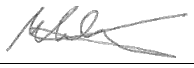
1 Project details

Table 1 Project details

Report title:	Stage 1 Road Safety Audit Lowfield Road Railway Bridge Signalisation
Date:	December 2021
Document reference and revision:	211214-MM-Lowfield Road RSA 1
Prepared by:	Road Safety Initiatives
On behalf of:	Gleeson Regeneration And Homes

Table 2 Authorisation sheet

Project:	Proposed Residential Development, Land off Lowfield Road, Bolton upon Dearne – Phase 3
Report title:	Stage 1 Road Safety Audit Response Report
Prepared by:	
Name:	Martin Crabtree
Position:	Associate
Signed:	
Organisation:	Bryan G Hall
Date:	15th December 2021
Approved by:	
Name:	James Pointon
Position:	Director
Signed:	
Organisation:	Bryan G Hall
Date:	15th December 2021

2 Introduction

This is the designers Response report for the Stage 1 Road Safety Audit dated 14th December 2021 for the proposed highway works to signalise the Lowfield Road Railway Bridge as part of the Proposed Residential Development, Land off Lowfield Road, Bolton upon Dearne – Phase 3.

3 Key personnel

Table 3 Key personnel

Overseeing Organisation:	Wayne Lake on behalf of Barnsley Metropolitan Borough Council
RSA team:	Martin Morley and Dean Barker of Road Safety Initiatives LLP
Design organisation:	Bryan G Hall Ltd

4 Road safety audit decision log

Table F.4 Road safety audit decision log

RSA problem	RSA recommendation	Design organisation response	Overseeing Organisation response	Agreed RSA action
Problem 2.1.1: Potential for debris associated with an errant vehicle to foul the railway line.	It is recommended that the risk of debris fouling the track is assessed and a mitigation measure is included in the design, if appropriate. 'Managing the accidental obstruction of the railway, road vehicles' (DfT, September 2020) is a useful reference.	The scheme that was subject to the audit included Trief style kerbs on the approach to and over the railway bridge. These have been extended on the southern side of the eastbound approach to be in line with the Network Rail scheme for the railway bridge and is shown on drawing numbers 20-237-DE-1300-001 Rev B and 20-237-DE-1300-002 Rev B. Network Rail will be consulted by the Local Planning Authority on the proposed scheme who would be responsible, to carry out an independent risk of debris fouling the track assessment in conjunction with the Local Highway Authority.		
Problem 2.1.2: Potential for overtaking and head-on conflicts.	It is recommended that the risk of overtaking is mitigated e.g., by providing 'prohibit' double-white-lines along both approaches to the traffic signal stop lines.	The proposed scheme has been updated to show 'prohibit' double-white-lines along both approaches to the traffic signal stop lines on drawing numbers 20/237/DE/1300/001 Rev B and 20-237-DE-1300-002 Rev B.		

Problem 2.2.1: Potential for a conflict involving a cyclist and an overtaking vehicle.	It is recommended that there is a mitigation measure for the potential 'squeeze' problem for cyclists. The running lane could be made narrower so that vehicle drivers were discouraged from trying to pass cyclists or made wider to allow for safe overtaking. Suitable warning signs or markings could also be provided.	The proposed scheme has been updated to show a 3.0m running lane in line with LTN1/20 across the bridge to allow cyclists to take up the primary position and to discourage vehicle drivers from attempting to pass a cyclist on drawing numbers 20/237/DE/1300/001 Rev B and 20-237-DE-1300-002 Rev B. Suitable warning signs or markings will be provided and agreed at the detailed design stage.		
Problem 2.2.2: Potential for a conflict involving a pedestrian crossing the access road. .	It is recommended that a safe, accessible, and convenient crossing is provided across the un-named access road.	The proposed scheme has been updated to show amendments to the footway on the south side together with dropped kerbs and tactile paving on drawing numbers 20/237/DE/1300/001 Rev B and 20-237-DE-1300-002 Rev B.		

