

HIGHWAYS TECHNICAL NOTE

Proposed Subdivision of Existing Dwelling

204 Spark Lane, Mapplewell, Barnsley

Project No.: 26638

Prepared for: Valerie Brown

Prepared by: Dart Engineers Ltd

July 2026

1. Introduction

Dart Engineers Ltd has been instructed by White Agus Ltd, on behalf of Mrs Valerie Brown, to undertake a highways assessment in support of a planning application for the subdivision of the existing dwelling at 204 Spark Lane, Mapplewell.

The proposal seeks to separate the existing dwelling and associated annex/garage accommodation to create two independent residential dwellings. The scheme includes the formation of separate vehicular accesses, parking provision and associated external works.

This Technical Note considers the proposed access arrangements from a highways perspective, including visibility, access geometry, parking, manoeuvrability and the likely requirements of the Local Highway Authority.

Vehicle swept path tracking and visibility splay drawings accompany this report as appendices.

2. Site Description

The site is located on the western side of Spark Lane within an established residential area of Mapplewell.

The property is currently served from a single vehicular access onto Spark Lane and benefits from generous frontage parking together with garage accommodation.

Spark Lane is a two-way residential road serving existing dwellings. Vehicle speeds are influenced by frontage development, numerous private accesses and local road geometry, resulting in an environment consistent with Manual for Streets.

The proposed development does not intensify the use beyond that typically associated with two detached dwellings.

3. Proposed Development

The proposals comprise:

- subdivision of the existing property into two dwellings;
- provision of independent vehicular accesses;
- separate parking areas for each dwelling;
- turning areas enabling vehicles to exit in a forward gear;
- provision for a garage serving the proposed dwelling.

The accompanying drawings illustrate the proposed arrangement.

4. Assessment Criteria

The assessment has been undertaken with reference to:

- Manual for Streets (MfS)
- Manual for Streets 2
- Barnsley Metropolitan Borough Council guidance where applicable
- Good practice for residential access design

The assessment has considered:

- access geometry;
- visibility splays;
- parking provision;
- internal manoeuvring;
- forward gear egress;
- overall highway safety.

5. Existing Highway Conditions

Spark Lane serves an established residential area with direct frontage access provided to numerous dwellings.

Characteristics include:

- residential frontage development;
- regular private driveways;
- relatively narrow carriageway width;
- low to moderate traffic flows;
- vehicle speeds moderated by the surrounding built environment.

The character of the road is therefore consistent with that normally assessed using Manual for Streets guidance rather than higher-speed rural road standards.

6. Proposed Access Arrangements

The proposal provides two independent accesses serving each dwelling.

The proposed arrangement allows vehicles to enter directly from Spark Lane before manoeuvring within the site to access parking spaces.

The accesses are considered appropriate for residential use and are capable of accommodating private cars together with occasional refuse, maintenance and delivery vehicles.

The layout has been developed to minimise conflict between vehicles entering and leaving each property whilst making efficient use of the available frontage.

No significant alterations to the public highway are required beyond the formation of the individual accesses, subject to the requirements of the Highway Authority.

7. Visibility Assessment

Visibility has been assessed in accordance with Manual for Streets.

Visibility splays of 2.4 m × 43 m have been demonstrated from both proposed accesses, as shown on Drawing No. 26638-DR-C-0801, which accompanies this report.

The proposed splays extend along Spark Lane in both directions and are considered appropriate for the observed characteristics of the highway.

The visibility envelopes indicate that drivers exiting each property will have clear sight of approaching traffic, allowing sufficient time to assess gaps and undertake safe manoeuvres.

The visibility requirements are achievable wholly within the highway or land under the applicant's control and can be maintained throughout the lifetime of the development.

To preserve the required visibility, any walls, fences, hedges or planting located within the splay envelopes should be maintained at a maximum height of approximately 600 mm above carriageway level, with tree canopies lifted where necessary to maintain clear visibility.

Accordingly, the proposed accesses are considered capable of providing satisfactory visibility in accordance with recognised residential highway design guidance.

8. Requirement for Speed Survey

Based upon the character of Spark Lane, a formal speed survey is not considered necessary.

The road exhibits the characteristics of a residential street where:

- frontage development is continuous;
- numerous private accesses exist;
- driver behaviour is influenced by residential activity;
- Manual for Streets visibility standards are appropriate.

The adopted visibility splays of 2.4 m × 43 m are therefore considered proportionate to the road environment.

Should the Local Highway Authority request observed speed data during determination of the planning application, this could be obtained at a later stage. However, based upon current observations, this is not anticipated.

9. Parking Provision and Garage

The proposed layout provides dedicated off-street parking for both dwellings.

A review of the available external space indicates that it is also capable of accommodating a domestic garage for the proposed dwelling, should the client wish to incorporate this into the final architectural design.

