

TECHNICAL NOTE

Job Name: Fort Halstead
Job No: 41290
Note No: 5503 - TN03
Date: 7th January 2021
Prepared By: F Mott / J Lewis
Subject: **Addressing KCC Comments Dated 17th November 2020**

1.1. This note addresses the consultation comments raised by KCC in their letter dated 17th November 2020, followed by a meeting between the applicant team, SDC and KCC on 15th December 2020. The note describes how the comments have been addressed in the revised planning application.

1.2. The comments on the remaining issues are grouped by subject matter.

2. Bus Transport

Weekend DRT Service

2.1. The Demand Responsive Transport (DRT) bus proposals set out in the Transport Assessment comprise weekday services, with no services at weekends on the basis that many of the journey purposes that exist in the week, e.g. commuting and school, do not exist at the weekend and additionally family groups would likely prefer to use the family car if going on a family group journey. Furthermore, the demand from employment at the weekend would be significantly lower. The applicant has reasserted that their wish is for the DRT service to be majority self sustaining at the end of the pump priming period, which could be impacted by loss making at the weekends.

2.2. In discussion with KCC it was agreed that the viability of a Saturday service should be tested through a trial period. It was agreed that the trial period should commence at occupation of the 50th dwelling unit and be reviewed at the occupation of the 100th dwelling unit, at which time discussion with KCC will be held using monitoring data from the trial to understand if demand would allow viable continuation of the Saturday service.

2.3. It is proposed that continuation should be based on the Saturday service covering its own costs and not be loss making. Should it be apparent that the service is loss making then the applicant will retain the ability to cease the service at occupation of the 100th dwelling and following the review. It is proposed that the review should be completed two months after occupation of the 100th dwelling.

DOCUMENT ISSUE RECORD

Technical Note No	Rev	Date	Prepared	Checked	Reviewed (Discipline Lead)	Approved (Project Director)
41290/5503/TN03	-	07/01/21	FM/JSL	JSL	JSL	JSL

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Other UK DRT Examples

- 2.4. Chaul End was given as an example of a recent scheme that has a similar DRT service. However the Chaul End DRT is currently operating under promotional incentives and therefore we cannot glean any data from it as to typical working (i.e. full fare) passenger loadings. We do however understand from reading industry press that this service is reasonably successful.
- 2.5. The information provided in the Fort Halstead application Updated Public Transport Strategy (Appendix M of the TA) confirms that the data underpinning bus service analysis therein is based on data provided by Go Coach, demand data from the TA and the annual bus industry cost index prepared by the bus and coach industry trade body, the Confederation of Passenger Transport (CPT). Therefore, the applicant is satisfied that the proposals for the Fort Halstead DRT supported for a period of 10 years are robust and the findings of the Updated Public Transport Strategy are sound.

DRT Use by School Children

- 2.6. As set out in the Bus Report appended to the TA, it is proposed that the DRT service allows for trips for commuters up to 8am, where after it will then act on school duty for school age children assuming the worst case scenario where KCC do not deem a primary school on the proposal site necessary. It is acknowledged that the youngest age primary children are less likely to use the bus service independently, however it is feasible that children over the age of 7 could feel confident enough to use the service without own parent supervision.
- 2.7. As with walking bus schemes it is envisaged that primary age children could be chaperoned on the bus, either by a member of the school team or by a parent volunteer who has been through the necessary security checking process. It is noted that bus drivers are also put through security checking processes before employment therefore passenger safety is assured. The service would also be a dedicated school service and not open to the general public. This would be done to ensure the safety of school children.
- 2.8. It is proposed that these matters can be dealt with at the time of implementation through appropriately worded planning conditions or S106 provisions.

10 Year DRT Funding

- 2.9. As set out in the Bus report appended to the TA the tapered funding mechanism for the DRT service is tabulated below:

Table 11: Forecast Funding Requirements

Year	1	2	3	4	5	6	7	8	9	10	Total	Annual Ongoing
REVENUE (£'000)												
Knockholt commuting trips	4	11	18	25	32	39	47	53	57	57	343	57
Other out-commuting trips	3	8	14	19	25	30	36	41	44	44	265	44
In-commuting trips	12	20	28	36	44	52	56	56	56	56	416	56
Off-peak trips	5	15	26	36	46	56	67	76	81	81	490	81
TOTAL REVENUE	24	55	85	116	147	178	205	227	238	238	1,513	238
COSTS (£'000)												
TOTAL COSTS	175	175	255	255	255	255	255	255	255	255	2,388	255
SURPLUS (£'000)												
SURPLUS / LOSS	-151	-120	-169	-138	-108	-77	-50	-28	-17	-17		-17
CUMULATIVE SURPLUS / LOSS	-151	-271	-441	-579	-687	-763	-813	-841	-858	-875	-875	

- 2.10. Table 11 shows that the operation would require funding support of circa £875k during development build out and an ongoing £17k per year thereafter. This could potentially be financed as part of a residents' / business service charge or other charge to be determined.