5 Design Organisation and Overseeing Organisation statements

Table 5 Design Organisation statement

On behalf of the design organisation I certify that: **1) the RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the Overseeing Organisation.**	
Name:	Martin Crabtree
Signed	
Position:	Associate
Organisation:	Bryan G Hall Ltd
Date:	15th December 2021

Table 6 Overseeing Organisation statement

On behalf of the Overseeing Organisation I certify that: **1) the RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the design organisation; and** **2) the agreed RSA actions will be progressed.**	
Name:	Wayne Lake
Signed:	
Position:	
Organisation:	Barnsley Metropolitan Borough Council
Date:	

N

POLE SCHEDULE

Pole Ref	Pole Type	Head Type	Primary Head + Primary Hood	Secondary head +Secondary hood	Detection: MVD (Detects approaching traffic)	Detection: MVD (Detects approaching and departing traffic	Detection: Above ground stopline detector	Pole clearance from stopline	Comments
1	4m	-	-	-	-		Yes	-	Pole at back of footway at end of fence.
2	4m	RAG	Yes	-	Yes	Yes	Yes	2.40m	Pole adjacent to and in line with stone pillar. Head side mounted.
3	4m	RAG	-	Yes	-	Yes	-	-	Pole adjacent to fence.
4	4m	RAG	Yes	-	Yes	Yes	Yes	2.40m	Pole at back of footway. Head side mounted
5	4m	RAG	-	Yes	-	Yes	-	-	Pole at back of footway to east side of stone pillar and abutting barrier rail. Photoelectric cell on this pole.

a) 4m = 4m straight pole (aluminium 114 mm diameter below ground tapering to 145mm above ground with low level lockable access door, vented pole cap and NAL enclosure for cable termination)

