The Planning Inspectorate

Appeal Decision

Inquiry opened on 11 May 2021

Site visits made on 10 May 2021 and 26 May 2021

by Martin Whitehead LLB BSc(Hons) CEng MICE

an Inspector appointed by the Secretary of State

Decision date: 26th July 2021

Appeal Ref: APP/Y0435/W/20/3252528
Land at Buckingham Road, Tattenhoe Roundabout, Standing Way to Bottledump Roundabout, Milton Keynes

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant outline planning permission.
- The appeal is made by South West Milton Keynes (SWMK) Consortium against the decision of Milton Keynes Council.
- The application Ref 15/00619/FUL, dated 30 January 2015, was refused by notice dated 15 November 2019.
- The development proposed is described on the decision notice as: '*physical improvements to the Bottledump roundabouts and a new access onto the A421 (priority left in only) to accommodate the development of land in Aylesbury Vale District reference 15/00314/AOP (for Outline planning application with all matters reserved except for access for a mixed-use sustainable urban extension on land to the south west of Milton Keynes to provide up to 1,855 mixed tenure dwellings; an employment area (B1); a neighbourhood centre including retail (A1/A2/A3/A4/A5), community (D1/D2) and residential (C3) uses; a primary and a secondary school; a grid road reserve; multi-functional green space; a sustainable drainage system; and associated access, drainage and public transport infrastructure - EIA development).*'

Decision

1. The appeal is allowed and outline planning permission is granted for physical improvements to the Bottledump roundabouts and a new access onto the A421 (priority left in only) to accommodate the development of land in Aylesbury Vale District reference 15/00314/AOP (for Outline planning application with all matters reserved except for access for a mixed-use sustainable urban extension on land to the south west of Milton Keynes to provide up to 1,855 mixed tenure dwellings; an employment area (B1); a neighbourhood centre including retail (A1/A2/A3/A4/A5), community (D1/D2) and residential (C3) uses; a primary and a secondary school; a grid road reserve; multi-functional green space; a sustainable drainage system; and associated access, drainage and public transport infrastructure - EIA development) on land at Buckingham Road, Tattenhoe Roundabout, Standing Way to Bottledump Roundabout, Milton Keynes in accordance with the terms of the application 15/00619/FUL, dated 30 January 2015, subject to the conditions in the attached schedule.

Preliminary and Procedural Matters

2. The above descriptions of the appeal site and the development proposed are those given on the decision notice and have been agreed with the appellant.

The application was submitted in outline form with all matters of detail, except access, to be considered later. The application describes the site as being '*Land south of the A421, west of Far Bletchley, north of the East West Rail Link and east of Whaddon Road, Aylesbury Vale'*. However, all the development site, except two of the proposed accesses, are within Aylesbury Vale District, the Council of which is now part of Buckinghamshire Council (BC). In these circumstances, I consider that the descriptions of the site and development given on the decision notice are more applicable to the proposal that was considered by Milton Keynes Council (the Council) and I have therefore determined the appeal based on these descriptions.

3. Separate applications for costs have been made against the appellant by the Council and by Newton Longville Parish Council & Bletchley Town Council (the Rule 6 Party). These 2 applications are the subjects of separate decisions.

4. The Inquiry opened on 11 May and sat for 9 days. I closed the Inquiry in writing on 17 June 2021, following the receipt of written closing submissions. I made an unaccompanied site visit between 1400 hours and 1500 hours on 10 May, before the Inquiry opened, and another unaccompanied site visit between 1330 hours and 1730 hours on 26 May to observe the site accesses and the relevant junctions, including during the PM peak traffic conditions.

5. The Government has published an update to its National Planning Policy Framework on 21 July 2021 (2021 Framework) which replaces the previous version of the Framework published in February 2019. It sets out the Government's latest planning policies for England and how they are expected to be applied. Whilst most of the paragraph numbers to the policies in the February 2019 version that were referred to at the Inquiry have changed, the wording has not been altered. I have therefore used the paragraph numbers in the 2021 Framework that relate to those policies referred to in the 2019 version.

Main Issue

6. The main issue is the effect of the proposed development on highway safety and the flow of traffic and congestion on the highway and Grid Road network, and in particular the A421 Standing Way and B4034 Buckingham Road.

Reasons

Development Plan

7. The development plan includes Plan:MK 2016-2031, which was adopted in March 2019. The reason for refusal refers to the following 2 policies in Plan:MK.

8. Policy CT1 indicates that the Council will promote sustainable patterns of development, including a safe, efficient, and convenient transport system, transport choice to provide a genuine alternative to the car, and the management of congestion.

9. Policy CT2 seeks to ensure that new development minimises the need to travel, promotes opportunities for sustainable transport modes, improves accessibility to services, and supports the transition to a low carbon future. Part A of the Policy lists criteria to be considered in determining whether new development should be permitted. Criterion A1 requires the development to integrate into

the existing sustainable transport networks and to not have an inappropriate impact on the operation, safety, or accessibility to the local or strategic highway networks.

10. The Council has also referred to Plan:MK Policy SD15, which establishes place making principles for sustainable urban extensions in adjacent local authorities. These include, in part B6, the requirement that technical work be undertaken to fully assess the traffic impacts of the development on the road network within the city and nearby town and district centres and adjoining rural areas, and to identify necessary improvements to public transport and to the road network.

Development under planning application reference 15/00314/AOP

11. This appeal development would provide access to the proposed South West Milton Keynes (SWMK) development in Aylesbury Vale District that has been submitted for outline planning permission under planning application ref 15/00314/AOP and is to be considered by BC. Whilst at the time of the Inquiry no decision had been made by BC regarding the application, none of the parties at the Inquiry disputed the principle of this mixed-use development on land which is allocated for that purpose in the emerging Vale of Aylesbury Local Plan (VALP), and the Council has not objected to this allocation.

Design

12. I have considered the use of the Design Manual for Roads and Bridges (DMRB) to design the mitigation measures at the existing roundabout junctions, as suggested by the Council. However, the existing layouts do not meet the standards set in the DMRB and no records of any existing safety problems at these roundabout junctions have been provided. Furthermore, the Stage 1 Road Safety Audits (RSAs) that the appellant has had independently carried out to assess the mitigation proposals have not indicated any significant road safety issues that would not be able to be addressed.

13. DMRB Document GG 101: Introduction to the Design Manual for Roads and Bridges advises that the DMRB provides requirements which shall be applied to the appraisal, design, maintenance, operation and disposal of motorway and all-purpose trunk roads, and notes that they can be applied to other roads with the approval of the specific highway or local authority acting as the 'Overseeing Organisation'. It then advises that, where DMRB requirements are applied to other roads, the specific highway or local road authority acting as the Overseeing Organisation should decide on the extent to which the requirements are appropriate in any given situation.

