
TECHNICAL NOTE

Project Title: St. Stephens Fields, Horsted Keynes

Report Reference: JNY10084 - 04

Date: 24th February 2020

Application Ref: DM/20/4692- Land South of St. Stephens Church, Hamsland

Introduction

- 1.1 This Technical Note has been prepared to address comments provided by West Sussex County Council (WSCC) dated 8th February 2021 with respect to the above planning application. The points raised by WSCC are identified in *blue italics* and RPS response is provided in black text.

Access Arrangements

- 1.2 *Modifications are proposed to the existing access point to form a bellmouth priority junction with 5.5m width narrowing to 5m within the site. Junction radii will be 5m. Swept path tracking plans show that with provision of a new parking lay-by opposite the site access, a refuse collection vehicle can manoeuvre from east on Hamsland into the site. The applicant should confirm that MSDC, as the Local Waste Authority, are satisfied that waste collection vehicle will enter from this direction during collection schedule. Separate tracking plan shows that a fire appliance can turn within the site in order to exit to the public highway in a forward gear. Internal tracking plans for a refuse collection vehicle show that whilst some manoeuvres are restrictive, turning on site is achievable.*
- 1.3 *The TS states that the access road will be shared surface with no segregated footway within the site. As per Manual for Streets (MfS) paragraph 7.2.14, shared surface streets are likely to work well in short lengths (or where they form cul-de-sacs), where the volume of motor traffic is below 100 vehicles per hour and where parking is controlled or it takes place in designated areas. Nevertheless, some of the plans appear to show a 1.5m width footway on the eastern side of the access – the applicant should clarify this point.*
- 1.4 *The access should also feature a dropped kerb tactile paving point either side to allow for pedestrians to utilise the existing footway along Hamsland. This should be reflected on the plans.*
- 1.5 It has not been possible to confirm the direction of the waste collection vehicle, as such a swept path analysis has been carried out shown a vehicle accessing the site from the west to

- demonstrate that which ever direction the vehicle approaches, all manoeuvres can be undertaken. A copy of this Swept path analysis is included in **Appendix A**.
- 1.6 The proposal is to provide a formal access arrangement with a 1.5m wide footway as identified on the plan included in the TA. This plan has been updated to include dropped kerbs and tactile paving as advised above. A copy of the updated plan is included in **Appendix A** of this Technical Note.
- 1.7 Within the site, the proposal will include a shared surface arrangement which is shown on Rydon Homes drawing No.1044-FA-201, a copy of which is also included in **Appendix A**.

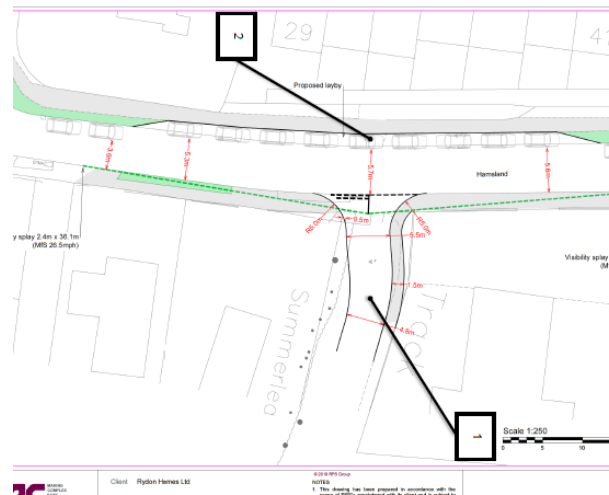
Visibility

- 1.8 *Traffic surveys undertaken pre-Covid restrictions revealed worst case average of 47 x vehicular two-way peak hour trips. It is considered that the nearby road network is conducive as lightly trafficked low speed situation and thus MfS guidance would apply. An ATC speed survey revealed 85th percentile speeds of 26.1mph eastbound and 25.8mph westbound. Using MfS co-efficient for calculating required Stopping Sight Distance (SSD), splays of 2.4m by 35.4m west and 34.8m east would be required. Splays of 36.1m west and 35m east have been demonstrated as achievable within public highway thus the LHA are satisfied that suitable visibility for the anticipated speeds along Hamsland has been demonstrated, for a car emerging from the access.*
- 1.9 Noted

Stage 1 Road Safety Audit (RSA)

