

Environmental Services

Divisional Director – Martin Dickman

Development Control
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FAO Sue Pilcher

Dear Sue,

Buckinghamshire County Council

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Date: 25th October 2017
Your ref: 16/00151/AOP

**HIGHWAY AUTHORITY COMMENTS
TOWN AND COUNTRY PLANNING ACT 1990**

Application Number: 16/00151/AOP
Proposal: Outline application with all matters reserved except access for up to 170 dwellings, public open space and associated infrastructure – Further Comments 2
Location: Land Off Walnut Drive And Foscoote Road, Maids Moreton, Buckinghamshire, MK18 1QQ

Following my previous comments dated 25th September 2017, the applicant has submitted a letter, dated 28th September 2017 which seeks to address the concerns that were raised. I will comment on the contents of that letter below.

College Farm Road/Stratford Road Junction

The first issue that I raised with this junction related to the visibility splays, both in the way they were calculated and the way that they were shown on the submitted plan. The required visibility splays are now shown on a topo based plan and are shown in the correct directions. The issues raised with regards to the visibility have now been addressed.

The remaining issue relating to this junction raised in my previous comments came about as a result of me re-visiting the junction modelling that was carried out for this junction in the revised TA. For confirmation, the revised TA looked at a capacity assessment of the junction with no mitigation measures in place, where the original TA considered a signalised junction and a right turn lane as mitigation.



You will be aware that in my previous comments I raised the issue of the capacity assessment in the revised TA showing increases in queueing and delay at the junction as a result of the development. I understand that the applicant is disappointed that I am again raising this issue as they thought it was addressed. However, while my focus in our meeting in May was on the visibility at the junction, the issue of increased queueing and delay at the junction has never been addressed and given that no mitigation measures are now proposed it is of significant importance. I have not at any point given any comments that specifically state that the operation of the junction in its current form is acceptable. The applicant's own TA shows queueing and delay issues at this junction, therefore they should not be surprised with regards to my comments.

I have previously stated that when the substandard visibility is considered in conjunction with the issues associated with increased queueing and delay it will result in a situation that is not acceptable from a highway safety point of view (email dated 5th May 2017). The applicant has taken this to mean that the issues are not necessarily unacceptable in their own right and that it is only when considered together they become unacceptable. As the visibility issue has now been addressed the applicant believes that my previous concerns should be alleviated. This is an assumption that I do not agree with. In my comments on the revised TA (email dated 3rd May 2017) I stated that I am concerned that the analysis shows that queueing at this junction will increase as a result of the development and that could lead to driver frustration and drivers seeking smaller gaps and pulling out when not entirely appropriate. This is a highway safety issue and is reason alone to recommend the application for refusal.

The applicant has stated in their letter that "...you have not raised any concerns regarding the increases in queueing or delay for the primary assessment (which assumes a 60/40 split between the Foscoote Road and Walnut Drive access points)...". In order to confirm which assessment was the primary assessment and which was the sensitivity test I have re-visited the original TA.

The assessments carried out as part of the original TA assumed 100% of the development traffic uses the Foscoote Road access as that was considered by the applicant to be a robust assessment. This is therefore the primary assessment and it highlighted the queueing and delay issues that would be caused at the junction as a result of the development. This is why the applicant started to investigate mitigation measures (signals/right hand turn lane). As part of further assessments we asked the applicant to look at a sensitivity test that assumed a proportion (60%) of traffic using the Walnut Drive access so that we could ensure that the junctions of Walnut Drive/Main Street, Towcester Road/Duck Lane/Main Street and Church Street/Main Street/Foscoote Road operate efficiently with a significant proportion of trips using that access.

The 60/40 split scenario was the sensitivity test, with the purpose of this test being to demonstrate how the other junctions in the vicinity of the Walnut Drive access would function and not to focus on how the College Farm Road/Stratford Road junction would operate with only 40% of the traffic using Foscoote Road. This fact may not have been reflected in some discussions that have previously occurred with the applicant, however looking back at the previous TA, there is no doubt that this is the correct view.



As highlighted by the various assessments carried out within both the TA and the revised TA, the AM peak hour is where the issues at the junction occur. This is as a result of vehicles not being able to exit the College Farm Road arm onto Stratford Road due to the high vehicle flows on Stratford Road.

For ease of reference I have included below a table that directly compares the impact of the development on the junction for both scenarios in terms of RFC (Ratio of Flow to Capacity), queueing and delay. This is only for the AM peak hour as this is when the issues occur with the main flow of traffic leaving the site.

