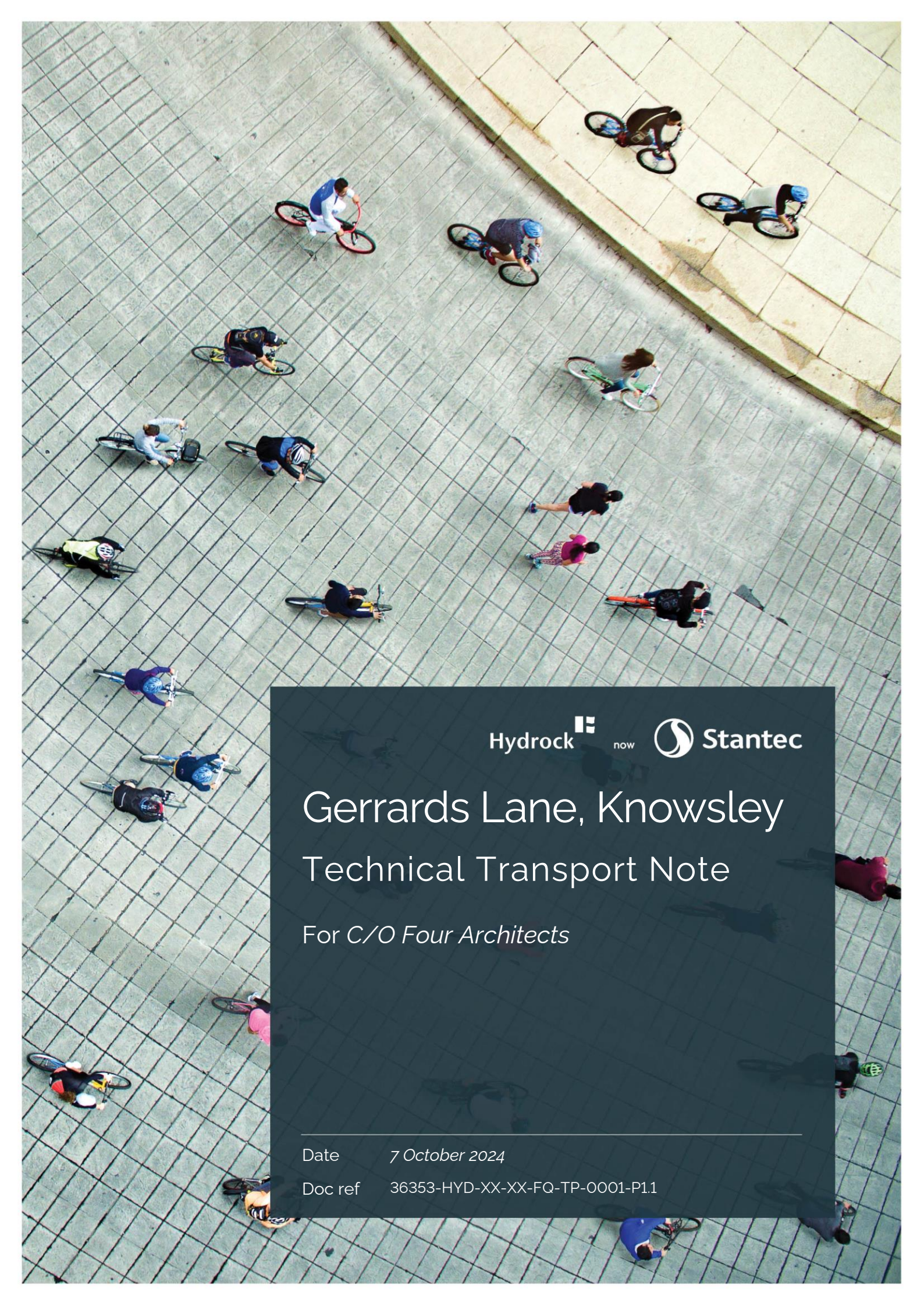




Hydrock

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Gerrards Lane, Knowsley

Technical Transport Note

For C/O Four Architects

Date 7 October 2024

Doc ref 36353-HYD-XX-XX-FQ-TP-0001-P11

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1. Introduction

1.1 Overview

- 1.1.1 Hydrock has been instructed by C/O Four Architects to prepare a Technical Transport Note [TTN] to justify a new access arrangement, located off Gerrards Lane, Knowsley, Merseyside.
- 1.1.2 This TTN will consider the context of the new proposed arrangement in relation to the local highway network.