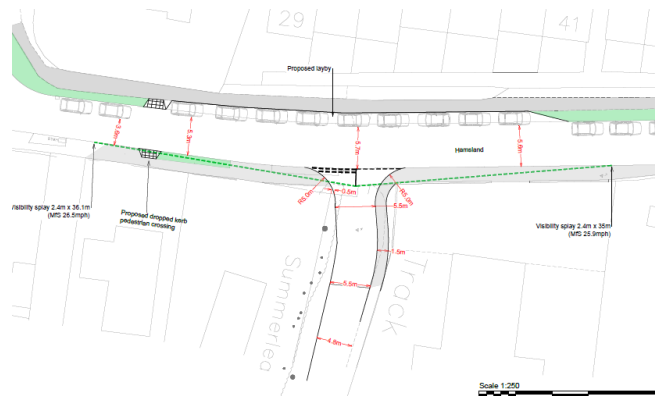
- 1.10 *The RSA raised two issues:*
- 3.1.1 – *Pinch point along access road may lead to collisions. The auditor recommends that tracking is provided for large cars to show that cars travelling in opposing directions can negotiate the pinch point. Designer has responded stating that tracking has been provided and that extent of access road that is 5.5m without narrowing has been extended. The LHA cannot see that tracking specifically for two large cars passing has been provided and therefore advise this is submitted.*
- 1.11 The original layout included the access road narrowing to 4.8m within 15m of the junction with Hamsland (see extract from RSA below).

Figure 01 – Site Access Arrangement – Extract from Road Safety Audit (Drawing No. JNY10084/03)



- 1.12 The revised arrangement, included in the TA shown on drawing No. JNY10084/03A, amended the access road to show the road narrowing further into the site, see Figure 02 below.

Figure 02 – Site Access Arrangement (Extract from Drawing No. JNY10084/03A)



- 1.13 To demonstrate that two cars can pass, the Auto Track computer software has been used and the output is provided in **Appendix A** to this Technical Note.

3.4.2 – Proposed lay-by will remove existing uncontrolled pedestrian crossing increasing risk of collisions from pedestrians crossing between parked cars. The auditor recommends that safe crossing points are provided. Designer has responded stating that new crossing point has been provided. Location of this is detailed on the Proposed Site Access Plan.

- 1.14 *The Designers Response should be sent in the format shown in Appendix F4 & F5 of GG119 so that the LHA can fill in response as 'Overseeing Organisation' and sign off.*

- 1.15 A copy of the RSA Designers Response has been amended to conform to GG119 and a copy is attached in **Appendix B**.

Layby

- 1.16 *A car parking survey revealed that up to 42 x cars could park on Hamsland. Over the period surveyed an average 50% of potential maximum parking capacity was used. Furthermore, parking opposite the site access occurs regularly and reduces the available carriageway width to approximately 3.5m. To improve the existing traffic conditions and allow for manoeuvres into the new site access, a layby is proposed on Hamsland in this location to accommodate approximately 10 x cars. The existing verge will be used to accommodate this without impacting existing footway along the back edge. These works will maintain existing capacity for on-street parking in the vicinity and improve passing width along Hamsland.*

Trip Generation & Road Network Capacity

- 1.17 *TRICs has been used to estimate the anticipated trip generation for the new development. Suitable parameters were employed and found that 30 x dwellings could create 22 x two-way vehicle trips in the AM and 19 x two-way vehicle trips in the PM peak hours respectively. This is considered to be a worst-case scenario and a 'severe' impact to the operational capacity of the nearby road network is not anticipated as a result if the development.*

Car and Bicycle Parking

- 1.18 *The LHA have assessed the parking provision using WSCC Car Parking Demand Calculator (PDC) using High Weald ward and proposed housing mix and allocated/unallocated parking provision shown on 'Parking Provision' plan.*
- 1.19 *1-bedroom units are allocated 1 x space each, 2-bedroom units are allocated 2 x spaces each, 3-bedroom units are allocated 2 x spaces each with the exception of unit 25 which has 4 x spaces and the 4-bedroom units are allocated 4 x spaces each (a total of 62 x allocated spaces). On this basis the PDC estimates a demand for 80 x spaces. There are an additional 5 x unallocated visitor spaces bringing the total to 67 x spaces. The parking is therefore short by 13 x spaces. Whilst there may be a benefit to providing some additional unallocated visitor spaces the LHA are mindful that some of the 2 and 3-bedroom unit driveways are in fact of sufficient length to accommodate an additional vehicle and therefore consider that sufficient parking within the site is achievable.*
- 1.20 *Cycle parking should be provided with 1 x space per 1 & 2-bedroom units and 2 x spaces per 3 and 4-bedroom units. Details of this can be secured via condition.*
- 1.21 *The TA stated that the parking would be provided in accordance with WSCC parking calculator (2018), however it is understood that this has been superseded by WSCC guidance on Parking at New Developments dated August 2019.*
- 1.22 *The calculation methodology using this guidance is as follows;*

