APPENDIX A1: Consultation Responses

BC Councillors:

Cllr D Watson (Ward Councillor):

Original Comments:

It is apparent that the application to build a Film Studio in Little Marlow is contentious with a significant number of local residents. Given the large scale of the proposed development I would ask, should officers be minded to approve this application, that it be determined by the appropriate planning committee.

Further Comments:

For the avoidance of doubt please be aware that I remain of the opinion that should the officers be minded to support this application then I would ask that this application be referred to the relevant planning committee for determination.

Additional Comments:

Further to the recent planning amendments I remain of the opinion that this application, if approved by the officers, should be referred to the relevant planning committee for determination.

Cllr D Johncock (Ward Councillor):

Original Comments:

I would like to second this call-in and also speak at the committee meeting if you are minded to recommend approval.

Further Comments:

Thank you for highlighting yet more documents trying to justify the building of this monstrous film studio on Green Belt land. Frankly, these latest documents fail to convince me on how the applicant will meet all the Council's planning policies and simply offers various forms of mitigation which certainly will not overcome the huge amount of harm that will be done if this application is permitted. More worrying, there seems to be some doubt now as to whether they would even provide the proposed training in the medium to long term and use the phrase "the first owner" which does not seem to support the applicant's previously stated commitment to this project long term. Clearly, these latest updates have not convinced me that the proposed scheme should now be supported and I remain of the view that the application should be refused.

Cllr S Wilson:

I am writing to OBJECT to the proposed development of Marlow Film Studios at Little Marlow Lakes Country Park (22/06443/FULEA).

This planning application is entirely contrary to Policy RUR4 of the Wycombe Local Plan and the 2002 Supplementary Planning Document for Little Marlow Lakes. Excessive development in the Little Marlow Lakes Country Park area will impact the provision of appropriate mitigation intended to offset recreational impact of the developments in Bourne End and Wooburn Town (Policies BE2 Hollands Farm and BE1 Slate Meadow) with regard to Burnham Beeches SAC. The reasons for objection here are not only the first principle of ANY development beyond that limited to supporting recreation, but all other implications of development on the green belt, impact on the adjoining AONB, ecology, appearance and character of the area, impact on the A404, Westhorpe Interchange, other nearby junctions (Sheepridge Lane roundabout) and main roads.

We also have grave concerns on additional traffic through Hedsor, Bourne End and Wooburn which will use roads from the east where many film and television production facilities and staff are already sited. There are additional concerns on commuter parking where staff may dump cars in an already over-stretched Bourne End to use the proposed "hopper service". There is no public bus service from Bourne End to Marlow at present and any bus provision needs to be regular, frequent and between terminus points in Bourne End and Marlow.

Cllr P Drayton:

As a member of Buckinghamshire Unitary Authority Council, a Ward Councillor for the Wooburns, Bourne End & Hedsor (the neighbouring Ward to the application site), I would like to OBJECT to this application to build Marlow Film studios on Green Belt land within Little Marlow Lakes Country Park.

1. Development on Green Belt

As per the NPPF Green Belt serves five purposes:

- a) to check the unrestricted sprawl of large built-up areas;
- b) to prevent neighbouring towns merging into one another;
- c) to assist in safeguarding the countryside from encroachment;
- d) to preserve the setting and special character of historic towns; and
- e) to assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

Green Belt land should only be downgraded or built upon in exceptional circumstances. The Green Belt in this location demonstrates and serves EVERY ONE of the five purposes listed above. There are no justifiable exceptional circumstances in this situation which would make this development acceptable. To note, Green Belt does not have to be beautifully manicured and sculptured. Despite this site being referred to as scrub land it not only serves

the purpose above but supports wildlife and wild landscape which has naturally evolved since the days of it being landfill and has great ecological value.

2. Cross purposes with the policy RUR4 in the Wycombe local Plan (adopted August 2019) - Little Marlow lakes Country Park.

Developing on the site of Little Marlow Lakes Country Park is in direct contradiction to policy RUR4 in regards to the following points within the policy;

- 1. The Little Marlow Lakes Country Park, as defined on the Policies Map, is allocated for outdoor recreation.
- 4. Planning permission will not be granted for development within the Country Park that has an adverse effect upon the amenities or setting the River Thames, watercourses, lakes, wet woodlands, adjoining conservation areas, or listed buildings, or which prejudices the function of the area for the purposes of a Country Park.

The idea can be 'prettied' up as much as the applicant likes (e.g we will provide some recreational space), but ultimately and fundamentally if the site is built upon it is detrimental to the space available and opportunities of recreational space.

Little Marlow Lakes Country Park is an important mitigation factor in policies BE1 and BE2 within the Wycombe Local Plan to provide alternative open green space to offset the recreational impact on Burnham Beeches SAC. If this alone, or in conjunction with other current and future applications on Little Marlow Lakes Country Parks, were to be granted, it would make these policies impossible to uphold.

3. Adverse hit on effects to neighbouring communities

There is not a sufficient transport solution locally to uphold or support the issues the additional car movements will bring. Suggesting so many will travel by train is not only unrealistic but unenforceable too. Bourne End already suffers with all the surrounding village centre residential roads being parked on, by commuters, but in addition many who intend to get the shuttle bus from Bourne End station, may drive to Bourne End and park up as opposed to getting the train as intended.

The local road structures are at (or nearly at) capacity and with the anticipated increase of movements to and from the Bourne End area, with the additional 800 homes in the Wycombe Local plan, plus the commuters for the Film studios it would bring the Village and surrounding communities to a stand still.

Summary

I am not objecting through an anti film studios perspective and appreciate there are benefits a studio could bring to an area, but I fully oppose the site selected being developed on. I feel there is not justifiable cause for the location to override the other local benefits and issues

and that in the best interests of the majority of the local residents, this application should be refused.

Cllr L Clarke:

Original Comments:

I support this application on the many improvements it will make not only to the local area but to others further afield.

I represent Abbey Ward in High Wycombe, within Buckinghamshire Council. Within Abbey ward there are two major sites who would both benefit and find many opportunities this application offers; these being Buckinghamshire New University with their Media Faculty and Buckinghamshire College opening in September 2024 with over 1000 students, both of the two educational establishments would be able to offer apprenticeships, work experience and employment to these young people and others. This would encourage more young students to remain in the area. This would both support and enhance the proposed education and skills commitment and fully support the proposed Culture and Skills Academy to be installed on this site.

This would also support the 4000+ offers of employment on this site and further afield that this application would bring. Notwithstanding the "on-spend" within the local community in the local retail and catering establishments.

This is both an outstanding and exciting opportunity for Buckinghamshire to become a larger player in the expanding offer of both film and television making services within Buckinghamshire itself. To then use an area that was the former refuse facility for the town of Marlow and now a very neglected area of an infill site. We must also remember that this site provided the gravel, for the nearby A404, which is part of the national strategic road network.

With the close proximity of this strategic road network, which will be a great asset to this application, with the inclusion of the offer by the applicant of several bus routes; locally from Bourne End into and out of Marlow itself, another being from High Wycombe through to Marlow, in particular this area and the nearby Globe Park Business Park, not to mention the Wycombe Sports and Athletic area nearby providing a service for everyone to get to and from these sites using the local bus network, something that at present is not in place. Further with the planned bus route going on to Maidenhead and that in itself offers travel to other areas of Southern and South Western England, notwithstanding the use of the newly opened Elizabeth Line into London and beyond. This offers flexibility of travel to all, something which is not on offer in any form today.

I fully support the upgrade to the cycling/walking routes locally, which could also help to put into place a cycling route from High Wycombe town centre, without cyclist having to use the main roads themselves. Something that could be an integral part of the Buckinghamshire Local Walking and Implementation Project (LCWIP).

I believe that this application will enhance the area dramatically and in this time of economic uncertainty it is an opportunity to ensure that there is employment on offer locally.

For the reasons set out above I fully endorse and support this application. I believe it delivers the special circumstances that the Council has put forward. I support wholeheartedly this application for the future employment of young people locally. It is a golden opportunity for everyone.

Further Comments:

Further to my previous comments, as sent 3rd January 2023, I would like to make it clear that I fully support this application, with the suggested amendments. Further, I seriously believe, that this application should be determined under the planning rules of "Special Circumstances" as I believe that this application, shows the many ways the special circumstances it offers. Furthermore, I believe it will materially enhance the area, with the notable upgrade of the local infrastructure, along with providing significant employment with the commensurate economic benefits, to the surrounding areas and promote Buckinghamshire as an outstanding area for film, television and media services.

Additional Comments:

I fully support this application and have from the very start. The offer that this planning application gives to the local area for jobs, not merely in the local Marlow area, but further a field such as High Wycombe for people and young people is enormous. With Buckinghamshire College also building a new campus what a splendid opportunity for their young students and those of BNU on their Media Degree Course to be able to find employment here, locally. With the offer of new bus routes, the change of the road layout, which in itself saves this Council's Highways the worry and enormous costs of providing this in the future. This application has much to offer on a local and regional economic basis, which I believe, should, override the Green Belt issues. As we are ALL aware the land is of poor quality, it can not be used for agriculture or housing due to the past use of this site. The opportunity this application brings is of great benefit to local tax payers and the local businesses surrounding area too..and we should not be frightened of supporting it

Cllr D Hayday:

I fully support this application and cannot wait for it to be built. The film industry is an exciting and growing industry to be working in the UK at this time and I suspect the future as

well.

I have received threats on my previous comments made regarding the previous application and I shall stand my ground and not be intimidated over this. Also as a Bucks Councillor, I have every right to comment on any application in any part of the County. This if passed would be very near to where I live as well.

Also I know it would be working in partnership with local schools.

Being someone who regularly litter picks in all weather, I care a great deal for our environment. I have all my life cared for the environment.

I do understand why people are against this application, but I want to think of a future for our children, grandchildren and to have a local place of employment / or for others to be employed here from outside of the area. A job is a job is a job.

Pinewood Studio shows us how much this as an industry is growing.

I love films and TV content, hope that this is passed and we can see the first building being put up.

Am not a member of the planning committee and have no connection with anyone involved in this project, other than showing my continued support.

Cllr S Kayani:

I am emailing my objection to the planning application for Marlow Film Studios on the grounds that it contravenes RUR4 of the Wycombe Local Plan that designates Little Marlow Country Park as an area for recreational use and limited development.

Parish/Town Council Comments

Little Marlow Parish Council (applicable Parish):

Original Comments:

The site is designated as Green Belt in the National Planning Policy Framework (NPPF) and part of the Little Marlow Lakes Country Park in the Wycombe District Local Plan.

Section 138 of the NPPF should stop unrestricted sprawl of built-up areas, prevent neighbouring towns from merging, safeguard the countryside and preserve the setting and special character of historic towns, all of which would be contravened.

The Wycombe District Local Plan (which is extant for this area) states in policy RUR4 that the Little Marlow Lakes Country Park is allocated for outdoor recreation and only developments for environmental improvements should be allowed that also provide safe access for pedestrians, cyclists and disabled users from Marlow and Bourne End. It stipulates that developments which have any adverse effect on the amenities of the area or prejudice the function as a Country Park are not permitted. Large industrial buildings over 20m high would destroy every element of this.

There are no Very Special Circumstances to justify the harm to the Green Belt:

- i) the economic benefits are based on values for the whole of the film industry including distribution and marketing not just production, the employment figures do not stack in an area where there are currently 67059 jobs on Indeed.com and there is definitely no increase in accessibility because the development will remove many existing deemed rights of way that currently exist over large parts of the site.
- ii) the claimed gains in biodiversity are irrelevant especially as the applicant is suggesting offsetting this and no site has yet been identified and could not possibly be close enough to relocate what is present now including a huge population of protected flora and fauna including bats, newts, badgers and rare orchids and stoneworts.

The development will dramatically damage the Visual Amenity of the area, most significantly around the Westhorpe Park Homes conurbation but also from an enormous area of the Chiltern Area of Outstanding Natural Beauty which according to the 2019-24 management plan should be protected from visual impact by any new developments.

This land also includes the Grade 2 Listed Westhorpe House and Park where the setting of historic parkland makes a significant contribution to its Heritage asset (para 180-208 NPPF) and this would be destroyed by the development.

The increase in traffic movements quoted as being around 2000 vehicles per day will completely overpower the Local Traffic Network which is already over capacity at certain times of day and will further reduce the Air Quality in Marlow which is already described as poor at times, hence the objection from Highways. It should be noted that the present proposed mitigation measures are totally unworkable and are based on untried and untested modelling.

The applicant has not shown evidence that significant effort has gone in to identifying alternative sites and has confined the search to within the West London Cluster which is contrary to the National Industry Strategy 2017 and Creative Industry Sector Deal 2018 whereby Government policy is to spread the media industry to other parts of the country in line with the Government's levelling up strategy. In fact the economic benefits to both Bucks and the UK are not proven to be dependent on being so close to this cluster.

Removal of such a large area of open space will also create a huge increase in the flood risk and has caused the objection by the LLFA. Little Marlow Parish Council therefore request that this application is refused.

If the Council are minded to approve this application LMPC requests that the following Mitigation measures are considered.

Proposed Mitigation Measures

High Priority

- 1. Increasing the area of the Little Marlow Lakes Country Park under public ownership to accelerate its development.
 - a. The purchase of the 2 riverside meadows currently owned by Westhorpe Farm (marked A1 and A2)

- b. The purchase of the land to the East of the running track owned by Follets (marked B)
- c. Transfer of land ownership of Plots 4 & 5 from Dido Properties Ltd to BC to enable Net Biodiversity Gain to be realised on-site.



- 3. Enhancing access and safety at the principal entrance to the Country Park
 - a. The creation of a mini-roundabout at the entrance to Muschallik Road and School Road
 - b. The surfacing and widening of Muschallik Road
 - c. The creation of a carpark for up to 80 cars in the disused quarry area to the North of Spade Oak Lake
 - d. Creation of a footpath from the quarry area to the riverside area A1
 - e. The creation of a drop-off/pick-up point for Little Marlow School
- 4. Creating amenities for visitors to the Country Park in the disused quarry area to the North of Spade Oak Lake
 - a. Visitor and Education Centre
 - b. Café
 - c. Administrative office & Ranger/Volunteer facility
 - d. Public toilets
 - e. Children's Play Area (Natural Play)
 - f. Forest School
 - g. Services Infrastructure (water/electricity)
- 5. Providing an alternative access road for the Westhorpe area residencies via Westhorpe Farm Road
- 6. Improving access to the Riverwoods Open Space/picnic area of the Country Park
 - a. Access road
 - b. Parking for 25 cars
- 7. The provision of recreational facilities in the Follets land (marked B)
 - a. Expansion of public carpark at running track
 - b. Creation of a bike park (eg BMX and/or off-road cycle training track)

- c. Creation of a pitch and put course with associated facilities
- d. Creation of a natural play park for children
- 8. The provision of recreational facilities in the in the riverside meadows (marked A1 and A2)
 - a. Natural play park
 - b. Picnic facilities
 - c. Adult well-being area
- 9. Improvements to biodiversity
 - a. Enhancements to hedgerows in the area
 - b. Riverbank restoration at Spade Oak Meadow (A3)
 - c. Creation of new wetland habitats in the riverside meadows (marked A1, A2 and A3)
 - d. Miscellaneous new plantings and habitats

Additional Comments:

Little Marlow Parish Council would like to reiterate the original objection below, submitted on 1st August 2023, and to raise concerns about the proposed new roundabout and impact on access to Westhorpe.

Further Comments:

Following on from consultee submissions on 1st August 2022 and 12th May 2023 Little Marlow Parish Council are submitting and reiterating their original objections to planning application 22/06443/FULEA.

Having consulted further with local residents, reviewed recent planning updates and discussed additional plans with the applicants Little Marlow Parish Council continue to object to the planning application.

Marlow Town Council (Neighbouring 'Parish'):

Latest Comments:

The above application affects two main parishes in the immediate vicinity of this application, as neighbours to the development. Marlow is the most significant settlement adjacent to this application and has a population approximately ten times greater than Little Marlow and a population density per square kilometre that is approximately thirty times greater. The statutory position of ward boundaries designates the position of consultee as a parish to Little Marlow. Marlow is not a statutory consultee and has therefore not received a statutory consultation request. Importantly we wish to add our own position as the closest and most dense settlement to the site, inevitability our residents will also be impacted as the closest Town.

In exercising its public service role, Marlow Town Council recognizes that it has a clear duty in representation of its 14,767 residents (Marlow Population [2021] Census). We have actively been encouraged and lobbied by our residents to form a view on the above application, including both positive and negative aspects, and have encouraged residents to make representations on the application via the BCC planning portal which we see are substantial. Notably, on the planning portal, there are approximately 3,600 representations posted, 2400 in support of this application and 1,200 against. Marlow Town Council members have followed in detail the elements of the application as it evolved and careful note of statutory consultee inputs and resident input to make an informed and fact driven representation. Councillors have attended representations at public consultations and soundings to inform themselves of the detail which were extensive. On balance, there is very positive support for the application currently, regardless of residents' exact locations in the county and this support is reflected in the representations made so far, with a near 2:1 ratio in favour, which aligns with the messaging coming from our Marlow residents.

Marlow Town Council has therefore informally consulted its entire membership group of Councillors at a members' only meeting (not an official Council meeting) through a democratic extensive debate and discussion on the 24th of August 2023 - (see meeting note below *). By majority vote, we have decided to fully support this application and not raise any objections to the proposed development. We recognize that our local Planning Authority (Bucks Council) will determine the lawfulness of the application's outcome, and its strategic planning group will convene to review the application at a point determined by them. The observations in coming to this decision and noted below.

(Note: Members agreed that the transport element of this application is complex, and statutory consultee comments and reporting have not yet been finalized. Such complexities can only be determined by data and analysis conducted by experts regarding highways operations.)

In coming to our decision to fully support this application the following points and observations from the application were noted:

- The site has historically been gravel pits that have ceased to operate over time and have been used for land backfill, waste disposal, and have been poorly remediated and landfilled. The development seeks to reclaim and regenerate a large area of very low-quality contaminated landfill that is mostly inaccessible to the public, other than a basic footpath dissecting its area from its public intersection from the Volvo footbridge to Little Marlow.
- Historical attempts to establish the site as a country park have been in discussion since the late 70's and as such a long term a legacy of waste dumps, waste processing and unlicensed activities have continued over the years. It is apparent that commitments could offer a future joined-up solution that will allow the

implementation of a well-managed adjunct to the Spade Oak area by creating enhanced access to those areas in the future.

- It is noted the applicant intends to use roughly 50 acres of a 150-acre overall site and enhance legitimized public access in the future with a commitment to 9 acres of open public space and a culture and skills academy. A provision is proposed for a further 15 acres of wildlife-protected land on bordering areas of the site.
- It is noted in recent new document submissions a 20% Biodiversity Net Gain in both on-site and nearby areas through a recent acquired addition to the applicant's site, achieving twice the national BNG standard, increasing even further public access and a potential enlargement of the country park and SANG area. This has the potential to double (excluding water areas) the land area delivery of any future country park implementation.
- The socio-economic benefits identify a training shortage in the Bucks economic report. There is significant support by Bucks' New university and Buckinghamshire College Group. Skills and training will be supported for a 10-year period.
 Compatibility with Bucks' local skills report, SIP (local skills improvement program), and support from educational institutions, including both senior schools, the British Film Commission, Great Marlow, and SWBGS, along with a commitment to work with all local institutions.
- Provision of a community hall for residents and a skills academy for industry. £750 million inward investment to Bucks, £338 million per annum GVA (gross value added) economic activity, and a minimum of 300 traineeships per annum in the first 5 years, as well as the creation of up to 4,180 new jobs. As part of this 780-2,415 jobs will be created through a variety of skill sets.
- It is noted that a sustainable travel strategy and investment has been a challenge in the area for the last few decades .The opportunity appears it can be accelerated through new public bus and hopper services, walking, and cycling provisions. Specifically, a new public bus that is proposed between High Wycombe and Maidenhead and a new East/West hopper bus service between Bourne End and Marlow. It is also noted that active travel commitment includes financial incentives for walking/cycling to studios, with government support for creative industries.
- We have noted the Economic growth and regeneration planning application response dated the 23rd of July 2022 in the application on behalf of the Bucks Council Directorate for planning, growth, and sustainability Bucks. This response puts forward an overwhelming argument detailing the support for the diversity and prosperity of the local economy overall, encouraging business, employment, and skills for Bucks, as well as the vibrancy benefits for local town and village centres.

*(Note: Eleven members attended this meeting on Wednesday, August 24th, out of 12 possible members. One member declared a conflict of interest with their role as a

member of Bucks Strategic Sites Committee and did not attend the meeting. Eight members voted in full support of the application, one member voted against support, and two members supported but did not wish to vote. Councillor Natalia Mityaeva asked for the submission to show that she does not support the application. Councillor Carol heap asked for the submission to show that she is neutral on the application The final vote was therefore declared at 8 to 3 in favour and carried.

Further Comments:

In my capacity as leader of Marlow Town Council I have reviewed a representation submission in detail made on my behalf by Cllr Scott dated the 6th of September 2023 to the planning portal which I approved and asked him to also submit on my behalf during my annual leave.

I am satisfied that the content of the collective representation and observation was clear but that some of the content was misleading in that it was not the case that Marlow Town Council informally consulted members.

By way of clarification this is to highlight that the comments made on 6 September 2023 were a collective view of the following Marlow constituency Councillors that wished to support this application by way of the detail provided, I have detailed the names of those below:

Cllr Tim Avery, Cllr David Brown, Cllr Roy Cadman, Cllr Chris Funnell, Cllr Chris Hoyle, Cllr Colleen Stapley, Cllr Richard Scott

I would be grateful if this amendment can be posted against this application unredacted and apologise to the public for any confusion this may have caused and for this error for which I am responsible.

Cookham Parish Council (Neighbouring Parish):

OBJECTION: We write to comment on this application. The Parish of Cookham has an obvious interest in that any such development will be a major feature of the view from Winter Hill within our Parish (part of an area of special landscape importance), may affect public transport services through our Parish, and is very likely to affect traffic flows across Cookham Bridge and therefore through the Cookham High Street Conservation Area.

Three members of our Planning Committee (including its Chairman and the Chairman of our General Purposes Committee) attended the applicant's exhibition in Marlow. They were grateful for the opportunity of talking to those present as well as looking at the exhibition. We have considered carefully the plans as submitted.

Regrettably, the Parish Council has come to the conclusion that it must in the interests of its residents oppose this development. We have a number of reasons for coming to this conclusion.

 The development is said to be likely to create about 4,200 jobs (Planning Statement, para 9.35). While of course the Parish Council would welcome any concomitant improvement in the railway service, and indeed the bus service, through this Parish from Maidenhead station to Marlow and/or High Wycombe, in its view any such potential gain is substantially outweighed by the likely substantial increase in traffic.

Our first concern relates to traffic entering and leaving the site itself. We are not satisfied that the road network serving the site is or can easily be made adequate, particularly in respect of traffic heading east, towards and through Little Marlow and Bourne End. This is not directly our concern, but it raises very serious issues for us.