14. The roads within the Grid Road network are not trunk roads and therefore the DMRB indicates that it is discretionary whether the standards should be applied. At my site visit I observed that the roads in the network do not convey the same characteristics as a trunk road or motorway, being more within an urban setting, with accesses to industrial and commercial premises and housing estates taken directly from the roads.

15. Although the A421 Standing Way is dual carriageway and subject to national speed restrictions, there are a significant number of junctions and crossings, together with bus lay-bys, along it which do not meet DMRB standards of design, in terms of such things as deceleration lanes and flare lengths. As

such, I consider that it would be inappropriate and disproportionate to expect any design of mitigation at the roundabout junctions to be to the DMRB standards, particularly as I have no substantive evidence to show that there are any significant safety issues that need to be addressed, as indicated by the RSAs.

Transport Assessment and Modelling Approach

16. The evidence indicates to me that, following the refusal of planning permission, the appellant's transport experts agreed with transport experts representing BC and the Council the scope of an updated Transport Assessment (TA). This included the appropriate study area, the extent of data collection, trip generation and the modelling methodology.

17. The methodology that has been agreed is that which has been used by the appellant for the Updated TA. That agreement appears to me to have been reached with detailed and local knowledge of the highway network concerned, including existing congestion, congestion predicted through the Milton Keynes Multi-Modal Model (MKMMM), and the potential for re-routing. This methodology uses a static spreadsheet model, collecting baseline traffic flows and applying TEMPro growth factors to 2033, and does not use the strategic MKMMM. Whilst the MKMMM was used for the 2016 TA that was considered with the application and was used as evidence base for the recently adopted Plan:MK, it has a 2009 base date.

18. The static spreadsheet model approach does not account for modal shift to alternative means of transport or the re-timing of trips to avoid peak periods. Neither does it account for dynamic reassignment away from congested areas. As such, I am satisfied that it provides a robust, worst case analysis of traffic impacts, particularly on the A421, and the traffic impact that has been modelled does not rely upon the redistribution of traffic to other routes in order to avoid any unacceptable congestion. As the redistribution of traffic has not been modelled, I have not taken it into account in my assessment of the traffic impacts on the Grid Road network.

19. I find that it would be unnecessary and disproportionate to undertake a microsimulation modelling exercise, as suggested by the Council. Potentially it would result in an unrealistic representation of traffic reassignment on the routes which were included, given that it would need to cover an extensive area. In addition, further detailed static junction models would be required using junction modelling software.

20. I agree with the appellant that an update to the MKMMM would require considerable work and would take a significant time to complete, needing further calibration and validation surveys. A manual reassignment would also be impracticable and unreliable, as it would have to cover an extensive area to fully calibrate and validate the model. Furthermore, it may well not have any better results from those used, given that the A421 corridor has been found to be the most congested part of the network.

21. The MKMMM Reference case, which includes the proposed SWMK development, was used as part of the Examination of Plan:MK, at which the Council advised that it assumed little in terms of behavioural change and so was likely to represent a worst-case scenario, given the aims of its Mobility Strategy for 2018 – 2036. In his Report on the Examination of Plan:MK, the Inspector

appears to me to have accepted the advice given by the Council that the 'unique' Grid Road network provides fast roads with limited congestion and comparatively good journey times, and that, even taking account of the SWMK development, additional development would not add significantly to journey times.

22. The Plan:MK Inspector did accept in the Report that committed growth is likely to increase average journey times across Milton Keynes but considered that, overall, the road network will experience limited congestion in comparison to other similar urban areas, irrespective of the potential for modal shift. The MKMMM Reference case indicates that many of the junctions where the Updated TA and Transport Response Notes (TRNs) show that mitigation is required based on static modelling perform within capacity when considering the redistributive effects accounted for in the strategic model, even with an unmitigated SWMK development in place.

23. The appellant has taken the results of the Updated TA and sought to mitigate the impacts through junction improvements. I accept the position of the appellant and BC that some redistribution of traffic is likely, but the appellant does not appear to me to have relied upon this in determining the mitigation and reaching its conclusions as to the acceptability of the traffic impacts of the SWMK development. As such, I am satisfied that it is not necessary to attempt to model any redistribution effects over the wider area, especially as the amount of extra work that would be required to provide anything that would be accurate enough to assess would be disproportionate in time and expense.

24. In terms of the robustness of the TEMPro growth factors, the Office for Budgetary Responsibility's (OBR) March 2020 population and economic projections show a reduction in growth of GDP per capita of 23.7% between 2019 and 2069 and an 8.4% reduction in population growth, compared to previous estimates. The appellant has indicated that, as a result, the DfT requires all new transport schemes to undergo sensitivity testing to assess the impacts of the changes in the OBR forecasts.

25. The appellant has suggested that, adopting a low growth sensitivity as set out in the DfT's TAG Unit M4 Forecasting and Uncertainty (May 2019) would result in a growth rate of 6% from 2020 to 2033, as opposed to the 15% assumed in its TA and TRNs. Furthermore, an up to date survey-based research report regarding the effects of Covid-19 restrictions on travel, referred to by the appellant, indicates that future commuter trips to work by car will reduce significantly and by as much as 13.8% with employees working from home. Whilst the effects of homeworking as a result of the Covid-19 restrictions may not be long term, overall, the above matters indicate to me that the TEMPro growth factors applied by the appellant will result in traffic flows well above those that are likely to occur in 2033.

26. I have had regard to other concerns expressed about the robustness of the modelling approach. Those regarding the number of vehicle trips to and from secondary schools have not been substantiated, given the likely level of walking and cycling and the large residential area adjacent to the school in West Bletchley. Concerns about the adjustment made to the TEMPro growth assessment because of the occupation of households in Kingsmead South and Tattenhoe Park have not been justified and would make very little difference to traffic flows. Concerns about the survey data due to road closures in place to

the north of Milton Keynes have also not been justified and the appellant has suggested that they were known about and would have had no effect on the robustness of survey data. This has not been contested using any substantive evidence. I am satisfied that the appellant has adequately addressed these, and the other, concerns raised.

Planned Future Initiatives and Development

27. In support of the appeal, the appellant has referred to some of the Council's recent documents. These include its Milton Keynes First/Last Mile Travel document (2017) in which the Council has outlined strategies to achieve its objectives given in Plan:MK of improving public transport services and cycling and walking networks and managing congestion. This document recognises that, without much greater investment in the public transport system, greater growth in the economy beyond 2031 could be stifled.