1.2 Site Location

- 1.2.1 The site is located in a suburban area of Liverpool, located approx.10km south east of the city centre near the towns and villages of Halewood, Woolton and Netherley. The site is served by Knowsley Metropolitan Borough Council.
- 1.2.2 The site is strategically located, with shops, schools, parks, and bus stops all within walking or cycling distance. The surrounding road network around Gerrards Lane connects the site to Liverpool City Centre and a number of important roads, including the M62 and the A562.
- 1.2.3 **Figure 1.1** below displays the site location within its local context below:

Figure 1.1: Site Location



Source: Google Maps ©

- 1.2.4 The current site consists of seven newly constructed detached homes on what was previously greenfield land. The site is bounded by field to the north, a residential property to the west, Gerrards Lane to the south and North End Lane to the east. There are spaces for 2 cars in front of each of the 7 properties. The layout of the site is illustrated in **Figure 1.2** below.

Figure 1.2: Layout of site



Source: Four Architects

2. Local Context

2.1 Highway Network

- 2.1.1 The site is bounded by 2 roads, Northend Lane which runs along the eastern edge of the site and Gerrards Lane which bounds the southern edge. Northend Lane is accessed through Gerrards Lane and is a no way through road.
- 2.1.2 Gerrards Lane meets Lydiate Lane eastbound from the site which provides connections to a wider road network including Hazelwood Road, B5171 and A662, providing links to Liverpool City Centre, Widnes and Runcorn.
- 2.1.3 Westbound from the site, Gerrards Lane provides links to Wood Lane and the B1578, which then closely link to the M62 and M57, providing connections to St Helens, Warrington and Manchester.

2.2 Gerrards Lane

- 2.2.1 Gerrards Lane is a single carriageway, that allows for two-way vehicle movement and is governed by a 30mph speed limit. Gerrards Lane is approximately 6.3m wide and bounds the southern edge of the site, providing the sites access point.
- 2.2.2 There are footways on one side of the road along Gerrards Lane measuring approximately 1.5m in width. Outside of the site and westbound the footway runs along the northern edge of the road. Immediately east of the site the footway switches and runs along the southern edge of Gerrards Lane.
- 2.2.3 Due to being a suburban road there are Traffic Regulation Orders [TROs] in the form of different road surfaces, marked in red, to dissuade people from speeding and going above the 30mph limit.
- 2.2.4 **Figure 2.1** below illustrates the existing conditions along Gerrards Lane.

Figure 2.1: Existing conditions along Gerrards Lane



Source: Google Maps ©

2.3 Accident Analysis

- 2.3.1 The DfT document "Guidance on Transport Assessment" states that:
- 2.3.2 "Critical locations on the road network with poor accident records should be identified. This is to determine if the proposed development will exacerbate existing problems or if proposed, whether highway mitigation works or traffic management measures will help to alleviate the problems".
- 2.3.3 A high-level review of the Personal-Injury Accidents [PIAs] recorded within the study area has been undertaken using the most recently available ten-year data (1st January 2013-31st December 2022) available from DfT.
- 2.3.4 **Figure 2.1** illustrates the recorded findings within the vicinity of Car Park D/ the site and the following **Table 2.1** will summarise the accident record and severity over the last 10 years in more detail. Most notably 1 accident has been recorded within the immediate vicinity of the existing site access / egress over this period.

Figure 2.2: Study Area Accident Report



Source: CrashMap.co.uk

Table 2.1: Study Area Accident Summary

Year/Severity	Slight	Serious	Fatal	Total
2013	1	-	-	1
2014	-	-	-	-
2015	-	-	-	-
2016	-	-	-	-
2017	1	1	-	2
2018	-	-	-	-
2019	1	-	-	1
2020	-	-	-	-
2021	-	-	-	-

2022	-	-	-	-
Total	3	1	-	4

2.3.5 **Figure 2.1** and **Table 2.1** highlight that there have been 4 recorded accidents within the study area between 2013-2022, 3 of which have been slight and 1 has been serious. Of the 4 accidents one slight accident occurred within close proximity to the current site access, however this incident occurred in 2017, before the site was developed, and therefore doesn't indicate any issues with the site access/egress. The further slight accidents occurred east of the site along Gerrards Lane and on the junction between Gerrards Lane/ Winstar Drive/ Wood Lane. The serious accident occurred west of the site, on the junction between Gerrards Lane and Lydiat Lane.