Much of such traffic is likely to come to and from the site from south of the Thames/Maidenhead (whether from housing or from the station) or from housing in or around Cookham. It would have to move over Cookham Bridge (which is single lane traffic, traffic light controlled, as you are no doubt aware) and through the Cookham High Street Conservation Area. Such traffic, once in Cookham, would either turn west through The Pound which is a very well-known traffic bottleneck with significant pedestrian safety issues, or continue south through the Riverside Conservation area in Maidenhead. Both would be seriously detrimental to the community of Cookham.

The existing levels of traffic result in significant queues, especially at rush hour (which is also, in the morning, drop-off time for Holy trinity primary School in the Conservation Area). Traffic jams and the traffic cause significant noise and fume pollution issues in the Conservation Area, as well as endangering pedestrians, including children, in the narrow streets. This will anyway be exacerbated by the developments in Slate Meadow and Hollands Farm north of the Thames with 850 homes, and new developments both in Cookham itself (approximately 270 homes over the next 10 years). This development would make things significantly worse. This is so both in respect of goods traffic, where there are already serious issues in lorries weighing more than the weight limit attempting to cross Cookham Bridge — no doubt many lorries would be needed to service your development - and also in car traffic. It will become significantly worse than at present due to the already planned increases in housing both immediately north of the bridge (at Slate Meadow and Hollands farm in Bourne End) and south of the bridge (at Lower Mount Farm in Cookham itself, and two other sites) already mentioned.

The extra traffic of both types created by the development would make an already very bad and worsening situation even significantly worse still. It would in our view trigger the NPPF threshold of 'severe' residual effect which should result in refusal.

2. The Parish Council is opposed to building in the green belt, particularly in an area hitherto protected by the "barrier" of the A404. It is irrelevant whether the building is a film studio project or any other kind of development. While we acknowledge the argument that the land is not of high quality, the fact is that it is green belt and the

- Parish Council considers preservation of the green belt to be highly important for amenity reasons. There are in its view no very special circumstances relating to the project to justify overriding the protection of the green belt.
- 3. The sheer mass of the project as outlined is unacceptable. It involves a large number of enormous buildings, in terms of height and general volume as well as ground space. This point simply enhances the main argument against building in the green belt. However, it is also disproportionate and out of keeping with the small number of residential homes which would adjoin the development.
- 4. The development would seriously detract from the view from Winter Hill in our Parish. It will be a very substantial developed area in what is currently open land. We are aware that no one has a legal right to a view, but the openness of the green belt is one of its fundamental characteristics which the national planning policy framework seeks to protect. Views created by such openness are of particular importance when themselves viewed from areas of special landscape interest. Winter Hill adjoins such an area and deserves similar consideration, and as Common Land including rights of way the views from it are of planning relevance and should be protected. This applies both to residents and walkers using public pathways and National Trust walks.
- 5. This is particularly so considering solar panels on the roofs of the buildings. These are both unsightly in themselves when viewed from above, and very reflective. Those looking at them from the south/south-east as from Winter Hill in this Parish will see the development not only has large block like buildings intruding into the green belt but also buildings with glaring, reflective roofs. This aspect in particular would be seriously detrimental to the enjoyment of all walkers along the network of paths around Winter Hill in our Parish, but also to the amenities of our residents.
- 6. The noise which would emanate from the development would also be a significant detriment to residents of our Parish overlooking the site. The noise from the A404 is already an issue for housing overlooking it and the site. The noise which would emanate from your development both in terms of traffic movements and work taking place on the site would add to this problem.
- 7. Both the noise and night lighting, especially on the potential out-door sets, could be seriously detrimental to wild-life and bio-diversity in our Parish as well as on and immediately adjacent to the site itself.
- 8. We believe that the water run-off and other drainage effects of the development, covering what are currently open fields which help absorb rainfall, would be seriously detrimental to the floodplain between the site and the river and consequently potentially to Cookham and those of its residents living in the floodplain. It is important that the land be left to absorb rainfall as part of the natural defences against flooding. The development is likely to cause a serious

- reduction in the ability of the land by Marlow to absorb rainfall and protect downstream Cookham. This is particularly so in view of the role already played by the areas of water to the south of the site which are used to absorb water from the area and estate around the Crowne Plaza Hotel.
- 9. Finally, we note that a very large planning application at Bray Studios has just been permitted by the Royal Borough of Windsor and Maidenhead. We also note that an even larger planning application has just been made by Pinewood Studios at Iver Heath. While we appreciate the argument that a cluster of such studios may assist the development of talent and expertise in this country and this area, we are compelled to the view that a third such development would represent overprovision of such facilities, leading eventually to its decline and the need to redevelop the site. Since we would oppose such redevelopment, we are also opposed to any development which might have that outcome.

Though it is not our direct concern, we are concerned about what seems to us must be the significant loss of amenity for the homes already within the proposed site, including noise, traffic, overlooking/loss of privacy, loss of open space and so on.

Regrettably, we do not believe that these objections can be removed by cosmetic or minor changes to the proposed development. Accordingly, we object to this or any similar development on this site.

Consultation Responses

Internal BC Responses:

BC Environmental Protection (Contaminated Land):

I can confirm that the investigations that have been undertaken to date are sufficient and that the proposed remediation strategy is considered to be acceptable.

It would be prudent to request that the Ground Gas Design Report be submitted for review once it has been prepared.

I would recommend that the following conditions be applied to any permission granted:

1. Following completion of measures identified in the approved remediation scheme and prior to the first use or occupation of the development, a verification report that demonstrates the effectiveness of the remediation carried out must be produced together with any necessary monitoring and maintenance programme and copies of any waste transfer notes relating to exported and imported soils shall be submitted to the Local Planning Authority for approval. The approved monitoring and maintenance programme shall be implemented.

Reason: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors.

The above must be undertaken in accordance with the Environment Agency's 'Land contamination risk management (LCRM)' guidance, available online at https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm.

2. Reporting of Unexpected Contamination: In the event that contamination is found at any time when carrying out the approved development that was not previously identified it must be reported in writing immediately to the Local Planning Authority. An investigation and risk assessment must be undertaken, and where remediation is necessary a remediation scheme must be prepared, which is subject to the approval in writing of the Local Planning Authority. Following completion of measures identified in the approved remediation scheme a verification report must be prepared, which is subject to the approval in writing of the Local Planning Authority.

Reason: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors.

BC Environmental Protection (Control of Pollution):

The proposed development has been considered by the Environmental Protection team who have carried out this consultation

Noise and light disturbance, as well as the effect on air quality has been considered.

In terms of air quality effect, we accept the developer's assessment of the potential effects of the development on local air quality and would support their intention to contribute to projects that will assist with reducing emissions. We also support the intention of the developer to install active electric vehicle charging points for 20% of parking spaces, with the remaining 80% of parking spaces having passive electric vehicle charging points that will allow for 100% of parking spaces to benefit from electric vehicle charging points if required in the future. The electric vehicle charging points should be conditioned.

The development's proposed lighting scheme and strategy has been designed to minimise light spill and would be deemed acceptable. It is not expected to cause any disturbance to neighbouring residents.

Noise from the development, particularly noise associated with filming, set construction and plant, has the greatest potential impact on neighbouring properties. A lot of these noise sources are unknown or variable in nature. To protect the amenity of residents in the vicinity, a noise management plan should be submitted prior to the occupation of the site, and details of plant should be submitted for planning approval prior to its installation.

Environmental Health therefore objects unless the following conditions are imposed.

No Further Plant/Machinery

Notwithstanding the provisions of Article 3 of the Town & Country Planning (General Permitted Development) Order 1995 (as amended), no further plant or machinery shall be erected on the site under or in accordance with Part 8 of Schedule 2 to that Order without planning permission from the Local Planning Authority. Reason.

To enable the Local Planning Authority to consider the likely impact of the new plant or machinery on the amenities of nearby residential properties.

Control of Noise

No development shall take place before a noise management plan, incorporating a plan for both the construction and operational phase, has been submitted to and approved in writing by the Local Planning Authority which specifies the provisions to be made for the control of noise emanating from the site. Thereafter, the use shall comply with the approved scheme.

Reason.

To protect the occupants of nearby residential properties from noise disturbance.

Electric Vehicle Charging Points

Prior to the occupation of the development hereby permitted, 20% of parking spaces must be provided with an electric vehicle charging point with a minimum rating of 32amp. The remaining parking spaces must be provided with passive installation of electric vehicle charging points which will allow for 100% provision of electric vehicle charging points in future if the need arises.

Reason – to comply with the air quality SPD and, to reduce the carbon emissions and the impact on the health of Nitrogen Dioxide emissions from the development.

This memo does not include comments relating to air quality and contaminated land, where relevant, these comments will be provided separately.

BC Heritage:

Heritage Assets Affected

Settings of:

- Westhorpe House Grade II listed building.
- Corner Cottage Grade II listed building
- Little Marlow Conservation Area

The 36-hectare site is located to the east of the A404 and on the south side of the Marlow Road. The site is situated on the former parkland historically associated with, and in the setting of, Westhorpe House; a prestigious listed building (Grade II) immediately outside the site boundaries but effectively surrounded by it on 3 sides.

Section 5, Fig 5.29 in the D&AS indicates that the Zone of Theoretical Visibility extends as far as central/eastern Marlow to the west, Bourne End and Well End to the east, and Cookham Dean/Winter Hill, in the adjacent District to the south, covering multiple heritage assets including listed buildings, conservation areas and non-designated heritage assets. The effect on the settings of many of these heritage assets will be neutral/negligible. However, as discussed in the Heritage Statement, the three designated heritage assets most affected by the proposal are: Westhorpe House; Corner Cottage, a Grade II listed building which dates from the 17th century lies just over 100m to the south, and approximately 500m to the east is Little Marlow Conservation Area.

Designed parks and gardens can also be considered non-designated heritage assets. It is acknowledged that the character of Westhorpe House's parkland has been compromised during the C20 and is unlikely to meet the Bucks local listing criteria.

Heritage Assessment

The proposals do not physically impact the built fabric of either listed buildings or the designated conservation area. The heritage assessment therefore relates to whether the application affects the significance of the designated heritage assets through development in their settings.

Westhorpe House (Grade II listed building)

Westhorpe House and the attached service wing were built in the early 1700s with C19 and C20 alterations and extensions. It was built by James Chase, (c. 1650 – 23 June 1721), who succeeded his father as Court Apothecary during the reigns of King William III, Queen Anne and King George I. He was a Whig politician and elected as Member of Parliament for Marlow between 1690 to 1710. The house, a very early example of the Palladian classical style in Buckinghamshire, and indeed the whole of England, is a property of distinction, and commensurate with his standing in society.

The principal elevation is well proportioned and sophisticated. The rendered 7 bay, three storey façade articulated by the shallow plinth, first floor band course and moulded cornice with stone balustrade above, partly masking the roof. The wider, outer bays have flanking pilasters. The central 3-bay arcaded portico and single-storey bowed projection on the garden front were added in the early 19th century.

The service wing attached to rear left corner is 2 storeys and also colour washed with hipped tile roof course. A substantial, modern wing was built at the rear in the 1980s and is not of architectural or historic importance.

Westhorpe House evolved over the years to form the centrepiece of the extensive surrounding estate. As befitted an owner of eminence and means, over the C18 and C19 centuries the estate grew to incorporate the pleasure gardens immediately surrounding the house, a lodge and an area of parkland to the north through which the carriage way crossed to continue onto the Marlow Road, orchards and meadows, walled garden, water course, dovecote and associated farmland and buildings.

A decline in fortunes during in the 20th century saw the estate fragmented and some deterioration of the historic environment. The house fell into a semi-derelict condition

during the 1950s and the large modern extension was permitted in the 1980s, in part to make it viable for use as an office headquarters. More recently, the house has been subdivided into self-contained apartments.

The building's significance was recognised in 1955 when it was added to the national list of buildings of architectural and historical importance. The submitted Heritage Statement suggests that the building now falls short of its listed status and that for the purposes of the application it should be downgraded from national (high) importance to medium. There would not appear to have been an application to de-list the building and in my opinion, such an application would not be successful in view of the building's surviving historical and architectural interest.

Furthermore, its significance is enhanced by the contribution of the surrounding estate to its setting. While still comprising open land, fields, and water courses, it is acknowledged that gravel extraction and subsequent landfill operations have impacted on the character of the parkland and the park home site is incongruous within the walled garden. The parkland trees have been removed to a large extent. Unmanaged ornamental planting has grown so that only glimpses of the house are gained from outside the immediate gardens. The A404 impinges on the western boundary and that the lodge was lost to the construction of the Marlow junction. Lack of environmental management has created areas of neglected landscape which require improvement but presumably the land should have been restored on cessation of the mineral operations. However, the parkland remains undeveloped open land and the ability to appreciate the house and the general structure of the landscape remains intact, despite the house now being divorced in ownership from its wider estate. In views from public vantage points from Winter Hill and the public footpath network, it remains legible as the principle building in the landscape which is largely devoid of unrelated built form and its significance is enhanced by its former associated buildings and structures, parkland remnants, the drive approach and entrance triangle, and the open character of the wider landscape.

Corners Cottage (Grade II listed)

The cottage is a timber frame with whitewashed render infill panels and old tile roof which dates from the C17 with C20 extension. Its significance relates to its vernacular construction, use of traditional local materials and to the quality of its incidental aesthetic appearance. While the development is not on land historically associated with the building, the building has incidental benefit from the rural ambiance and countryside which defines its wider setting. Again, the Heritage Statement suggests that the building is not particularly remarkable; however, the building was listed in 1987 at Grade II which identifies it of (high) national significance.

Little Marlow Conservation Area (LMCA) – Designated Heritage Asset
Little Marlow is an attractive, compact village that extends south from the Marlow - Bourne
End road, to the stream running parallel to the River Thames. The parish church and Manor
House form the focus of the village and there are 20 listed buildings within the settlement.
Fields and arable land surround the village and it remains remarkably coherent with little
modern development within or around it. The village is regarded as one of the most

attractive in the area and it became one of the first conservation areas to be designated by the council in 1970.

The Development Proposals

The proposed development of the film studios extends to nearly 170,000 sq m and comprises large scale blocks of built form on land to the north Westhorpe House and wrap around the building to the south and west. The development would be built over the former parkland which was historically associated with the house. The buildings in closest proximity to Westhorpe House include workshop/offices 30m to the north of the site boundary, the Studio Hub to the northeast, and the Culture and Skills Academy and the Backlot are located to the west and southwest respectively. A large roundabout provides access to the site and the existing northern boundary vegetation is removed. The existing driveway becomes the main spine road through the site. It is increased in width to 7-8m, extends around the entrance triangle to Westhorpe House and continues south across a new bridge over the water course to connect through to the Backlot. The development of Plot 2a, to the east of Westhorpe House and closest to Corners Cottage, comprises a community building, further workshops/offices, a multi-story carpark and sound stage.

Impact of the Development on the settings of the Heritage Assets

Westhorpe House

The site surrounding Westhorpe House has long been associated with the property since its construction in the early C18th. Although the ownership of the park is now divorced from the house and the parkland character diminished, the site makes an important contributes to the significance of the building. It forms a spacious, open setting which allows the building to be appreciated as an important asset at the centre of a historic estate and the long driveway approach heightens the experience. Issues:

1. Amount and disposition of development on the listed building's former parkland

Para 2.4.1 of The Little Marlow Gravel Pits SPD (2002) describes the 1st Ed OS Plan which illustrated the area between 1882-83 as 'highlighting the strong historic associations. The key landscape features of this time include the parkland settings of the Manor House and Westhorpe House. Westhorpe House, in particular, had a strong parkland setting with the watercourse being an important feature of this landscape. Only remnant areas of this landscape remain with the northern part of the grounds lost and being subject to gravel extraction and landfill.

Para 2.4.2 continues: 'A strong network of hedgerow and tree belts existed at this time. Many of these landscape elements remain today showing an historic association with past land uses. The general structure of this landscape has remained intact with much of the gravel workings respecting the historic field pattern'.

This strong relationship of the existing buildings to historic landscape features and the parkland was obviously extant in 2002 and much of this framework remains legible today. In comparison, the proposed development would encircle Westhorpe House on three sides and the proposed dispersal of development would cover almost the entirety of its former

parkland in built form. This would permanently and irrevocably change the character of the open landscape of the wider setting of the listed building. The legibility and structure of the historic environment would be eradicated.

The existing landscape is potentially capable of restoration to a more pastoral appearance, and indeed, is likely to be enhanced if the site were developed in accordance with Policy RUR4. Consequently, the development of this amount, scale and density of built form would adversely affect the significance of Westhorpe House.

2. Scale and Massing of proposed buildings

While an attempt has been made to mitigate the impact of the development by placing the 'smallest' buildings at the edges, the scale of the individual buildings is substantial. The 4 workshop/offices adjacent to the southern boundary of plot 3 range from 55m to 61m in length and are 15m in height. Soundstages are of an even more considerable scale (the sound stage on plot 2a is 73m x 50m and 21m in height to the PV panels on the roof). As the ground contamination requires an appropriate response, the buildings are likely to be built up on platforms, increasing the height further.

The scale of even the small buildings dwarfs the scale of Westhorpe House which in most scenarios would be considered a sizeable building: the main elevation extends to 22m and the height to the ridge is 15m but this scale is overwhelmed by the sheer size, number and dispersal of the proposed buildings on site. As such, the legibility of the building being the centrepiece of the estate surrounded by open land would be lost. Instead, the placement and orientation of buildings and roads seems intent on ignoring the existing buildings rather than incorporating them positively into proposals.

3. Building Design and Function

Two substantial, landmark buildings within the Studio complex are located within close proximity to Westhorpe House. The Studio Hub, described as 'the heart of the scheme', is located immediately beyond the listed building's garden curtilage and is designed as the focal point of the development with a deliberately eye-catching scale and design. The Culture and Skills Academy, aligned with the house's garden front also utilises an arresting design. Rather than 'highlighting the assets significance within the landscape', they will distract attention away from Westhorpe House. The location, scale and design of these buildings challenge the prominence and primacy of the listed building as the principle building within its the landscape, eroding its significance.

The description and plan of Plot 5 as an open green area screened by planting (pg 286 DAS) conflicts with information about the backlot (pg 121 DAS). This confirms that 'outdoor sets will generally be under 15m...occasionally some productions might require higher structures...'. The image at Fig 6.5 (pg 89 DAS) indicates that taller cranes, scaffolding and flood lighting are likely to be required. It is accepted that the sets are temporary in nature, but no time periods are specified. While on site, the sets are potentially of such a scale they will further detract from the setting of the listed building.

The northern boundary and access into the site have been redesigned on the amended masterplan.

The entrance into the site is dominated by a highway-engineered roundabout which, together with the loss of the existing boundary tree belt, the lack of space for any meaningful replacement landscape, the proposed northern boundary security fence up to 3m in height and the almost continuous frontage of 15m high office/workshops, further exacerbates the visual impact of the built form. The scale, density and form of such development is utterly incongruous as the approach to a sizable country house and will be perceived as urban sprawl of Marlow and encroachment into the adjacent countryside.

4. Visual Impact of the development

The Heritage Statement emphasises the screening effect of the landscape buffer around the pleasure garden which defines Westhorpe House's immediate setting. This situation largely arises through lack of management of the trees and woodland: historic maps show that the planting was historically more open, allowing views across the parkland from the house and gardens.

The lack of inter-visibility between the listed building and the surrounding development provided by this screening is stressed, despite Historic England advice and case law confirming the importance attached to setting of a building is not solely contingent on its visibility from public vantage points. It should also be borne in mind that the existing landscaping around the house includes mature trees; I will defer to the council's tree officer on their life expectancy, but landscaping is not necessarily permanent and there will be inevitable changes to the density of the planting over time, as trees mature and die back. This screening is also dependant on landscaping that is not within the site boundaries and therefore beyond the applicant's control.

At pre-application stage, sections through the site were requested to demonstrate the extent that the development would be seen from the gardens and from within the house. The site section B-B (Fig 6.52 in the D&AS) is diagrammatic and takes a favourable section. As such, it does not confirm that the development will not be apparent in views from the house or within the immediate gardens setting of the house. Nevertheless, as shown in the photomontages for Viewpoints 14 and 15 in the LVIA, development will be clearly and dramatically visible from the entrance triangle adjacent to the gardens.

The density of plots 1,2a, 2b and 3 leaves little spacing between blocks or around the edges for meaningful landscaping. New landscaping will take time to establish as indicated on pg 292 of the DAS which illustrates anticipated tree growth. Large standard trees are expected to reach a height of 10m within a 15-year period. The smaller workshop/office buildings are 15m in height and the Studio Hub and proposed sound stages are even taller. Consequently, even where trees are incorporated into the landscape masterplan, the planting will take a considerable period to reach maturity and provide screening.

5. Increased activity and changes to the experience within the setting

The experience of approaching the house along the line of its historic driveway will also be radically changed. The existing trees and gateway would be replaced on the northern boundary with a dominant, highway-engineered roundabout, a 2.4m-3m high security fence

and an almost continuous frontage of 15m high office/workshops. Whereas the existing long driveway through open land increases the anticipation of arriving at an important country house, the approach experience is along the main road (8.9m wide at the entrance: Fig 8.52, pg 278 DAS) through the studio complex with substantial buildings lining both sides of the route. It is acknowledged that the alignment of the historic drive will remain and that a landscape buffer is proposed on either side of the road but the roundabout, scale of the buildings and the high security fencing are uncharacteristic of the established context.

The increased on-site activity and the noise, lighting and movement generated, will also detrimentally impact the building's setting. The number of vehicle movements will increase dramatically. The road linking plots 4 and 5 is designed to be wide enough for two 16.5m articulated lorries to pass in an area where there is currently no vehicular access. The noise and movement is likely to affect the amenity of the pleasure gardens.

The cumulative effect of the development therefore harms the significance of Westhorpe House from its position as the centrepiece of its estate by the construction of landmark buildings and substantial blocks of development on its former parkland, overwhelming the listed building's wider setting and erasing the legibility of the historic environment. It is unfortunate that Westhorpe House is not within the ownership of the applicant and that incorporating the building (together with associated features including the coach house and walled garden) into the development proposals is not achievable. Had the film studios incorporated the listed building positively within the proposals, the impact could have been mitigated to a degree: the house could have been designed as the focal point of the development, continuing the role it enjoyed for over three centuries. Performing the function of the Studio Hub could have negated the requirement for the landmark building in close vicinity and the Cultural and Arts Centre reflected the design of traditional estate buildings.

Nonetheless, it is accepted that there has been some mitigation to reduce the impact and that the existing character of the landscape has been degraded to a degree. Consequently, the harm arising would be less than substantial. This is the same conclusion reached in the Heritage Statement which I agree with.

Para 199 NPPF differentiates between substantial harm, total loss and less than substantial harm to the significance of a heritage asset. It does not seek to elicit a sliding scale of harm within each categories.