The garage can be accommodated without compromising:

- parking provision;
- vehicle turning;

- access to the highway;
- overall manoeuvrability.

Consequently, adequate parking provision can be maintained whilst retaining satisfactory highway operation.

10. Vehicle Manoeuvring

Swept path analysis has been undertaken using a standard passenger vehicle representative of those expected to regularly use the development.

The accompanying tracking drawings demonstrate that:

- vehicles can enter both accesses safely;
- parking spaces are readily accessible;
- adequate turning space is available;
- vehicles are able to leave each property in a forward gear;
- reversing movements onto Spark Lane are avoided.

The internal layout therefore provides a safe and practical arrangement for everyday residential use.

11. Highway Safety

The proposal represents the subdivision of a single residential property into two dwellings.

The resulting increase in vehicle movements is expected to be relatively modest and well within the capacity of the surrounding highway network.

The proposed development provides:

- suitable access widths;
- compliant visibility splays;
- adequate parking provision;
- safe internal manoeuvring;
- forward gear egress.

The development is therefore not expected to result in any material adverse impact upon highway safety or the efficient operation of the local highway network.

12. Conclusions

Dart Engineers Ltd has undertaken a highways assessment of the proposed subdivision of the existing dwelling at 204 Spark Lane, Mapplewell.

The assessment concludes that:

- The proposed separate vehicular accesses are appropriate for residential use.
- Visibility splays of 2.4 m × 43 m can be achieved from both accesses in accordance with Manual for Streets principles.
- The surrounding road environment is consistent with a residential street where a formal speed survey is not considered necessary.
- The proposed layout provides adequate off-street parking for both dwellings.
- A domestic garage can be incorporated within the proposed layout without compromising highway operation.
- Swept path analysis confirms that vehicles can enter, turn and leave both properties in a forward gear.
- The modest increase in traffic associated with the proposed development will not adversely affect the operation or safety of Spark Lane.

Accordingly, it is the opinion of Dart Engineers Ltd that the proposed development is acceptable from a highways perspective and should not give rise to any highway safety objections.

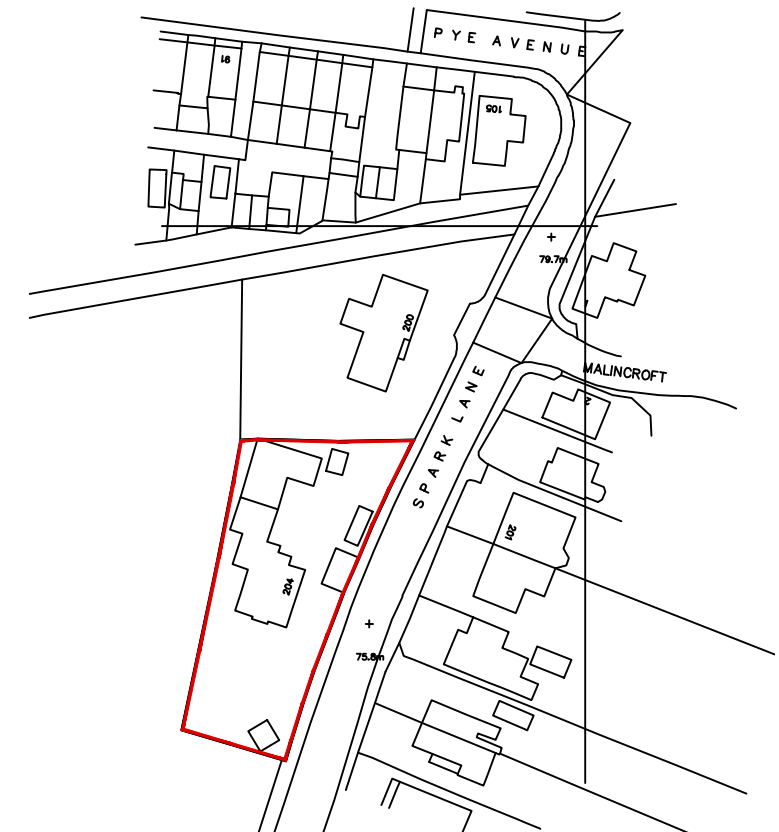
Appendices

Appendix A – Proposed Site Layout

Appendix B – Visibility Splays Drawing (Drawing No. 26638-DR-C-0801)