2.3.6 It is in Hydrock's view that although all accidents are unfortunate, due to the disparity and rarity of the incidents, there is no evidence to indicate any problems with the existing local highway network surrounding the site. The road safety record will not be a concern in the context of the proposed development.

3. Development Proposals

3.1 Introduction

- 3.1.1 The proposal for the site is to replace the existing site access with an electric sliding double opening gate and an electric pedestrian access gate. The electric gate will be used by the residents of the 7 homes within the site as well as potential visitors and bin/delivery vehicles etc.

3.2 Proposed Site Arrangements

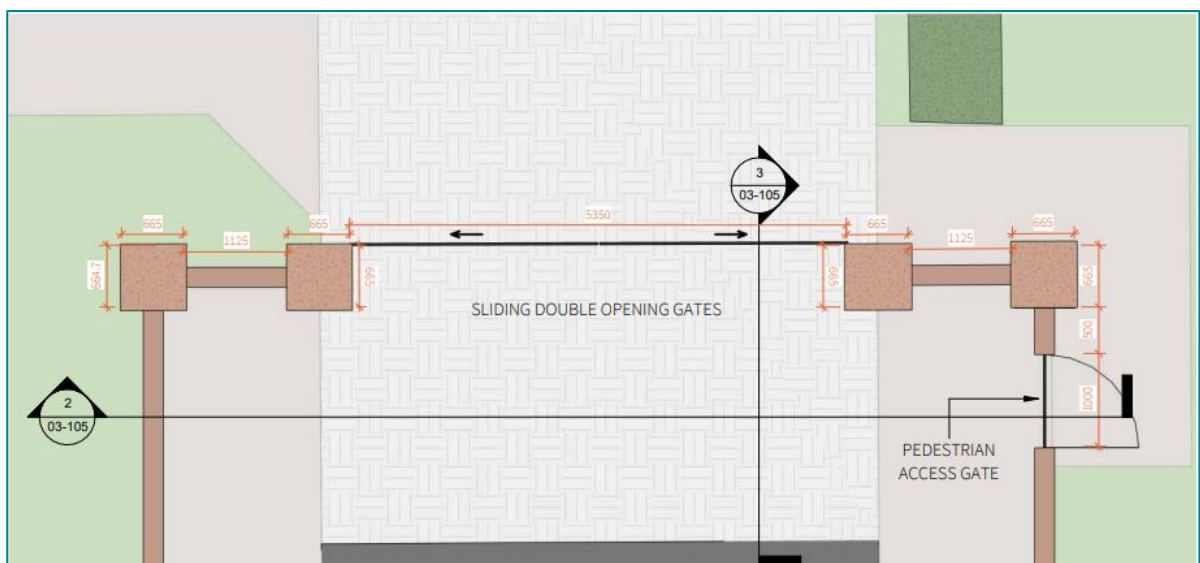
- 3.2.1 The internal arrangement of the site will remain the same in regards to the car parking and road layout. The positioning of the site access and the external road layout will also remain the same. As previously discussed, there has been one recorded accident within the vicinity of the car park entrance/exit within the most recently available ten-year data (1st January 2013-31st December 2022).
- 3.2.2 The proposed electric gate has been set back from the road a sufficient distance to allow other traffic passing through to be unaffected by a large car waiting. This will be shown in the swept path analysis in **Appendix A**.
- 3.2.3 A further swept path analysis for a large car will also be presented in **Appendix A**, demonstrating that vehicles can safely access/egress the site in a forward gear.
- 3.2.4 A visibility spray will be presented in **Appendix B**, demonstrating that while cars are egressing from the proposed site, they can view a sufficient amount of the road in both directions so that they can safely leave the site.
- 3.2.5 The proposed changes to the access layout are shown within **Figures 4.1** and **Figures 4.2** below, as well as **Appendix C** at the rear of the report:

Figure 3.1: Site Plan



Source: Four Architects

Figure 3.2: Entrance Wall & Gate



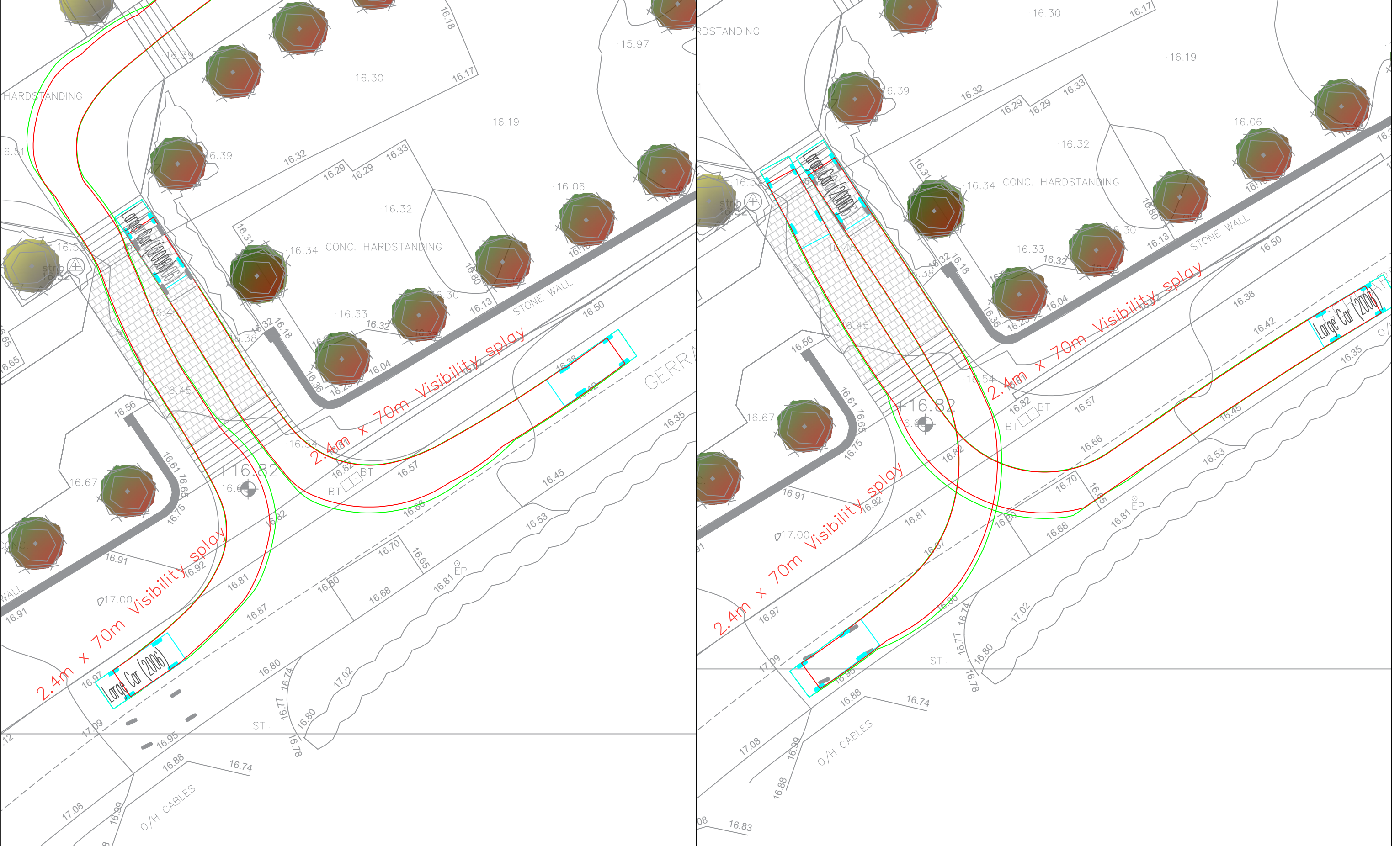
Source: Four Architects

4. Conclusion

4.1 Overview

- 4.1.1 Hydrock has been instructed by C/O Four Architects to prepare a Technical Transport Note [TTN] to justify a new access arrangement, located off Gerrards Lane, Knowsley, Merseyside, and will consider the context of the new proposed arrangement in relation to the local highway network.
- 4.1.2 In summary the site:
- » Is bounded by Gerrards Lane, a single carriageway which provides strong connections to the surrounding road network.
 - » Accident data displays that the surrounding roads around the site are safe, with 4 accidents recorded in the most recent 10 years where data is available.
 - » A large car can wait at the gate without affecting the traffic flow on Gerrards Lane.
 - » A swept path analysis showed large cars can access/egress from the site at the same time.
 - » A visibility splay analysis displayed that the access allowed for a 70m view in both directions.
- 4.1.3 In conclusion, Hydrock believes that the new proposed access will not impact the surrounding road network and will not cause any more safety or congestion problems.