However, the Heritage Statement, while accepting that the proposals cause less than substantial harm, downplays the magnitude of harm is in the light of the above issues. Using the same methodology for the impact as set out in the ES at Chapter 15, the effect of the development would be Moderate/Large in value. This arises as the sensitivity of the statutory Grade II listed building is of High importance. By reducing the impact magnitude /change to Moderate Adverse rather than Major Adverse as a consequence of the extant character/mitigation, the Significance of the Effect Matrix (Table 15.5) assesses a Moderate/Large Impact. Para 15.30 confirms the effects would be significant. On this basis, for the purposes of para 202 of the NPPF, the impact of the proposals on the significance of the setting of Westhorpe House would be Less than Substantial: High.

Corners Cottage

The site is not directly associated with Corner Cottage but provides an incidental tranquil and open setting for this C17th timber framed rural cottage and enjoys the benefits of the rural landscape in its wider setting. The effect of the development will transform this context and urbanise its surroundings, harming the significance of its setting. I agree with the conclusions of the Heritage Statement that the harm would be less than substantial and of a lower magnitude than Westhorpe House.

Little Marlow Conservation Area (LMCA)

LMCA benefits from the fields and countryside that extend from its western boundary, helping reinforce the village character and rural context. Views towards the development in proximity of the LMCA are rendered in Viewpoints N and O in the LVIA. The eastern boundary landscape buffer within the development is only 10m wide including the existing hedgerow (pg 273 DAS) while the existing trees are outside the development boundary and are therefore not within the control of the applicant. I will defer to my landscape and tree colleagues on the adequacy of this proposal, but it does not appear particularly generous for the species of very large trees that would be required to provide meaningful screening to the 16m high buildings plus 3m platform above existing ground levels proposed adjacent to this boundary. Anticipated tree growth of 10m in 15 years means any tree planting would take a significant period before adequate screening would be reached. Softening the visual impact by training plants on wires would offer limited visual mitigation, particularly if brightly coloured cladding is incorporated into the design as illustrated at Fig 7.17 (pg 163 DAS). The blocks of development would be evident above the tree line and visible from public viewpoints in proximity of the conservation area, adversely affecting the character of its setting. I therefore agree with the Heritage Statement that the development would cause less than substantial harm to this designated heritage asset.

Heritage Policy Assessment

The Planning (Listed Building and Conservation Areas) Act 1990

Section 66 of the Planning (Listed Buildings Conservation Areas) Act 1990 places a duty on the LPA to have special regard to the desirability of preserving listed building or their settings or any features of special architectural or historic interest which it possesses. As discussed above, the scale, height amount and dispersion of the development would not preserve the settings of the listed buildings and therefore the proposals fail to comply with section 66 of the Act.

NPPF

Para 199 of the NPPF requires that great weight should be given to the conservation of designated heritage assets. Para 200 confirms that harm to the significance of a designated heritage asset can arise from its alteration or destruction, or from development within its setting. Any harm should require clear and convincing justification. The harm would be less than substantial and of a high magnitude in relation to the setting of Westhorpe House. The

impact would be less than substantial but of a lower magnitude to the settings of Corner Cottage and LMCA.

Para 202 requires that this harm should be outweighed by public benefits. Appendix 1A highlights the economic benefit of the film industry on heritage assets in general. However, the film studios would contribute nothing directly to the identified heritage assets. Indeed, far from enhancing their presentation, their settings would be permanently and profoundly altered by the amount, scale and appearance of the development.

Wycombe District Local Plan 2019

Policy DM31 of Wycombe District Local Plan states that all development is required to conserve and where possible enhance the historic environment. Bullet 5 requires that where development would lead to less than substantial harm to the significance of a designated heritage asset, consent will be refused unless this harm is outweighed by the public benefits of the proposal, including securing its optimum viable use.

Table ESA 18: Summary of Likely Significant Effects, Mitigation Measures and Likely Residual Effects (Historic Environment) (pg 63, Chapter 15 of the Addendum to the Environmental Statement) confirms that in the applicant's opinion the impact of the development on the Historic Environment causes less than substantial harm. Similarly, my assessment of the proposals as stated above remains that the proposal causes less than substantial harm to the setting of three designated heritage assets and in accordance with this policy, the harm should be outweighed by the public benefits including, where appropriate, securing its optimum viable use, in the planning balance.

RUR4 – Little Marlow Lakes Country Park

This policy confirms that 'Planning permission will not be granted for development within the Country Park that that has an adverse effect upon the amenities or setting {of}adjoining conservation areas, or listed buildings'.

As discussed above, the impact of the development fundamentally changes the character of the settings of the designated heritage assets and causes harm to their significance. The application is therefore contrary to this policy.

Conclusion

For the reasons given above, the application does not comply with the Act, relevant heritage policy and advice. It is recommended for refusal on heritage grounds unless the harm is outweighed by the public benefits of the proposal including, where appropriate, securing its optimum viable use..

Appendix 1a and 1b (The Benefits of New Studios on Local Heritage and Landscape) of the Planning Statement Addendum highlights the income and wider public interest generated in the historic environment as a consequence of filming at heritage sites. While this is of public benefit, the income is not secured; at least a proportion of the anticipated investment could be generated from other existing or proposed sites; and the optimum use of the site could avoid harm to the assets. Presumably this information was also taken into account when

Table ESA 18 was updated by the applicants. Consequently, the application is recommended for refusal on heritage grounds unless the identified harm to the heritage assets is outweighed by the public benefits of the proposal, including, where appropriate, securing the site's optimum viable use.

BC Highways:

Latest Comments:

The Highway Authority (HA) has provided a number of previous consultation responses in relation to this application, the latest being in a letter dated 11th August 2023 that responded to information contained within the second Transport Assessment Addendum (TAA2). The applicant has now submitted a Supplementary Transport Assessment (STA) that seeks to deal with the issues that were not fully covered within TAA2.

To confirm, the issues that were considered to be outstanding following the review of the TAA2 documents related to traffic impact, car parking, layout, sustainable travel, connectivity and mitigation. The information contained within the STA documents seeks to deal with some of these issues and I will therefore provide comments on that information below.

Paragraph 1.3 of the STA confirms that the document updates and provides additional information with respect to transport and presents the outputs of additional technical work and supplementary traffic modelling in support of the development proposals. Conformation of what the STA provides is as follows:

- Additional information to support the internal layout design.
- An updated Travel Plan.
- Updates to the proposed improvements for pedestrians and cyclists including the completed WCHAR assessment.
- An explanation of how offsite on-street parking will be monitored and the measures taken if there is an increase in on-street parking associated with the proposed development.
- An update on 2023 traffic surveys undertaken.
- Presentation of the updated modelling of the site access and proposed improvements to the Westhorpe Interchange using the approved VISSIM model.
- Details of the modelling of the identified junctions on the wider highway network in Marlow and Bourne End, and on the A404 (M40 Junction 4 Handy Cross, Bisham Roundabout).
- Details of the assessment of identified areas on the wider highway network.

I will now provide comments on the specific detail contained within the STA and I will include these under the same headings used in the document for ease of reference.

Internal Layout

The internal layout has been previously discussed with the applicant and comments relating to the latest site layout, included in TAA2, and the associated tracking provided are in included

in my response to TAA2. In that previous response I raised a number of concerns relating to the tracking of vehicles through the site and how vehicle movements within the site would be managed.

In paragraph 1.11 of the STA the applicant has confirmed the following:

"The position with respect to the internal layout of the Site, as set out in Section 1 of TAA2, remains current and is materially unchanged. This STA does not therefore seek to replicate that information other than to reiterate that the internal layout of the site will remain within the private ownership and control of the Applicant."

The HA has previously confirmed its position in relation to the site remaining in private ownership and still considered that the site layout should be safe and suitable. This is supported by paragraph 130 of the NPPF, which states the following:

- 130. Planning policies and decisions should ensure that developments:
 - a) will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;
 - are visually attractive as a result of good architecture, layout and appropriate and effective landscaping;
 - are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities);
 - establish or maintain a strong sense of place, using the arrangement of streets, spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit;
 - e) optimise the potential of the site to accommodate and sustain an appropriate amount and mix of development (including green and other public space) and support local facilities and transport networks; and
 - f) create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users⁴⁹; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience.

As the applicant has confirmed that the internal details submitted have not materially changed when compared to the details submitted as part of TAA2, the HA's comments given in the response to TAA2 remain applicable.

The applicant has provided some additional information on a few of the points raised. The main comment is that the applicant states that a Site Management Plan will be prepared to outline how vehicles are expected to operate whilst on site, including the use of supervised manoeuvres. The HA confirmed that it would expect to see a Site Management Plan to detail how the internal workings of the site will operate, however one is not provided as part of this application. As this is a detailed application, the HA and LPA should have the opportunity to consider this information to ensure that adequate detail is provided and the proposed operation of the site is safe and suitable. Without this information the HA is not in a position to confirm that this is the case.

In paragraph 1.13 of the STA the application refers to comments that they have received from the HA, which were given during a meeting following an initial review of the vehicle tracking details submitted with TAA2. I would just like to cover a few of these points here.

Firstly, the applicant refers to comments made in relation to the ground floor of the western section of the northern car park. The response to TAA2 highlighted that no tracking had been provided for this section of the northern car park, and the applicant has confirmed that this part of the car park is for the electrical substation and a flexible space, therefore it does not accommodate vehicle parking. However, the details of the plan submitted for this part of the car park, shown on drawing number 60654980-ACM-XX-XX-SK-HW-000055, would suggest that vehicles would at least pass through the car park. Details have not been provided to show how this would occur.

Another comment the applicant has responded to relates to the tracking provided for the ground floor of the southern car park. The previous plans submitted did not show how the two spaces adjacent to the Car Park Pavilion would be accessed, with the drawing also showing that the Pavilion door opened outwards into the car park. The latest version of plan number 60654980-ACM-XX-XX-SK-HW-000055 Rev P03, shows the door that did open into the car park removed. The plan also provides tracking of vehicles accessing the places adjacent to the Pavilion, however the tracking of the standard parking space in this location appears to show the vehicle only being able to park right up against the southern edge of the parking space, resulting in possible difficulties for people to utilise the doors on whichever side of the car is located on that side of the parking space. It is evident that this part of the car park may require further adjustment.

One further point raised in the HA comments for TAA2 related to the tracking of an HGV exiting the site and onto the new roundabout access junction which showed that an HGV would accommodate much of the carriageway through the bend leading to the roundabout, which would have the potential to impact on the ability of other vehicles to utilise the full two lane approach. There was concern that this had not been taken into account in the VISSIM modelling as the modelling appeared to include vehicles as PCU's rather than showing cars and HGV's as different size vehicles. It is evident in the latest submissions that the applicant has now revised the modelling to show cars and HGV's as different vehicles, thereby taking into account the different impact that a larger HGV may have on the network.

When taking the above comments into account it is evident that sufficient detail has not been submitted at this stage to allow the HA to determine that the internal site layout is safe and suitable.

Sustainable Travel Strategy

Travel Plan

It is confirmed within the STA that the Travel Plan submitted in May 22 as part of the original application information has been updated to reflect ongoing consultation with the Highway Authority and refinement of the Sustainable Transport Strategy (STS) for the site. The updated

TP has been sent to Travel Planning colleagues in the Council for comment they have provided their response, which is appended to this letter.

The comments conclude that the Travel Plan is well thought out with some good detail, however it is evident that there are a number of amendments and additional information requested in the review which are important to ensure that the Travel Plan is effective.

Public Transport

The bus service improvement information contained within the STA is consistent with that previously included within TAA2. The submitted information has been considered by the Council's Public Transport section and they have provided comments, which I will summarise below:

- "In principle, the suggested service provision on the main Marlow-High Wycombe service would provide a good level of connectivity to and from the site. This links to High Wycombe town centre, High Wycombe Coachway (where it can meet coaches from Oxford, Heathrow, Gatwick and Central London) and Maidenhead. The applicant should have considered whether the addition of a stop at High Wycombe railway station would be worth providing. The indicative timetable would appear to allow time for this.
- There are concerns that the running time of 35-minutes between High Wycombe and Maidenhead is somewhat optimistic, in particular the running time between High Wycombe and Marlow.
- Where the service will specifically stop is to be determined, but it is assumed from the information provided that this will be limited stop. The submitted information does not provide detail on the nature of the technology and decision making that will dictate the variable routing between Marlow and Maidenhead. There is insufficient information in order to confirm whether the service will be delivered directly by the development in conjunction with an operator rather than through contribution to the Council and the time period for this commitment. The inference is that this will be provided in perpetuity.
- It is not evident that synergies with the existing bus market have been explored to avoid duplicating resource.
- Similarly the provision of a local route within Marlow and Bourne End is to be welcomed, however it is unclear from the information submitted as to whether this can, in time, replace the existing Marlow town bus service.

It is evident form the comments above that, based on the information submitted to date, the Council's Public Transport Section have raised a number of issues that are not addressed in the information submitted and therefore they cannot confirm that they are satisfied with the public transport improvements being proposed as part of this application.

Operational Management Plan

The STA includes a proposal by the applicant to provide a Operational Management Plan which will set out how the "Managed" traffic assessment undertaken in the transport work submitted to date will be achieved through operational management. There does not appear to be any detail of this Plan and I am not aware of the detail being provided previously. At this stage I am therefore unable to comment on the measures that the applicant intends to include and their potential effectiveness.

Active Travel Strategy

I have previously provided comments on the Active Travel Strategy proposed by the applicants in my responses to the original TA, the TAA and the TAA2. My comments in relation to TAA2 detailed my considerations of the Pedestrian and Cycle Audit previously carried out by the applicant. It is evident from my previous comments that the Audit carried out by the applicant lacked the detail necessary in order to the Highway Authority (HA) to determine that the proposed pedestrian and cycle routes were adequate and provided safe and suitable links between the site and the surrounding residential areas.

The applicant has therefore carried out a further assessment of the pedestrian and cycle routes called a 'Walking Cycling and Horse-Riding Assessment and Review' (WCHAR), in accordance with the requirements set out in the Design Manual for Roads and Bridges document GG 142.

The WCHAR assessment has been reviewed and comments detailing the HA's considerations are included below. The full WCHAR assessment is included in Appendix E of the STA.

Comments on WCHAR Assessment

As per the requirements of the GG 142 document, collision data needs to be investigated as part of assessment and this should include a review of personal collision data for the latest available period and a minimum of three years needs to be studied to identify any collision cluster sites and trends that can influence or impact the highway scheme.

The applicant has used Crashmap to review the data for the last five years and has stated that their analysis showed that there were only 22 collisions in the identified study area that resulted in 17 slight injuries and five serious injuries. Five of these collisions however involved cyclists.

Paragraph 2.6 of the WCHAR assessment states:

"It should be noted that at the request of NH / BC, a further investigation into collision data has been undertaken and is provided separately to this audit to support the application".

The applicant has carried out an assessment of PIC data for the three main junctions on the Strategic Road Network in the 'Briefing Note: Strategic Road Network (SRN) Junctions – Personal Injury Accident Analysis' document in Appendix M of the STA and this includes the Westhorpe Interchange. The study period covered is from January 2015 to December 2021 with the study area confirmed in Figure 3 on page 5 of the Briefing Note, included below for confirmation.

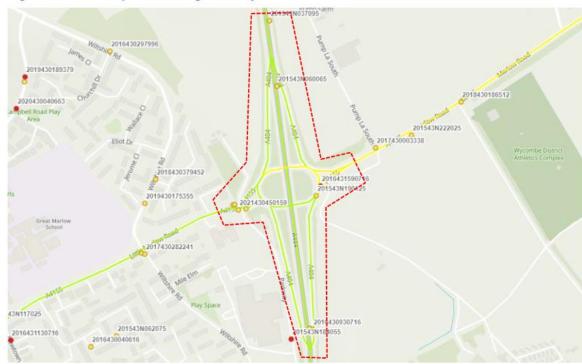


Figure 3: Westhorpe Interchange – Study Area

During the seven year period 10 PIA's were noted at the junction of which nine were categorised as slight and one serious. The serious collision occurred in 2016 and was a shunt type collision.

The review of collision data does not appear to demonstrate that there is any serious collision cluster in the last five years in the vicinity of the site or the Westhorpe Interchange.

Multimodal Transport Services and Interchange Information

The WCHAR assessment states that the nearest existing bus stops are located around 430 metres east of the Site access on the A4155 Marlow Road at Winchbottom Lane. However, it is understood that these stops are served by infrequent bus services only. The nearest stops with regular services are located 700m from the site at Wiltshire Road. These stops are served by the Arriva Buses 800/850 route between High Wycombe, Marlow, Henley, and Reading

which operates on a weekday 20-minute frequency, Saturdays at a 30-minute frequency, and Sundays at an hourly frequency.

The CIHT 'Buses in Urban Developments' (2018) provides guidance on the recommended maximum walking distance to bus stops. The guidance recommends that for 'core bus corridors with two or more high-frequency services' the maximum recommended distance is 500m and for 'less frequent routes' the maximum recommended distance is 300m.

It is to be noted that both these bus stops fall outside the desired walking range and have been measured from the proposed site access. Although not mentioned in the WCHAR assessment, the HA is aware that a new bus interchange is proposed as part of the proposed development, which is to be located at the Entrance Square. The proposed bus interchange will result in bus stops serving the site that are within a reasonable walking distance of the majority of the site.

Marlow Railway Station is located 1.8km from the site. Four routes have been investigated for cyclists but other than the plans showing the improvements on Westhorpe Interchange junction seeking to make the route attractive for cyclists, the proposals for all three remaining routes appear to have been identified as opportunities that can be implemented either in the medium term or by the applicant providing financial contributions for the Council to carry out improvements. The applicant has not defined a time period for the 'medium term', therefore it is not known if and when these proposals identified as 'opportunities' could be delivered. The HA would also require the applicant to carry out any highway works to deliver any identified opportunities rather than the applicant providing a contribution, due to the risk involved to the Council.

Bourne End station is approx. 3.8km from the site access. However, no information has been provided in terms of the attractiveness of the existing route for cyclists traveling between the site and Bourne End station. It is to be noted that this is an important interchange as people from Marlow will have to change train here if they want to travel to Maidenhead and further afield as the Marlow line is a single track line operating only between Marlow and Maidenhead.

Additionally, at the heart of the National Planning Policy Framework is a presumption in favour of sustainable development (paragraph 11). The NPPF states that decisions should take account of whether opportunities for sustainable transport modes have been taken up and whether safe and suitable access to the site can be achieved for all people (paragraph 110). Developments should also be located and designed where practical to give priority to pedestrian and cycle movements, and have access to high quality public transport facilities (paragraph 112)

In summary, the proposed development is not providing adequate improvements in order to exploit opportunities for the use of sustainable transport modes. The site is reliant primarily on the pedestrian/cycle route via Westhorpe, the improvements to which are yet to be agreed with NH and confirmed to be deliverable. Even if it were deliverable, the lack of

certainty that additional routes for all users to ensure the site is permeable and well connected given its size call in to question the sustainability of the site and the prospects of it being able to meet its mode shift aspirations.

Trip Generators

GG 142 Walking, cycling and horse-riding assessment and review guidelines require key trip generators and local amenities to be identified to identify key desire lines for pedestrians, cyclists and equestrians and requires assessments to also include future committed development, including any improvements to multi modal transport services, interchanges and facilities. The applicant has carried out this analysis and has predicted that the highest proportion of trips would route westbound from the site via the Westhorpe Interchange, with the remaining trips routing to Marlow via Volvo footbridge and/or the New Link through Fieldhouse Lane. There are also a proportion of trips that have been forecasted to route towards the east from the site via the A4155.

Para 2.22 of the WCHAR assessment states:

"Through the improvements that will be proposed to the west of the site cyclists will either choose to route via Fieldhouse Lane, Volvo Footbridge or via Westhorpe Interchange depending on whether the best facilities and the safest route are provided."

However, the applicant has acknowledged that any improvements to make a connection to Fieldhouse Lane will require third party land and there is no clarity if and when this land can be secured for this connection to be made in future.

Site Visit

The WCHAR study area, as shown below, was agreed with NH and BC in a meeting dated 20^{th} July 2023.

Key
Ste Location
Route 1
Route 2
Route 3
Route 3 Alternative Routing
Route 4

0 250 500 m
© OpenStreetMap contributors

Figure 1.1: Agreed WCHAR Study Area

There were 4 primary routes identified to investigate existing walking and cycling conditions in order to identify the opportunities for improvements. The study routes are confirmed below;

- 1. Starting from Marlow Station via Fieldhouse Lane to the site
- 2. Through application site (PRoW LMA/20/1) via Pound Lane and Church Lane towards Bourne End
- 3. A404 Footbridge to Town Centre
- 4. Westhorpe Interchange and Marlow Road (A4155) to Town Centre

The site visit was conducted on 1st August 2023 and took the form of the assessors walking along the identified pedestrian, cycle and equestrian facilities located within the agreed scoping area of visit.

Paragraph 2.24 of the WCHAR assessment summarises a number of key findings which were concluded from the site visit. These findings are as follows:

- Significant peak period cycle and pedestrian usage of the A4155 within Marlow with sufficient infrastructure to support pedestrian and cyclist movements. This provides a distributor route with connections to wider pedestrian facilities and to Marlow Town Centre.
- The experience of the assessors crossing the Westhorpe Interchange junction was that it was unpleasant and difficult to cross due to high traffic flows. Therefore,

- improvements would be required to enhance the experience of pedestrians and cyclists using this junction.
- The PROW route through the site was found to be a generally pleasant route with connections to wider pedestrian facilities to the east of the site. However improvements would be required to improve the safety of the route at night for both pedestrians and cyclists. Similar observations can be made for the section of Fieldhouse Lane link adjacent to the A404.
- No evidence of horse riders using the existing network in the vicinity of the site.

Existing Pedestrian, Cyclist and Equestrian Facilities

From Marlow Station and Fieldhouse Lane to the site

Paragraph 2.26 of the WCHAR assessment provides a description of the route, which is as follows:

"Starting at Marlow station, the route heads onto Station Approach, before turning right onto Fieldhouse Way, which leads to Globe Business Park. Pedestrians then continue along Fieldhouse Way, passing Chives Café, and turn right onto Fieldhouse Lane until reaching the end of the Business Park at the T-junction. Pedestrians then turn right onto Fieldhouse Lane, continuing south underneath the A404 bridge. Upon passing beneath the bridge, an informal crossing point provides access to a car park, in which pedestrians can access a footpath which continues north to the A404 footbridge".

This route has been identified to particularly benefit southern end users of the site, however, the applicant has already confirmed during meetings with the HA and in other documentation submitted with the application that they do not currently have control of sufficient land to provide access to and from the site to the south. While the applicant is not currently able to deliver this route as an access option to the site, for completeness and to assist with any future proposals for this route, the HA will still provide comments on the assessment findings.