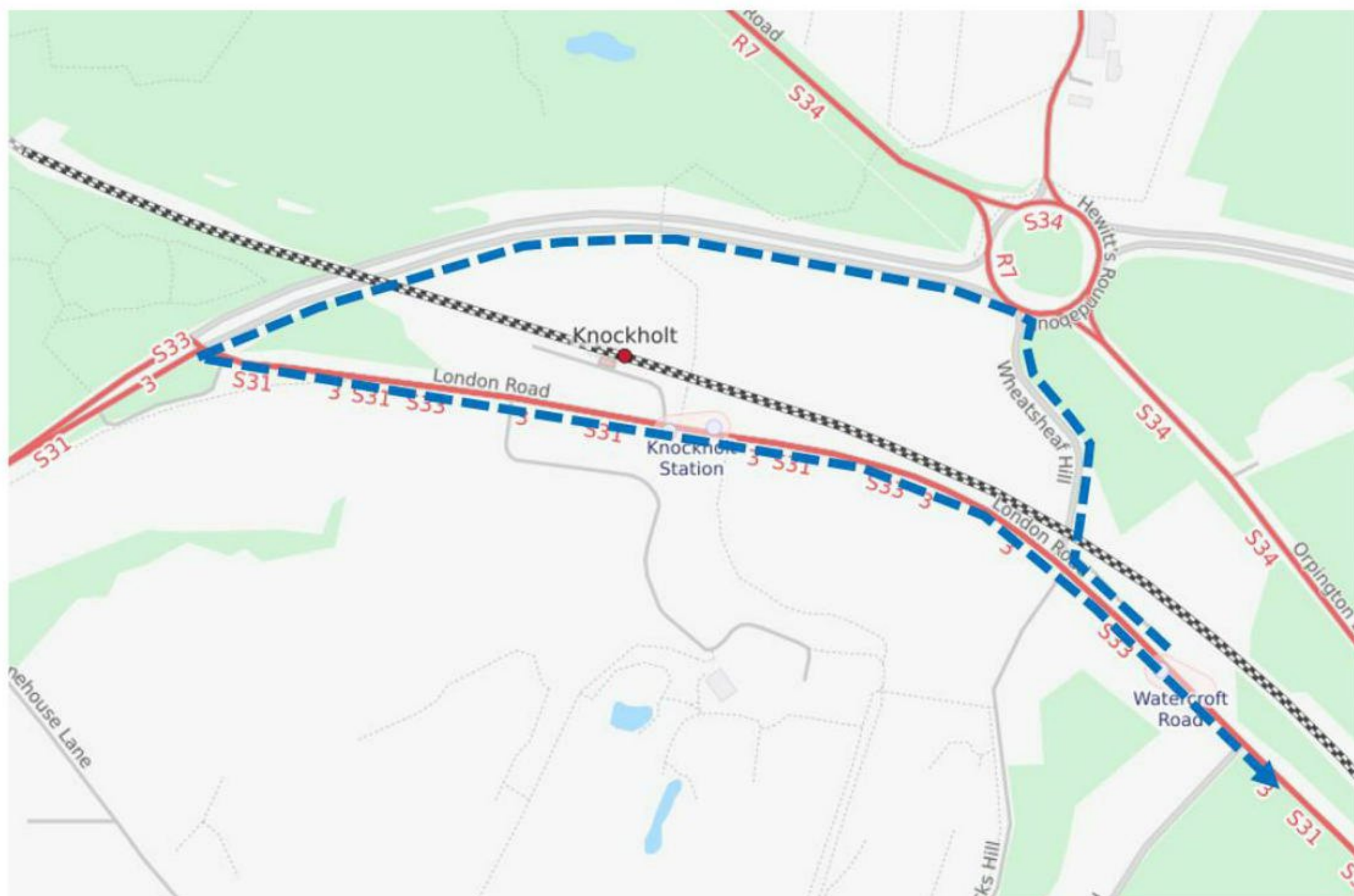
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2.11. With regard to other potential S106 contributions for secondary age school bus services (Go-Coach services S31, S33 and T3 using Starhill Road) the applicant has confirmed that they are happy to make provision for these services by way of a bespoke school bus turning loop on Crow Drive just east of the Starhill Road junction, but would not make further contributions to the cost of school services as these are both numerous and funded through existing charges levied on passengers.