STAGING

Stage 1 — Dummy C

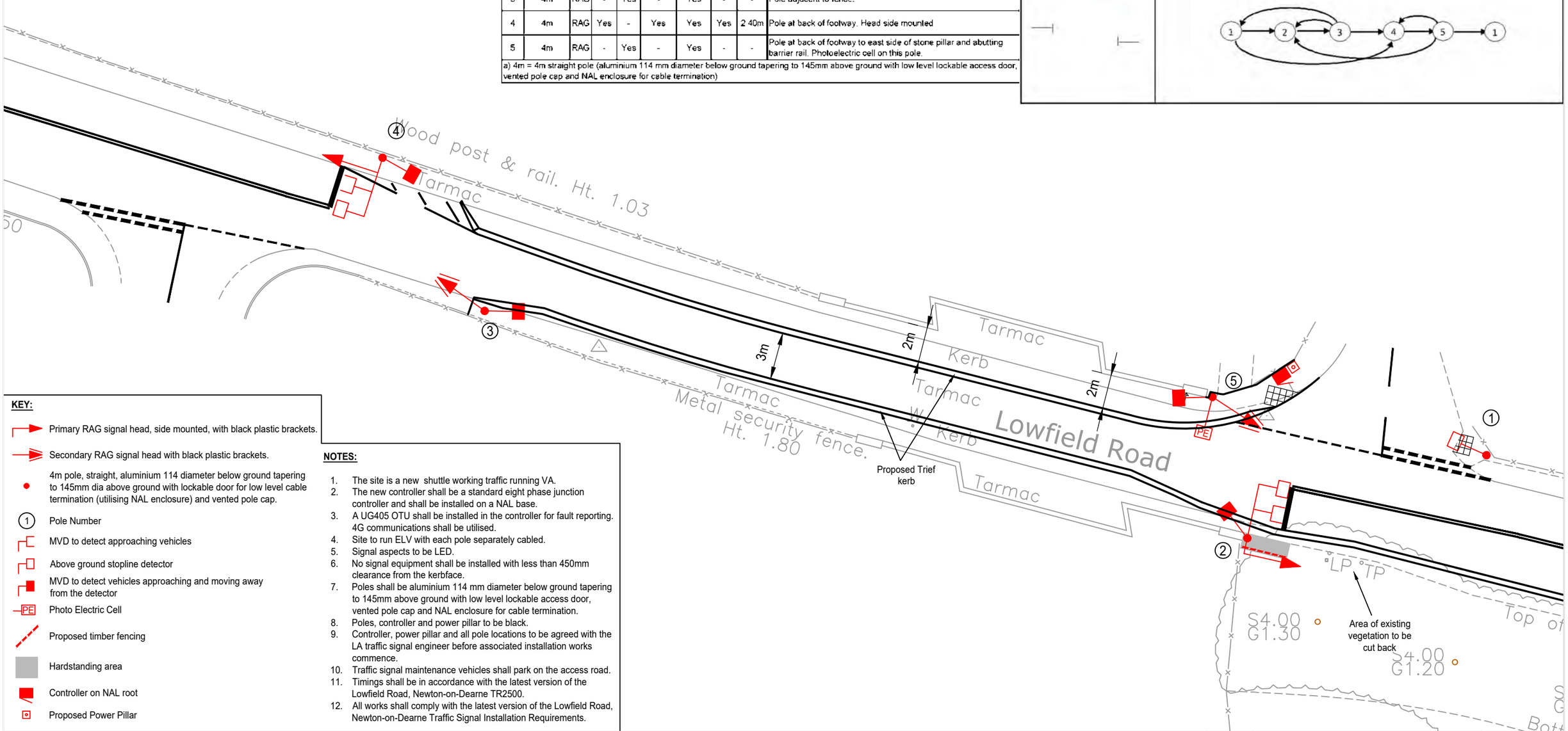
Stage 2 — A — Demanded by A

Stage 3 — Dummy D

Stage 4 — B — Demanded by B

Stage 5 — Dummy E

Main Permitted Moves



KEY:

- Primary RAG signal head, side mounted, with black plastic brackets.
- Secondary RAG signal head with black plastic brackets.
- 4m pole, straight, aluminium 114 diameter below ground tapering to 145mm dia above ground with lockable door for low level cable termination (utilising NAL enclosure) and vented pole cap.
- (1) Pole Number
- MVD to detect approaching vehicles
- Above ground stopline detector
- MVD to detect vehicles approaching and moving away from the detector
- PE Photo Electric Cell
- Proposed timber fencing
- Hardstanding area
- Controller on NAL root
- Proposed Power Pillar

NOTES:

1. The site is a new shuttle working traffic running VA.
2. The new controller shall be a standard eight phase junction controller and shall be installed on a NAL base.
3. A UG405 OTU shall be installed in the controller for fault reporting. 4G communications shall be utilised.
4. Site to run ELV with each pole separately cabled.
5. Signal aspects to be LED.
6. No signal equipment shall be installed with less than 450mm clearance from the kerbface.
7. Poles shall be aluminium 114 mm diameter below ground tapering to 145mm above ground with low level lockable access door, vented pole cap and NAL enclosure for cable termination.
8. Poles, controller and power pillar to be black.
9. Controller, power pillar and all pole locations to be agreed with the LA traffic signal engineer before associated installation works commence.
10. Traffic signal maintenance vehicles shall park on the access road.
11. Timings shall be in accordance with the latest version of the Lowfield Road, Newton-on-Dearne TR2500.
12. All works shall comply with the latest version of the Lowfield Road, Newton-on-Dearne Traffic Signal Installation Requirements.

BRYAN G HALL

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Rev:	Date:	Amendment:	DRN	CHK	APR
B	16/12/21	Proposed layout updated following RSA comments	JI	MC	