28. The Milton Keynes 2050 Growth Study Mobility and Mass Rapid Transit Study (2019) recognises that the Council's aspirational growth of Milton Keynes needs to be intrinsically linked to the delivery of an efficient, 21st century public transport system. The Study has investigated the delivery of a Rapid Transit network that would include 'Line 10' to serve allocated growth to the south west of Milton Keynes and has identified a park and ride location near to the proposed SWMK development. The Mobility Strategy aims to reduce private car use for inter-borough commuter trips from 85% to 60%. I am satisfied that the measures that have been put forward would be achievable and, although there does not appear to be any immediate commitment by the Council, would be likely to come forward before 2050.

29. The Mobility Strategy for Milton Keynes 2018 – 2036 (LTP4): Transport Infrastructure Delivery Plan (2019) is the most up-to-date Local Transport Plan for the area. Amongst the transport strategies that it sets out are pinch point junction improvements to be carried out within 5 to 10 years, including some on the A421. Sources of funding for the improvements have also been identified in LTP4. The appellant has suggested that improvements to the A421 would be eligible for Government funding through the Major Road Network scheme, being able to comply with the scheme's objectives of reducing congestion and supporting the delivery of housing. I find that such improvements would be likely to take place and be funded by 2029 at the latest, particularly as they accord with Policy CT8A of Plan:MK, which provides for enhancements to the Grid Road network.

30. The LTP4 includes an initial 'Modal Action Plan' which covers infrastructure priorities over the next 3 years. The infrastructure priorities would, amongst other things, seek to provide new cycle routes to extend the Redway network; review car parking in Central Milton Keynes; enhance Smarter Travel Team services to support, undertake and monitor residential education and employment travel planning; and improve bus stop infrastructure and bus fleets. These initiatives should have an impact on reducing congestion on roads in and around Milton Keynes.

31. The Council's Strategy for 2050 (2020) identifies seven 'big ambitions' which include the aim to '*make it easier for everyone to travel on foot, by bike and with better public transport'*. The Strategy acknowledges that traffic congestion in Milton Keynes is not at the levels seen in other United Kingdom towns and cities but, without intervention, some grid roads would exceed their

capacity. To address this concern, it commits the Council to future measures which include improving and extending the Redways and delivering a mass rapid transit network.

32. None of the impacts from the above planned initiatives have been allowed for in the forecast traffic. I am satisfied that at least some of them would be likely to come forward in the short to medium term, or at least by 2033, which is the projected year for the appellant's assessment. As such, the assessment will have most likely overestimated the traffic volumes and need for mitigation, especially if the initiatives for junction improvements at some of the identified pinch points on the A421 are implemented. Furthermore, Milton Keynes Strategy for 2050: Growth Options Assessment (2020) includes the SWMK development in one of its spatial options that also includes additional land delivering 10,000 new homes and does not identify congestion on the network as a constraint to development.

Travel Plan

33. The appellant has provided a revised (2020) Framework Travel Plan, which is an update of the 2016 document. Whilst the Council has criticised the provisions of the Travel Plan, I am satisfied that an appropriate planning condition under the SWMK development approval to secure an approved travel plan would overcome these criticisms. BC has indicated that the implementation and monitoring of commercial and residential full travel plans would specifically be secured through a Section 106 Agreement for the SWMK development, in accordance with the draft document, along with substantial funding for highways matters, including up to £2million of funding for bus provision.

34. I have noted that the trip rates from TRICS used in the 2020 TA and subsequent TRNs 1-3 refer to some sites that already have travel plans. However, as BC has pointed out, the TRICS data used in the trip generation is based on 'person total trips', and not 'modal trips', which are not affected by travel plans. Therefore, I consider that this matter gives no justified reason to discount any modal shift as a result of a travel plan being implemented for the SWMK development, even if it only offers measures that would be expected from a travel plan. The Government, in its Planning Practice Guidance (PPG), indicates that it is supportive of travel planning and that its benefits can be considered in a TA.

35. The appellant has suggested that it agreed with the Council and BC that a sensitivity test to take account of the benefits of a development travel plan should be based on an assumption of a 12% reduction in car driver trips to/from the SWMK development. Although it seems to me to be an ambitious target, there is nothing before me to indicate that it would not be achievable. Furthermore, the Plan:MK Inspector suggested in paragraph 183 of his Report that '*the ambitions for modal shift are realistic reflecting the current low base in public transport patronage and walking and cycling and the potential to upgrade and extend infrastructure for non-car based travel'*.

Access Design

A421 Left-in Site Access

36. I am satisfied that the proposed left-in only access on the A421 has been designed in accordance with relevant design standards, and there is no requirement for a capacity assessment as it would be a free flow access to the development. It would include a deceleration taper that would be longer than most of those at other accesses to development from the A421 Standing Way.

37. Whilst Old Buckingham Road would need to cross the access, at my site visit I observed that it does not appear to me to be an official route for cyclists and pedestrians and has a barrier across its ends at Buckingham Road and Whaddon Road to prevent vehicular access. It is not designated as a Public Right of Way, cycle route or Redway and the only measure that the Stage 1 RSA recommended was the introduction of a Vehicle Restraint System.

38. The proposed diverted route of Old Buckingham Road would not be the most direct. However, I accept that it would provide a safe crossing location and it is not unusual that a balance needs to be struck between the 5 criteria, given in the DfT Local Transport Note 1/20 (LTN1/20): Cycle Infrastructure Design, of being coherent, direct, safe, comfortable and attractive. I am satisfied that the evidence demonstrates that an acceptable crossing, which would be subject to further detailed design following any recommendations in a Stage 2 RSA, would be deliverable to ensure that Old Buckingham Road would be available for use by pedestrians and cyclists without compromising their safety.

Buckingham Road Site Access

39. Access to the SWMK development site from Buckingham Road would be provided by a new roundabout junction as part of the appeal development. Buckingham Road is a 'B' classified road and therefore the strict application of the DMRB is not required, including for the design of the entry widths. I am satisfied that, based on the actual surveyed 85th percentile speed of traffic along Buckingham Road, the required 'Stopping Site Distance' for vehicles approaching the junction along Buckingham Road from the east would be able to be accommodated within the public highway and on land within the appellant's control. Furthermore, should the Stage 2 RSA recommend any changes, these would be able to be accommodated within the land that would be available.