Allocated parking requirement

No of bedrooms	No of unit size on site	Required parking per unit	Total parking demand
1	6	1.5	9
2	9	1.7	15.3
3	12	2.2	26.4

- | | 4 | 3 | 2.7 | 8.1 |
|------|--|---|-----|-----|
| 1.23 | Using this guidance the requirement would result in a total allocated parking provision of 58.8 / 59 spaces . | | | |
| 1.24 | The proposed layout is shown to accommodate 54 spaces with an additional 8 spaces within garages. As garage spaces only equal 0.5 spaces in accordance with para 4.14a this results in 4 spaces in garages which brings the total allocated parking provision to 58 . | | | |

Visitor Spaces

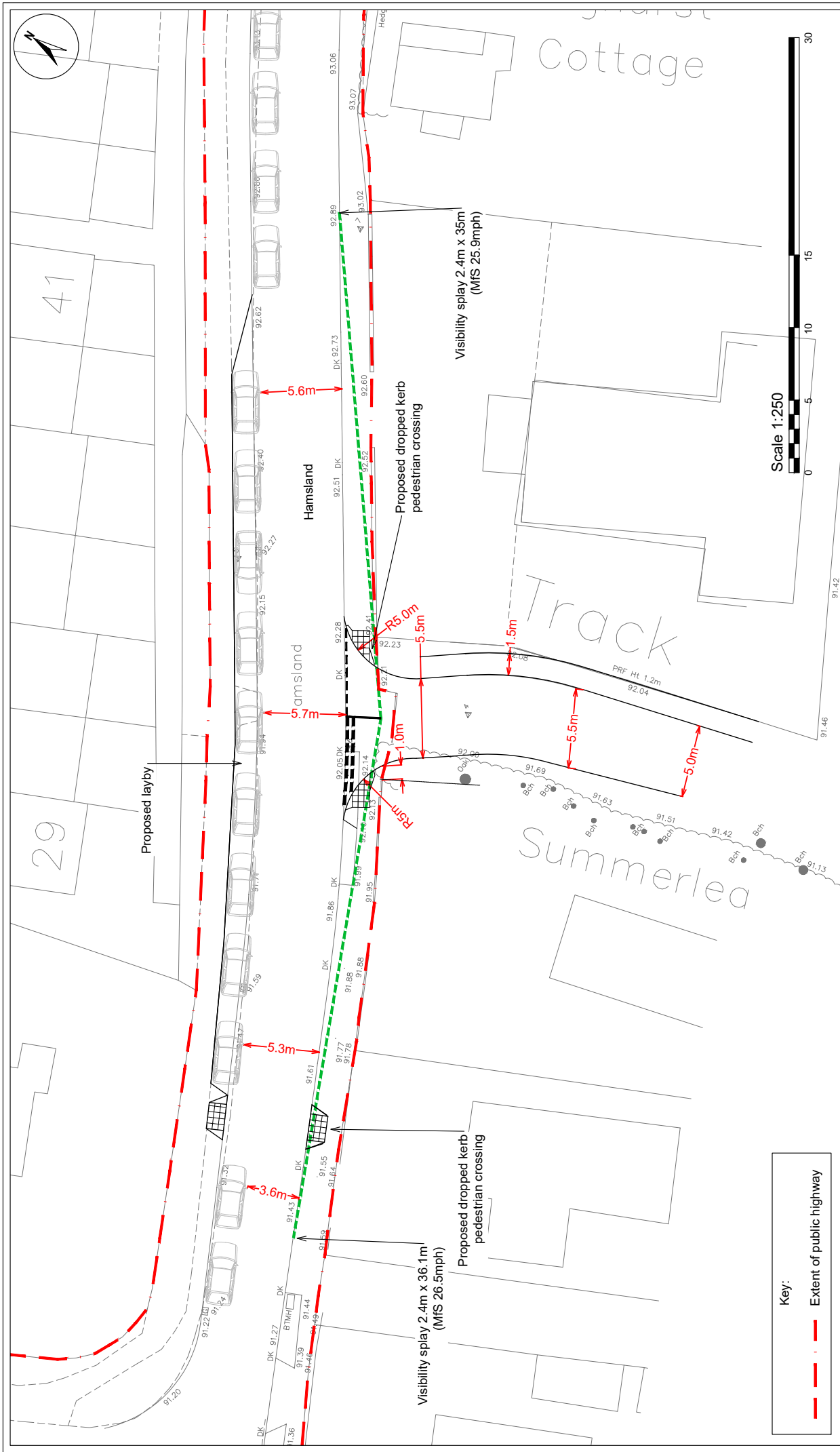
- 1.25 In accordance with para 5.8, 0.2 visitor spaces per dwelling needs to be provided. This would mean a total on site provision of **6** visitor spaces. A total of 5 spaces have been identified which equates to 0.17 per dwelling
- 1.26 Overall there is a total of 2 spaces less than the latest guidance which is not considered to be of significant concern.
- 1.27 With regard to cycle parking, it is agreed that this can be conditioned as part of a planning consent.

