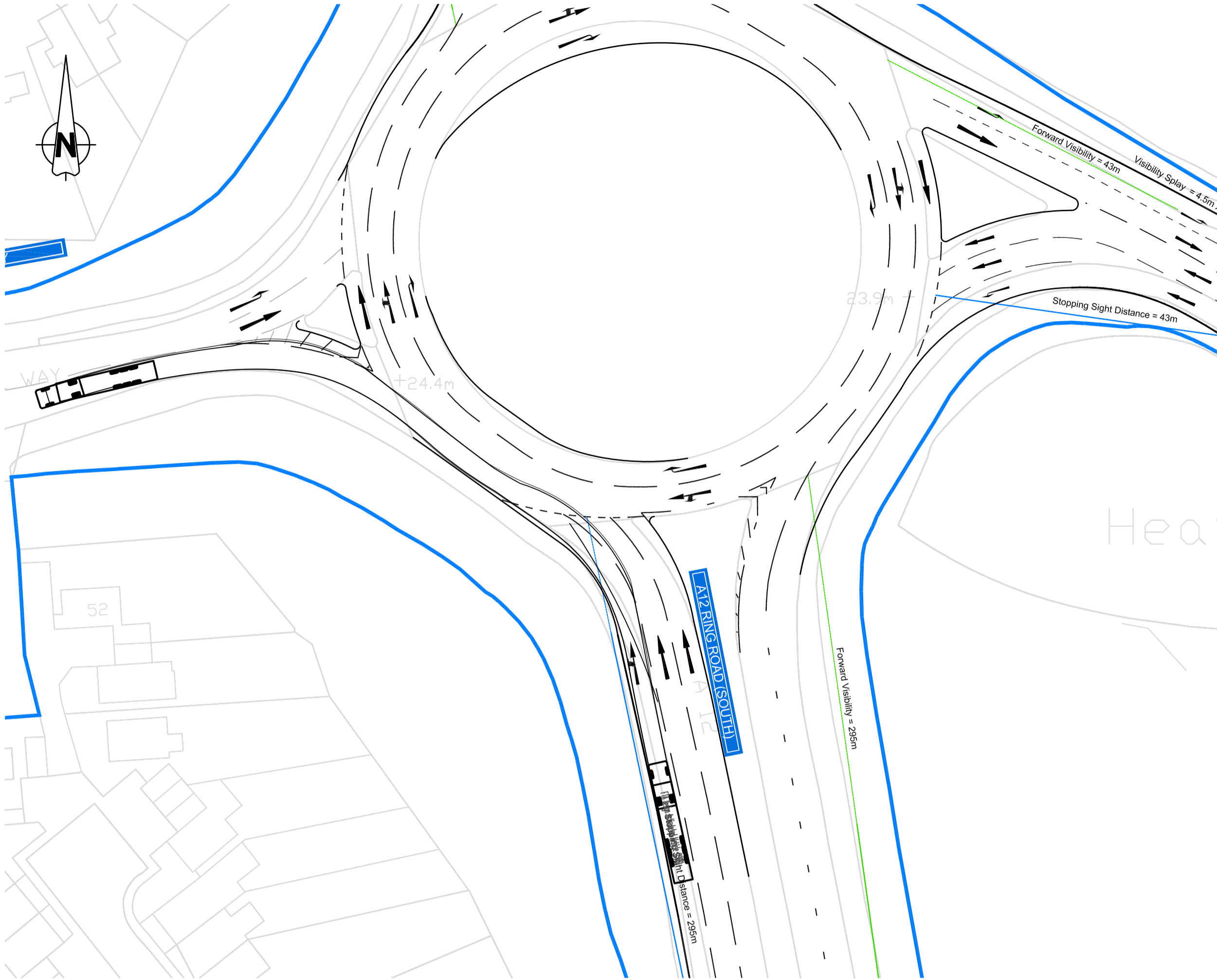
Land South and East of
Adastral Park, Ipswich

Off-site Highway Mitigation:
Adastral Park Roundabout
and Gloster Road Mitigation