40. The Toucan crossing proposed on Buckingham Road between the site access and the Tattenhoe Roundabout has been shown on the drawings as being sited to tie into the existing uncontrolled crossing point from the shared cycle/footway which forms part of the Redway. I am satisfied that amendments could be made to the bellmouth of Old Buckingham Road to ensure that this crossing would be safe without preventing access to Old Buckingham Road, given vehicular rights over it have been extinguished. It would integrate with the existing 3m wide Redway route on the northern side of Buckingham Road, and the design guidance for cycle tracks provided by LTN1/20 allows for shared cycle/footways of 3m in certain circumstances.

41. I conclude on this junction that it has been designed in sufficient detail to demonstrate that it would be safe, or would be able to be made safe with minor amendments that might be recommended by a Stage 2 RSA, particularly

with regard to the provision of adequate visibility, its entry widths and pedestrian and cycle crossings.

Mitigation

42. The appellant has listed and numbered 18 junctions at which the modelling identifies the greatest impact on traffic congestion. It has submitted plans and details of the form of mitigation that it has proposed to be carried out at some of these junctions. This mitigation would be subject to agreements under Section 278 of the Highways Act 1980 and these agreements would be secured by a Grampian Condition. Under these agreements, detailed designs with Stage 2 RSAs will need to be presented to the respective highway authorities for approval. The drawings provided for assessment at this appeal are to be used to determine whether the overall principle of the junction design is achievable and acceptable. Therefore, I accept that the use of Ordnance Survey mapping rather than topographical surveys is appropriate.

43. I have examined those junctions where concerns have been raised about whether the proposed mitigation would be deliverable, safe, and effective in reducing congestion.

Junction 1: Buckingham Road/Sherwood Drive/Water Eaton Road Roundabout

44. With regard to the proposed mitigation at this existing roundabout junction, I find that there would be sufficient provision for pedestrians/cyclists and the improvements would allow a wide enough footway for pedestrians to safely pass at the pinch points and for lighting columns to be relocated where necessary. There are no accidents identified at this location from the data presented in the Updated TA, and insufficient evidence has been provided to show that the proposed reduction in visibility to the right at the roundabout on Water Eaton Road would present a safety concern, given that it has not been raised by the Stage 1 RSA. As such, I am satisfied that the proposed mitigation at this junction would be deliverable, would not cause any safety concerns and would be effective in reducing congestion.

Junction 2: Buckingham Road/Shenley Road/Newton Road Double Mini roundabouts

45. The junction comprises two mini roundabouts separated by a short length of Buckingham Road. The easterly roundabout forms a junction with Shenley Road to the north and the westerly roundabout forms a junction with Newton Road to the south. All the roads at this junction are single carriageway and are constrained by buildings and property, including shops and houses. Due to these constraints, vehicle speeds through the junction are likely to be significantly less than the 30mph speed limit.

46. The proposed mitigation includes the removal of the lay-by on Shenley Road and its replacement by an additional lane to provide greater capacity at that junction. At my site visit I observed that, although it has double yellow lines at the side of the road, the lay-by was being used for parking either side of the driveway access from it. In my opinion, its removal would improve safety for this access as well as for pedestrians.

47. The entries to the roundabouts would be widened and the islands at the pedestrian crossings would be retained. Whilst there would be a resulting reduction in footway widths and a change to the carriageway alignment, I find

that the footways would be wide enough and, given the likely speed of the traffic, the visibility would be sufficient to ensure that safety would not be compromised. Furthermore, the Stage 1 RSA did not raise any concerns.

48. The worst case of queuing at the roundabouts in 2033 would be in the PM peak on Buckingham Road East. However, I am satisfied that it would not be for long enough to cause any significant harm to access along that part of Buckingham Road, including near Holme Chase Primary School, particularly as the traffic generated by that school during the PM peak would not be as high as during the school drop-off and pick-up times.

49. The modelling shows that, with the provision of the proposed mitigation, overall, there would be an improvement in the operation of the junction when considering both peaks and the level of queuing on all the approaches. Therefore, I find that the mitigation for this junction would be deliverable and would be proportionate and appropriate to provide an overall improvement in the performance without resulting in any unacceptable harm to highway safety.

Junction 5: Tattenhoe Roundabout

50. The junction consists of an existing four-armed roundabout on the A421, with the south eastern arm being the B4034 Buckingham Road that leads to the proposed access to the SWMK development. The roundabout is included within the boundary of the appeal development. The mitigation proposed would include part time signalisation of the roundabout as well as realignment of the roads at the entries onto the roundabout.

51. Concerns have been raised about potential blocking on the circulatory carriageway and Heavy Goods Vehicles (HGVs) not having sufficient width to prevent them from colliding with other vehicles using the roundabout. In this respect, I accept that 'Maximum Back of Uniform Queue' (UQ) rather than the 'Mean Maximum Queue' (MMQ) is the appropriate way in the LinSig model to test whether blocking would occur within the internal circulatory of the proposed signalisation of the roundabout. As all the arms into the junction would be signalised, the traffic entering the circulatory arms would be fully controlled and would be platooned and non-random. In addition, signal timings could be co-ordinated to ensure the circulatory stop lines would be kept within capacity.

52. The appellant's latest document, TRN3 has given the longest UQ as 3.13 Passenger Car Units (PCUs), which is about an 18m queue, and 16m to 20m stacking capacity has been provided. Furthermore, there is potential for greater capacity enhancement through the inclusion within the Council's Urban Traffic Control (UTC) systems. I am therefore satisfied that there would not be a problem with blocking across the circulatory carriageway because the signal staging would be able to be set up to ensure that the arms would run with a 'green wave' to enable the circulatory traffic queues to clear.

53. The appellant has provided plans with swept paths of large HGVs and cars through the roundabout that show that they would be able to avoid each other without a collision. Also, the number of large HGVs using the roundabout has been shown to be relatively small and other vehicles would be capable of taking avoiding action if any overrunning of lanes occurs, as they would at any other similar type of controlled roundabout junction.

54. The existing roundabout junction does not meet the DMRB standards for design and it would be unreasonable and unnecessary to expect any changes to the junction to meet such standards. Furthermore, the proposed changes to entry widths and radii as part of the mitigation works have not been highlighted as a concern in the Stage 1 RSA. I therefore find that the proposed mitigation works would be able to be accommodated at the junction, albeit that some street furniture and lighting would need to be relocated, would not harm highway safety, and would improve the overall performance of the junction compared with the Do Nothing 2033 scenario, where there would be significant delay and queuing at the junction.