Title: TRAFFIC SIGNAL SIGNALS LAYOUT

Status: FOR APPROVAL

Client: GLEESON REGENERATION AND HOMES

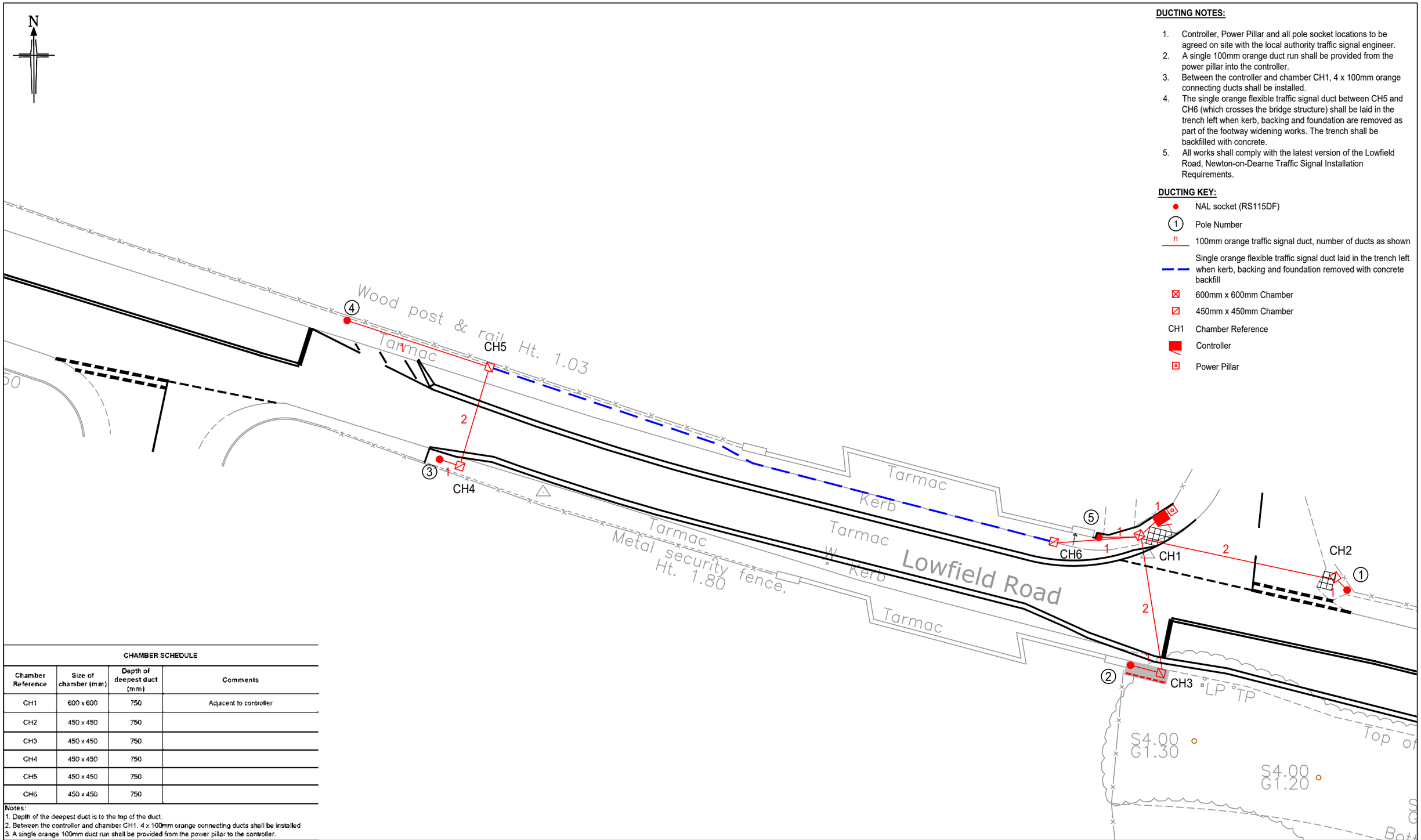
Project: LOWFIELD ROAD
BOLTON ON DEARNE

Scale: 1:250
Size: A3 - 420 x 297

Drawn: MM | Chkd: IR | Appvd: IR

Drawing No: 20/237/DE/1300/001
Job No: 20-237

Revision: B
Date: 09/06/2020



DUCTING NOTES:

1. Controller, Power Pillar and all pole socket locations to be agreed on site with the local authority traffic signal engineer.
2. A single 100mm orange duct run shall be provided from the power pillar into the controller.
3. Between the controller and chamber CH1, 4 x 100mm orange connecting ducts shall be installed.
4. The single orange flexible traffic signal duct between CH5 and CH6 (which crosses the bridge structure) shall be laid in the trench left when kerb, backing and foundation are removed as part of the footway widening works. The trench shall be backfilled with concrete.
5. All works shall comply with the latest version of the Lowfield Road, Newton-on-Dearne Traffic Signal Installation Requirements.