Appendix A Swept Path Analysis



KEY PLAN

VEHICLE BODY IN FORWARD GEAR

VEHICLE BODY IN REVERSE GEAR

VEHICLE CHASSIS IN FORWARD GEAR

VEHICLE CHASSIS IN REVERSE GEAR

5.072

5.072

Large Car (2008)

Overall Length

1.872m

Overall Width

1.525m

Overall Body Height

1.310m

Min Body Ground Clearance

0.310m

Max Track Width

1.831m

Lock to lock time

4.00s

Kerb to Kerb Turning Radius

5.900m

REVISIONS (CONTINUED)

REVISIONS

P01.01	NC	07/10/2024	SD	07/10/2024	SD	07/10/2024
REV	REVNOTES	DATE-D	CHKBY	DATE-C	APPLY	DATE-A

Hydrock

C/O Four Architects

Gerrards Lane, Knowsley

STATUS DESCRIPTION

SUITABLE FOR REVIEW

DRAWING NO.

36353-HYD-XX-XX-DR-TP-0001

STATUS

S3

REVISION

P01.01

TITLE

SWEPT PATH ANALYSIS - LARGE CAR

HYDROCK PROJECT NO.

C-36353

SCALE @ A3

1:250



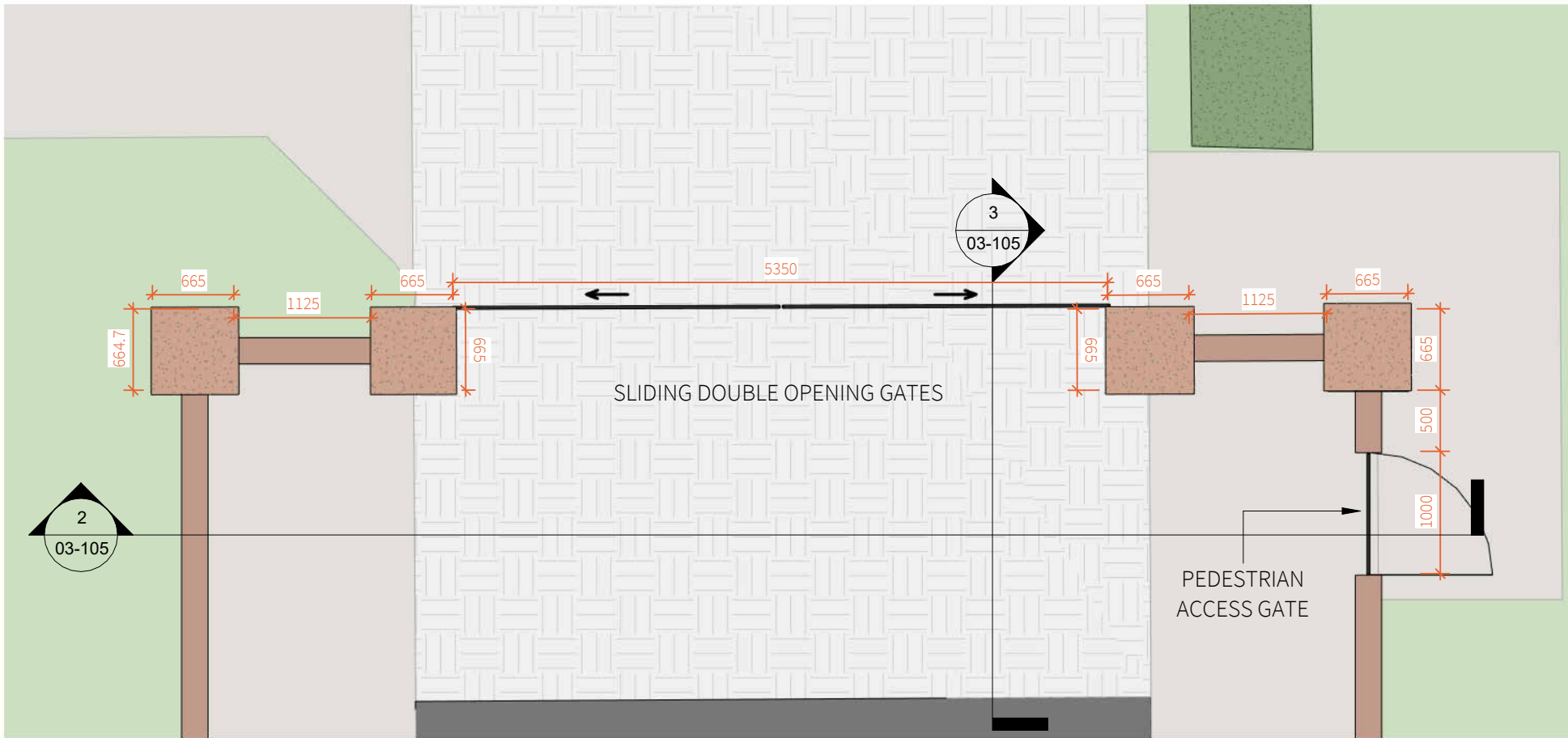
KEY PLAN				REVISIONS (CONTINUED)		REVISIONS		Hydrock		TITLE	
	VEHICLE BODY IN FORWARD GEAR							CLIENT		SWEPT PATH ANALYSIS - LARGE CAR	
	VEHICLE BODY IN REVERSE GEAR							C/O Four Architects		HYDROCK PROJECT NO. C-36353	
	VEHICLE CHASSIS IN FORWARD GEAR							PROJECT		SCALE @ A3 1:200	
	VEHICLE CHASSIS IN REVERSE GEAR							Gerrards Lane, Knowsley		STATUS DESCRIPTION SUITABLE FOR REVIEW	
										STATUS S3	
										REVISION P01.01	