Sustainable Transport

- 1.28 *As per comment above the applicant should confirm whether footway is proposed extending from the site access on the eastern side as some of the plans show this. They should also show a dropped kerb tactile paving crossing across the new junction to enhance connectivity for pedestrians.*
- 1.29 *The new dropped kerb tactile paving point to cross Hamsland will also provide an improvement for pedestrians. A few local amenities and services are within walking distance of the site using Lewes Road for a continuous route or shared surface routes via Bonfire Lane and Chapel Lane (0.4 mile), such as post office and local shop.*
- 1.30 *Most cycling trips are for short distances, with 80% being less than five miles. Nevertheless, Haywards Heath, with Train Station and further amenities, is 4.7-mile cycle distance via Keysford Lane although this is a rural route of varying gradient without segregated cycle route and may not be inviting for majority of cyclists.*
- 1.31 *The nearest bus service runs from Station Road with a route between East Grinstead and Brighton (including Hassocks and Haywards Heath). With an hourly service available, travel by public transport could make up part of a sustainable journey.*
- 1.32 *Residential Travel Information Pack will be provided for new residents and include details of cycle parking facilities at nearby areas, a bus discount voucher, details of pedestrian and cycle routes and maps/timetables for public transport. This detail could be provided via a Travel Plan Statement and could be conditioned as part of a planning approval.*
- 1.33 It is agreed that a Travel Plan Statement, if required, can be conditioned as part of a planning consent.