DUCTING KEY:

- NAL socket (RS115DF)
- (1) Pole Number
- n — 100mm orange traffic signal duct, number of ducts as shown
- Single orange flexible traffic signal duct laid in the trench left when kerb, backing and foundation removed with concrete backfill
- 600mm x 600mm Chamber
- 450mm x 450mm Chamber
- CH1 Chamber Reference
- Controller
- Power Pillar

CHAMBER SCHEDULE

Chamber Reference	Size of chamber (mm)	Depth of deepest duct (mm)	Comments
CH1	600 x 600	750	Adjacent to controller
CH2	450 x 450	750	
CH3	450 x 450	750	
CH4	450 x 450	750	
CH5	450 x 450	750	
CH6	450 x 450	750	

Notes:
1. Depth of the deepest duct is to the top of the duct.
2. Between the controller and chamber CH1. 4 x 100mm orange connecting ducts shall be installed
3. A single orange 100mm duct run shall be provided from the power pillar to the controller.

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Rev:	Date:	Amendment:	DRN	CHK	APR
B	16/12/21	Proposed layout updated following RSA comments	JI	MC	

Title: TRAFFIC SIGNAL DUCTING LAYOUT

Status: FOR APPROVAL

Client: GLEESON REGENERATION AND HOMES

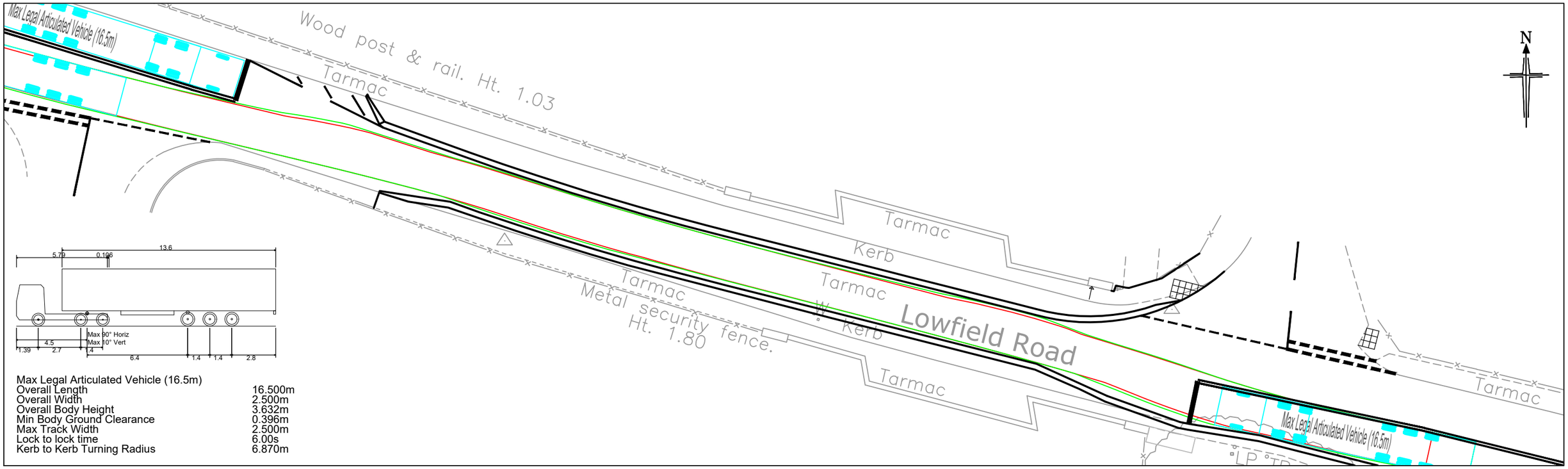