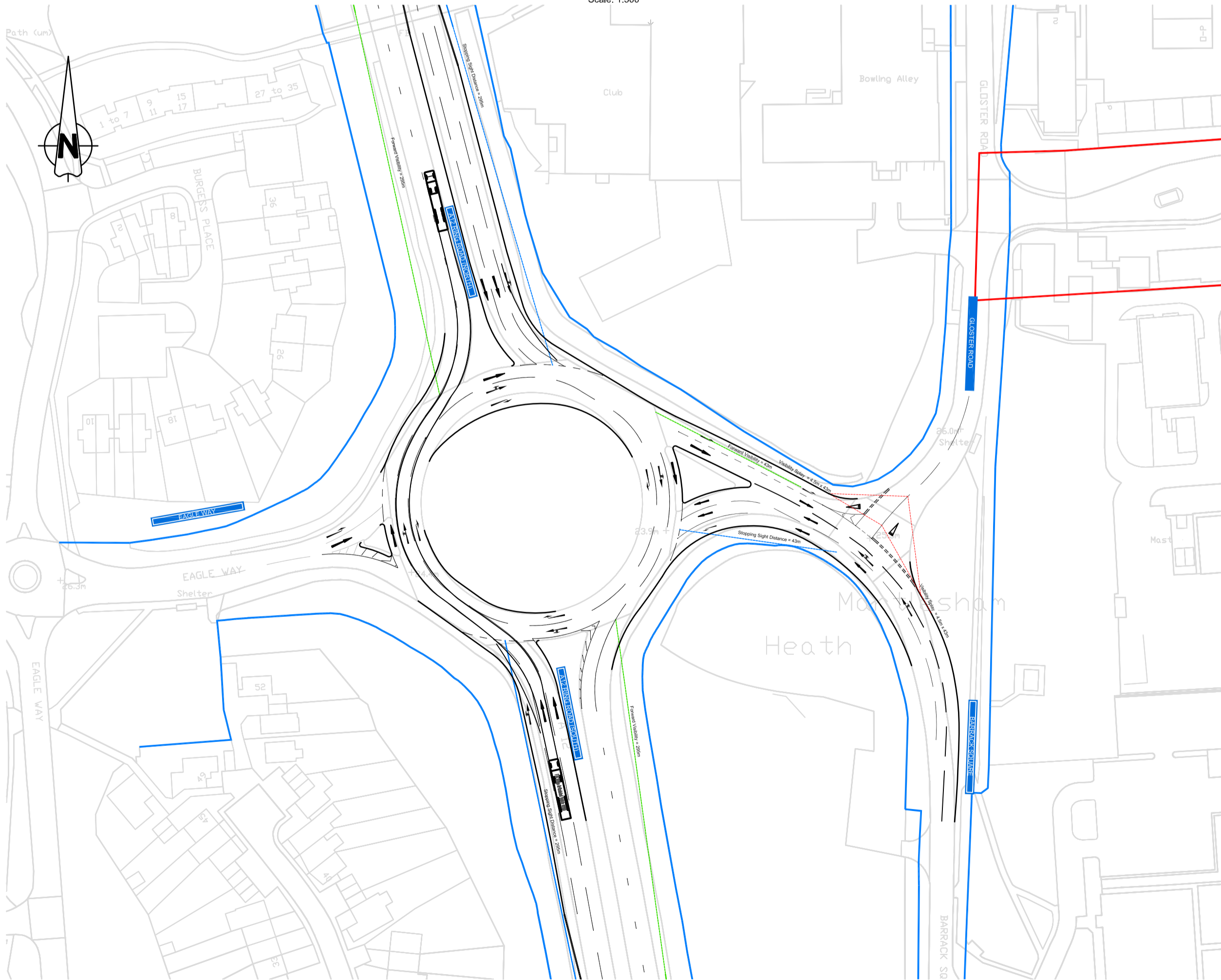
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Approval			Feb 2017		
Drawn		Checked		Date	
MDM		LW		28.02.2017	
Scale		Number		Rev	
As Shown		10391-HL-23		D	
0	10	20	30	40	50
					