The HA has reviewed the comments provided on this route and has the following concerns in relation to this route;

Pedestrian Facilities:

- Reference made to the section of Station Road measuring 42m in length, but no mention of footway width in order to determine whether it is adequate or not.
- Absence of dropped kerbs connecting Station Road to Fieldhouse Lane which can be problem for people with mobility or sight impairments.
- Reference Station Approach where pedestrians were observed utilising the space on the carriageway as a shared surface space. However, while reference is made to it being lightly trafficked during the survey period, the route appears to be subject to on-street parking associated with the dwellings and this could lead to issues to pedestrians utilising this route as a shared surface. No reference is made to the adequacy of the existing footway width. It maybe that

- pedestrians were observed using the carriageway because the footways are inadequate.
- The footway on Fieldhouse Way's southern side providing a connection to Station Road measures 1.5m in width, which is below the requirement of 2m stated in Manual for Streets (MfS). However it has been argued that as per the Inclusive mobility guidelines the minimum width of 1.5m can be regarded as acceptable under most circumstances.
- There is a gap between the connectivity of footways within Globe Business Park with no provision of formal crossing points between the connections. However it has been argued that since Globe Business Park is subject to a 15mph speed limit this should be acceptable and give pedestrians ample of time to cross. With no formal crossing facility (dropped tactile crossing) it is not clear how all pedestrians, including those with mobility and sight issues, are supposed to utilise this route.
- Para 2.35 has already identified that there is no clear route for pedestrians to navigate through Globe Business Park to continue to Fieldhouse Lane which can create confusion for the users. It should be noted that the route through the Globe Business Park is private and does not form part of the adopted public highway. It is not therefore clear how the applicant would guarantee this route is available to access the site. As present it is not considered it can be relied upon to provide access to the application site.
- It has been mentioned that there is a potential to discuss the feasibility of signage in the form of finger posts with the Globe Business Park owners but there is no confirmation from the applicants that this action would be carried out as part of overall site improvements.
- It has been further identified that the pedestrians will be required to navigate car park access junctions where dropped kerbs have not been provided consistently across the approaches. However, it has been argued that this should not cause concern as the speed limits are restricted to 15mph. The HA does not agree with this approach as this is still a safety concern especially for people with mobility issues and equally for visually impaired people.
- The route through the Globe Business Park comes out onto Fieldhouse Lane. The footway width measured on Fieldhouse Lane is also 1.5m but a similar argument has been provided for it meeting the standards in the Inclusive Mobility guidance, consistent with the argument for Fieldhouse Way. However, the environment along Fieldhouse Lane is different as in this location Fieldhouse Lane provides access to a number of industrial units so is more highly trafficked than Fieldhouse Way. Requiring pedestrians to step into the carriageway of Fieldhouse Lane to pass, which may give rise to safety issues due to the restricted footway width, is far from ideal. The applicant should consider this further.
- It has been noted that the footway width reduces further underneath the A404 bridge with a pinch point of 1.42m, which will ultimately lead pedestrians to step out on carriageway. This has been recognised as a safety risk by the applicant and therefore requires addressing.

- Coming out from underneath the footbridge it has been recognised that the visibility can be an issue for both pedestrians and cyclists wanting to cross and join the latter section of the route adjacent to the A404.
- The latter section of the route is mainly rural in nature and despite being sufficient in width lacks in basic infrastructure to make it usable and safe for all users who would want to access this route. As it stands, this section of the route would require improvements. A photo is included below for reference;



Cycling Facilities

- The route for cyclists mirrors that for pedestrians.
- It is noted that no off-carriageway facilities are provided for cyclists along this route. There are no on-carriageway facilities for cyclists either that could make it a safe environment for cycling.
- As a potential improvement for cyclists it has been identified that a one-way narrowing could be introduced in the vicinity of the bridge on Fieldhouse Lane to slow the traffic and provide a segregated facility for pedestrians and cyclists.
- However it appears that this has been stated just as an option with no confirmation as to whether this improvement would be carried out or not.

In summary;

- No comments have been made in terms of the attractiveness of the route.
- No technical information has been provided for improving the footway width beneath the A404 bridge or how any one-way narrowing will be carried out to segregate vehicle route from pedestrians/cyclists.
- There is no guarantee that the third party land passing through the car park to link this route to the site can be secured.
- Part of the highlighted route passes through the Globe Business Park, which
 is a private development. There is no information on how it will be ensured

- that the pedestrians/cyclists associated with the site can use this section of route which is a private area and does not form part of the public highway.
- It has been stated as an option that signage along the route maybe required to guide pedestrians/cyclists. However, no details have been further provided about what signage might be used and where it would be located. It is also not clear how the applicant would provide signage on the private land within the Globe Business Park.
- It is stated that the applicant is committed to upgrading the section of the route adjacent to the A404 in order that it is suitable for both pedestrian and cyclist use in line with LTN1/20, however no details of these improvements have been provided to allow the Council to Condition them as part of any permission.

Through Application Site (PROW LMA/20/1)

Paragraph 2.51 of the WCHAR assessment gives the following description of this route:

"This route begins at the A404 footbridge and continues along a public footpath in a north-eastern direction. Pedestrians / cyclists will cross Pump Lane Street near Westhorpe House before continuing along the footpath to Westhorpe Farm Lane, crossing Westhorpe Farm Lane and continuing on the PROW. Pedestrians will then reach Pound Lane, before routing northbound on Church Road, adjoining Marlow Road (A4155). Pedestrians will then continue eastbound on the A4155, before adjoining back onto client land separated from the carriageway, and finally route back onto the highway at the Marlow Road / Sheepridge Lane roundabout".

It is to be noted that on audit has been carried out for the later section of this route as it is on land not owned by the applicant is currently inaccessible and access is not provided.

Pedestrians Facilities:

- It is stated that the route provided an excellent, pleasurable route along the entirety
 of its length and would likely be the first choice for pedestrians routing from locations
 to the east of the site during daylight hours. The statement relating to daylight hours
 is reflective of the more rural nature of this route, which may not be attractive to users
 during darker winter months.
- It is noted that the beginning of this route has uneven paving, presenting issues for those with mobility issues. This will need to be addressed by the applicant.
- The footpath comprises of variable widths ranging from 2.9m to in excess of 3.2m.
 However, there were sections of the route where overgrown and low hanging
 vegetation might require users to traverse these sections in single file and therefore
 can be a problem for cyclists as well as users with mobility issues. The vegetation
 present also provides screening of the route which may present security issues for
 pedestrians and cyclists using the route.
- No lighting is present on the route.

- The route lacks adequate sign postage to direct the users for the entire length of the route.
- Upon reaching Pound Lane and further north from Church Road, pedestrians will be required to walk on the carriageway which results in them having to negotiate circa 100m of carriageway on Pound Lane and 200m of carriageway on Church Road. This could pose a risk to safety for pedestrians and cyclists in darker winter months.
- It is to be noted that there are parked vehicles in certain sections on Church Road as seen in the Photo below. There is a high likelihood that this can cause a safety concern especially for the users of mobility vehicles and visually impaired people as this route provides a more direct and shorter connection to the A4155.



Cyclists

- The comments raised in relation to pedestrians are also mirrored for cyclists.
- The low hanging vegetation will pose an issue for cyclists, along with the sections of the route that are narrow due to overgrown vegetation.
- The surface of the route needs improving so that it is suitable for cyclists.
- It is noted that cyclists would need to carry their bikes over the wooden stile located
 at the first intersection where the footpath meets Pump Lane Street. This would rely
 on the cyclist being able to do this and may present an issue for those with accessible
 bicycles.
- It is noted that the route is currently classified as a PROW for pedestrians only, so the route would need to be reclassified if cyclists are to use it.

In summary

• It is recognised that this PROW is not currently suitable to provide a safe and suitable route to the site, and therefore will require improvements. However, no plans of these

- improvements have been provided which would allow the Council to secure them as part of any permission.
- It is noted that the applicant states resurfacing of the existing path and the provision of low level lighting will deliver a secure and safe connection at all times. However the HA has concerns over the attractiveness of what is essentially a PROW, which is not overlooked and is remote from built up areas, as a main link to provide safe and suitable access to the site.
- Paragraph 2.69 of the WCHAR assessment states that the cyclists will be required to lift their bikes over a wooden stile located at the first intersection where the footpath meets Pump Lane Street, which may be an issue for those with accessible bikes. Overgrown vegetation will need to be trimmed regularly.
- It has been mentioned in paragraph 2.70 of the WCHAR assessment that the traffic flows are higher on Marlow Road, but the cyclists can use the shared footway/cycleway provided. However, no details about the width of this shared footway/cycleway has been provided. Looking at google earth, it does not appear that the width is sufficient to be used as a shared footway/cycleway.
- The applicants have stated in paragraph 2.72 of the WCHAR assessment that "It is proposed to provide a new pedestrian and cycle route to the east of the site from Little Marlow to the western edge of Bourne End. This will be a segregated pedestrian/cycle route in line with LTN1/20 to be provided across the field to the south of the A4155 Marlow Road. The exact design of this route is to be agreed with Buckinghamshire Council as the local planning and highway authority."
- However there is no clarity on whether this proposal will definitely be carried out or not.

A404 Footbridge to Town Centre

Paragraph 2.73 of the WCHAR assessment gives the following description of this route:

"This route starts with pedestrians traversing the A404 footbridge from the site, before exiting onto The Chase and Wiltshire Road. Pedestrians / cyclists, then continue north on Wiltshire Road, before taking a left turning onto Gunthorpe Road. Continuing west on Gunthorpe Road, pedestrians / cyclists then access Westhorpe Road via a dedicated pedestrian and cyclist cut-through, continuing until reaching the T-junction with Newton Road.

Following this, pedestrians and cyclists route for approximately 20m north, before routing west onto Newfield Road. Upon reaching the western extent of Newfield Road, pedestrians will utilise the passage adjacent to the allotments, continuing until the path merges onto Victoria Road. Continuing, pedestrians will travel along Claremont Road and subsequently Cromwell Gardens, from which a right turning will take them to a network of small footways that lead to a public realm and ultimately the town centre".

It should be noted that while the above route description refers to both pedestrians and cyclists, the Volvo Footbridge does not currently cater for cyclists. Therefore any cyclists

using this route would be required to push their bike up and down stairs and relies on them being physically able to do this. The route is therefore not attractive or convenient for cyclists.

Pedestrian Facilities

- The width of the Volvo Footbridge is 1.8m but the bridge has no ramps and therefore will be an issue for wheelchair users which has been identified as a concern in the audit.
- No footways are present on Wiltshire Road on either side of the carriageways and therefore pedestrians will be required to walk on the carriageway for this section of the route as seen in the photo below. This can cause serious safety concerns for the users with mobility issues especially with parked cars on both sides of the carriageway which will further narrow down the usable width of the carriageway.



- Footways on Gunthorpe Road have been measured as 1.65m and it has been argued that although they do not meet the required standards of 1.8m-2m, the current width should be acceptable due to the residential nature of the street.
- The section of the route passing through Westhorpe Road has also been identified to not benefit from footway provision. However, it has been argued that due to the street being residential in nature and relatively low traffic this should be acceptable.
 It is questionable whether this would be consistent with a safe and suitable route for pedestrians and no further information is included to demonstrate that it is.
- The footpath adjacent to Foxes Piece Allotments also varies in width and has been measured as 1.30m at its narrowest point, thereby creating concerns for the users with mobility issues and may require extra space on footpath. It has also previously been highlighted that this route is not well overlooked due to the high hedge along one side, which could result in security issues for users.
- The footway widths on Cromwell Gardens have also been measured at approximately 1.18m wide and are therefore substandard. However the same argument has been

provided that due to the street being residential in nature and lightly trafficked, the substandard width should not be regarded as major safety issue. As with Westhorpe Road, further information has not been included to demonstrate that this is a safe and suitable route.

Cycling Facilities

- The width of bridge at 1.8m is insufficient for cyclists as the minimum width requirement is 2m.
- It has also been acknowledged that the bridge parapets might not be sufficient for cyclists as well as the lack of a ramp which will make it difficult for cyclists to access the bridge as they will be required to dismount their bikes and carry it across the bridge.
- Two alternative routes have been proposed for cyclists; one route is via Newton Road,
 Dedmere Road and Glade Road and the second route is via joining the northern side
 of the Foxes Piece allotment after turning right at the end of Newton Road and
 subsequently joining Little Marlow Road.
- Footway widths on Newton Road have been measured as 1.5m while the northern end of Dedmere Road has been measured as 1.8m wide. No further measurements of footway widths have been provided for the remaining section of the route.
- For the section of the route passing through Station Road it has been mentioned in paragraph 2.120 of the WCHAR assessment that the effective width of the carriageway decreases due to the parked cars outside the properties and cyclists might also be required to navigate through parked cars further on Glade Road.

In Summary

- Along with the already identified issues of lack of footways on Wiltshire Road and Westhorpe Road and insufficient widths on a couple of sections of road, it has also been acknowledged that a couple of the junctions are missing tactile paving and that it needs to be provided.
- It has also been mentioned in the audit that the road on this route can benefit from maintenance via some resurfacing in places due to the presence of potholes.
- No plans have been provided to confirm any of the improvements suggested in the audit.
- The section of route that comprises of a footway that passes adjacent to Foxes Piece allotment has insufficient width in certain sections and does not appear to be attractive or safe, especially when being used in dark winter months.
- No detailed assessment has been carried out to judge the attractiveness of the alternative route for cyclists other than stating that the auditors felt that the routes are safe due to the residential nature and light traffic on the streets.

Westhorpe Interchange and Marlow Road to Town Centre

Paragraph 2.129 provides a description of the route, which is as follows:

"This route provides a connection from Marlow town centre, routing eastbound via Chapel Street and subsequently onto Little Marlow Road (A4155) eastbound. Pedestrians and cyclists will then continue eastbound before crossing the A404 via Westhorpe Interchange, in order to reach the main site access."

Pedestrian Facilities

- It is noted that the footway provision and environment in Marlow town centre is suitable to accommodate pedestrians associated with the proposed development.
- The town centre route benefits from street lighting at semi regular intervals which is beneficial during darker winter months.
- A zebra crossing is provided in the town centre with a refuge island and dropped tactile crossings.
- It is noted that as you travel to the north east on the A4155 the footway narrows where it passes Lidl and the assessment states that while pedestrians can walk side by side, it may be difficult for a pedestrian and wheelchair to pass each other comfortably, possibly resulting in a pedestrian having to walk on the carriageway to pass. The width of this section of footway is not given in the assessment.
- The assessment notes that dropped kerbs are provided on the approach to junctions, however it also noted that there were crossings over junctions that did not benefit from tactile paving.
- There are bus stops along the A4155 route that pedestrians wanting to access the site can utilise.
- The assessment highlights the pedestrian crossing located approximately 70m north
 of the Chapel Street bus stop, which gives pedestrians the opportunity to cross to
 utilise the footway on the opposite side of the A4155 if required. At this point the
 shared footway/cycleway also begins adjacent to the south eastern side of the
 carriageway.
- As pedestrians travel to the north east they need to cross the side road junction at Cedar Court, which the assessment states benefits from a tactile dropped crossing and colour surfacing on the carriageway. The assessment does not however comment on the condition of the coloured surfacing and whether it is still in a condition where it can be effective.
- The assessment notes that beyond this junction the footway widens to 2.45m and then onto 3m as it heads to the north east.
- The assessment has highlighted the dropped tactile crossing across the side road junction with Glade Road, which is shown to benefit from coloured surface across the crossing.
- The crossing point across Foxes Piece is also stated to benefit from the same crossing arrangements as the other two side road junctions, however the assessment makes the comment that both features across Foxes Piece would benefit from maintenance through repainting.
- There is a further crossing facility as the route continues to the north east. At this point
 the shared footway / cycleway facility changes to the north west side of the
 carriageway and the assessment notes that there is directional signage on the surface
 of the route for cyclists that is currently faded and would benefit from maintenance
 in the form of repainting.

- Further to the north east there is a bus stop on the western side of the carriageway and at this point the shared footway/cycleway separates with the cycleway travelling behind the bus stop.
- Adjacent to the Great Marlow School, located further to the north east, there is a
 zebra crossing to allow pedestrians to utilise the footway on the opposite side of the
 carriageway if required. The assessment suggests that this crossing would benefit
 from maintenance in the form of repainting. It also states that consideration could be
 given to changing this crossing to a signalised crossing to provide a better facility for
 pedestrians and cyclists and also to potentially assist with the flow of traffic along the
 A4155 during peak times.
- The section of footway/cycleway adjacent to the school boundary where there is a strip of vegetation between the footway/cycleway and the carriageway. It is noted that regular street lighting is provided along this section of the route.
- To the north east of the school the route reaches the Wiltshire Road roundabout where dropped tactile crossings are provided for pedestrians and cyclists crossing the roundabout.
- The footway/cycleway facility continues along the north western side of the carriageway with a dropped tactile crossing and coloured surfacing across the Woodside Gardens sideroad junction.
- Further to the north east the route eventually reaches the Westhorpe Roundabout junction. The assessment notes that this section of the route that traverses the Westhorpe Interchange is unfavourable due to the highway traffic flows experienced not allowing much time to allow pedestrians and cyclists to cross the on/off-slips of the A404. This poses an additional issue for pedestrians with reduced mobility.
- The footway across the bridge is stated to measure approximately 2.2m and while this
 meets the required widths for pedestrians, it is not sufficient for cyclist use. The height
 of the parapet railings is also not suitable for cyclists.
- The assessment does not make comment on whether there is any buffer between the footway provision across the roundabout and the main circulatory carriageway.
- Once over the interchange, pedestrians would then continue along the A4155 where the footway measures 2m in width.

Cycling Facilities

- Many of the facilities for cyclists have been mentioned in the above text concerning pedestrian routes.
- The route from Marlow town centre along the A4155 does benefit from a shared footway/cycleway facility along much of its length.
- The assessment mentions the side road crossings that it has already identified as requiring maintenance in the form of repainting to increase cyclist awareness and awareness to drivers.
- The assessment mainly highlights the "likely unpleasant" environment across the Westhorpe Interchange where cyclists would compromise their safety navigating the junction due to high traffic flows (which will increase as a result of the development) and uncontrolled crossing points.
- The footway and parapet across the bridge are also inadequate to provide a safe and suitable route for cyclists.

In Summary

- The route between the town centre and the Westhorpe roundabout is generally appropriate for pedestrians and cyclists noting that we are looking at an existing network with existing constraints.
- The HA has previously highlighted possible improvements along this route which could include the upgrading of the side road junction crossings to provide LTN1/20 compliant crossing points.
- It is evident that there are significant safety issues relating to the movement of pedestrians and cyclists across the Westhorpe Interchange and if the applicant is to achieve their ambitious mode share targets, this route will need to be significantly improved to provide and safe, suitable and attractive route to and from the site.
- Any improvements across the Westhorpe Interchange, in terms of signalised crossing facilities and changes to footway widths are likely to have an impact on the operation of the junction which needs to be fully taken into account.
- It is also noted that this is a junction that falls under the control of National Highways so they will have the final say on the acceptability of any improvements proposed.

User Opportunities

Section 3 of the WCHAR assessment looks at User Opportunities which the applicant considers to be relevant to the proposed scheme and it states they should be considered by the wider design team throughout the progression of the development. The extract below includes the pedestrian specific user opportunities that have been identified.

Pedestrian Specific

- Opportunity 1: Seek agreement for signposting within the vicinity of Globe Business Park to improve routing for pedestrians for the Marlow Station via Fieldhouse Lane route.
- Opportunity 2: Improvement to the Marlow Station via Fieldhouse Lane route through the widening of the footway beneath the A404 bridge, to improve safety for pedestrians.
- Opportunity 3: Improvement to the Fieldhouse Lane track adjacent to the A404 through the resurfacing of the track and provision of lighting to improve pedestrian access and safety.
- Opportunity 4: Improvement of the existing PRoW Footpath LMA/20/1, to enhance the footpath by increasing the width of the path to improve access for pedestrians from all walks of life, resurfacing the existing path to improve mobility, and provision of low level lighting.
- Opportunity 5: Improvement to the route to the east of the site by providing a connection to Bourne End, through the provision of a segregated footpath/cycleway through land in the control of the client which would be separated from the Marlow Road (A4155) from School Lane, Little Marlow to the Marlow Road (A4155) / Sheepridge Lane roundabout.
- Opportunity 6: Improvement to the pedestrian zebra crossing on Marlow Road (A4155) adjacent to Bobmore Lane through the signalisation of the crossing to cater for pedestrians and cyclists.
- Opportunity 7: Improvement through signalised pedestrian crossings at the Westhorpe Interchange for both the A404 On and Off Slips, on the northern arm of the junction.
- Opportunity 8: Seeking to improve the Marlow Road (A4155) northern footway from Westhorpe Interchange to the Site Access through widening where possible in public highway land.
- Opportunity 9: Ensuring tactile paving is proposed as appropriate at all road crossings.

It is noted that there is no opportunity identified to improve the crossings on the side road junctions on the A4155 route to be consistent with the requirements set out in LTN1/20. It is also difficult to determine whether all opportunities have been identified as the assessment lacks detail of widths of footway provision in places, so possible requirements to widen sections of footway may have been missed.

The extract below contains the cyclist specific user opportunities that have been identified.

Cyclist Specific

- Opportunity 1: Potential improvement to the Marlow Station via Fieldhouse Lane route to improve visibility for cyclists through one way narrowing beneath the A404 bridge.
- Opportunity 2: Potential improvement to the Fieldhouse Lane track adjacent to the A404 through the resurfacing of the track and provision of lighting to improve cyclist access and safety.
- Opportunity 3: Improvement of the existing PRoW Footpath LMA/20/1, to enhance the footpath by increasing the width of the path to allow cyclists access, resurfacing the existing path to improve the route for cyclists and provision of lighting.
- Opportunity 4: Potential improvement to the Volvo Footbridge through the implementation of ramps to allow for cyclist access and the increase of the parapet height on the bridge to 1.4m, improving cyclist safety.
- Opportunity 5: Improvement to the bridge parapet height to 1.4m to allow for improved cyclist safety across Westhorpe Interchange.
- Opportunity 6: Improvement to the route to the east of the site by providing a connection to Bourne End, through the provision of a segregated footpath/cycleway through land in the control of the client which would be separated from the Marlow Road (A4155) from School Lane, Little Marlow to the Marlow Road (A4155) / Sheepridge Lane roundabout.

As with the identified pedestrian opportunities, there is no mention of improvements to the side road junction crossings to make them LTN1/20 compliant. Also consistent with the pedestrian opportunities, it is difficult to determine whether all opportunities have been identified. For instance, in places where it is proposed that cyclists use on-carriageways routes instead of off-carriageway routes, would there be anything that could be done to better alert drivers to the presence of cyclists on the carriageway.

The WCHAR assessment also includes the two plans showing the changes proposed to the Westhorpe Interchange. It should again be noted that these changes will need to be considered by National Highways who will confirm whether or not they are acceptable in terms of safety, capacity impacts on the operation of the junction and also DMRB requirements. At this stage the improvements have not been confirmed as acceptable and deliverable.

Proposed Improvements

Following the work carried out to date and the information contained within the WCHAR assessment, the applicant has prepared a summary of the walking and cycling improvements that are intended to be associated with the proposed development. These improvements are detailed in paragraph 2.21 of the STA and are as follows:

Onsite

- The retention and enhancement of the existing PROWs that cross the site through improved surfacing and lighting.
- The provision of new routes to allow pedestrians and cyclists to move around the site.