Project: LOWFIELD ROAD
BOLTON ON DEARNE

Scale: 1:250
Size: A3 - 420 x 297

Drawn: MM | Chkd: IR | Appvd: IR

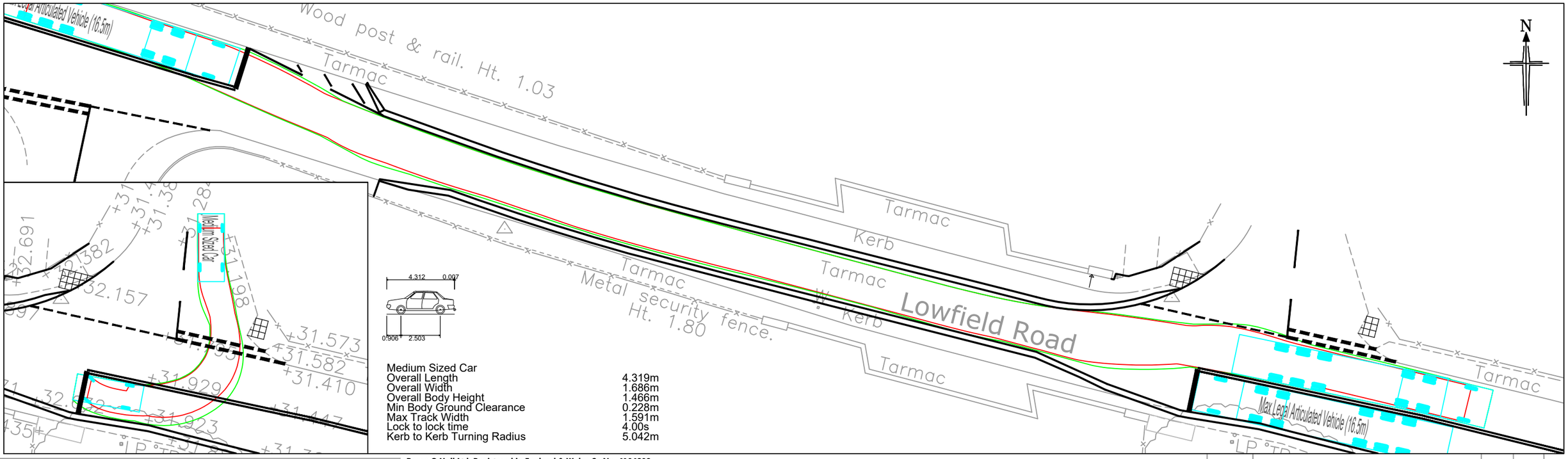
Drawing No: 20/237/DE/1300/002
Job No: 20-237

Revision: B
Date: 09/06/2020



Max Legal Articulated Vehicle (16.5m)

Overall Length	16.500m
Overall Width	2.500m
Overall Body Height	3.632m
Min Body Ground Clearance	0.396m
Max Track Width	2.500m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	6.870m



Medium Sized Car

Overall Length	4.319m
Overall Width	1.686m
Overall Body Height	1.466m
Min Body Ground Clearance	0.228m
Max Track Width	1.591m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.042m

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Title: SWEPT PATH ANALYSIS OF BRIDGE

Status: FOR APPROVAL

Scale: 1:250 | Size: A3 - 420 x 297 | Drawn: MM | Chkd: MC | Appvd: MC

Rev:	Date:	Amendment:			
A	16/12/21	Proposed layout updated following RSA comments	JI	MC	

Client: GLEESON REGENERATION AND HOMES

Project: LOWFIELD ROAD
BOLTON ON DEARNE

Drawing No: 20/237/ATR/003

Job No: 20-237

Revision: A

Date: 17/11/2021