Appendices

Appendix A – Access Arrangement & Swept Path Analysis



Key:
 - - - - - Extent of public highway

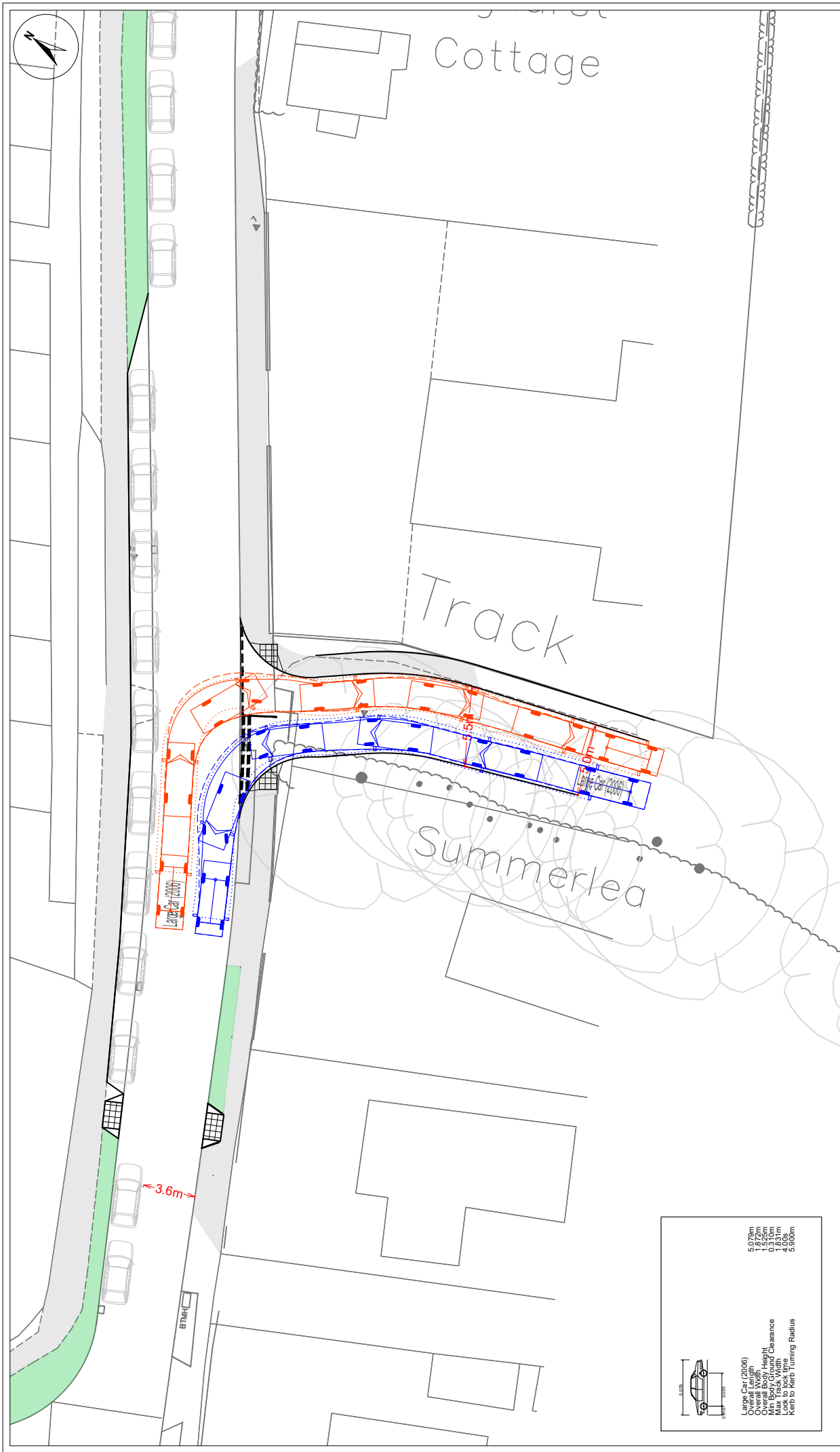
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 Drawn By: AJ
 Project Number: JNY10084
 Scale @ A3: 1:250
 Date Created: April 2019
 PM/Checked by: MRA
 Rev: C
 JNY10084-03
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

Rev	Description	By	CB	Date
C	Dropped kerb and tactile added at access and highway boundary added	AJ	MA	30/12/18
B	Access Road width amended	AJ	MA	03/12/20
A	Amendments Made in response to RSA	DA	MA	17/09/20

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 3. This drawing is to be read in conjunction with all relevant scheme drawings.

Client: Rydon Homes Ltd
 Project: St Stephens Fields, Horsted Keynes
 Title: Proposed Site Access
 Visibility Splay

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	5.072m 1.972m Overall Width 0.370m Min. Entry Clearance 1.831m Max. Track Width 5.920m Kerb to Kerb Turning Radius
	5.072m 1.972m Overall Width 0.370m Min. Entry Clearance 1.831m Max. Track Width 5.920m Kerb to Kerb Turning Radius

Status	Drawn By	PM/Checked by
PRELIMINARY	AJ	MRA
Project Number	Scale @ A3	Date Created
JNY10084	1:250	22/02/21
RPS Drawing/Figure Number		Rev
JNY10084-23		