Site Access

The provision of a roundabout on Marlow Road (A4155) retaining access for residents
of Westhorpe House, Westhorpe Park Homes, and provide access to Pump Lane South
including the provision of a signal-controlled crossing on the eastern arm of the new
roundabout (A4155 Marlow Road) and uncontrolled pedestrian and cycle crossings on
the remaining arms (Pump Lane South and the site access).

It should be noted that following the HA's review of the traffic modelling of the site access, it is yet to be convinced that the proposed roundabout provides an appropriate access arrangement for the proposed development.

Connections to the East

• The provision of a new connection to Bourne End, through the provision of a segregated footpath/cycleway through land in control of the applicant which would be separated from the Marlow Road (A4155) from School Lane, Little Marlow to the Marlow Road (A4155) / Sheepridge Lane Lane roundabout.

Connections to the West

- Partial Signal Control at Westhorpe Interchange (A404 Northbound On and Southbound Off Slip and the A4155 westbound approach)
 - Signal controlled crossing of the A404 northbound onslip;
 - Signal controlled crossing of the A404 southbound offslip;
 - Widening of the pedestrian/cycle route across the junction to 3m with a 300m buffer strip;
 - Increasing the height of the bridge parapet to 1.5m;
 - Provision of improvements to the existing pedestrian and cycle route between the site and Westhorpe Interchange.

As stated in the comments relating to the WCHAR assessment, the proposed alterations to the Westhorpe Interchange will be subject to assessment by National Highways in terms of safety, capacity and compliance with the Design Manual for Roads and Bridge. Initial discussions with National Highways has highlighted that they have not yet finalised their assessment of the junction changes and are not therefore in a position to determine the acceptability or deliverability of the proposed changes.

While National Highways are not able to confirm that the proposed changes to the Westhorpe Interchange are acceptable, it brings into doubt the applicants ability to deliver a safe and suitable walking and cycling route between the site and Marlow via the Westhorpe Interchange. Without the link across the Westhorpe Interchange the HA considers that the

site would not be well connected in terms of sustainable forms of transport and therefore unlikely to achieve the mode share targets that are contained with their STS.

There is no mention in the improvements listed above or any improvements off site within Marlow to further aid the safe and convenient movement of pedestrians and cyclists and to encourage walking and cycling as a form of transport to and from the site. For a development of this scale, and one with mode share targets that push towards the use of sustainable forms of traffic to a higher level than would normally be expected, the HA would expect further off-site improvements to aid walking and cycling.

It is also evident from the improvements listed above that the applicant is proposing the connection across the Westhorpe Interchange as the only improvement to walking and cycling connections to the west into Marlow. The HA considers that in order achieve a site that is well connected to the local area by walking and cycling the applicant should be providing a number of route choices to make accessing different areas within Marlow as convenient as possible. At present the only cycle link is proposed to be via the main site access to the north of the site if indeed that is deliverable. If someone wanted to cycle from the southern end of the site to a location towards the southern end of Marlow, the route they would be required to take would be through the site to the north then out the site, across the Westhorpe Interchange, and back down through Marlow to the south. The distance of such a route and the time taken to travel it would be greatly reduced if a further access option for cyclists was provided for toward the centre (or south) of the site. However, based on the information provided at this stage, the applicant is not proposing to deliver such an access option.

Paragraph 2.22 of the STA states that in addition to the improvements that the applicant has listed, there are a number of ways in which the footbridge could be improved to cater for pedestrians and cyclists, which would range from replacing the existing steps and ramps to make them DDA compliant.

Paragraph 2.23 states the following in relation to any improvements that may be required to the Volvo footbridge:

"If the monitoring to be undertaken as part of the MSIS shows that additional improvements are needed to achieve the specific targets for pedestrians and cyclists to/from the Site, the approaches to the Volvo Footbridge will be improved to provide DDA compliant ramps and stairs. This will both improve this route for pedestrians and make it available for cyclists. The mechanism for this monitoring will be set out in the S106 Agreement associated with the proposed development."

It is therefore evident that improvements to the Volvo footbridge are not to be implemented from the outset and would only be provided at a later stage should the monitoring proposed by the applicant show that improvements are necessary. The HA does not agree with the principle of this approach. Improvements to provide a choice of safe, suitable and attractive walking and cycling routes to the site should be in place before the site is occupied in order that they can help influence peoples travel choice from the outset. This would give the best chance of convincing people to walk or cycle rather than use a private car. Not providing

adequate links from the outset and then waiting for mode share targets not to be met before making improvements may mean that it is too late to then influence people to change their travel choice and in turn be too late to address any issues that may have arisen from the mode share targets not being met. It has also not been successfully demonstrated at this stage that any such improvements to the Volvo footbridge are acceptable to National Highways and deliverable on the available land.

In relation to the potential for a link to the south of the site to Fieldhouse Lane, paragraph 2.26 of the STA states the following:

"A pedestrian and cycle link to Fieldhouse Lane is not proposed in association with the proposed development. The achievement of this route is within the control of BC, but not the applicant as there is third party land at the southern end of the link. BC could achieve the link through progressing the submitted Definitive Map Modification Order (DMMO) application. There will also be opportunities for achieving this link when a further planning application is submitted for the third-party land. This land having previously been the subject of a refused planning application and then a second planning application that was withdrawn."

Paragraph 2.27 of the STA then goes onto state:

"There is a reasonable chance that a link to Fieldhouse Lane will be achieved in the near future for pedestrians and cyclists."

It is evident from paragraph 2.26 that a link to Fieldhouse Lane cannot be achieved and is not going to be delivered as part of this planning application. A link to Fieldhouse Lane cannot there be taken into account by the HA as something that will contribute to the connectivity of the site to surrounding walking and cycling facilities.

Paragraph 2.28 of the STA states that the applicant will make a financial contribution towards the implementation of the other elements of the opportunities identified in the WCHAR assessment, which includes the provision of tactile paving and dropped kerbs and signage and the conversion of the zebra crossing on Marlow Road adjacent to Bobmore Lane to a Toucan Crossing. Paragraph 2.29 also goes onto state that there are also minor improvements that potentially could be made on the routes between the A404 and Marlow town centre which include directional fingerposts and tactile paving at all crossing points.

The HA has previously advised the applicant that in order for any improvements to be considered and secured as part of the planning application, details would be required to demonstrate what improvements are being proposed and where they are going to be implemented. At present the improvements proposed by the applicant are uncertain in terms of details, therefore it is difficult for the HA to make a judgement on their likely effectiveness. The HA has also previously advised the applicant on the need for side road junction crossings to be LTN1/20 compliant, however the applicant is only referring to tactile crossings being provided, which is not sufficient. Finally, the applicant has previously been advised that once any improvement works have been identified and secured, they will need to be delivered by the applicant as part of an off-site highway works package, however the applicant is only

referring to making contributions for the Council to deliver the works, which is not acceptable to the Council.

In summary, the applicant appears to be offering a route into Marlow via the Westhorpe Interchange as the only walking and cycling route that is aimed at catering for walking and cycling for both able bodied people and people with mobility impairments and the deliverability of necessary improvements to this route is currently uncertain. The only other link to the west is via the Volvo footbridge and this is only useable by able bodied pedestrians and will not be an attractive or convenient route for people with mobility impairments or cyclists. It is therefore considered that as the site does not offer a choice of multiple safe and suitable pedestrian and cycle routes to allow people to access the site, the site is not therefore considered to be well connected to Marlow and does not promote the use of sustainable forms of transport, contrary to local and national policy.

Notwithstanding the comments relating to the choice and suitability of routes, there is also uncertainty as to whether the route for pedestrians and cyclists across the Westhorpe junction will be acceptable to National Highways and therefore at present the HA is not in a position to confirm the acceptability of this route.

Car Parking

The HA's previous comments relating to TAA2 noted the proposed parking management within the site and the HA considers that parking management within the site forms a significant part of the strategy to reduce the number of car movements to it. The HA is however also aware that if the parking management proposals within the site are to be successful in reducing car trips to the site, then there also needs to be a mechanism by which any off-site overspill parking can be managed and restricted. This is to stop people who drive to the site and are turned away, as they are not entitled to park on site, parking within Marlow to the west and Little Marlow to the east, resulting in additional pressure on the local highway network.

The applicant has previously stated that in the event that parking restrictions are required offsite to deal with any issues resulting from the parking of vehicles associated with the film studio, a contribution will be made to enable the introduction of parking restrictions. The HA's concern was that the applicant had not given any details as to how any issues associated with off-site parking, and the extent of any parking restrictions would need to cover, would be identified.

The STA confirms in paragraph 2.34 that as part of the Mode Share Incentive Scheme (MSIS) it is proposed to monitor whether there is any increase in on-street parking on the roads around the film studio site as a result of the development. In order to do this the STA includes an area that the applicant has identified where they consider there could be a potential for on-street parking to occur. The area covers roads in Little Marlow to the east of the site and Marlow to the west of the site which are within a reasonable walking distance of the site, which the applicant has identified as a 10 minute walking distance. The identified area is shown in Figure 1 on page 18 of the STA and is included below for confirmation.

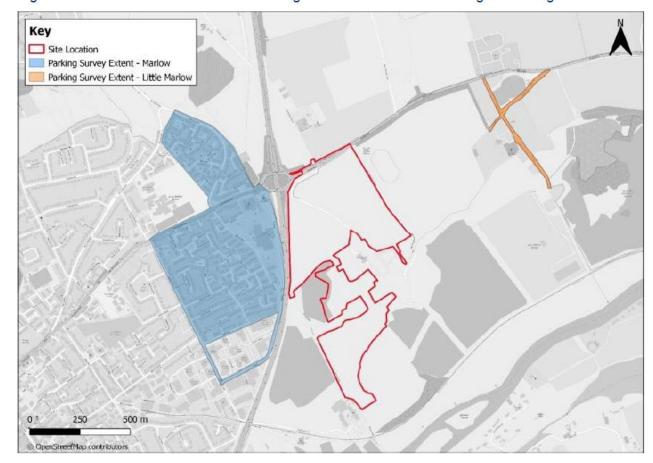


Figure 1: Marlow and Little Marlow Walking Isochrones - Offsite Parking Monitoring

It is proposed that the streets identified in the highlighted area would be subject to an onstreet parking survey on a neutral weekday (Tuesday, Wednesday and Thursday) between 1400 and 1600 to establish the baseline position of on-street parking. It is then proposed that annual surveys of the same streets at the same times would be undertaken in order to identify whether on-street parking conditions have changed. If there is an identified change in conditions then further surveys would be needed in the identified areas to determine whether the changes relate to the site. It is suggested that this could be done through surveys of pedestrians arriving at the site on foot and through observations.

The applicant states that in the event that there is additional on-street parking associated with the development then a financial contribution will be made available to fund the Traffic Regulation Order (TRO) process to manage the parking on the identified roads. In order to minimise any implications for residents on the identified roads the parking restrictions could simply be to restrict parking for 1 hour on weekdays between 1100 and 1200, consistent with other areas where restrictions are used to manage commuter parking.

The HA considers that the principles of what is being proposed to manage any impacts of any identified off-site parking associated with the development site are appropriate, however as the final details of the strategy (e.g. scope of surveys and the ability to secure appropriate mitigation) have not been submitted and agreed, the HA is not in a position to confirm that

the measures are acceptable. It is noted that while the Volvo footbridge is being proposed as an access route to the site for pedestrians it does not appear that the survey area covers a 10 minute walk from where the footbridge crosses the A404. The scope of the survey will therefore need to be increased to cover that area. It is also noted that the applicant may look to provide the link to the south of the site to Fieldhouse Lane in the future and if this did occur then the detail of the strategy would need to allow the impacts of that link on on-street parking to also be monitored and managed if required.

Monitor and Manage

The Monitor and Manage approach has been set out in previous documentation provided by the applicant, however for confirmation I will set out the main aims below:

- Provide the framework for delivery of the mode share targets for the site.
- Deliver the mechanism for monitoring vehicular access to the site and car park demand, and for reviewing the modal share targets in the future.
- Set the parameters for a 'Mode Share Incentive Scheme' (MSIS) to ensure achievement of mode share targets.
- Monitoring of travel to/from the site will be undertaken to ensure that the objectives and targets of the MSIS and the Travel Plan are met.
- Monitoring will also be undertaken of parking on identified roads around the site to ensure that there is no increase in on-street parking associated with the proposed site. Should these show a significant rise in demand then further work will be undertaken to determine whether the increase in parking relates to the site. If this is the case then money can be secured through the S106 to fund (partially or fully) the implementation of car parking restrictions to manage this parking.

The full details of the Monitor and Manage Strategy will need to be set out and agreed in the S106 Agreement that is secured as part of any planning permission that may be granted. At present the full details of the Monitor and Manage Strategy and how it would work have not been submitted by the applicant and therefore the HA is not in a position to confirm that the measures included in it would be adequate to deal with any issues arising from the proposed development. It should also be noted that the applicant will need to full fund any TRO and parking restrictions that may be required in order to address the impact of an identified onstreet parking issues associated with the development.

Baseline and Future Network Traffic Flows

Baseline Data

Paragraph 3.2 of the STA confirms that the applicant has carried out a number of new traffic surveys comprising Manual Classified Count (MCC) surveys and queue length surveys to obtain current baseline data to inform the assessments on the wider highway network. To confirm, the additional surveys were carried out at the following locations.

- A4155 Little Marlow Road j/w Bobmore Lane and Newtown Road (Staggered Crossroad junction)
- · A4155 Little Marlow Road j/w Glade Road (Priority T-junction)
- · A4155 Little Marlow Road j/w Wycombe Road (Priority T-junction)
- A4155 Chapel Street j/w Dean Street and Marlow Road (Three-arm mini roundabout)
- · A4155 Marlow Road j/w High Street and West Street (Three-arm mini roundabout)
- A4155 Marlow Road j/w Sheepridge Lane (Three-arm mini roundabout)
- A4155 Marlow Road j/w Blind Lane (Priority T-junction)
- · A4155 The Parade j/w Cores End Road and Station Road (Three-arm mini roundabout)

Future Year Traffic Data

The STA confirms that the future year traffic growth has been obtained using TEMPro growth factors that have previously been agreed with the HA. It also confirms that the development flows used to inform the assessments contained with the STA are the flows that have also been previously agreed with the HA.

Junction Impact and VISSIM Model Assessment

VISSIM Model Assessment

As mentioned in my previous consultation responses, the VISSIM modelling that the applicant has carried out has been reviewed by Atkins on behalf of the Council to ensure that the model has been built correctly, it validates well and the driver behaviour reflects real life conditions on the network. Following a number of reviews and a number of updates by the applicant, Atkins have confirmed that they are satisfied with these elements of the modelling, therefore the applicant has moved to use that approved model to carry out the scenario testing of the development traffic impact on the modelling area.

As a result of the final assessment by Atkins being submitted after the STA was written, the final updates to the applicant's modelling have been submitted in a document titled 'Briefing Note: VISSIM Modelling', dated September 2023 (Document Reference 'WIE18037.125.TN.21.1.2'). Paragraph 1.3 of the Briefing Note (BN) confirms that it updated and supersedes the content of Section 4 and Appendices G, H and I of the STA submitted on 4th September 2023.

The following comments therefore consider the VISSIM modelling contained within the BN rather than Section 4 of the STA.

Paragraph 2.8 of the BN confirms that the calibrated and validated base model has been used to test agreed scenarios comprising:

 Do Nothing (DN or 'Reference Case') – base traffic factored up to future years 2027 and 2034 using TEMPRO; Do Something (DS or 'Proposed Development') – as above, but with the inclusion of the Managed (STS) development traffic, the proposed Marlow Road/Site Access roundabout, including a controlled signalised pedestrian crossing on the eastern arm (DS5), and proposed mitigation at Westhorpe Interchange comprising partsignalisation and including signalised pedestrian crossings on the northern slip roads.

Paragraph 2.10 of the BN states the following:

"2.10 As previously reported a 'Sensitivity Test' has also been undertaken for the DS scenario which contains 'Unmanaged' development flows. As previously set out, given the nature and provisions of the Proposed Development, and the direct level of control inherent in the operation of the Film industry, it is not considered that an unmanaged scenario will arise."

However, the HA has always considered the mode share targets put forward by the applicant to be ambitious and unrealistic. It is also not possible to guarantee that the mode share targets will be met, therefore the HA has always insisted that the unmanaged scenario needs to be tested as the HA needs to be sure that any impact arising from that scenario can be adequately mitigated.

The BN goes onto confirm at paragraph 2.12 that two variations of the Do Something scenarios have been tested. These are as follows:

- Option 1 which includes a two-lane approach on Little Marlow Road between the Parkway Roundabout and Westhorpe Interchange; and
- Option 2 as above, but with a three-lane approach.

The BN states in paragraph 2.13 that the results presented for Managed (STS) development traffic are reporting the impact for both the Do Something Options 1 & 2, whereas the 'Unmanaged' development flows are reported for the Do Something Option 2 only.

MOVA Operation

The applicant has stated that feedback and commentary from the independent reviews of the VISSIM model identified that the impact of Microprocessor Optimised Actuation (MOVA) should be investigated to better balance queues around the junction and one the A404 slip roads. The model has therefore been set up to allow fixed-time plan changes which respond to changing flows within the model, which will reflect the effect of MOVA operation.

The HA has now taken the opportunity to review the VISSIM modelling results and can confirm the following observations in relation to the performance of the modelled network.

A4155 Little Marlow Road/Wiltshire Road Roundabout

Wiltshire Road North Arm

2027

In the AM peak, the 2027 baseline average maximum queue on the Wiltshire Road north approach to the junction is 94 metres long, increasing by 32 metres to 126 metres in the Managed Option 1 scenario and to 119 metres, an increase of 25 metres, or a 27% increase, in the Managed Option 2 scenario.

For the Unmanaged Option 2 scenario the queue increases by 39 metres to 133 metres. There are continuous queues on this approach throughout the AM peak hour.

In the evening peak, the 2027 baseline average maximum queue on the Wiltshire Road north approach to the junction is 46 metres long, remaining at 46 metres in the Managed Option 1 scenario and increasing slightly to 47 metres in the Managed Option 2 scenario and the Unmanaged Option 2 scenario. There are small continuous queues on this approach throughout the PM peak hour.

2034

For 2034 in the AM peak, the baseline average maximum queue on the Wiltshire Road north approach to the junction is 101 metres long, increasing by 58 metres to 159 metres in the Managed Option 1 scenario and by 33 metres to 134 metres, a 33% increase, in the Managed Option 2 scenario.

For the Unmanaged Option 2 scenario the queue increases by 74 metres to 175 metres, a 73% increase. There are continuous queues on this approach throughout the AM peak hour.

For 2034 in the PM peak, the baseline average maximum queue on the Wiltshire Road north approach to the junction is 49 metres long, increasing to 53 metres in the Managed Option 1 scenario and reducing to 45 metres in the Managed Option 2 scenario.

For the Unmanaged Option 2 scenario the queue reduces to 48 metres, a reduction of 1 metre when compared to the 2034 DN scenario. There are small continuous queues on this approach throughout the PM peak hour.

It can be concluded that there will be a significant increase in queueing in the AM peak hour on this arm due to development traffic, even with the Option 2 scenario. The AM peak hour impact on this arm of the junction is therefore not acceptable to the HA. The impact in the PM period in terms of queueing is shown to be minimal.

In the AM peak, the 2027 baseline average maximum queue on the Little Marlow Road East approach to the junction is 171 metres long, increasing slightly to 172 metres in the Managed Option 1 and the Managed Option 2 scenarios.

In the Unmanaged Option 2 scenario the queue increases to 173 metres. There are continuous queues on this approach throughout the AM peak hour with a peak between 0810 and 0830.

In the evening peak, the 2027 baseline average maximum queue on the Little Marlow Road East approach to the junction is 141 metres long, increasing to 159 metres in the Managed Option 1 scenario and increasing to 164 metres in the Managed Option 2 scenario.

In the Unmanaged Option 2 scenario the queue increases by 22 metres to 163 metres, a 16% increase, in the Unmanaged Option 2 scenario. There are continuous queues on this approach throughout the PM peak hour.

2034

For 2034 in the AM peak, the baseline average maximum queue on the Little Marlow Road East approach to the junction is 171 metres long, increasing to 172 metres in the Managed Option 1 scenario and remaining at 171 metres in the Managed Option 2 scenario.

For the Unmanaged Option 2 scenario the queue increases to 172 metres. There are continuous queues on this approach throughout the AM peak hour with a peak between 0810 and 0830.

For 2034 in the PM peak, the baseline average maximum queue on the Little Marlow Road East approach to the junction is 143 metres long, increasing by 24 metres to 167 metres in the Managed Option 1 scenario and to 168 metres in the Managed Option 2 scenario.

For the Unmanaged Option 2 scenario the queue also increases to 167 metres. There are continuous queues on this approach throughout the PM peak hour.

It can be concluded that the development traffic and the proposed improvements have a minimal effect on this arm of the junction in the AM peak hour, but there is already significant queueing in the DM scenario. The development traffic impact in the PM peak hour is shown to be greater with increases in queueing of over 20 metres, however this equates to around 4 Passenger Car Units (PCU's) and is not considered to be material.

Wiltshire Road South

2027

In the AM peak, the 2027 baseline average maximum queue on the Wiltshire Road south approach to the junction is 68 metres long, increasing to 78 metres in the Managed Option 1 and the Managed Option 2 scenarios.

For the Unmanaged Option 2 scenario the queue increases by 13 metres to 81 metres, which equates to around a 2 PCU increase. There are continuous queues on this approach throughout the AM peak hour with a peak between 0815 and 0830.

In the evening peak, the 2027 baseline average maximum queue on the Wiltshire Road south approach to the junction is 15 metres long, remaining at 15 metres in the Managed Option 1 and increasing to 16 metres in the Managed Option 2 scenario, increasing to 17 metres in the Unmanaged Option 2 scenario. There is very little queuing on this approach during the PM peak hour.

2034

For 2034 in the AM peak, the baseline average maximum queue on the Wiltshire Road south approach to the junction is 94 metres long, increasing by 11 metres to 105 metres in the Managed Option 1 scenario and to 107 metres in the Managed Option 2 scenario.

For the Unmanaged Option 2 scenario the spreadsheet attached to the STA shows that the queue increases to 97 metres. There are continuous queues on this approach throughout the AM peak hour with a peak between 0810 and 0830.

For 2034 in the PM peak, the baseline average maximum queue on the Wiltshire Road north approach to the junction is 16 metres long, remaining at 16 metres long in the Managed Option 1 and the Managed Option 2 scenarios. For the Unmanaged Option 2 scenario the queue increases to 17 metres. There is very little queuing on this approach during the evening peak hour.

It can be concluded that the development traffic and the proposed improvements have a minimal effect on this arm and there is little queuing on this arm.

Little Marlow Road West

2027

In the AM peak, the 2027 baseline average maximum queue on the Little Marlow Road West approach to the junction is 141 metres long, increasing by 122 metres to 263 metres, an 87% or 21 PCU increase, in the Managed Option ,1 and by 117 metres, an 83% or 20 PCU increase, to 258 metres in the Managed Option 2 scenario.