METRES					



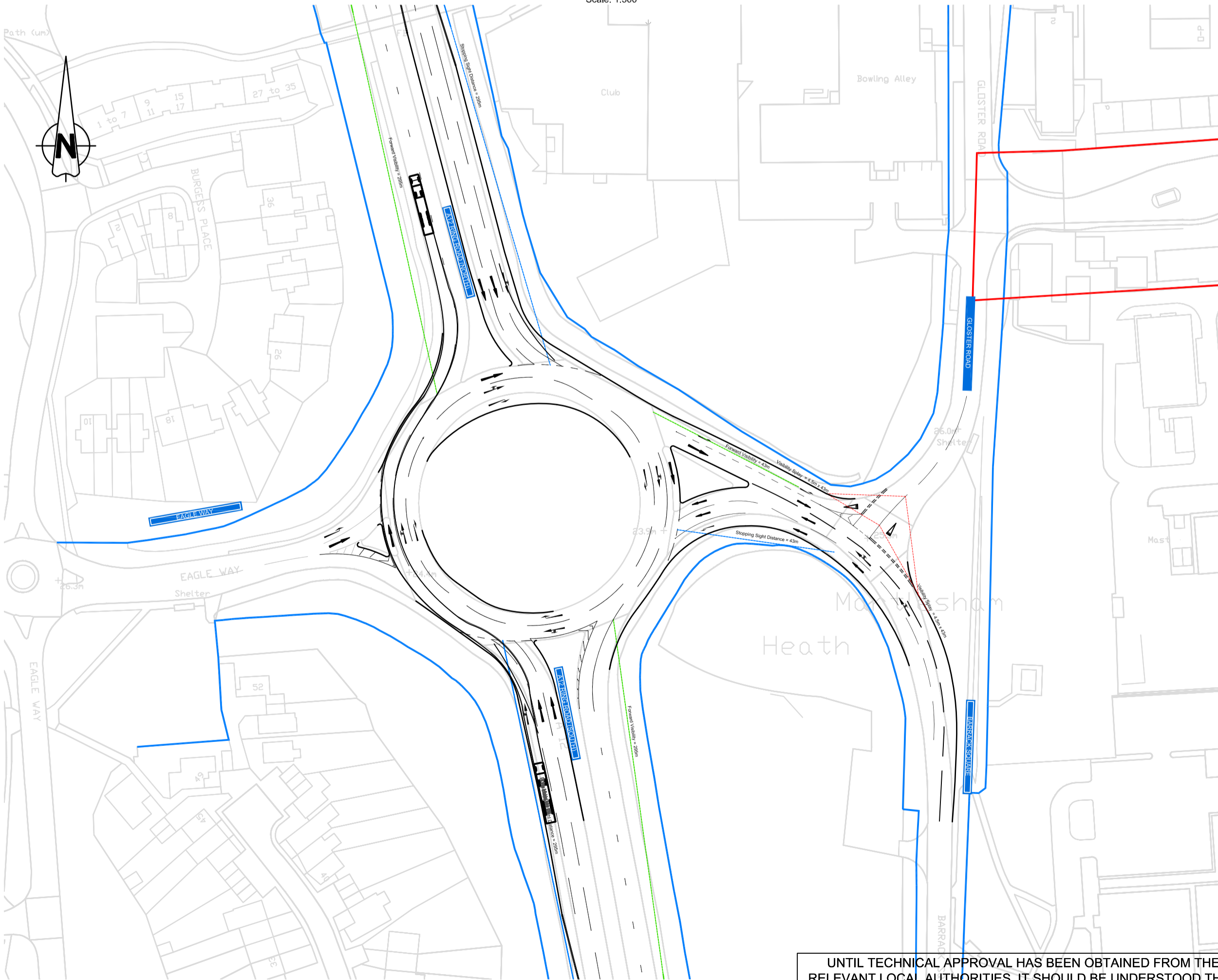
Manoeuvre One: Offside Lane to Barrack Square
Scale: 1:500



Manoeuvre Two: Offside Lane to Eagle Way
Scale: 1:500



Manoeuvre Three: Centre Lane to A12 (North) Offside lane
Scale: 1:1000



Manoeuvre Four: Nearside Lane to A12 (North) Nearside Lane
Scale: 1:500

Construction Design and Management (CDM), Key Residual Risks
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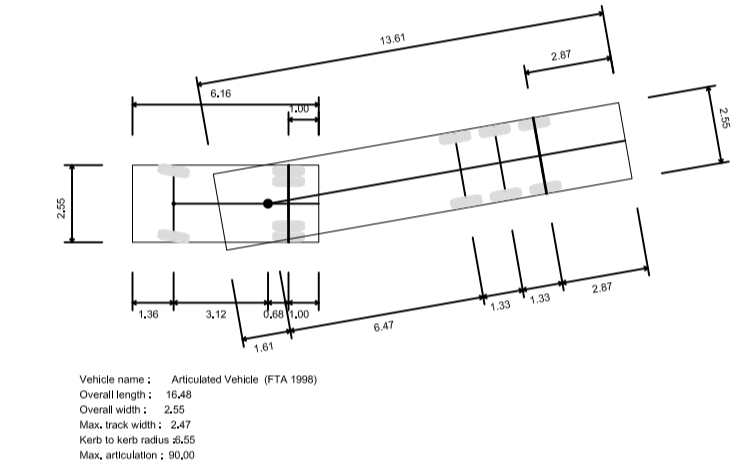
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KEY:

Highway Boundary




Articulated Lorry Dimensions and Details
Scale: 1: 250

First Issue 15.09.17

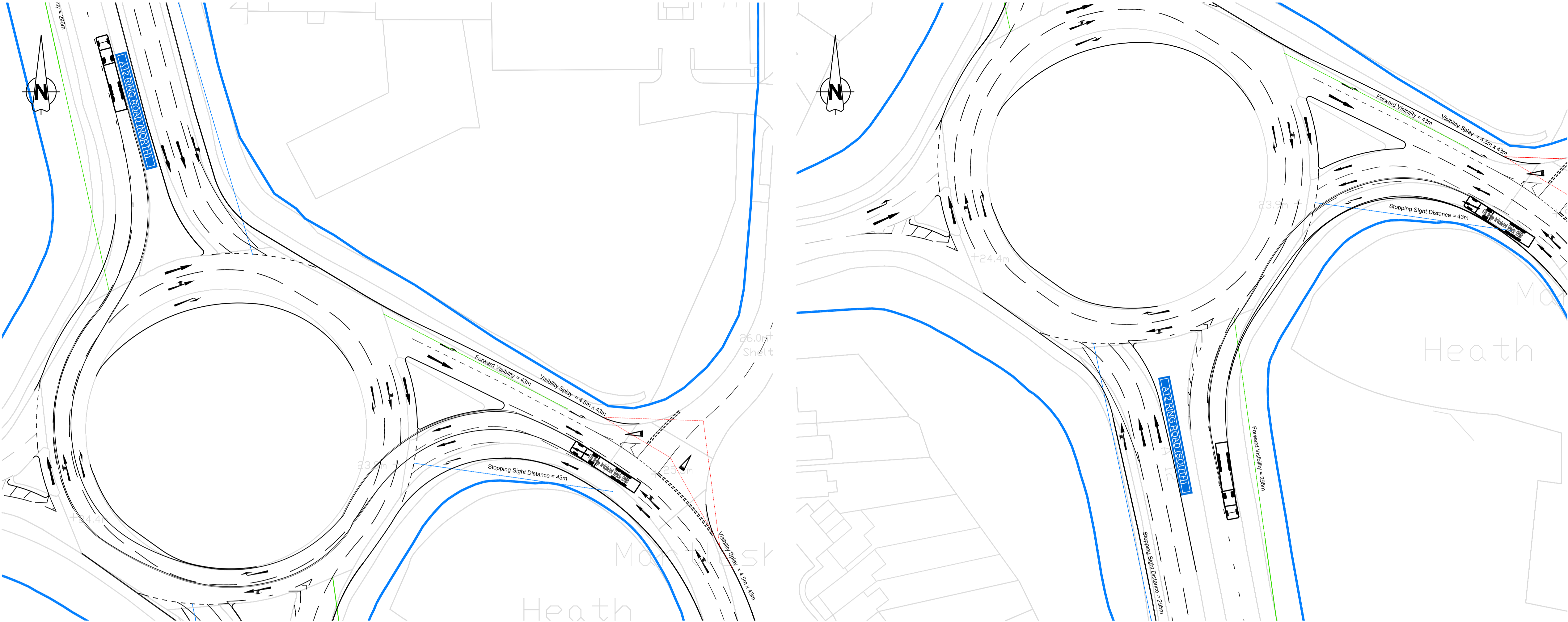
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Land South and East of
Adastral Park, Ipswich

Off-site Highway Mitigation:
Adastral Roundabout Mitigation
Swept Paths from A12 (South)