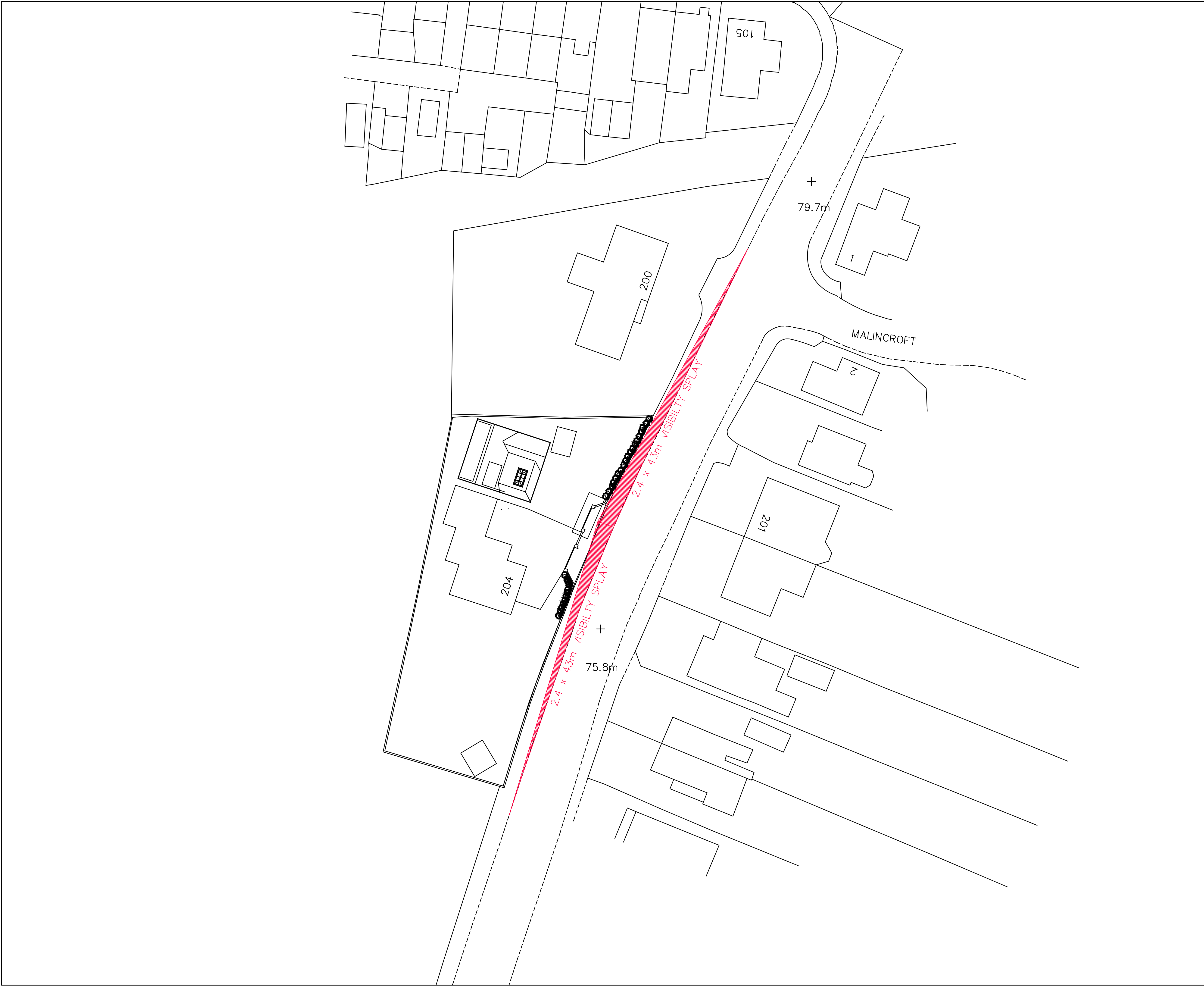
Appendix C – Vehicle Swept Path Tracking Drawings

Appendix A – Proposed Site Layout



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Project. PROPOSED DWELLING AT 204 SPARK LANE, MAPPLEWELL, BARNSELY S75 6AF				Client. MRS V. BROWN	
Drawing Title. SITE PLAN				Date. JUNE 2026	Scale. 1:200 @ A3
Ref. 26-048				Dwg. No. 03	Rev.
Date	Suffix	Description	Date	Suffix	Description

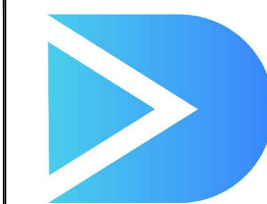
Appendix C – Visibility Splays Drawing



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1. Do not scale off this drawing
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Status				PRELIMINARY			
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PROJECT