Bus Turning at Knockholt Station

2.12. The updated Public Transport Strategy Note appended to the TA included indicative timetabling for journeys to Knockholt, Orpington and Sevenoaks rail stations. It is anticipated at this stage that the former two destinations could be served one after the other, in which case the DRT bus service can route along Old London Road in a west bound direction, stop outside Knockholt Station in the bus layby and then continue on to the A21 without a U-turn being necessary.

2.13. On the assumption that DRT services could be set up to call at Knockholt station only, then it is possible for a loop to be timetabled that takes the route set out in the following plan (blue dash line), utilising Wheatsheaf Hill and A21:



2.14. This loop route is shown on Google Maps to take two minutes, which is considered to be insignificant and would not adversely impact on the route timetable. Routeing in this anti-clockwise direction the bus can make use of the east bound bus stop just east of the station approach road. The above confirms that it should not be necessary for the DRT bus to turn outside Knockholt station in the event it serves that location only.

Consultation with School Bus Operator

2.15. Contact has been made with Go-Coach, the operator of school bus services S31, S33 and T3 which operate on Starhill Road in the morning and evening school journey peaks. Go-Coach has been provided with drawing 41290/5503/004 (Appendix A) showing a bus turning area on Crow Drive just east of the Starhill Road junction, as well as the associated tracking drawing.

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- 2.16. Stantec has reached out to Go Coach to confirm the suitability of the turning facility at the Starhill Road access. The email in Appendix B confirms that Go Coach are happy with the proposed turning loop. They have also expressed that they would be happy for the school bus services to pass through the site rather than turning around. This would provide further penetration for secondary school bus trips from the site.
- 2.17. It is confirmed that the bus turning loop near the Starhill Road junction will be provided prior to first occupation, on completion of the Crow Drive / Starhill Road junction works.

Parking Charges at Knockholt Station

- 2.18. Parking charges for the parking areas outside Knockholt station are set by Sevenoaks District Council. Discussion has been undertaken in April 2020 with the parking manager at SDC re the possibility of requesting these are set at a rate commensurate with the cost of the DRT bus service.
- 2.19. It was confirmed by the parking manager that charge rates for parking are reviewed and set annually every February. This process is entirely in the gift of SDC and unfortunately the applicant has no influence over the rates charged for daily parking at Knockholt station.
- 2.20. It is however proposed that as part of the Travel Plan for the site, the Travel Plan Coordinator (TPC) seeks to discuss the potential for such charge changes in January every year with the SDC parking manager. It is hoped that this cooperation could yield changes to the charge regimen to be aligned with the charge levied for the equivalent journey by DRT.

3. Cycle Safety at Shacklands Roundabout

- 3.1. Technical Note 5503 - TN01 issued by Stantec in April 2020 included a detailed analysis of cyclist accidents on the route between the site and Knockholt station, in particular in the vicinity of Shacklands roundabout.
- 3.2. It concluded:

It is of our opinion and experience of the route that many of the cyclists using this route are pleasure/sports/competitive cyclists who are unlikely to use a formal cycleway even if one were provided. The route is a well documented sports 'velo' cycling route, and is shown on the popular Strava mobile phone tracking app as being well used by amateur athletes who are undertaking the hill climb 'King of the Mountain' challenge up A224 Polhill. This is relevant in the timing of the majority of accidents, which are seen to occur outside of normal commuting hours and would suggest sports cyclists are cycling at speed, particularly at the Shacklands roundabout which has a level gradient at that point.

It is therefore considered unlikely that a separate 'off-carriageway' cycle route would act to reduce the number of personal injury accidents to cyclists at this location. It would however be a recommendation that further work is carried out by the Highway Authority to understand the exact circumstances behind each accident, and remedial measures that could be undertaken to reduce the frequency and severity of accidents involving sports cyclists, if this group is indeed found to be the main source of such accidents.

- 3.3. It is proposed that further road signs are provided on approaches to Shacklands roundabout and on London Road between the site and Knockholt station warning drivers of cyclists. This would act to give warning to drivers that there are cyclists frequently using the route, particularly at junctions, that they should be aware of.
- 3.4. It is proposed that a suitably worded planning condition can be included to secure this proposal.

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4. Pedestrian Route to Knockholt Pound

- 4.1. It is confirmed that the proposals include a pedestrian and cycle route linking the site to Knockholt Pound, via Birchwood Lane. This will be alongside the existing alignment of PRow SR172, which heads in a north west to south east alignment.
- 4.2. This would provide the most direct traffic free / lightly trafficked route between the site and Knockholt Pound and would comprise a surface type suitable for cycling and walking.
- 4.3. This proposal is already set out in the application documents and would be secured as part of the permission.