Junction 6: Bottledump Roundabout

55. This existing 3-armed roundabout junction on the A421 is included within the appeal development boundary. At my site visit I observed that there are signs of vehicles having overrun the nearside kerb on Standing Way. However, no substantive evidence has been provided to show that this would have any significant effect on the performance of the roundabout in 2033 with the proposed mitigation in place, and the appellant's swept path analysis indicates that large HGVs would be accommodated without overrunning the kerb. Also, no substantive evidence has been provided to support the suggestion that changes to the entry path curvature and increasing the circulatory width would result in higher vehicle speeds through the junction in 2033. Furthermore, the junction safety should be improved by lane markings at the approaches, as recommended by the Stage 1 RSA, which raised no concerns with either the entry widths or the entry path curvature.

56. The proposed increased entry widths should result in an increase in the capacity of the roundabout, as modelled by ARCADY. I have not been referred to any existing safety concerns at the roundabout junction and the Stage 1 RSA has not raised any concerns that would not be able to be addressed. I am satisfied that the lane simulation model has been used correctly to accurately reflect the existing situation at the roundabout. As such, I find that the modelling is reasonably accurate and robust. Therefore, based on the above, I conclude that the proposed mitigation would be deliverable, would not result in any highway safety concerns, and would increase the capacity of the junction to cater for the forecast traffic flows in 2033.

Junction 12: Kingsmead Roundabout

57. Only minor improvements are proposed at this existing roundabout junction. The appellant has provided swept path analysis to show that there are no safety issues relating to side-swipe collisions, and there are no accident records to show that they currently occur at the junction. Although it was raised in the Stage 1 RSA, the appellant has addressed it with such measures as the provision of lane markings. I find that none of the concerns raised about this junction have any highway safety or future capacity implications that cannot be addressed.

Junction 14: Furzton Roundabout

58. At the Inquiry, no concerns were raised about the junction. Therefore, I am satisfied that this junction would be capable of accommodating the traffic flows in 2033 without any significant mitigation.

Junction 15: Bleak Hall Roundabout

59. The proposed mitigation scheme at this existing roundabout on the A421 would increase all approaches to three lanes. The Council has provided plans showing queue lengths if only one of the lanes on the dual carriageway is used for the queue. This identifies from the modelling data that in the 2033 PM peak there would be queues on the A421 south west approach that would block back towards the upstream junction, Elfield Park Roundabout, and queues on the north east approach that would block back through the upstream Coffee Hall Roundabout. However, this and the other queue lengths would be very unlikely to occur, as I consider the use of only one lane to be totally unrealistic. Even though the nearside lane is the one that would be most used in free flow conditions, in circumstances when there are long queues on this lane it is probable that the other lane would be equally used, as modelled by the appellant.

60. The appellant's modelling has demonstrated that in 2033 there would be no interaction between Junction 15 Bleak Hall Roundabout and Coffee Hall Roundabout to the northeast, to Junction 16 Elfield Park Roundabout to the southwest, nor to the A5 Redmoor Roundabout to the southeast. Furthermore, it shows that there would be a reduction in the queue on the eastbound arm and on Grafton Street South in the 'Do Something' scenarios with mitigation as compared to the baseline (without the SWMK development) scenario. The appellant also confirmed at the Inquiry that the modelling accounts for slow moving traffic at the back of the queue with an allowance being made of 5.75m per vehicle such that vehicles are not assumed to queue bumper to bumper. I accept these results as being a more accurate representation of the maximum queues that could occur in 2033 with the SWMK development in place than those presented by the Council.

61. It has not been disputed that, even without the SWMK development, this junction would be operating over capacity in 2033 in the AM and PM peaks. The appellant has shown that over both the AM and PM peaks, there would be an overall improvement in the performance of the junction with the proposed mitigation as compared to the Do-Nothing scenario. Furthermore, the junction is identified in the LTP4 as a junction to be upgraded within the next 3 to 8 years (between 2024 and 2029) as part of the Council's proposed capacity improvements strategy on the A421.

62. No substantive evidence has been provided to support the concern that the proposed minor changes to the entry widths and the entry path radii would result in either higher vehicle speeds through the junction or give rise to any unacceptable safety impacts. Also, I note that these have not been raised as matters of concern in the Stage 1 RSA. Therefore, based on the above, I find that the proposed mitigation would not result in any highway safety concerns and would increase the capacity of the junction to ensure that the forecast traffic flows in 2033 would not cause a severe impact on the operation of this junction and the other nearby junctions.

Junction 16: Elfield Park Roundabout

63. The proposed mitigation scheme comprises of localised entry, exit and circulatory carriageway widening at the existing roundabout junction on the A421. The Council has suggested that the A421(South) exit would be blocked by queuing traffic from Junction 17 Emerson Roundabout, and increased

queuing from this roundabout would cause blocking-back through to Emerson Roundabout. However, I have found that the Council's modelling of queue lengths is unrealistic and is very unlikely to occur.

64. The Council has expressed concerns regarding blocking-back to Junction 15 Bleak Hall Roundabout. The appellant has indicated that there is queuing space for 203 vehicles between Junctions 16 and 15, assuming equal usage of both lanes and not accounting for HGVs, and Table 5.10 of TRN3 predicts a PM peak hour queue of 292 vehicles on this link. It has suggested that only a very small reduction in traffic flow of 5% would be required to avoid interaction between junctions 15 and 16 in the PM peak, and that this would be the case if the downward reduction in the OBR's growth projections and DfT's low growth sensitivity were used to model the traffic rather than the 15% assumed in the Updated TA and TRNs. However, even if there would be queue lengths as shown in Table 5-10 of TRN3 for 2033, this would be likely to occur over a relatively short time and, in my opinion, would be insufficient to result in any severe impact on the road network, taking into consideration the urban nature of the Grid Road network in Milton Keynes.

65. The appellant has demonstrated that the proposed mitigation would reduce delays on 3 of the arms, including the A421, in the AM peak, and improve queuing on 3 of the arms, including on the A421, in the PM peak. I am satisfied that, overall, the proposed mitigation would result in an improvement to the operation of the junction in 2033. Furthermore, it is another one of the junctions on the A421 that has been identified in the LTP4 as being upgraded between 2024 and 2029.

66. Based on the findings of the Stage 1 RSA and vehicle tracking provided by the appellant, I find that the minor changes that are proposed to the geometry of the roundabout would not cause any significant harm to highway safety. As the roundabout does not currently conform to DMRB standards and there is no history of serious or fatal accidents, it would be unreasonable and unrealistic to expect any changes to comply with the DMRB. Therefore, taking the above into account, I conclude that the mitigation proposed at the junction would not result in any highway safety concerns and would improve its capacity to an acceptable level to ensure that there would not be any severe impacts on the operation of it and the other nearby junctions in 2033 with the SWMK development in place.