Rev	Description	By	CB	Date

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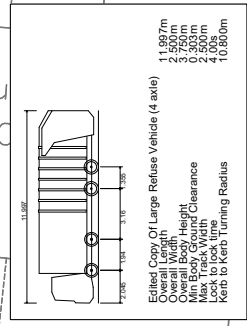
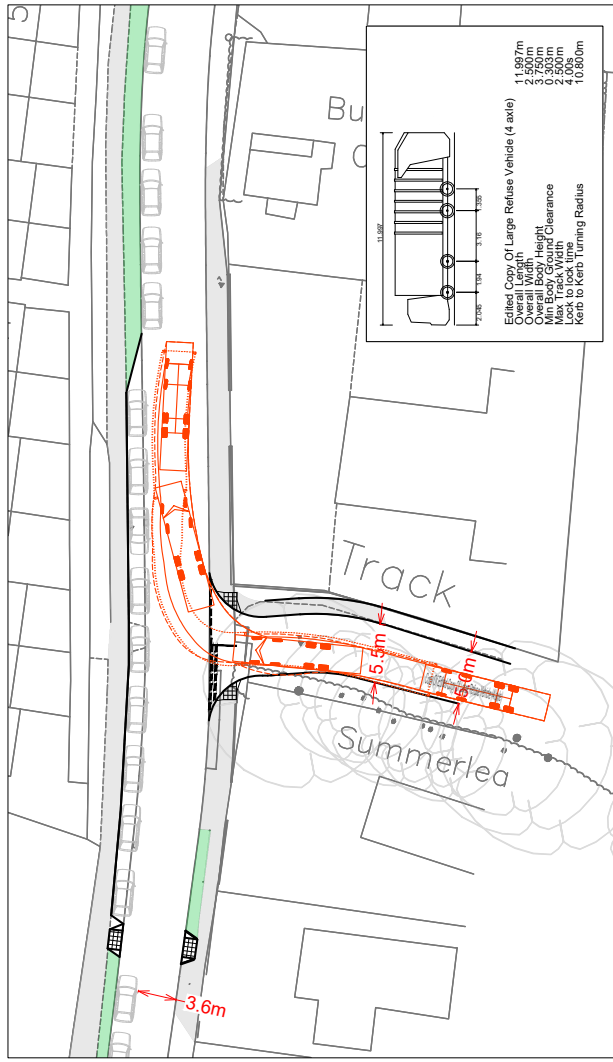
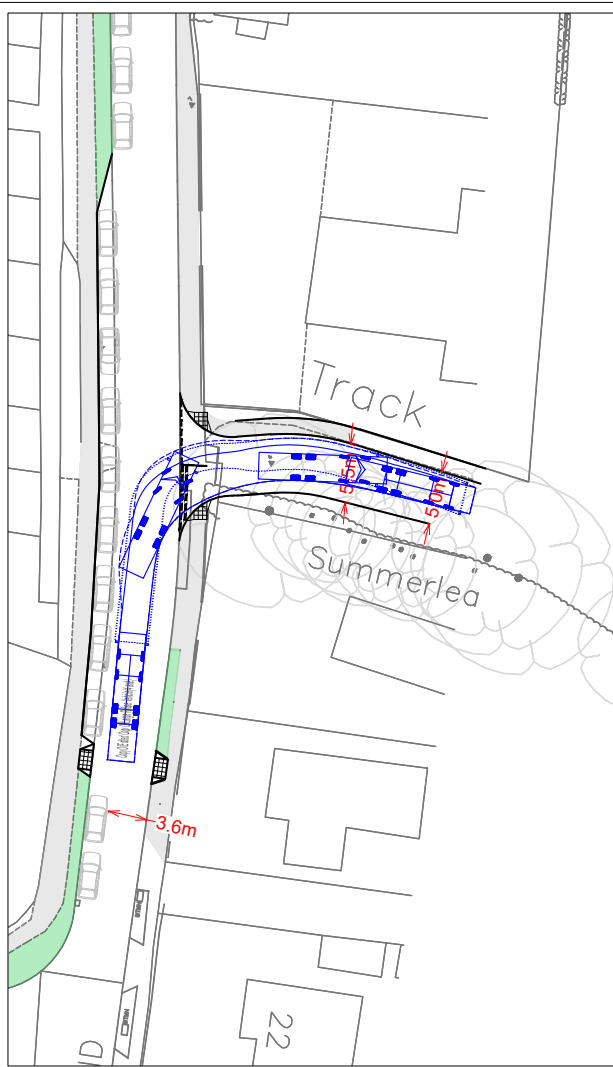
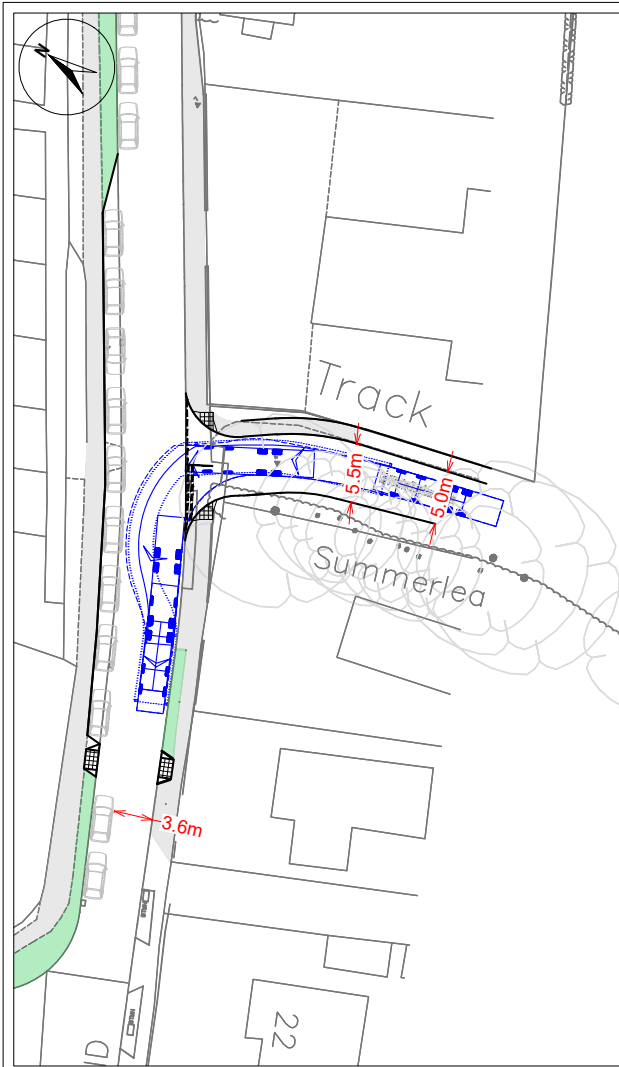
Client Rydon Homes Ltd