For the Unmanaged Option 2 scenario the queue increases by 139 metres, or 24 PCU's, to 280 metres thereby doubling the queue length. There are continuous queues on this approach throughout the AM peak hour.

In the evening peak, the 2027 baseline average maximum queue on the Little Marlow Road West approach to the junction is 156 metres long, increasing by 33 metres, or 6 PCU's, to 189 metres, a 21% increase in the Managed Option 1 scenario and by 31 metres, or 5 PCU's, to 187 metres in the Managed Option 2 scenario.

For the Unmanaged Option 2 scenario it increases by 89 metres, or 15 PCU's, to 245 metres, a 57% increase. There are continuous queues on this approach throughout the PM peak hour.

2034

For 2034 in the AM peak, the baseline average maximum queue on the Little Marlow Road West approach to the junction is 169 metres long, increasing by 137 metres, or 24 PCU's, to 306 metres, an 81% increase, in the Managed Option 1 scenario and by 125 metres, or 22 PCU's, to 294 metres, a 74% increase, in the Managed Option 2 scenario.

For the Unmanaged Option 2 scenario the queue increases by 143 metres, or 25 PCU's, to 312 metres, an increase of 85%. There are continuous queues on this approach throughout the AM peak hour.

For 2034 in the PM peak, the baseline average maximum queue on the Little Marlow Road West approach to the junction is 197 metres long, increasing by 48 metres, or 8 PCU's, to 245 metres in the Managed Option 1 scenario, a 24% increase, and by 40 metres, or 7 PCU's, to 237 metres in the Managed Option 2 scenario.

For the Unmanaged Option 2 scenario the queue increases to 245 metres, the same increase as experienced in the 2034 Managed (Option 1) scenario. There are continuous queues on this approach throughout the PM peak hour.

There is significant queueing in both peak hours on this arm but specifically in the AM peak hour. The development traffic has a significant effect on this arm, increasing queueing by between 74% and 100% in the AM peak hour. In the PM peak hour, the increases are between 20% and 57%. The results show a material increase in queueing on this arm of the junction, which as far as can be determined, is a considered to be a severe impact.

Junction Summary

It can be concluded that the development traffic has a significant effect on the Wiltshire Road North and Little Marlow Road West arms of this junction in the AM peak hour with queue lengths increasing by between 27% to 100%. It is considered that this is a severe impact on an already congested junction.

A4155 Little Marlow Road/Parkway Roundabout

Little Marlow Road West arm

2027

In the AM peak, the 2027 baseline average maximum queue on the Little Marlow Road West approach to the junction is 81 metres long, increasing to 90 metres in the Managed Option 1 scenario and to 91 metres in the Managed Option 2 scenario. For the Unmanaged Option 2 scenario the queue increases to 93 metres.

In the PM peak, the 2027 baseline average maximum queue on the Little Marlow Road West approach to the junction is 91 metres long, increasing to 93 metres in the Managed Option 1 scenario, but reducing to 85 metres in the Managed Option 2 scenario. For the Unmanaged Option 2 scenario the queue would be 88 metres long.

2034

For 2034 in the AM peak, the baseline average maximum queue on the Little Marlow Road West approach to the junction is 85 metres long, increasing by 9 metres to 94 metres in the Managed Option 1 scenario and to 93 in the Managed Option 2 scenarios. For the Unmanaged Option 2 scenario the queue increases to 94 metres.

For 2034 in the PM peak, the baseline average maximum queue on the Little Marlow Road West approach to the junction is 91 metres long, increasing to 93 metres in the Managed Option 1 scenario and reducing to 87 metres in the Managed Option 2 scenario. For the Unmanaged Option 2 scenario the queue would be 88 metres long. For the Unmanaged Option 2 scenario the queue would be 90 metres long.

It can be concluded that the development traffic and the proposed improvements have a minimal effect on this arm but there is already some queueing in the DN scenario.

Little Marlow Road East arm

2027

In the AM peak, the 2027 baseline average maximum queue on the Little Marlow Road East approach to the junction is 175 metres long, increasing by 146 metres, or 25 PCU's, to 321 metres in the Managed Option 1 scenario, an increase of 83% and increasing by 142 metres, or 24 PCU's, to 317 metres in the Managed Option 2 scenario.

For the Unmanaged Option 2 scenario the queue increases by 160 metres, or 28 PCU's, to 335 metres, a 91% increase. There is considerable queueing on this approach throughout the AM peak hour, which at 335 metres, would extend back through the Westhorpe Interchange and along the A4155 up to the site access.

In the evening peak, the 2027 baseline average maximum queue on the Little Marlow Road East approach to the junction is 35 metres long, increasing by 71 metres, or 12 PCU's, to 106 metres in the Managed Option 1 scenario, a 200% increase and increasing by 124 metres, or 22 PCU's, to 159 metres, a 350% increase, in the Managed Option 2 scenario.

For the Unmanaged Option 2 scenario the queue would increase by 156 metres, or 27 PCU's, to 191 metres which is an increase of 445%.

2034

For 2034 in the AM peak, the baseline average maximum queue on the Little Marlow Road East approach to the junction is 202 metres long, increasing by 146 metres, or 25 PCU's, to 348 metres in the Managed Option 1 scenario, a 72% increase, and to 343 in the Managed Option 2 scenarios.

For the Unmanaged Option 2 scenario the queue increases to 396 metres, an increase of 194 metres, or 34 PCU's (96%).

For 2034 in the PM peak, the baseline average maximum queue on the Little Marlow Road East approach to the junction is 49 metres long, increasing by 133 metres, or 23 PCU's, to 182 metres in the Managed Option 1 scenario and by 136 metres, or 24 PCU's, to 185 metres in the Managed Option 2 scenario.

For the Unmanaged Option 2 scenario the queue would be increasing by 209 metres, or 36 PCU's, to 258 metres long, an increase of 427%.

As the impact of the development traffic on this arm is so significant, it is questioned whether the results in the spreadsheet are correct or whether the DS results have been swapped with the Little Marlow Road West arm especially as Paragraph 2.26 of the VISSIM Modelling Note states "...in the AM Peak, the impact of the additional development traffic is mitigated such that a significant decrease in queueing is observed, particularly on the A4155 (East) at Parkway...". However, the results as presented in the information submitted show that the development traffic has a material impact on the queueing at this junction, which is considered to be a severe impact.

Parkway arm

2027

In the AM peak, the 2027 baseline average maximum queue on the Parkway approach to the junction is 30 metres long, increasing to 36 metres in the Managed Option 1 and the Managed Option 2 scenarios. For the Unmanaged Option 2 scenario the queue increases to 37 metres. There is minimal queueing on this approach throughout the AM peak hour.

In the evening peak, the 2027 baseline average maximum queue on the Parkway approach to the junction is 514 metres long, increasing to 516 metres in the Managed Option 1 scenario, but reducing to 387 metres in the Managed Option 2 scenario.

For the Unmanaged Option 2 scenario the queue would be 463 metres long, a reduction of 51 metres. Even in the DN scenario there is considerable queuing on this approach throughout the evening peak period.

For 2034 in the AM peak, the baseline average maximum queue on the Parkway approach to the junction is 36 metres long, increasing to 41 metres in the Managed Option 1 scenario and to 48 in the Managed Option 2 scenarios.

For the Unmanaged Option 2 scenario the queue increases to 44 metres.

For 2034 in the PM peak, the baseline average maximum queue on the Parkway approach to the junction is 517 metres long, remaining at 517 metres in the Managed Option 1 scenario and reducing to 508 metres in the Managed Option 2 scenario.

For the Unmanaged Option 2 scenario the queue would be 516 metres long, a reduction of 1 metre.

It can be concluded that the development traffic has minimal effect on this arm and the mitigation reduces the queues on this arm in the 2027 Option 2 scenario.

Junction Summary

It can be concluded that the development has an unacceptable impact on the Little Marlow East arm with queue lengths increasing by 72% to 445% but minimal effect on the other arms. However, it is considered that there might be an error in the data of the spreadsheet and the increase is in fact on the Little Marlow Road West arm which would correspond with the Wiltshire Road junction and paragraph 2.26 of the VISSIM Modelling Note. The mitigation slightly improves the queues on Parkway. Nevertheless, it is considered that the proposed development has a severe impact on an already congested junction.

A404/A4155 Westhorpe Interchange

This junction forms part of the Strategic Highway Network that falls under the control of National Highways (NH). While NH will be mostly interested in the development traffic impact on the on and off slips to the A404, the HA will still need to carefully consider the impact on the A4155 arms of the junction that fall under the control of the HA.

A404 North off slip road

It should be noted that this arm of the junction links to the A404 and will be of particular interest to National Highways (NH) as this falls under their control. The Local HA will give a view on the operation of this arm; however, NH will ultimately confirm the development traffic impact on this arm.

In the AM peak, the 2027 baseline average maximum queue on the A404 North approach to the junction is 236 metres long, reducing to 186 metres in the Managed Option 1 and to 192 metres in the Managed Option 2 scenarios.

For the Unmanaged Option 2 scenario the queue reduces to 212 metres. There is continuous queueing on this approach throughout the AM peak hour.

In the evening peak, the 2027 baseline average maximum queue on the A404 North approach to the junction is 78 metres long, increasing by 34 metres, or 6 PCU's to 112 metres (44%) in the Managed Option 1 scenario and by 37 metres, or 6 PCU's, to 115 metres, 47%, in the Managed Option 2 scenario.

For the Unmanaged Option 2 scenario the queue would be 108 metres long, an increase of 30 metres or 5 PCU's. There is considerable queuing on this approach throughout the evening peak period.

2034

For 2034 in the AM peak, the baseline average maximum queue on the A404 North approach to the junction is 372 metres long, reducing to 273 metres in the Managed Option 1 scenario and to 292 in the Managed Option 2 scenarios. For the Unmanaged Option 2 scenario the queue increases to 287 metres.

For 2034 in the PM peak, the baseline average maximum queue on the A404 North approach to the junction is 90 metres long, increasing by 54 metres, or 9 PCU's to 144 metres in the Managed Option 1 scenario and by 51 metres, or 8 PCU's, to 141 metres, an increase of 57%, in the Managed Option 2 scenario.

For the Unmanaged Option 2 scenario the queue would be 138 metres long.

This arm sees a reduction in the AM peak hour with the development traffic but an increase in the PM peak hour of 44% to 57% in the PM peak hour, which is considered to be material.

Marlow Road arm (westbound approach)

2027

In the AM peak, the 2027 baseline average maximum queue on the Marlow Road approach to the junction is 137 metres long, increasing by 68 metres, or 12 PCU's, to 205 metres, a 50% increase, in the Managed Option 1 scenario and by 76 metres, or 13 PCU's, to 213 metres, a 55% increase, in the Managed Option 2 scenarios.

For the Unmanaged Option 2 scenario the queue increases by 82 metres, or 14 PCU's, to 219 metres a 60% increase. There is continuous queueing on this approach throughout the AM peak hour.

In the evening peak, the 2027 baseline average maximum queue on the Marlow Road approach to the junction is 77 metres long, increasing by 90 metres, or 15 PCU's, to 167 metres, a 117% increase, in the Managed Option 1 scenario and increasing by 94 metres, or 16 PCU's, to 171 metres in the Managed Option 2 scenario.

For the Unmanaged Option 2 scenario the queue would be increasing by 107 metres, or 19 PCU's, to 183 metres long, a 139% increase. There is queuing on this approach throughout the evening peak period.

2034

For 2034 in the AM peak, the baseline average maximum queue on the Marlow Road approach to the junction is 152 metres long, increasing by 68 metres, or 12 PCU's to 220 metres, a 45% increase in the Managed Option 1 scenario, and by 62 metres, or 11 PCU's, to 214 in the Managed Option 2 scenarios. For the Unmanaged Option 2 scenario the queue increases by 74 metres, or 13 PCU's, to 226 metres.

For 2034 in the PM peak, the baseline average maximum queue on the Marlow Road approach to the junction is 85 metres long, increasing by 96 metres, or 17 PCU's, to 181 metres, a 113% increase, in the Managed Option 1 scenario and to 182 metres in the Managed Option 2 scenario.

For the Unmanaged Option 2 scenario, the queue would be increasing by 106 metres, or 18 PCU's, to 191 metres long, a 125% increase.

This arm is significantly affected by the development traffic in the PM peak hour with queues lengths doubling. In the AM peak hour queues are already long and there are increases in queue lengths of 45% to 60%. In all Do Something scenarios the maximum queues extend beyond the site access junction having the potential to block it. Even the average queues approach the site access junction in the AM peak hour. This is considered to be a severe impact.

A404 South off slip road

It should be noted that this arm of the junction links to the A404 and will be of particular interest to National Highways as this falls under their control. The Local HA will give a view on the operation of this arm; however, NH will ultimately confirm the development traffic impact on this arm.

2027

In the AM peak, the 2027 baseline average maximum queue on the A404 South approach to the junction is 934 metres long, reducing to 300 metres in the Managed Option 1 and to 304 metres in the Managed Option 2 scenarios. For the Unmanaged Option 2 scenario the queue reduces to 280 metres. There is continuous queueing on this approach throughout the AM peak hour, particularly after 0815.

In the evening peak, the 2027 baseline average maximum queue on the A404 South approach to the junction is 117 metres long, increasing by 76 metres, or 13 PCU's, to 193 metres, a 65% increase, in the Managed Option 1 scenario and by 82 metres, or 14 PCU's, to 199 metres in the Managed Option 2 scenario.

For the Unmanaged Option 2 scenario the queue would increase by 86 metres, or 15 PCU's, to 203 metres long, a 74% increase. There is considerable queuing on this approach throughout the evening peak period.

2034

For 2034 in the AM peak, the baseline average maximum queue on the A404 South approach to the junction is 1439 metres long, reducing by 984 metres to 455 metres in the Managed Option 1 scenario and to 453 in the Managed Option 2 scenarios. For the Unmanaged Option 2 scenario the queue reduces by 974 metres to 465 metres.

For 2034 in the PM peak, the baseline average maximum queue on the A404 South approach to the junction is 154 metres long, increasing by 83 metres to 237 metres (54%) in the Managed Option 1 scenario and to 232 metres in the Managed Option 2 scenario.

For the Unmanaged Option 2 scenario the queue would increase by 92 metres be 246 metres long, a 60% increase.

This arm sees a significant reduction in queue length in the AM peak hour with the development traffic but an increase of 54% to 74% in the PM peak hour.

Little Marlow Road arm (eastbound approach)

2027

In the AM peak, the 2027 baseline average maximum queue on the Little Marlow Road approach to the junction is 57 metres long, increasing by 6 metres to 63 metres in the Managed Option 1 scenario and reducing to 53 metres in the Managed Option 2 scenarios. For the Unmanaged Option 2 scenario the queue would reduce to 55 metres. There is a small amount of queueing on this approach throughout the AM peak hour.

In the evening peak, the 2027 baseline average maximum queue on the Little Marlow Road approach to the junction is 71 metres long, increasing to 73 metres in the Managed Option 1 scenario and reducing to 56 metres in the Managed Option 2 scenario. For the Unmanaged Option 2 scenario the queue would also be 56 metres long. There is a small amount of queueing on this approach throughout the AM peak hour.

2034

For 2034 in the AM peak, the baseline average maximum queue on the Little Marlow Road approach to the junction is 57 metres long, increasing to 64 metres in the Managed Option 1

scenario and to 55 in the Managed Option 2 scenarios. For the Unmanaged Option 2 scenario the queue increases to 56 metres.

For 2034 in the PM peak, the baseline average maximum queue on the Little Marlow Road approach to the junction is 71 metres long, increasing to 75 metres in the Managed Option 1 scenario and reducing to 58 metres in the Managed Option 2 scenario. For the Unmanaged Option 2 scenario the queue would be 59 metres long.

It can be concluded that the impact of the development traffic is minimal on this arm in both peak hours.

Junction Summary

The development traffic has a severe impact on the Marlow Road arm with queue lengths doubling in the PM peak hour and queue lengths of 220 metres in AM managed scenario. In all Do Something scenarios the maximum queues extend beyond the site access junction having the potential to block its operation and consequent impacts on its other arms.

The PM also sees increases on the A404 South off Slip road of 54% to 74% although there is a significant improvement in queue length in the AM peak hour. The AM North off slip road sees a small reduction in the AM peak hour with the development traffic but an increase in the PM peak hour of 44 to 57%.

It is considered that the proposed development will result in an unacceptable material impact on the Marlow Road arm of the junction, which forms part of the highway network under the control of the Local HA. It is understood that National Highways will confirm their position with regards to the impact on their part of the network in due course.

A4155 Marlow Road/Pump Lane South/Site Access

Pump Lane South

2027

In the AM peak, the 2027 baseline average maximum queue on the Pump Lane South approach to the junction is 6 metres long, remaining at 6 metres in the Managed Option 1 scenario, the Managed Option 2 scenario and the Unmanaged Option 2 scenario. Very little queuing occurs on this approach during the AM peak hour.

In the evening peak, the 2027 baseline average maximum queue on the Pump Lane South approach to the junction is 12 metres long, reducing to 9 metres in the Managed Option 1 scenario, the Managed Option 2 scenario and the Unmanaged Option 2 scenario. Very little queuing occurs on this approach during the evening peak hour.

For 2034 in the AM peak, the baseline average maximum queue on the Pump Lane South approach to the junction is 9 metres long, reducing to 6 metres in the Managed Option 1 scenario, the Managed Option 2 scenario and the Unmanaged Option 2 scenario.

For 2034 in the PM peak, the baseline average maximum queue on the Pump Lane South Little Marlow Road approach to the junction is 14 metres long, reducing to 9 metres in the Managed Option 1 scenario, the Managed Option 2 scenario and the Unmanaged Option 2 scenario.

It can be concluded that the development traffic and the proposed improvements have a minimal effect on this arm and there is minimal queueing.

Marlow Road East (westbound approach)

2027

In the AM peak, the 2027 baseline average maximum queue on the Marlow Road East approach to the junction is 81 metres long, increasing by 101 metres, or 17 PCU's, to 182 metres, an increase of 125%, in the Managed Option 1 scenario and to 183 metres in the Managed Option 2 scenarios.

For the Unmanaged Option 2 scenario the queue also increases by 101 metres to 182 metres. There is continuous queueing on this approach throughout the AM peak hour, particularly after 08:20.

In the evening peak, the 2027 baseline average maximum queue on the Marlow Road East approach to the junction is 0 metres, increasing to 67 metres, or 12 PCU's in the Managed Option 1 scenario and to 63 metres in the Managed Option 2 scenario. For the Unmanaged Option 2 scenario the queue would be 75 metres, or 13 PCU's, long. There is limited queuing on this approach during the evening peak period.

2034

For 2034 in the AM peak, the baseline average maximum queue on the Marlow Road East approach to the junction is 134 metres long, increasing by 59 metres, or 10 PCU's, to 193 metres in the Managed Option 1 scenario and 193 in the Managed Option 2 scenario. For the Unmanaged Option 2 scenario the queue increases to 194 metres.

For 2034 in the PM peak, the baseline average maximum queue on the Marlow Road East approach to the junction is 18 metres long, increasing by 70 metres, or 12 PCU's to 88 metres in the Managed Option 1 scenario and to 86 metres in the Managed Option 2 scenario. For the Unmanaged Option 2 scenario the queue would increase by 102 metres, or 18 PCU's, and would be 120 metres long.

It can be concluded that there is an unacceptable increase in queueing on this arm in the AM peak hour due to the priority give way to the Marlow Road West arm. The development traffic impact is therefore considered to be severe.

Site Access

2027

In the AM peak, the 2027 baseline average maximum queue on the Site Access approach to the junction is 12 metres long, increasing to 48 metres in the Managed Option 1 and the Managed Option 2 scenarios. For the Unmanaged Option 2 scenario the queue would be 60 metres long.

In the evening peak, the 2027 baseline average maximum queue on the Site Access approach to the junction is 7 metres long, increasing by 89 metres, or 15 PCU's, to 96 metres in the Managed Option 1 scenario and by 94 metres, or 16 PCU's to 101 metres in the Managed Option 2 scenario. For the Unmanaged Option 2 scenario the queue would be 229 metres long, an increase of 222 metres. Considerable queuing occurs on this approach throughout the evening peak hour.

2034

For 2034 in the AM peak, the baseline average maximum queue on the Site Access approach to the junction is 16 metres long, increasing to 49 metres in the Managed Option 1 scenario and to 53 metres in the Managed Option 2 scenario. For the Unmanaged Option 2 scenario the queue would be 69 metres long.

For 2034 in the PM peak, the baseline average maximum queue on the Site Access approach to the junction is 7 metres long, increasing by 102 metres, or 18 PCU's, to 109 metres in the Managed Option 1 scenario, and by 113 metres, or 20 PCU's, to 120 metres in the Managed Option 2 scenario and increasing by 314 metres, or 55 PCU's, to 321 metres in the Unmanaged Option 2 scenario.

As expected, queues on the site access arm are long in the PM peak hour. It is not clear how queues of this length will impact on the internal operation of the development and the applicant has not provided any evidence to show that it would not have a detrimental impact. As it stands the HA has concerns over the operation of a new form of junction providing access to new development and the associated impacts both on and off the site that the shown level of queueing could have.

Marlow Road West (eastbound approach)

2027

In the AM peak, the 2027 baseline average maximum queue on the Marlow Road West approach to the junction is 0 metres long, increasing to 18 metres in the Managed Option 1 scenario and to 15 metres in the Managed Option 2 scenarios. For the Unmanaged Option 2 scenario the queue increases to 30 metres.

In the evening peak, the 2027 baseline average maximum queue on the Marlow Road West approach to the junction is 0 metres long, increasing to 21 metres in the Managed Option 1

scenario and to 20 metres in the Managed Option 2 scenario. For the Unmanaged Option 2 scenario the queue would be 24 metres long.

2034

For 2034 in the AM peak, the baseline average maximum queue on the Marlow Road West approach to the junction is 0 metres long, increasing to 23 metres in the Managed Option 1 scenario and to 36 in the Managed Option 2 scenario. For the Unmanaged Option 2 scenario the queue reduces to 18 metres.

For 2034 in the PM peak, the baseline average maximum queue on the Marlow Road West approach to the junction is 0 metres long, increasing to 25 metres in the Managed Option 1 scenario and to 26 metres in the Managed Option 2 scenario. For the Unmanaged Option 2 scenario the queue would be 21 metres long.

It can be concluded that the queues on this arm are minimal and are not shown to block back to the Westhorpe Interchange.

A4155 Marlow Road/Westhorpe Farm Lane

Marlow Road West (eastbound approach)

2027

In the AM peak, the 2027 baseline average maximum queue on the Marlow Road West approach to the junction is 0 metres long, increasing to 30 metres in the Managed Option 1 scenario and to 53 metres in the Managed Option 2 scenarios. For the Unmanaged Option 2 scenario the queue increases to 56 metres.