Junction 17 Emerson Roundabout

67. The proposed mitigation scheme at this existing roundabout junction on the A421 comprises of localised entry, exit and circulatory carriageway widening. The Fulmer Street arm widening would impact on street furniture and signage which could also affect nearby trees that I observed are at the top of an embankment adjacent to a children's play area. However, the appellant has claimed that the carriageway would be widened to be 2.9m from the nearest tree and arboricultural measures would be able to be secured through the Section 278 process. As the retention of the trees that would be most likely to be affected do not appear to me to be essential, with the band of trees being relatively wide at this location, I find that there would not be any insurmountable obstacles that would prevent the implementation of this localised carriageway widening.

68. Concerns about the entry widths and deflection not complying with DMRB standards have not been substantiated by the evidence, particularly as the Stage 1 RSA did not raise this as an issue.

69. The Council has suggested that in the PM peak, TRN3 predicts worsening queues on Shenley Way and both Standing Way approaches, with queuing on the Standing Way (North) arm extending as far as the upstream Elfield Park Roundabout. The appellant has provided evidence to the Inquiry to demonstrate that there would not be any interaction between these roundabout junctions and that no further mitigation would be necessary at Junction 17 Emerson Roundabout.

70. Table 5-10 of TRN3 shows that, with the proposed mitigation measures in place, there would be improvements in queuing and delay on the Fulmer Way northern arm and Shenley Road arm in the AM peak hour when compared to the 2033 Do Nothing scenario, and improvements on the Fulmer Street and Standing Way southern arm of the junction in the PM peak. Also, the junction as whole would have an overall reduction in delay with minimal additional queuing.

71. In response to issues raised by BC regarding queuing and delay arising during peak times from the proposed mitigation scheme shown within TRN3, the appellant provided at the Inquiry a plan of part-time signalisation of the roundabout. BC's highways expert indicated at the Inquiry that he was satisfied that this proposal for part-time signalisation, to be installed if necessary, would provide sufficient mitigation. A planning condition would secure a 'Monitor and Manage' strategy at the roundabout, which would include the Council's involvement and require its approval. This would set out a programme for the future review of traffic demand, capacity, queuing/delay and delivery of the alternative mitigation measures comprising part time traffic signals.

72. Whilst the future use of part-time signals at the junction would be unlikely to be necessary, given that revised growth forecasts suggest reduced traffic flows from those used in the model, it would ensure that there would be a workable solution to avoid any interaction of queues between Emerson Roundabout and Elfield Park Roundabout. Therefore, I find that the appellant has demonstrated that it would be able to provide mitigation at this junction that would not result in any safety concerns and would prevent any severe impact on the highway network due to queuing traffic in 2033.

Junction 18: Windmill Hill Roundabout

73. The proposed mitigation scheme at this existing roundabout junction on the A421 includes localised changes to kerb lines to increase the widths of the carriageway. The Council has provided evidence to show that, with the addition of SWMK development traffic, the proposed mitigation works would result in increased AM peak hour queuing on both Standing Way approaches and in the PM peak hour, the Standing Way (North) queue would extend towards the exit of the upstream Junction 17 Emerson Roundabout. However, this is based on an unrealistic representation of the queue lengths, as previously mentioned. The appellant has provided a more realistic representation of the PM Peak maximum queue lengths which shows that there would not be any interaction between junctions, and that queuing on 3 arms of the roundabout would be improved as a result of the proposed mitigation.

74. The appellant has provided details to show that the mitigation proposals would not require amendments to accommodate the street furniture and are deliverable. It has also carried out swept path analysis which demonstrates that the proposed widening would not result in a safety issue on the highway network. The Stage 1 RSA concluded that the junction proposals would be safe if minor amendments to signage and lining are included at detailed design. Concerns over entry paths are not justified as a review of the collision record from 2014 to 2019 given in the Updated TA does not indicate that the entry speed through the entry path to be a contributor to the existing collisions, nor was the potential impact raised in the Stage 1 RSA process.

75. I conclude on this junction that the proposed mitigation would be deliverable and would ensure that the impact of the SWMK development on the junction would not be severe in terms of traffic and would not result in any unacceptable harm to highway safety in 2033.

Overall Effects of the Mitigation

76. The modelling has shown that there would be increased congestion on some arms of some of the junctions by 2033, with the forecast traffic growth. However, this would be expected in an urban area and, when all parts of the junctions are considered across the AM and PM peaks, the modelling shows that with the mitigation there would be an improvement in 2033 compared to the 'Do-Nothing' scenario. With regard to an assessment of the overall effect on the network, I accept that the MKMMM Reference case is based on out of date data, but it does not indicate that there would be any significant problems due to congestion on the Grid Road network as a result of the identified additional development in Plan:MK, including the SWMK development.

77. For the reasons given above, I have found that the proposed mitigation is deliverable and would not result in any unacceptable impact on highway safety. I conclude that the appellant has demonstrated that the residual cumulative impact during peak travel periods with the SWMK development fully occupied in 2033 on a worst-case basis would not be severe. The mitigation would address the impact of the SWMK development and assist with accommodating the predicted wider growth in traffic. This view is also supported by the BC highways expert that provided evidence to the Inquiry.

Other Matters

78. Regarding concerns about highway safety, BC has indicated that the appellant performed a review of the highway safety of the SWMK development using the computer programme COBALT (Cost and Benefit to Accidents – Light Touch) developed by the DfT. The analysis predicts an increase of 140 collisions with 202 casualties because of development traffic over a 60-year period. As the development would result in an increase in traffic, it would inevitably show an increase in collisions. This has been calculated as averaging 2.4 collisions and 3.4 casualties per year, in the context of 37.4 collisions in the 2033 base year. I agree with BC Highways that this demonstrates that the SWMK development would not have an unacceptable impact on highway safety, particularly as the analysis does not take account of proposed mitigation measures.

79. The Council has expressed concern late in the proceedings that an assessment of re-routing traffic needs to be included in the Environmental Statement (ES). The adequacy of the ES is not given in the reason for refusal and, if it were

considered to be inadequate, it should have been raised earlier in the appeal process. I have not been provided with sufficient evidence to substantiate the claim that the ES is inadequate, given that the traffic impact assessment presents a worst-case scenario and the methodology was agreed on this basis, and an acceptance by all parties that there would be no likely significant effects beyond those assessed in the TA/ES.