Project St Stephens Fields, Horsted Keynes

Title Proposed Site Access
Large Car
Swept Path Analysis



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1. 15.7m
 2. 5.0m
 Overall Width
 3. 7.50m
 Overall Body Height
 2. 5.00m
 Max Track Width
 4. 0.05m
 Lock to lock time
 10.00m
 Kerb to Kerb Turning Radius

Status: PRELIMINARY
 Drawn By: AJ
 Project Number: JNY10084
 PM/Checked by: MRA
 Scale: @A3
 Date Created: April 2019
 Rev: C
 JNY10084-04
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

Rev	Description	By	CB	Date
C	Further swept paths added	AJ	MRA	22/02/21
B				
A				

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Client: Rydon Homes Ltd
 Project: St Stephens Fields, Horsted Keynes
 Title: Proposed Site Access
 12m Refuse Collection Vehicle
 Swept Path Analysis

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-  Footpath
-  Margin
-  Access Road
-  Shared Driveway
-  Private Driveway
-  Shared Surface



Appendix B – RSA Designer’s Response

Stage 1 Road Safety Audit – Designers Response

Horsted Keynes, West Sussex – Proposed Site Access

Project Ref: JNY10084


Audit Ref	Problem Summary and Recommendation	Designers Response	WSSCC Comments
3.1	<p>Summary: A pinch point along the development site access road may increase the risk of vehicle to vehicle head on type collisions.</p> <p>Recommendation: The Audit Team recommends that for the next stage of Audit vehicle tracking movements are carried out for large cars negotiating the pinch point so that opposing cars can safely travel through the pinch point without colliding with each other.</p>	<p>The proposed access road will be 5.5m as it enters the site narrowing to 4.8m. The extent over which the access road is 5.5m has been extended to provide more room for vehicles as they enter the site. Swept path analysis has been carried out to demonstrate that two vehicles will be able to pass.</p>	<p>The layout has been amended to include a dropped kerb new crossing point.</p>
3.4	<p>Summary: Removal of uncontrolled pedestrian crossing facility may force pedestrians to cross between parked vehicles with a risk of vehicle to pedestrian type collisions.</p> <p>Recommendation: The Audit Team recommends that safe crossing points are provided to ensure the pedestrian to driver inter visibility is adequate for the traffic speeds along Hamsland.</p>		



Stage 1 Road Safety Audit – Designers Response

Horsted Keynes, West Sussex – Proposed Site Access

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	Melanie A'Lee
Signed	
Position	Associate Director
Organisation	RPS
Date	22/02/2021

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	
Signed	
Position	
Organisation	West Sussex County Council
Date	