5. M25 / A21 / A25 Junction

- 5.1. The Transport Assessment submitted with the planning application included assessment of the M25 / A21 / A25 junction utilising AM and PM peak TRANSYT network models.
- 5.2. Paragraph 6.4.51 of the TA confirmed that under the OPA this remote junction was not assessed, therefore OPA traffic is not included in the impact assessment. Junction model link 17/1, relating to the Homedean Road / Westerham Road priority (unsignalised arm) of the junction on the north east side of the small network highlighted the potential for a slight increase in Degree of Saturation (DoS) in the morning peak, but a sizable improvement in the evening peak compared to the CLEUD case. The extent of worsening in the morning is recorded as an additional 4% DoS, with a queue increase of 3 PCUs. All other arms of the junction are seen to be within capacity.
- 5.3. Traffic flows on this arm of the junction were predicted in the TA to be 31 PCUs AM peak hour and 45 PM peak hour, based on the full 635 dwellings. However, as only the 185 dwellings are additional over and above the 450 already permitted, the AM peak PCU number is 9 and PM 13. These are less than those passing through Otford village, which KCC have confirmed is insignificant.
- 5.4. The point is further made that because right turns at this junction are reasonably difficult to make it is more likely that traffic from the development would choose to take alternative routes to access the A21/M25, such as via the B2011 Chevening Road arm of the Sundridge cross roads, left turning along the A25 to access the junction. Many drivers would find this more comfortable, and indeed Google Maps traffic route tool confirms that this is the chosen route from the site to the M25 / A21 / A25 junction over the Homedean Road arm.
- 5.5. It is therefore considered unlikely that the small impact shown in the traffic modelling would play out in reality.
- 5.6. In regard to consultations with Highways England, it is confirmed that HE has not objected to the proposals as set out in their consultation response dated 3 September 2020.

6. Otford Highway Impacts

- 6.1. As discussed previously with KCC further investigation had been undertaken using the site traffic model to estimate forecast traffic flows through Otford, as previously presented.
- 6.2. As set out in the TA (section 6.7) The predicted trips through Otford are 14 two way trips in the AM peak and 13 two way trips in the PM peak as a result of the proposed 185 units. These trips would be approximately 1 car every 4 minutes in both the AM and PM peak. This level of trip making is considered to be imperceptible in practice and would not lead to 'severe' impacts in terms of NPPF paragraph 109.

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7. Travel Plan Measures

- 7.1. It is confirmed that the Framework Travel Plan issued with the planning application will be secured by appropriately worded planning condition, with the expectation being that two separate Full Travel Plans will be produced for agreement prior to first occupation.
- 7.2. The Full Travel Plans will include further detail on car club provisions, cycle facilities and all other measures for agreement with KCC, to be implemented prior to first occupation and secured by condition.
- 7.3. The applicant is in agreement with KCC in respect of the separate Travel Plan Monitoring Fees set out in the latest KCC consultation response.

8. Securing of Contributions and Obligations

- 8.1. It is confirmed that the package of highway works set out in the TA will be implemented prior to first occupation, including Full Travel Plans. These would be secured in the appropriate manner through the planning permission. There are no items that would be subject to triggers at later stages other than the second DRT bus; this assumes the first service is introduced at first occupation with one bus, and built up to two buses in year 3 assuming the occupations trajectory set out in the application.
- 8.2. The items on Starhill Road including signage and implementation of a 40mph speed limit would be subject to a Traffic Regulation Order (TRO) and therefore these would be listed in the planning permission as informatives and would assume 'best endeavours'. The TRO process would be commenced at commencement of development implementation (i.e. construction start) to allow adequate time for the TRO process to be gone through.

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Appendix A



Mark	Revision	Date	Drawn	Chkd	Appd


SCALING NOTE: Do not scale this drawing - any errors or omissions shall be reported to Stantec without delay.
 UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake their own investigation where the presence of any existing sewers, services, plant or apparatus may affect their operations.