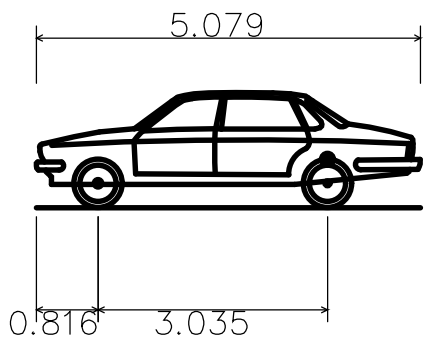
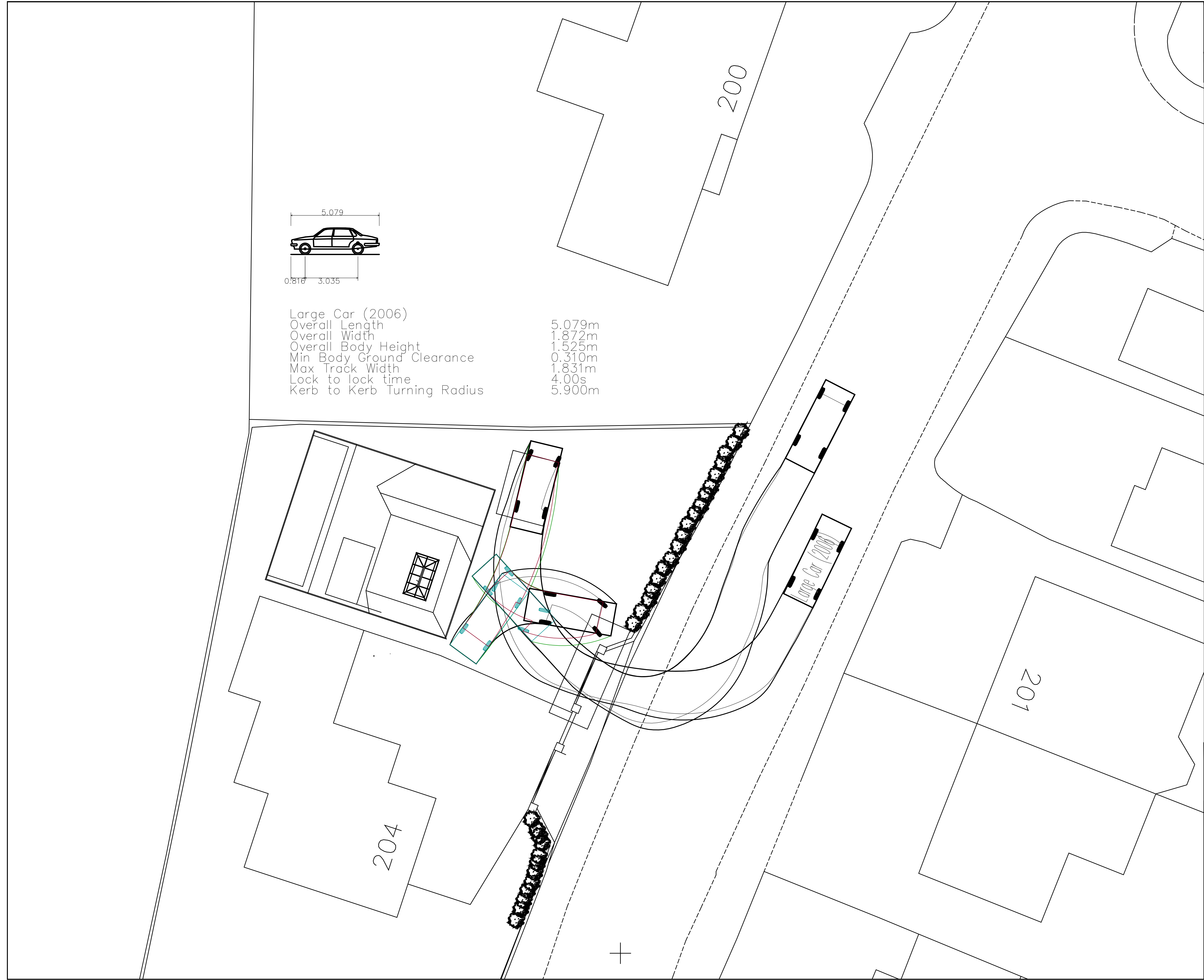
Sparks Lane, Mapplewell

DRAWING TITLE

Visibility Layout

Drawn	AD	Chkd	RT	Date	July 2026	Scale	1:250	
Sheet Size	A1		Drawing No.		26638-DR-C-0801		Revision	P1

Appendix D – Vehicle Swept Path Tracking Drawing

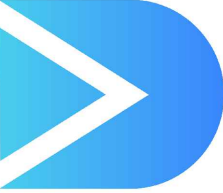


Large Car (2006)
Overall Length 5.079m
Overall Width 1.872m
Overall Body Height 1.525m
Min Body Ground Clearance 0.310m
Max Track Width 1.831m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 5.900m

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Sparks Lane, Mapplewell

DRAWING TITLE

Tracking Layout

Drawn	AD	Chkd	RT	Date	July 2026	Scale	1:100
Sheet Size	A1	Drawing No.			26638-DR-C-0800	Revision	P1