In the evening peak, the 2027 baseline average maximum queue on the Marlow Road West approach to the junction is 0 metres long, increasing to 8 metres in the Managed Option 1 scenario and to 11 metres in the Managed Option 2 scenario. For the Unmanaged Option 2 scenario the queue would be 24 metres long. There is very little queuing on this approach during the evening peak period.

2034

For 2034 in the AM peak, the baseline average maximum queue on the Marlow Road West approach to the junction is 0 metres long, increasing to 63 metres in the Managed Option 1 scenario and to 77 in the Managed Option 2 scenario. For the Unmanaged Option 2 scenario the queue reduces to 22 metres.

For 2034 in the PM peak, the baseline average maximum queue on the Marlow Road West approach to the junction is 0 metres long, increasing to 14 metres in the Managed Option 1

scenario and to 28 metres in the Managed Option 2 scenario. For the Unmanaged Option 2 scenario the queue would be 25 metres long.

It can be concluded that there is minimal queueing on this arm but the development has an effect in the AM peak hour increasing queue lengths in Managed scenarios to 53 to 77 metres.

Marlow Road East (westbound approach)

2027

In the AM peak, the 2027 baseline average maximum queue on the Marlow Road East approach to the junction is 86 metres long, increasing by 262 metres, or 45 PCU's, to 348 metres, an increase of 300% in the Managed Option 1 scenario and to 333 metres in the Managed Option 2 scenarios. For the Unmanaged Option 2 scenario the queue increases to 324 metres.

In the evening peak, the 2027 baseline average maximum queue on the Marlow Road East approach to the junction is 0 metres long, increasing to 14 metres in the Managed Option 1 scenario and to 4 metres in the Managed Option 2 scenario. For the Unmanaged Option 2 scenario the queue would be 11 metres long.

2034

For 2034 in the AM peak, the baseline average maximum queue on the Marlow Road East approach to the junction is 219 metres long, increasing by 165 metres, or 29 PCU's, to 384 metres, an increase of 75%, in the Managed Option 1 scenario and to 382 in the Managed Option 2 scenario. For the Unmanaged Option 2 scenario the queue also increases to 384 metres.

For 2034 in the PM peak, the baseline average maximum queue on the Marlow Road East approach to the junction is 9 metres long, increasing to 29 metres in the Managed Option 1 scenario and to 39 metres in the Managed Option 2 scenario. For the Unmanaged Option 2 scenario the queue would be 36 metres long.

It can be concluded that the proposed development results in significant queue increases in the AM peak hour on this arm, which is considered to be a severe impact

Westhorpe Farm Lane

In the AM peak, the 2027 baseline average maximum queue on the Westhorpe Farm Lane approach to the junction is 4 metres long and remains at 4 metres in the Managed Option 1 scenario, the Managed Option 2 scenario and the Unmanaged Option 2 scenario. Very little queuing takes place during the morning peak hour.

In the evening peak, the 2027 baseline average maximum queue on the Westhorpe Farm Lane approach to the junction is 2 metres long and remains at 2 metres in the Managed Option 1

scenario, the Managed Option 2 scenario and the Unmanaged Option 2 scenario. Very little queuing takes place during the evening peak hour.

2034

For 2034 in the AM peak, baseline average maximum queue on the Westhorpe Farm Lane approach to the junction is 4 metres long and remains at 4 metres in the Managed Option 1 scenario, the Managed Option 2 scenario and the Unmanaged Option 2 scenario.

For 2034 in the PM peak, the baseline average maximum queue on the Westhorpe Farm Lane approach to the junction is 3 metres long and remains at 3 metres in the Managed Option 1 scenario, the Managed Option 2 scenario and the Unmanaged Option 2 scenario.

Junction Summary

There is significant continuous queueing on the Marlow Road East arm resulting from the impact of the development traffic causing blocking back through the site access junction. This impact is considered to be severe.

Overall Summary

The spreadsheet data, queue profiles, heatmaps and videos show that the proposed development will result in significant increases in queueing in the AM peak hour in particular on the A4155 through the modelled area affecting a number of junctions with long queues also occurring on the site access itself.

Overall, it is the position of the Local HA that the VISSIM modelling demonstrates that the development traffic will result in a severe impact on the operation of the local highway network as submitted and further information would be required to show if and how this can be adequately mitigated.

Wide Area Network Assessment

Section 5 of the STA looks at the assessment on the wider highway network. This assessment was originally included in a Briefing Note, however the assessment, and associated information in now contained in the STA. While the majority of the information in the STA is consistent with the information contained in the Briefing Note, the STA contains updated assessments mainly for the junctions on the National Highways network.

Following discussions between the applicant, National Highways and the Council, it has been agreed that the applicant carries out detailed junction impact assessments of 11 further junctions on the local highway network. The Briefing Note states that junctions subject to further assessment are as follows:

- M40 Junction 4 Handy Cross Roundabout National Highways to confirm requirements. BC would also like to understand any impact on the Local Highway Authority network;
- 2. A404 / Marlow Road 'Bisham' Roundabout National Highways to confirm requirements;
- 3. Wiltshire Road / A4155 Little Marlow Road Roundabout;
- 4. Newtown Road / A4155 Little Marlow Road / Bobmore Lane priority staggered crossroads:
- 5. Glade Road / A4155 Little Marlow Road priority T-junction;
- 6. Wycombe Road / A4155 Little Marlow Road priority T-junction Not previously included;
- 7. A4155 Chapel Street / B482 Dean Street / A4155 Marlow Road mini-roundabout;
- 8. High Street / A4155 Marlow Road / A4155 West Street mini-roundabout;
- 9. Winchbottom Lane / A4155 Marlow Road priority T-junction (Little Marlow);
- 10. Sheepridge Lane / A4155 Marlow Road mini-roundabout (Bourne End);
- 11. Blind Lane / A4155 Marlow Road priority T-junction;
- 12. A4155 Cores End Road / The Parade / Station Road mini-roundabout.

Survey Data

The applicant has explained that additional Manual Classified Turning Count and Queue Length traffic surveys have been undertaken during July 2023 at the identified Local Road Network (LRN) junctions on the A4155 corridor to obtain current 2023 baseline data, upon which the current detailed assessments are based.

The STA also explains that traffic flows for junctions on the Strategic Road Network (SRN) have been factored to reflect observed changes in network traffic flow between 2021 and 2023 observed data at Westhorpe Interchange.

Scenarios

The applicant explains that the following scenarios have been tested:

- Observed (Existing) Baseline (for model calibration);
- 2027 Future Baseline;
- 2034 Future Baseline;
- 2027 Baseline plus Managed Development;
- 2034 Baseline plus Managed Development;
- 2027 Baseline plus Unmanaged Development;
- 2034 Baseline plus Unmanaged Development;
- 2027 Baseline plus Reasonable Unmanaged Development; and
- 2034 Baseline plus Reasonable Unmanaged Development.

TEMPro has been used to factor up the 2023 flows to 2027 and 2034. The TEMPro data has been reviewed and is considered to be acceptable.

As explained in previous highways responses, there remains concern that the mode share targets proposed by the applicant are ambitious and unlikely to be achieved. Appropriate mitigation measures are therefore required should model shift targets not be achieved.

Strategic Road Network Assessment

Handy Cross Roundabout

Handy Cross is the grade separated traffic signalled controlled junction between the M40 and the A404 which also connects High Wycombe to the M40. It is located approximately 3.5km to the north of the Westhorpe Interchange. The junction forms part of the SRN managed by National Highways, however the A4010, Marlow Road, Marlow Hill and Wycombe Road approaches are part of the local highway network maintained by BC.

In consultation with National Highways, a bespoke LinSig based assessment of the A404 and M40 approaches at the Handy Cross Interchange has been undertaken.

The STA states in paragraph 5.59 that:

"A simple assessment has been provided for the A4010 and A404 North approaches to Handy Cross interchange in the morning peak."

It goes on to state in paragraph 5.61 that:

"The average additional demand per lane for the A4010 entry would be 0.3 pcu cycle, or 1 pcu every third cycle. This increase is not considered significant."

It also states in 5.62 that:

"The average additional demand per lane for the A404 North entry would be 1.1 pcu per cycle when considered over a single lane."

While it has not been explained how the 0.3 PCU and 1.1 PCU per cycle has been obtained, it has been assumed that the hourly increase in PCUs, 34 and 54, has been divided by the number of cycles in the AM peak hour. The Briefing Note explains that the cycles are 72 seconds, which would result in 50 cycles in the AM peak hour. The A4010 has two entry lanes, therefore the increase would be 0.3 PCU per lane. The A404 entry has one lane towards the A404 as the other two lanes are for the M40. Therefore, the increase is 1.1 PCU per cycle.

In addition to demand per cycle the hourly % increase has been shown in Table 28 on page 77 of the TAA2. It shows an increase of 3% on the A4010 in the unmanaged growth scenario in the AM peak hour and 4.65% on Marlow Hill. In the PM peak hour, shown in Table 29, the increase is less, with 0.85% increase in the unmanaged growth scenario on the A4010 and 1.63% in the PM peak hour.

Following a review of this information it is concluded that the impact of the development proposals on the operation of the A4010 arm and the Marlow Hill arm of the Handy Cross

Interchange is likely to be minimal and mitigation measures are therefore not required to improve capacity on these arms.

A404 / Marlow Road 'Bisham' Roundabout

As this junction is located on part of the network that falls under the control of National Highways, in addition to it being located outside of Buckinghamshire, National Highways will provide comments.

Local Road Network Assessment

A4155 Little Marlow Road / Wiltshire Road Roundabout

Paragraph 5.92 of the STA states the following:

"The A4155 Little Marlow Road / Wiltshire Road Roundabout is included within the Westhorpe Interchange VISSIM model, which enables a microsimulation assessment of the junction. The VISSIM model provides an assessment of the impact of the Proposed Development upon the Wiltshire Road roundabout in the context of the adjoining network and reflecting the interaction of traffic effects on the A4155 corridor and at adjacent junctions."

Paragraph 5.93 of the STA goes onto state:

"On this basis the VISSIM model is considered to represent a more accurate assessment of the impact of the Proposed Development upon this junction than a standalone capacity model. Accordingly a Junctions 10 ARCADY model has not been prepared for this junction, which will be assessed with reference to the emerging VISSIM model."

A review of this junction has therefore been conducted as part of the VISSIM model review. **A4155 Little Marlow Road / Bobmore Lane / Newton Road Junction**

This is a staggered priority junction with Bobmore Lane located north west of Newton Road. A Zebra Crossing facility is located on the A4155 Little Marlow Road western arm, 20m west of Bobmore Lane.

The geometry has been checked and is correct, however, the zebra crossing on the western arm has not been included in the model. The applicant should have included this zebra crossing as well as reasonable demand on the crossing. The flows have been checked and are consistent with the flow matrices provided. However, the 2023 modelled queues have been compared with the recorded queues in the queue survey and there are significant differences in the PM peak hour with queue lengths of over 13 vehicles on the Little Marlow Road Eastbound arm. It is therefore considered that the junction is not correctly calibrated, therefore the future year modelling results may be unreliable.

	Bobmo	re Lane	Little Marlo Lane Road WB Rig Turn		Newtown Road		Little Marlow Road EB Right- Turn	
Times	Lane 1		Lane 1		Lane 1	Lane 2	Lane 1	
17:00 - 17:05	2		7		5	0	2	
17:05 - 17:10	2		1		7	0	3	
17:10 - 17:15	2		7		8	0	3	
17:15 - 17:20	2		1		10	0	7	
17:20 - 17:25	3		2		11	0	2	
17:25 - 17:30	3		2		12	0	12+	
17:30 - 17:35	6		4		16	0	12+	
17:35 - 17:40	8		2		11	0	13+	
17:40 - 17:45	7		6		10	0	12+	
17:45 - 17:50	9		0		9	0	11+	
17:50 - 17:55	5		9		10	0	13+	
17:55 - 18:00	6		4		7	0	13+	

handler Asse		AM Peak			PM Peak		
Junction Arm	RFC	Queue (PCUs)	Delay (s)	RFC	Queue (PCUs)	Delay (s)	
	2023 Observed Flows						
Newtown Rd	0.45	0.8	19.47	0.59	1.4	22.44	
A4155 WB Right-turn into Bobmore Lane	0.22	0.4	7.83	0.38	0.9	7.86	
Bobmore Lane	0.32	0.5	10.14	0.23	0.3	8.01	
A4155 EB Right-turn into Newtown Road	0.24	0.4	7.26	0.14	0.2	7.54	

Paragraph 5.102 of the STA states:

"It should be noted that this junction is occasionally impacted by queueing which extends back from downstream junctions causing exit blocking and therefore does not always operate as a standalone junction. This junction may also experience occasional delays resulting from pedestrians crossing the A4155 at the zebra crossing located to the west of this junction during peak periods."

However, a review of queue lengths shows consistent queueing rather than short periods of congestion. The survey shows queues of 14+ vehicles but this could be significantly more vehicles. It is therefore considered that the base model for this junction in the Wider Network Assessment does not reflect existing conditions and, therefore, the results from the future

year modelling are unreliable. The HA is therefore not in a position to determine that the development traffic impact at this junction is not severe.

A4155 Little Marlow Road / Glade Road Junction

The junction of the A4155 Little Marlow Road with Glade Road is a priority T-junction with a ghost island right-turn facility. The ghost island is 24m long and would accommodate approximately 4 PCUs.

The geometry of the model has been checked and it would appear that there are significant errors. The width of the A4155 is 5.7m rather than 6.55m. The Little Marlow Road right turn only accommodates 4 vehicles before it blocks, and this has not been reflected in the model which shows no blocking. Also, kerbed central reserve has been ticked while there is none.

The flows have been checked and it is noted that, in both the spreadsheet and the PICADY model, the peak hour flows on the Glade Road and Little Marlow Road East arms have been switched when compared to the survey data. The 2023 modelled queues have been compared with the recorded queues in the queue survey and there are differences in both peak hours with queues on both Glade Road and Little Marlow Road Eastbound arm. This will mainly be the result of the errors in data entry and geometry as described above, but the junction also needs to be calibrated against recorded vehicle queues.

	Glade	Road	Little	Marlow ght-Turn
Times	Lane 1	Lane 2	Lane 1	
08:00 - 08:05	2	4	7	
08:05 - 08:10	4	2	6	
08:10 - 08:15	1	3	1	
08:15 - 08:20	2	3	3	
08:20 - 08:25	1	2	3	
08:25 - 08:30	2	2	1	
08:30 - 08:35	4	2	2	
08:35 - 08:40	1	1	1	
08:40 - 08:45	1	1	3	
08:45 - 08:50	3	3	4	
08:50 - 08:55	3	2	0	
08:55 - 09:00	1	1	4	

Table 12: A4155 Little Marlow Road j/w Glade Road - Junctions 10 (PICADY) Results

Junction Arm	AM Peak			PM Peak		
Junction Arm	RFC	Queue (PCUs)	Delay (s)	RFC	Queue (PCUs)	Delay (s)
2023 Observed Flows						
Glade Road (Left-turn lane)	0.56	1.4	14.59	0.50	1.0	12.53
Glade Road (Right-turn lane)	0.36	0.6	16.09	0.30	0.4	11.65
A4155 Little Marlow Rd (EB right-turn to Glade Road)	0.65	1.9	17.49	0.25	0.3	8.20

Due to the geometry and data errors and lack of calibration, the base model for this junction in the Wider Network Assessment does not reflect existing conditions and, therefore, the results from the future year modelling are unreliable. The HA is therefore not in a position to confirm that the development traffic impact at this junction is not severe.

A4155 Little Marlow Road / Wycombe Road Junction

The junction of the A4155 Little Marlow Road with Wycombe Road is a priority T-junction with a ghost island right-turn facility, located approximately 50m west of Glade Road. The ghost island is 40m long and would therefore accommodate approximately 7 vehicles.

The geometry of the model has been checked and the peak hour flows from Wycombe Road to Little Marlow Road East and West have been switched in the PICADY file. The width of the A4155 is 5.7m rather than 6.7m. The Little Marlow Road right turn only accommodates 7 vehicles before it blocks, and this has not been reflected in the model which shows no blocking. The model shows there is a flare of 1 vehicle on Wycombe Road but there is not sufficient width, and an error code is shown in the model.

The flows have been checked and the 2023 modelled queues have been compared with the recorded queues in the queue survey and there are significant differences with queues on both Wycombe Road and Little Marlow Road especially in the AM peak hour.

	Wycom	be Road		Marlow ght-Turn
Times	Lane 1 Lane 2		Lane 1	Lane 2
08:00 - 08:05	1	3	6	0
08:05 - 08:10	1	6	0	1
08:10 - 08:15	0	7	0	2
08:15 - 08:20	0	5	8	1
08:20 - 08:25	0	6	10	0
08:25 - 08:30	0	6	0	0
08:30 - 08:35	1	9	0	1
08:35 - 08:40	0	12	4	1
08:40 - 08:45	1	9	0	1
08:45 - 08:50	0	7	0	0
08:50 - 08:55	1	2	0	1

Table 13: A4155 Little Marlow Road j/w Wycombe Road – Junctions 10 (PICADY) Results

Junction Arm -		AM Peak			PM Peak		
	RFC	Queue (PCUs)	Delay (s)	RFC	Queue (PCUs)	Delay (s)	
	2	023 Observe	ed Flows				
Wycombe Road (Left-turn Flare)	0.16	0.2	7.01	0.09	0.1	6.22	
Wycombe Road (Right-turn Lane)	0.31	0.4	14.11	0.19	0.2	13.04	
A4155 Little Marlow Rd (WB right-turn to Wycombe Road)	0.09	0.1	7.19	0.25	0.3	9.25	

Due to the geometry errors and lack of calibration, the base model for this junction in the Wider Network Assessment does not reflect existing conditions and, therefore, the results from the future year modelling are unreliable. The HA is therefore not in a position to confirm that the development traffic impact is not severe.

A4155 Chapel Street / B482 Dean Street / A4155 Marlow Road Junction

The junction of the A4155 Chapel Street with B482 Dean Street and A4155 Marlow Road is a three-arm mini-roundabout junction, located approximately 275m west of Wycombe Road. Zebra Crossing facilities are located on the Dean Street arm 20m north of the junction and the Marlow Road 6m south-west of the junction.

The geometry has been checked and is correct, however, the zebra crossings have not been included in the model.

Paragraph 5.134 of the STA states:

"It should be noted that this junction is occasionally impacted by queueing which extend back from downstream junctions during peak periods and therefore does not always operate as a standalone junction."

However, the survey shows continuous queueing in both peak hours of over 46 vehicles on the Chapel Street (eastern) arm while the modelled queue is 1 vehicle. On the Dean Street (north western) arm there is continuous queuing of 15 to 18 vehicles while the model shows 2 to 3 vehicles. It is clear that the model has not been calibrated and the modelling is therefore not considered representative of the operation of the junction. Once the model has been calibrated correctly consideration should be given to the interaction between this junction and the mini roundabout to the south west should there be queueing back along the link to that junction. It maybe that the two junctions need to be modelled in ARCADY as linked mini roundabouts with a queue limited link between them.

	AM Peak (0800-0900	PM Peak 1700-1800		
	Observed Modelled		Observed	Modelled	
	Queue Ave Queue		Queue Ave	Queue	
	(Max)		(Max)		
A4155 Chapel St	46+ (48+)	1	48 (49)	0.7	
A4155 Marlow Road	4 (7)	0.8	9 (19)	1	
B482 Dean Street	18 (19)	2.4	15 (19+)	1.7	

	Dean Street B482		Chapel street		A4155 Marlow Road	
Times	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
08:00 - 08:05	16+	0	45+	0	1	
08:05 - 08:10	18+	1	46+	1	5	
08:10 - 08:15	17+	1	45+	0	1	
08:15 - 08:20	17+	0	44+	0	5	
08:20 - 08:25	16+	0	47+	0	3	
08:25 - 08:30	17+	1	46+	0	6	
08:30 - 08:35	17+	1	47+	1	2	
08:35 - 08:40	17+	0	48+	0	2	
08:40 - 08:45	17+	0	46+	0	7	
08:45 - 08:50	17+	0	45+	0	6	
08:50 - 08:55	17+	0	46+	0	4	
08:55 - 09:00	17+	0	46+	0	2	
09:00 - 09:05	16+	0	45+	0	8	

	Dean Street B482		Chapel street		A4155 Marlow Road	
Times	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
17:00 - 17:05	9	0	44	1	11	
17:05 - 17:10	16	1	46+	1	1	
17:10 - 17:15	13	1	47+	0	5	
17:15 - 17:20	15	1	46+	0	9	
17:20 - 17:25	11	1	48+	0	5	
17:25 - 17:30	16+	0	47+	1	16	
17:30 - 17:35	16+	0	47+	1	8	
17:35 - 17:40	18+	1	48+	0	17	
17:40 - 17:45	18+	0	48+	1	3	
17:45 - 17:50	16+	0	47+	0	7	
17:50 - 17:55	10	0	48+	0	19	
17:55 - 18:00	16+	1	48+	1	7	

Table 14: A4155 Chapel Street j/w Marlow Road - Junctions 10 (ARCADY) Results

Junction Arm		AM Peak			PM Peak		
Junction Arm	RFC	Queue (PCUs)	Delay (s)	RFC	Queue (PCUs)	Delay (s)	
	2023 Observed Flows						
A4155 Chapel Street	0.48	1.0	8.69	0.42	0.7	7.40	
A4155 Marlow Road	0.43	0.8	6.53	0.50	1.0	7.47	
B482 Dean Street	0.70	2.4	16.77	0.62	1.7	13.54	

Due to the lack of calibration, the base model for this junction in the Wider Network Assessment does not reflect existing conditions and, therefore, the results from the future year modelling are unreliable. The HA is therefore not in a position to confirm that the development traffic impact at this junction is not severe.

A4155 Marlow Road / High Street / A4155 West Street Mini-Roundabout

The junction of the A4155 Marlow Road with High Street and A4155 West Street is a three-arm mini roundabout junction, located approximately 145m south-west of Dean Street.

The geometry has been checked and it was considered that the High Street arm is 7m not 7.3m although this is unlikely to have a significant effect on the modelling. This junction also experienced continuous queueing throughout the entire peak periods on all arms with observed average queues between 10 and 24 vehicles while the model shows queues of less than 1 vehicle on all arms. The modelling is therefore not considered representative of the operation of the junction.

	AM Peak (0800-0900	PM Peak 1700-1800		
	Observed Modelled		Observed	Modelled	
	Queue Ave	Queue Ave Queue		Queue	
	(Max)		(Max)		
A4155 Marlow Road	14 (14)	0.7	13 (13)	0.5	
High Street	24 (29+)	0.7	23 (27)	0.7	
A4155 West Street	10 (10+)	0.5	10 (10+)	0.6	

	Marlow Road		High S	Street /B	West Street	
Times	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
08:00 - 08:05	14		29+		9+	
08:05 - 08:10	14		25		10+	
08:10 - 08:15	13		19		10+	
08:15 - 08:20	14		26		10+	
08:20 - 08:25	13		23		10+	
08:25 - 08:30	14		16		10+	
08:30 - 08:35	13		21		10+	
08:35 - 08:40	14		22		10+	
08:40 - 08:45	13		21		10+	
08:45 - 08:50	14	,	23		10+	
08:50 - 08:55	14		26		10+	
08:55 - 09:00	13		30+		9+	

Table 15: A4155 Marlow Road j/w High Street & West Street – Junctions 10 (ARCADY) Results

		AM Peak			PM Peak	
Junction Arm	RFC	Queue (PCUs)	Delay (s)	RFC	Queue (PCUs)	Delay (s)
2023 Observed Flows						
A4155 Marlow Road	0.41	0.7	6.57	0.34	0.5	5.68
High Street	0.41	0.7	6.89	0.41	0.7	6.53
A4155 West Street	0.34	0.5	5.60	0.37	0.6	6.04

Due to the lack of calibration, the base model for this junction in the Wider Network Assessment does not reflect existing conditions and, therefore, the results from the future year modelling are unreliable.