Drawing Issue Status
INDICATIVE - FOR INFORMATION

FORT HALSTEAD

CROW DRIVE INDICATIVE LAYOUT
POTENTIAL BUS TURNING LOOP - OPTION 2

Client		
MERSEYSIDE PENSION FUND		
Date of 1st Issue	Designed	Drawn
06.04.2020	REM	REM
A3 Scale	Checked	Approved
1:500	JSL	JSL
Drawing Number	Revision	
41290/5503/004	-	



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Appendix B

Mott, Felicity

From: Austin Blackburn [REDACTED]
Sent: Wednesday, January 6, 2021 2:51 PM
To: Mott, Felicity
Cc: Lewis, Jason
Subject: RE: S31 S33 T3 - Fort Halstead development, proposed bus turning area off Star Hill

Good Afternoon Felicity,

I see no reason why all of the buses could not pass through the development. The S31, 33, T3, TW6 could enter from Star Hill and out through Polhill, the S32 the other way. At present S31, and 33 go to the same school Knole Academy, so only one would need to serve FHD. In the future I'm sure the routes / numbers will be different as we adapt to different passenger numbers, but the idea could still be the same.

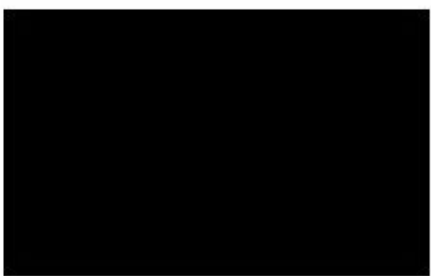
Regards

Austin Blackburn

Managing Director

go-coach hire limited / go-taxi hire limited / The Bus Doctor Limited

Block 10, Vestry Road, Sevenoaks, Kent, TN14 5EL



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From: Mott, Felicity [REDACTED]
Sent: 06 January 2021 14:43
To: Austin Blackburn [REDACTED]
Cc: Lewis, Jason [REDACTED]
Subject: RE: S31 S33 T3 - Fort Halstead development, proposed bus turning area off Star Hill

Good Afternoon Austin,

Thank you for coming back to us. Is it possible for the S32 to pass through the site and out onto Starhill Road? Or would it have to turn within the site and exit back onto Polhill?

Kind Regards,

Felicity Mott
Assistant Engineer

Connect 38, 1 Dover Place, Ashford, Kent, TN23 1FB, United Kingdom
Direct: [REDACTED]

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From: Austin Blackburn [REDACTED]
Sent: Wednesday, January 6, 2021 2:03 PM
To: Lewis, Jason [REDACTED]
Cc: Mott, Felicity [REDACTED]
Subject: RE: S31 S33 T3 - Fort Halstead development, proposed bus turning area off Star Hill

Good Afternoon Jason,

I'm sorry in my delay in replying.

Just looking at you drawings I think you have covered and problems that we may have. We would be more than happy to divert the buses into the pick up / drop off bus stop facility. Will we have new residents be having access from the other end of Crow Drive where reception is? We could divert school bus S32 in there to serve that side of the new development.

Regards

Austin Blackburn

Managing Director

go-coach hire limited / go-taxi hire limited / The Bus Doctor Limited

Block 10, Vestry Road, Sevenoaks, Kent, TN14 5EL



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From: Lewis, Jason <[REDACTED]>
Sent: 06 January 2021 09:12
To: Austin Blackburn <[REDACTED]>
Cc: Mott, Felicity <[REDACTED]>
Subject: RE: S31 S33 T3 - Fort Halstead development, proposed bus turning area off Star Hill

Good morning Austin

Happy New Year!

Can we please politely chase for your comments as per our email below and the attached? Please feel free to phone me if it is easier and quicker.

All the best.

Kind regards

Jason Lewis

Director of Transport Planning

Ashford

Land: [REDACTED]

Mobile: [REDACTED]

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From: Lewis, Jason
Sent: 15 December 2020 12:46
To: [REDACTED]
Cc: Mott, Felicity [REDACTED]
Subject: S31 S33 T3 - Fort Halstead development, proposed bus turning area off Star Hill

Dear Austin

As you know there are proposals to redevelop part of the Fort Halstead site for residential and further employment uses. As part of the current application, for 750 houses plus employment, KCC has asked us to seek your views on the bus turning facility we are proposing to serve school buses that run along Starhill Road in the morning and afternoon.

Our initial concern was the limited pedestrian waiting areas on Starhill Road, northbound in particular, therefore we are proposing a bus turning and stop immediately within the site access for your services S31, 33 and T3 to pull just within the access to pick up or drop off school children in a safe location that allows plenty of space (750 houses are likely to yield a reasonable number of children) and does not require children to cross Starhill Road.

Attached is our scheme drawing showing the proposals and junction improvements, including a tracking drawing.

We would welcome your views on this proposal.

Should there be anything that you would like to discuss please do not hesitate to contact me.

Kind regards

Jason Lewis
Director of Transport Planning
Ashford
Land: [REDACTED]
Mobil: [REDACTED]

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