Appendix B Visibility Splay Analysis



KEY PLAN VEHICLE BODY IN FORWARD GEAR VEHICLE BODY IN REVERSE GEAR VEHICLE CHASSIS IN FORWARD GEAR VEHICLE CHASSIS IN REVERSE GEAR			REVISIONS (CONTINUED)	REVISIONS	Hydrock	TITLE						
						Visibility Splay Analysis						
						CLIENT						
						C/O Four Architects						
						HYDROCK PROJECT NO. C-36353		SCALE @ A3 1:500				
P01.01	FIRST ISSUE					PROJECT		STATUS DESCRIPTION		STATUS		
	NC		07/10/2024		SD	07/10/2024		SD	07/10/2024		S3	
	REVNOTES					Gerrards Lane, Knowsley		STATUS DESCRIPTION				
	REV					DRAWING NO.		REVISION				
DRAWNBY		DATE-D		CHKBY	DATE-C		APPLY	DATE-A		36353-HYD-XX-XX-DR-TP-1001		P01.01

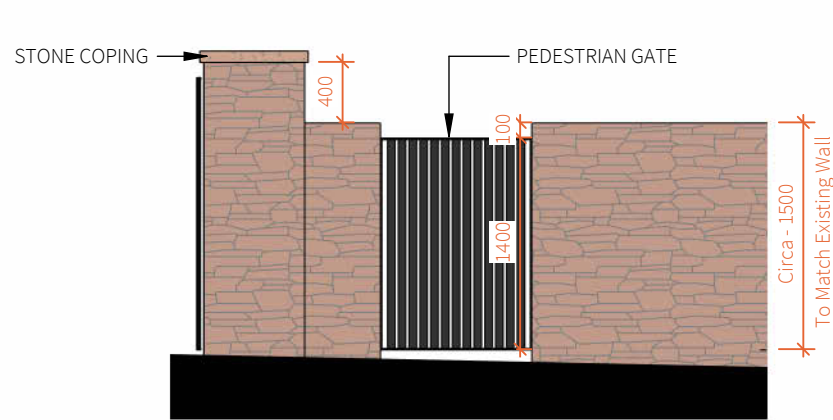
Appendix C New Site Plan



1 ENTRANCE WALL & GATE - PLAN
1 : 50



2 FRONT ELEVATION
1 : 50



3 SIDE ELEVATION
1 : 50

Four Architects Limited (11613893)
Note:
This drawing is copyright.
Do not scale dimensions from drawings.
All dimensions must be checked on site by
contractor or suitable qualified individual.
Contractor to report any discrepancies, errors
or omissions prior to commencing work.

Project Title:
Gerrards Lane

Location:
HALEWOOD

Drawing title:
ENTRANCE WALL & GATE

Status:
PRELIMINARY

Scale:
1 : 50

Date:
26/04/2023

Job Number:
21-002

Drawing Number:
FA-DR-03-105

Revision:
P1

F

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