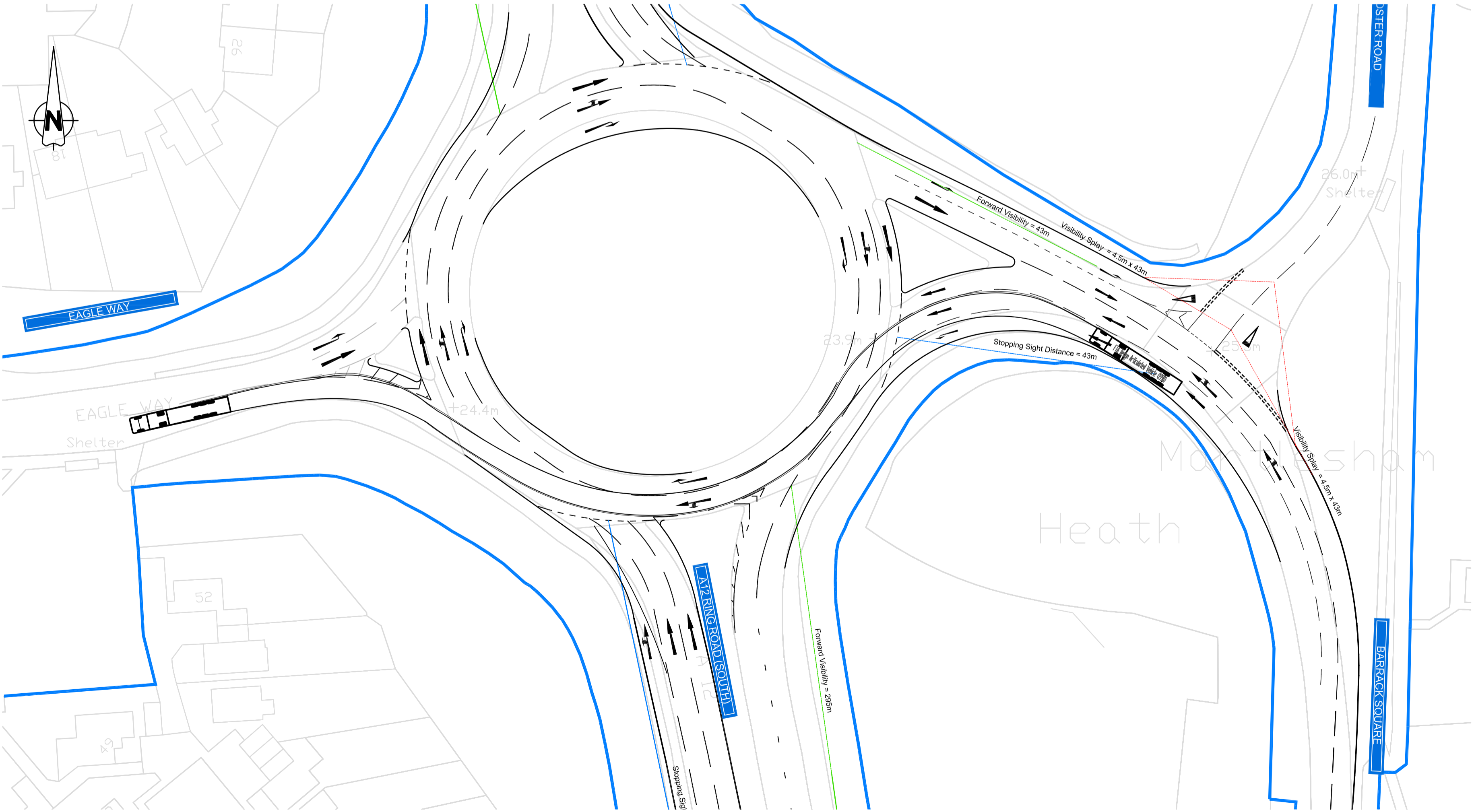
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Approval	September 2017				
Drawn	Checked	Date			
MDM	LW	15.09.2017			
Scale	Number	Rev			
As Shown	10391-HL-36	-			
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METRES					

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Manoeuvre One: Offside Lane to A12 (North) Nearside Lane

Manoeuvre Two: Offside Lane to A12 (South) Nearside Lane



Manoeuvre Three: Centre Lane to Eagle Way

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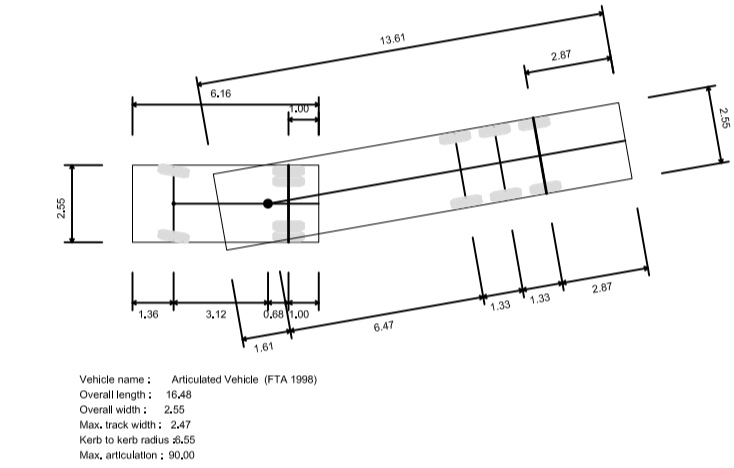
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KEY:

— Highway Boundary



Articulated Lorry Dimensions and Details
Scale: 1: 250

First Issue 15.09.17

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Off-site Highway Mitigation:
Adastral Roundabout Mitigation
Swept Paths from Gloster Road

Status	Approval	Checked	Date	Status Date
MDM	LW		15.09.2017	September 2017
Scale	Number	Rev		
1:500	10391-HL-37	-		
0	10	20	30	40
50				
METRES				

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