Planning Balance

80. I have found that the appeal proposal, which would facilitate the SWMK development, with the identified mitigation in place would result in an overall improvement to the highway network. It would accord with Plan:MK Policy CT1, as the appellant has demonstrated that it would manage congestion and provide for consistent journey times; and Policy CT2, as it has been shown that it would mitigate impacts through the provision of, or contribution towards, necessary and relevant transport improvements and would not have an inappropriate impact on the operation of the highway network. These are the only policies in Plan:MK given in the reason for refusal.

81. In so far as Policy SD15 applies, I am satisfied that the technical work carried out by the appellant fully assesses the traffic impacts of the scheme and identifies the transportation improvements necessary to mitigate impacts. I find that the proposal would also comply with Plan:MK Policy CT3, with regard to walking and cycling; and Policy CT5, with regard to the needs of public transport operators and users. The public transport issues would be addressed by the Section 106 contribution of £2 million and the delivery of bus priority measures within LTP4's 3-year initial action plan.

82. I therefore conclude on the development plan that the appeal proposal accords fully with the relevant policies in Plan:MK. Therefore, the presumption in favour of sustainable development in paragraph 11c) of the 2021 Framework applies in that planning permission should be granted without delay.

83. In addition to the above presumption in favour of the proposed development, the appeal scheme would secure substantial benefits in facilitating the delivery of a key strategic development in a sustainable location. I have therefore taken account of the benefits of the SWMK development in the planning balance for the appeal development.

84. I agree with the Council and appellant that the SWMK development would make a significant contribution to boosting the supply of housing, in accordance with the Government's policy. The delivery of 1,855 new homes is relied upon by BC to meet its housing needs over the plan period of the emerging VALP. It would also contribute 30% (557) affordable homes.

85. The SWMK development would deliver a mix of uses, including residential, community, retail, employment and education, and thereby reduce the need to travel off-site. It would also deliver walking, cycling and public transport infrastructure which would connect into the existing networks and provide alternatives to the private car. The Framework Travel Plan would secure measures to support the use of sustainable transport modes.

86. Other benefits that the appellant has claimed of the SWMK development include the delivery of a biodiversity net gain, open space for the benefit of existing and future residents, landscaping, woodland planting, and green

infrastructure to both mitigate and enhance the surrounding landscape. In addition, it would create jobs both in the construction and operational phases and support local business and services through the additional expenditure from future residents.

87. I have also considered the proposal in relation to the policies in the 2021 Framework. Regarding paragraph 110, I am satisfied that the appellant has demonstrated that any significant impacts from the SWMK development on the transport network, in terms of capacity and congestion, and on highway safety, would be able to be cost effectively mitigated to an acceptable degree. I have also assessed the appeal proposal having regard to paragraph 111, which states that '*Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.*'

88. For the above reasons, I have found that the appellant has demonstrated that mitigation would be able to be provided to adequately address the highway impacts, and the proposal would not have an unacceptable impact on highway safety or on the flow of traffic and congestion on the Grid Road network. The residual cumulative impacts on the road network would not be severe and there are no highways related grounds for refusing planning permission. The proposal would accord with the statutory development plan, and policies in the Framework taken as a whole, and would facilitate the delivery of substantial benefits in the public interest through the SWMK development.

Planning Conditions

89. I have considered the suggested conditions should the appeal be allowed that formed the basis of discussions at the Inquiry. It is necessary to impose the conditions regarding the time scale for submission of reserved matters to ensure that development would be carried out expediently. I consider that the condition requiring the standard 3-year period for the application of reserved matters is an appropriate timescale, as the appellant has emphasised how important it is that there is no unnecessary delay. The appellant has not given sufficient justification to extend it to its originally suggested 5 years or to include a non-standard extension of one year from the determination of any subsequent application under Section 288 of the Town and Country Planning Act 1990, given that I have not been provided with any evidence to show that such an application would be likely to be made.

90. A condition referring to the relevant detailed plans of the accesses is necessary to provide certainty, given that access is not a reserved matter. A condition to ensure that trees, woodland and hedges would be appropriately protected is necessary in the interests of the character and appearance of the area. Conditions requiring the approval of temporary accesses and details of how the proposed permanent accesses would be constructed are necessary to safeguard highway safety and local amenity. A condition to ensure that Shenley Brook End Bridleway would be kept open and unobstructed is necessary in the interests of public amenity and safety.

91. Conditions to ensure compliance with the Environmental Impact Assessment in relation to drainage and ecology are necessary to protect the environment, with particular regard to matters of drainage, flooding and ecology. A condition to prevent the permitted development commencing until the grant of planning permission for the SWMK development that it would serve is necessary to

ensure that the works would not be carried out before there is any certainty over the associated development in the interests of visual amenity.

92. A condition to secure a Highways Works Delivery Scheme is necessary to ensure that highway mitigation would be provided to reduce the impact of traffic generated by the SWMK development on the junctions at which the mitigation works would be provided. A condition to secure a Monitor and Manage Strategy at Junction 17 Emerson Roundabout on the A421 is necessary to prevent an unacceptable impact on the flow of traffic at this junction.

93. I am satisfied that all the conditions that I have included are reasonable and necessary, satisfy the tests given in the 2021 Framework and reflect the advice in the PPG.

Overall Conclusions

94. I have found that the proposal would accord with the development plan as a whole and the other material considerations that I have given above weigh in its favour. Therefore, for the reasons given, and having regard to all relevant matters raised, I conclude that the appeal should succeed.

Martin Whitehead
INSPECTOR

APPEARANCES

FOR THE LOCAL PLANNING AUTHORITY: MILTON KEYNES COUNCIL

Tom Cosgrove	Queens Counsel, instructed by Nazneen Roy, Solicitor for Milton Keynes Council
He called	
James McKechnie BA(Hons) DipTPHE CILT CIHT	National Transportation Divisional Director, Hydrock Consultants Ltd
Paul Keen MA MRTPI	Team Leader, Development Management, Milton Keynes Council

FOR THE APPELLANT: SOUTH WEST MILTON KEYNES CONSORTIUM

Craig Howell Williams and Isabella Tafur	Queens Counsel Of Counsel, both instructed by Carter Jonas LLP
He called	
Martin Paddle BSc CEng CWEM MICE FCIHT MCIWEM	Director, WSP
Mark Hyde BA(Hons) BTP MRTPI PIEMA	Partner, Planning & Development Team, Carter Jonas LLP,

FOR BUCKINGHAMSHIRE COUNCIL:

Hugh Flanagan	Of Counsel, instructed by Laura Lee-Briggs, Buckinghamshire Council
He called	
James Bedingfeld HNC(CivEng) CIHT	Principal Transport Planner, Jacobs Ltd
Claire Bayley BSc(Hons) MRTPI	Associate Planner, Buckinghamshire Council

FOR NEWTON LONGVILLE PARISH COUNCIL & BLETCHLEY TOWN COUNCIL:

Meyric Lewis	Of Counsel, instructed by Robert McGeady, Ashtons Legal
He called	
Clive Burbridge BSc(Hons) MSc MRTPI FCIHT FIHE CMILT	Equity Director and Director of Transportation, Iceni Projects Ltd

Other Interested Parties

Steve Heath	Local Resident

DOCUMENTS SUBMITTED AFTER OPENING THE INQUIRY

CD22	Round table drawing package, submitted by the appellant on 11 May
INQ1	Appellant's Opening Statement, submitted by the appellant on 11 May
INQ2	Milton Keynes Council Opening Statement, submitted by Milton Keynes Council on 11 May
INQ3	Buckinghamshire Council Opening Statement, submitted by Buckinghamshire Council on 11 May
INQ4	Rule 6 Party Opening Statement, submitted by Newton Longville Parish Council & Bletchley Town Council on 11 May
INQ5	Statement – Steve Heath, submitted by Steve Heath on 11 May
INQ6	Highways England Document GG 101 Introduction to the Design Manual for Roads and Bridges, submitted by the appellant on 20 May
INQ7	Inquiry Note SWMK HGVs at J5 Tattenhoe Roundabout, submitted by the appellant on 20 May
INQ8	Draft Conditions, submitted by the appellant on 20 May
INQ9	The Council's suggested amendments to the draft conditions, submitted by the Council on 21 May
INQ10	Appellant's suggested amendments to the proposed conditions, submitted by the appellant on 25 May
INQ11	Mr Burbridge response to Mr Paddle CD16C Table 5.5 Clarification, submitted by Newton Longville Parish Council & Bletchley Town Council on 25 May
INQ12	Closing submissions of Rule 6, submitted by Newton Longville Parish Council & Bletchley Town Council on 15 June
INQ13	Closing submissions of Buckinghamshire Council, submitted by Buckinghamshire Council on 15 June
INQ14	Closing submissions of Milton Keynes Council, submitted by Milton Keynes Council on 15 June
INQ15	Closing submissions of the appellant's, submitted by the appellant on 16 June

SCHEDULE OF CONDITIONS

1) Details of the appearance, landscaping, layout, and scale (hereinafter called 'the reserved matters') shall be submitted to and approved in writing by the local planning authority before any development takes place and the development shall be carried out as approved.

2) Application for approval of the reserved matters shall be made to the local planning authority not later than 3 years from the date of this permission.

3) The development hereby permitted shall take place not later than 2 years from the date of approval of the last of the reserved matters to be approved.

4) The development hereby permitted shall be carried out in accordance with the following approved details:
   i) Buckingham Road Access – drawing ref 1067760-D016 Rev B insofar as the toucan crossing at the end of Weasel Lane and drawing ref 1067760-D017 Rev D; and
   ii) A421 'Left in' Access – drawing ref 1067760-D013 Rev A and details of a cycle/pedestrian crossing in accordance with details to be first submitted to and approved in writing by the local planning authority.

5) No site clearance, preparatory work or development shall take place until a scheme for the protection of the retained trees (the tree protection plan) and the appropriate working methods (the arboricultural method statement) in accordance with paragraphs 5.5 and 6.1 of British Standard BS 5837: Trees in relation to design, demolition and construction - Recommendations (or in an equivalent British Standard if replaced) shall have been submitted to and approved in writing by the local planning authority. The scheme for the protection of the retained trees shall be carried out as approved.

   [In this condition 'retained tree' means an existing tree which is to be retained in accordance with the approved plans and particulars.]

6) Prior to the commencement of the development hereby permitted details of any temporary accesses to site compounds/storage yards and any construction accesses shall be submitted to and approved in writing by the local planning authority. The temporary access works shall be carried out in accordance with the approved details.

7) Prior to the commencement of the development hereby permitted details of the construction of the A421 and Buckingham Road accesses shall be submitted to and approved in writing by the local planning authority. The development works shall be carried out in accordance with the approved details.

8) Prior to the commencement of the development hereby permitted details showing how Shenley Brook End Bridleway 009 shall remain open and unobstructed at all times shall be submitted to and approved in writing. The development shall be carried out in accordance with the approved details.

9) The development hereby permitted shall be carried out in full accordance with the recommendations and mitigation measures outlined within the submitted Environmental Impact Assessment relating to drainage strategy.

10) The development hereby permitted shall be carried out in full accordance with the recommendations and mitigation measures outlined within the submitted Environmental Impact Assessment relating to ecology.

11) The development hereby permitted shall not be implemented prior to a grant of planning permission for the Proposed Development of South West Milton Keynes in Buckinghamshire, as provided for in the planning application reference 15/00314/AOP to Buckinghamshire Council, or for an alternative planning application for substantially the same development as provided for by the site's allocation in the Vale of Aylesbury Local Plan.

12) No development shall commence until a Highways Works Delivery Scheme (HWDS) has been submitted to and approved in writing by the local planning authority. The HWDS shall set out a programme for the delivery of highways mitigation works in general accordance with the drawings referenced in the schedule below. The highways mitigation works shall only be undertaken in accordance with the HWDS.

Junction ID	**Junction Name**	**Mitigation Drawing Reference**
Junction 1	Buckingham Road j/w Sherwood Drive and Water Eaton Road	70069442-001B-P04
Junction 2	Buckingham Road j/w Shenley Road and Newton Road	70069442-015-P04
Junction 5	Tattenhoe Roundabout	9442-TP-SK-004-P06
Junction 6	Bottledump Roundabout	70069442-004-P05
Junction 12	Kingsmead Roundabout	70069442-010-P03
Junction 14	Furzton Roundabout	70069442-011-P03
Junction 15	Bleak Hall Roundabout	70069442-012-P04
Junction 16	Elfield Park Roundabout	70069442-016-P03
Junction 17	Emerson Roundabout	70069442-013-P03
Junction 18	Windmill Hill Roundabout	70069442-014-P03

13) No development shall commence until a Monitor and Manage (M&M) Strategy has been submitted to and approved in writing by the local planning authority. The M&M Strategy shall set out a programme for the future review, assessment, and delivery of alternative mitigation measures at Junction 17 Emerson Roundabout on the A421. The alternative highway mitigation works shall only be undertaken and implemented in accordance with the M&M Strategy.