100% Traffic via Foscoate Road (Primary assessment)	RFC	Delay (seconds)	Queue (PCU's)
2021 AM without Dev	1.05	222.18	12.5
2021 AM with Dev	1.42	589.1	42.6

Table 1

The information in the table above is taken from the original TA and shows that in the 2021 AM without development scenario the junction will operate over capacity with an RFC of 1.05. The queueing is not ideal with queues of 12.5 PCU's (Passenger Car Units) and the delay of 222.18 seconds. With the development traffic included it can be seen that the situation gets considerably worse. The RFC value increases to 1.45, the queues significantly increase to 42.6 PCU's and even more significantly, the delay increases to 589.1 seconds. These results show that the original assessment carried out by the applicant demonstrates a severe impact on the operation of the junction to the detriment of highway safety and convenience.

60/40 Split between Walnut Drive (60%) & Foscoate Road (40%) (Sensitivity Test)	RFC	Delay (seconds)	Queue (PCU's)
2021 AM without Dev	0.76	65.99	3.2
2021 AM with Dev	0.86	108.66	5.9

Table 2

The information in the table above is taken from the revised TA and clearly shows that even in the sensitivity test scenario; the development will have an unacceptable impact on the junction. The junction goes from operating within capacity to operating just over its practical capacity with an RFC of 0.86, the queue will increase from around 3 PCU's to 6 PCU's, with the greatest impact being with the delay which increases from 65.99 seconds to 108.66 seconds. This is an increase in delay of around 43 seconds which is significant and is considered to be a severe impact particularly when the actual impact is likely to be greater than in Table 2 and could be as high as in Table 1.

When comparing the information above, which has been taken from both the original TA and the revised TA, the biggest concern to me is that the baseline scenarios in each case do not correlate. Regardless of how the development traffic has been distributed, the baseline assessments in both TA's should be the same as they are based on the same survey data, and they are clearly not the same. I will require the applicant to investigate this and explain why there is a difference.



Main Street/Walnut Drive junction (mini roundabout)

My previous concerns relating to this junction arrangement centred on the potential for on-street parking to occur around the junction and also the proposed give-way line on the south eastern approach to the junction conflicting with the access to the parking area labelled as Duck Lake on the plan.

The applicant has submitted an amended plan (1158-01 Rev G), which proposes double yellow lines around the junction to remove the potential for on-street parking. I am satisfied that the proposed parking restrictions will remove the potential for cars to park in the vicinity of the mini roundabout and restrict its operation. The parking restrictions will be subject to a Traffic Regulation Order (TRO).

I also note from the amended plan that the give-way line has been relocated so that it does not conflict with the access to the parking area for Duck Lake.

I am now satisfied that the technical issues previously raised have now been addressed. The final design will of course still be subject to detailed design as part of the S278 Agreement.

Foscote Road Footway and Carriageway proposals

An issue I raised in my previous comments was the tracking of a large car into and out of the access to the dwelling opposite the new section of footway that narrows the carriageway. The applicant has re-visited the tracking through the access and has submitted plan number 1158-SP03 Rev A that shows a large car turning through the access with no conflict with the adjacent walls. I am satisfied that the proposed narrowing of the carriageway will not adversely affect the operation of the access.

I also raised an issue with the size of refuse vehicle that had been tracked through the one-way section of carriageway as it looked to be approximately 10m in length on the plan. The applicant has now submitted a revised tracking plan (1158-SP04) that shows the swept path of an 11.4m refuse vehicle through the narrowed section of carriageway and past a car that is stationed at the give-way line to the north east. This plan now shows that an appropriately sized refuse vehicle can pass through the section of proposed carriageway narrowing on Foscote Road.

The final issue that I raised with the footway and carriageway proposals along this section of Foscote Road related to the potential for on-street parking in the vicinity of the give-way line on the north eastern approach to the one-way section of carriageway. This issue was raised by the RSA and I did not consider it to be adequately addressed by the applicant. The applicant has now submitted an amended Highway Improvements Plan (1158-02 Rev E) that shows double yellow lines along both edges of the carriageway in the vicinity of the give-way line. The exact extent of these yellow lines can be agreed as part of the detailed design and they will be subject to a TRO.



Mindful of the above, while the issues relating to the proposed mini-roundabout at the Walnut Drive/Main Street junction and the footway/carnagoway works along Foscoote Road have been addressed, issues relating to the College Farm Road/Stratford Road junction remain. The applicant is therefore required to address the concerns raised above.

I trust that these comments have been of some assistance.

Yours sincerely

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Development Management Consultant
Transport, Economy and Environment
Buckinghamshire County Council