A4155 Marlow Road / Sheepridge Lane, Little Marlow Mini Roundabout

The junction of the A4155 Marlow Road with Sheepridge Lane is a three-arm mini roundabout located in Little Marlow approximately 2.3km east of Westhorpe Interchange.

There are some minor discrepancies between the geometry on the plan and the geometry in the model. The A4155 Marlow Road West approach half road width is coded as 3.6m in the model but measures and is printed as 3.5m on the plan. On the Marlow Road East approach, the approach half road width is coded as 3.5m but is measured and printed as 3.4m on the plan. Otherwise, the geometry is correct, and these discrepancies will have minimal impact.

The flow data in the spreadsheet has been checked and it appears that that the development flows from the A4155 / West Street junction (managed and unmanaged) have been added to the base flows of this junction for both the 2027 and 2034.

Whilst the model validates well against observed queues as shown in the table below, it was noted that the summary output table, Table 21 on page 65 of the STA, does not correspond at all with the output file in Appendix T which shows queues of 121 vehicles on Marlow Road West. It is assumed that this junction has been calibrated and the wrong output data has been attached. However, without the correct output data, it has not been possible to check the modelling.

	PM Peak 1700-1800		
	Observed Modelle		
	Queue Ave	Queue	
	(Max)		
A4155 Marlow Road West	4 (9)	9	
Sheepridge Lane	5 (6)	6	
A4155 Marlow Road East	5 (9)	8	

Table 21: A4155 Marlow Road j/w Sheepridge Lane - Junctions 10 (ARCADY) Results

Junction Arm -	PM Peak					
Junction Ann —	RFC Queue (PCUs)		Delay (s)			
2023 Observed Flows						
A4155 Marlow Road (W)	0.91	8.9	32.49			
Sheepridge Lane	0.88	5.5	71.49			
A4155 Marlow Road (E)	0.91	8.0	41.57			

Summary of junction performance

	PM				
	Queue (PCU)	Delay (s)	RFC		
	2023 Existing Base				
1 - A4155 Marlow Rd (W)	121.0	509.98	1.24		
2 - Sheepridge Lane	1.6	19.62	0.62		
3 - A4155 Marlow Rd (E)	2.9	14.56	0.75		

The STA only includes the PM results only as the initial impact assessment demonstrated that a further detailed assessment was not required in the AM.

The PM peak hour shows that the junction is approaching capacity in the 2027 Do Minimum Scenario and is at capacity in the 2034 Do Minimum Scenario. In the 2027 Do something Managed Scenario, the Sheepridge Lane arm increases by 28 vehicles from 8 to 36 and in the 2027 Unmanaged Scenario, it increases by 45 vehicles from 8 to 53 vehicles with an increase in waiting time on Sheepridge Lane of 5.5 minutes. In the 2034 Managed Scenario the queue

on this arm increases by 35.5 vehicles and the waiting time increases by nearly 5 minutes. With the 2034 Unmanaged Scenario, it increases by 53.5 vehicles with an increase in waiting time of 8 minutes.

This is an unacceptable increase in queuing and delay and mitigation would therefore be required. However, no mitigation has been proposed and instead paragraph 5.144 of the STA states the following:

"It is not considered likely that the additional demand forecast by the Proposed Development will be significant in terms of the day-to-day operation of the Sheepridge Lane junction, and the forecast increase in queue lengths and delay on the junction approaches are not considered material relative to the baseline values. The forecast impact of all scenarios is therefore not considered severe in terms of the NPPF test."

Increases in waiting times that range from 5 to 8 minutes are considered significant and material increases, along with significant increases in queueing, all leading to an unacceptable impact on the junction. Therefore suitable mitigation of the development traffic impact should be considered. However, the applicant has not considered any form of mitigation for the junction and therefore the HA considers that the development traffic impact at this junction remains severe.

	PM Peak					
Junction Arm	RFC	Queue (PCUs)	Delay (s)			
2027 Base						
A4155 Marlow Road (W)	0.94	11.7	41.36			
Sheepridge Lane	0.94	7.9	96.93			
A4155 Marlow Road (E)	0.94	10.1	51.14			
	2034 B	ase				
A4155 Marlow Road (W)	0.99	19.9	64.90			
Sheepridge Lane	1.04	14.6	160.54			
A4155 Marlow Road (E)	0.98	15.8	74.02			
	Base 2027 + Manag	ed Development				
A4155 Marlow Road (W)	0.96	13.9	48.37			
Sheepridge Lane	1.20	36.2	312.38			
A4155 Marlow Road (E)	0.95	11.8	58.55			
	Base 2034 + Manag	ed Development				
A4155 Marlow Road (W)	1.00	24.3	76.51			
Sheepridge Lane	1.30	50.1	454.95			
A4155 Marlow Road (E)	0.99	17.3	79.80			
	Base 2027 + Unmana	ged Development				
A4155 Marlow Road (W)	0.96	15.1	51.99			
Sheepridge Lane	1.30	53.0	434.66			
A4155 Marlow Road (E)	0.95	12.0	59.19			
	Base 2034 + Unmana	ged Development				
A4155 Marlow Road (W)	1.01	26.6	82.26			
Sheepridge Lane	1.40	69.3	639.59			
A4155 Marlow Road (E)	0.99	17.7	80.99			

A4155 Marlow Road / Blind Lane, Bourne End Junction

The junction of the A4155 Marlow Road with Blind Lane is a priority T-junction, located approximately 965m south-east of Sheepridge Lane in Bourne End.

The STA includes the PM results only as the previous assessment work concluded that a further detailed assessment in the AM peak hour was not required.

The geometry has been checked. The model shows there is a flare of 1 vehicle on Blind Lane but there is not sufficient width, and an error code is shown in the model.

The flow data in the spreadsheet has been checked and it appears that that the development flows from the A4155 / West Street junction (managed and unmanaged) have been added to the base flows of this junction for both the 2027 and 2034.

The junction does not calibrate well with the surveyed queues. Due to the geometry and data entry errors and lack of calibration, the base model for this junction in the Wider Network Assessment does not reflect existing conditions and, therefore, the results from the future year modelling are unreliable. The HA is therefore not in a position to confirm that the development traffic impact at this junction is not severe.

	PM Peak 1700-1800		
	Observed	Modelled	
	Queue Ave	Queue	
	(Max)		
Blind Lane	3 (6)	0.4	
A4155 Marlow Road South	6 (11)	1.3	

and the second s		N	
Junction Arm —		PM Peak	
Junction Arm —	RFC	Queue (PCUs)	Delay (s)
	2023 Observ	ved Flows	
Blind Lane (Left-turn flare)	0.23	0.3	10.65
Blind Lane (Right-turn lane)	0.30	0.4	26.29
A4155 Marlow Road (NB right- turn to Blind Lane)	0.43	1.3	8.65

	Blind Lane			v Road -Turn
Times	Lane 1	Lane 2	Lane 1	
17:00 - 17:05	4	1	7	
17:05 - 17:10	2	0	7	
17:10 - 17:15	5	1	8	
17:15 - 17:20	4	0	5	
17:20 - 17:25	2	0	2	
17:25 - 17:30	2	0	5	
17:30 - 17:35	3	0	5	
17:35 - 17:40	2	1	4	
17:40 - 17:45	2	0	3	
17:45 - 17:50	6	1	5	
17:50 - 17:55	1	0	11	
17:55 - 18:00	2	0	11	

A4155 The Parade / Cores End Road / Station Road, Bourne End Mini-Roundabout

The junction of the A4155 The Parade with A4155 Cores End Road and A4155 Station Road is a three-arm mini-roundabout junction, located approximately 410m south-east of Blind Lane in Bourne End.

The STA only includes the PM results only as the initial assessment work concluded that a further detailed assessment was not required in the AM peak. The geometry has been checked and appears correct.

The flow data in the spreadsheet has been checked and it appears that the development flows from the A4155 / West Street junction (managed and unmanaged) have been added to the base flows of this junction for both the 2027 and 2034.

It was noted that the summary output table, Table 24 on page 70 of the STA, does not correspond with the output file in Appendix V. It is assumed that the junction has been calibrated to queues on Station Road of 14 vehicles and the wrong output file has been attached. However, the survey shows queues of 14+ vehicles which could well be 31 vehicles as the modelling suggests. Without the correct output data, it has not been possible to check the modelling.

Summary of junction performance

	PM					
	Queue (PCU)	Delay (s)	RFC			
	2023 Existing Base					
1 - A4155 The Parade	6.6	30.71	0.88			
2 - A4155 Cores End Road	2.2	15.07	0.69			
3 - A4155 Station Road	31.4	186.08	1.08			

Table 24: A4155 The Parade j/w Cores End Road and Station Road– Junctions 10 (ARCADY) Results

Junction Arm —		PM Peak				
Junction Ann	RFC Queue (PCUs)		Delay (s)			
2023 Observed Flows						
A4155 The Parade	0.90	8.0	37.09			
A4155 Cores End Road	0.97	12.7	90.15			
A4155 Station Road	0.98	13.9	89.70			

	The P	arade		s End ad	Statio	n Road
Times	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
17:00 - 17:05	3		6		12+	
17:05 - 17:10	8		9		13	
17:10 - 17:15	1		6		14+	
17:15 - 17:20	5		7		6	
17:20 - 17:25	8		6		7	
17:25 - 17:30	3		5		14+	
17:30 - 17:35	3		9		14+	
17:35 - 17:40	1		14		14+	
17:40 - 17:45	1		4		11	
17:45 - 17:50	4		4		13+	
17:50 - 17:55	1		3		1	
17:55 - 18:00	3		4		8	

Junction Arm		PM Peak				
ounded 74 m	RFC	Queue (PCUs)	Delay (s)			
2023 Observed Flows						
A4155 The Parade	0.90	8.0	37.09			
A4155 Cores End Road	0.97	12.7	90.15			
A4155 Station Road	0.98	13.9	89.70			
	2027	Base				
A4155 The Parade	0.93	9.9	45.11			
A4155 Cores End Road	1.01	17.6	117.34			
A4155 Station Road	1.01	18.1	110.59			
	2034	Base				
A4155 The Parade	0.97	15.8	66.87			
A4155 Cores End Road	1.08	29.2	177.32			
A4155 Station Road	1.06	27.9	157.01			
Junction Arm -		PM Peak				
	RFC	Queue (PCUs)	Delay (s)			
	Base 2027 + Mana	ged Development				
A4155 The Parade	1.02	26.1	98.80			
A4155 Cores End Road	1.07	27.7	173.21			
A4155 Station Road	1.00	17.5	108.03			
	Base 2034 + Mana	ged Development				
A4155 The Parade	1.07	43.3	149.82			
A4155 Cores End Road	1.12	39.4	249.63			
A4155 Station Road	1.07	31.5	172.51			
	Base 2027 + Unman	aged Development				
A4155 The Parade	1.06	41.3	143.57			
A4155 Cores End Road	1.08	30.4	188.80			
A4155 Station Road	1.03	22.2	130.06			
	Base 2034 + Unman	aged Development				
A4155 The Parade	1.11	59.2	201.59			
A4155 Cores End Road	1.13	42.5	277.46			
A4155 Station Road	1.08	33.8	182.79			
Base	2027 + Reasonable L	Inmanaged Development				
A4155 The Parade	1.05	35.1	125.86			
A4155 Cores End Road	1.08	29.4	183.09			
A4155 Station Road	1.03	21.6	127.11			
Base	2034 + Reasonable L	Inmanaged Development				
A4155 The Parade	1.09	52.5	176.35			
A4155 Cores End Road	1.13	41.8	270.26			
A4155 Station Road	1.08	32.8	178.53			

Notwithstanding the above, the modelling shows that the junction currently has exceeded practical capacity and will reach theoretical capacity in 2027. The development traffic will have a significant effect on The Parade arm of the junction with queues increasing by 16 vehicles in the 2027 Managed Scenario and by 31 vehicles, from 10 to 41 vehicles, in the 2027 Unmanaged Scenario. In the Reasonable Managed Scenario there was an increase of 25 vehicles on this arm.

In 2034, The Parade arm increases by 27.5 vehicles in the Managed Scenario, by 36.7 vehicles in the Reasonable Managed Scenario and by 43.4 vehicles in the Unmanaged Scenario. This is an unacceptable impact, and it is therefore likely that mitigation is required.

Wide Area Network Assessment Summary

The Wider Network Impact Briefing Note has been reviewed and the following can be concluded:

- Handy Cross Roundabout The impact of the development proposals on the operation of the A4010 arm and the Marlow Hill arm of the Handy Cross Interchange is likely to be minimal and mitigation measures are therefore not required on these arms.
- A404 / Marlow Road 'Bisham' Roundabout As this junction is not located in Buckinghamshire, National Highways will provide comments.
- Wiltshire Road / A4155 Little Marlow Road Roundabout A review of this junction has been conducted as part of the VISSIM model review.
- Newtown Road / A4155 Little Marlow Road / Bobmore Lane crossroads It has not been demonstrated that the proposed development will not have a severe impact on the junction.
- Glade Road / A4155 Little Marlow Road priority T-junction It has not been demonstrated that the proposed development will not have a severe impact on the junction.
- Wycombe Road / A4155 Little Marlow Road priority T-junction It has not been demonstrated that the proposed development will not have a severe impact on the junction.
- A4155 Chapel Street / B482 Dean Street / A4155 Marlow Road mini roundabout It has not been demonstrated that the proposed development will not have a severe impact on the junction.
- **High Street / A4155 Marlow Road / A4155 West Street mini roundabout** It has not been demonstrated that the proposed development will not have a severe impact on the junction.
- Sheepridge Lane / A4155 Marlow Road mini roundabout (Bourne End) Although
 there are errors in the modelling and it has not been possible to check the modelling
 output, it appears that the proposed development has a material impact at the
 junction and appropriate mitigation should have been considered by the applicant. It
 has not been demonstrated that the proposed development will not have a severe
 impact on the junction.

- Winchbottom Lane / A4155 Marlow Road priority T-junction It has not been demonstrated that the proposed development will not have a severe impact on the junction.
- **Blind Lane / A4155 Marlow Road priority T-junction** It has not been demonstrated that the proposed development will not have a severe impact on the junction.
- A4155 Cores End Road / The Parade / Station Road mini roundabout Although there
 are errors in the modelling and it has not been possible to check the modelling output,
 it appears that the proposed development has a material impact at the junction and
 mitigation is required. The applicant has not however proposed mitigation for this
 junction and therefore it has not been demonstrated that the development will not
 have a severe impact on this junction.

Summary and Conclusions

It is evident from the comments contained within this letter that there are issues relating to the internal layout, the Sustainable Travel Strategy, sustainable transport connectivity and traffic impact that remain unresolved and outstanding. As such the Highway Authority cannot conclude at this stage that the development is acceptable, well connected with safe and suitable access and would not lead to a severe impact on road safety and network operation.

It is understood that the Local Planning Authority wish to determine this application as submitted, therefore the Highway Authority would recommend the refusal of planning permission for the following reasons:

- Reason 1: Insufficient information has been submitted with the planning application to enable the highways, traffic and transportation implications of the proposed development to be fully assessed. From the information submitted, it is considered that the additional traffic likely to be generated by the proposal would have a severe impact on the safety and flow of users of the existing distributor road network, and lead to additional on-street parking, contrary to the National Planning Policy Framework, Policy DM33 (Managing Carbon Emissions: Transport and Energy Generation) of the Wycombe District Local Plan (adopted August 2019), Buckinghamshire Council Local Transport Plan 4 (adopted April 2016) and the Buckinghamshire Council Highways Development Management Guidance document (adopted July 2018).
- Reason 2: The proposed development fails to make adequate provision to allow accessibility to the site by non-car modes of travel. The development will therefore be heavily reliant on the use of the private car contrary to sustainable transport policies as set in the National Planning Policy Framework, Policy DM33 (Managing Carbon Emissions: Transport and Energy

Generation) of the Wycombe District Local Plan (adopted August 2019), Buckinghamshire Council Local Transport Plan 4 (adopted April 2016) and the Buckinghamshire Council Highways Development Management Guidance document (adopted July 2018).

Reason 3: The proposed layout would by virtue of its standard of design and layout give rise to a form of development which in the opinion of the Local Planning Authority is therefore contrary to the National Planning Policy Framework, Policy DM33 (Managing Carbon Emissions: Transport and Energy Generation) of the Wycombe District Local Plan (adopted August 2019), Buckinghamshire Council Local Transport Plan 4 (adopted April 2016) and the Buckinghamshire Council Highways Development Management Guidance document (adopted July 2018).

Previous Response (11th August 2023):

The Highway Authority (HA) has provided a number of previous consultation responses in relation to this application, the latest being in a letter dated 5th May 2023 that responded to the information contained within the Transport Assessment Addendum, dated March 2023, submitted by the applicant.

That previous response concluded that a number of issues were still outstanding and these were listed as bullet points at the end of the response. I will repeat those bullet points below for confirmation.

- The updated VISSIM modelling is required so that it can be reviewed by Atkins on behalf of the Council.
- Swept path analysis plans for the internal layout showing the largest vehicles travelling through the site is required.
- The applicant's response to the HA comments on the RSA Designers Response is required.
- A response to the comments made by the Council in relation to the Cycle and Pedestrian Strategy document is required.
- A response to the comments made by the Council in relation to the Sustainable Travel Strategy: Handy Cross Park & Ride Opportunity document is required.
- Further consideration of the parking within the site is required on the basis that the 60% vehicle mode share is not considered to now be realistic due to the Council's position on the reliance of the Handy Cross P&R site.
- Further clarification on the parking accumulation exercise is required.
- The Mode Share Incentive Scheme needs to distinguish between sustainable trips, vehicle trips to off-site locations and vehicle trips to the site.
- Reconsideration of trip distribution for the managed flow scenario to take into account any changes in the modal share targets and provide information to confirm the distribution assumptions.
- Further consideration of the development traffic impact on the wider network base on the need to carry out further detailed assessments of junctions that show greater than a 5% traffic flow impact on any one arm.
- Reconsideration of the impact of the development traffic on the Parkway arm of the A4155 Little Marlow Road/Parkway roundabout junction and appropriate mitigation measures.
- Reconsideration of the standalone assessments of the three identified junctions once the VISSIM modelling review has been finalised by the Council.

Following consideration of the points raised in the previous response the applicant has submitted a Transport Assessment Addendum 2 (TAA2) dated June 2023 and I will provide comments on that information below.

Resurvey and VISSIM Modelling

As mentioned in my previous response, the applicant took the decision to rebuild the VISSIM model provided to them by the Council and in order to do this they carried out new traffic surveys in March 2023 to inform the rebuilt model.

The applicant has provided the Council with the rebuilt base model, which has been subject to review by Atkins on behalf of the Council. The base model has now been confirmed as suitable for use as a reference case against which the proposed development model impact can be compared. Currently the applicant is making amendments to the future year model following a further review by Atkins in order to be in a position where they can test the development traffic impact. The applicant provided the updated model with associated information on 11th August 2023 and Atkins have started to undertake a further review. At this stage I am therefore unable to provide any further comments on the VISSIM modelling at this stage or confirm that it presents an acceptable assessment of network operation with the inclusion of the development.

Sustainable Travel Strategy

Travel Plan

As referred to in the original consultation response from the HA, dated 21st September 2022, a Framework TP, dated May 2022, has been prepared which will be upgraded to a Full TP upon occupation of the Site. Since the submission of the original Framework Travel Plan (FTP) there have been a number of changes to the application. The HA is not currently aware that an updated FTP has been provided which reflects the current proposals. I would be grateful if the applicant could please confirm whether an updated FTP has been prepared and submitted for consideration. Once I have received an up to date FTP I will finalise my comments in this respect.

Public Transport

The applicant has previously set out their proposals for public transport provision in the original TA and TAA. The applicant is still proposing to include a new north-south bus service between High Wycombe and Maidenhead which will connect with the site; however previously there was a suggestion that the site could rely on a number of parking spaces being available at the Handy Cross Park and Ride site, to effectively act as off site parking for the development. A number of discussions relating to this have taken place between the applicant and the Council, which has led to this suggestion being removed from the application proposals.

The applicant has suggested that a new 30-minute interval service with three vehicles will provide quick access between the urban areas and railways stations in High Wycombe and Maidenhead, including the Elizabeth Line. It is proposed that operational times will be centred on employee start/finish times whilst also providing a public service.

The applicant is also proposing an east-west 'hopper' style local bus between Marlow and Bourne End which they state would cover both employee requirements and local movements within the immediate vicinity of the Site. Buses will be used flexibly to provide

local 'staff only' commuter bus services in the 06:00 - 08:45 and 16:15 - 19:05 periods as well as public 'hopper' services. The Councils Passenger Transport section have been asked for up to date comments on the current proposal and I will update the HA's position once the new comments have been received.

<u>Active Travel – Cycle and Pedestrian Strategy</u>

The HA has previously provided comments on the cycle and pedestrian links to the site, especially with regards to the physical and psychological barrier for pedestrians and cyclists, travelling between the site and Marlow, that is created by the A404.

The HA had also previously highlighted the need for a pedestrian and cycle audit to be carried out in order to demonstrate the suitability of the existing pedestrian and cycle network and identify where improvements are required. In previous responses the HA also highlighted the need for plans to be provided that show any improvements proposed so that the HA can be satisfied that they can be delivered by the applicant on land within either their control or land that forms the adopted public highway.

As part of the further investigations into the walking and cycling routes to/from the site, the applicant has considered the main walking and cycling routes into Marlow to the west of the site and towards Little Marlow and Bourne End towards the east of the site. The applicant has advised that an audit of each route has been undertaken in order to identify where improvements are needed. The principal routes that have been identified are included in Figure 4 on page 22 of the TAA2, which I include below for confirmation.

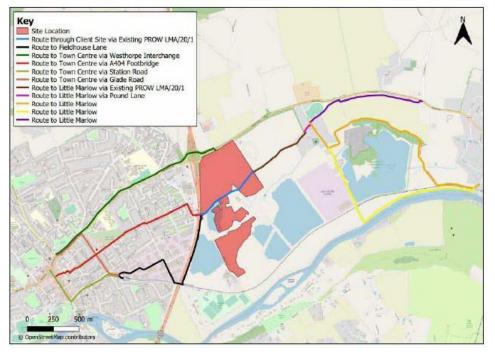
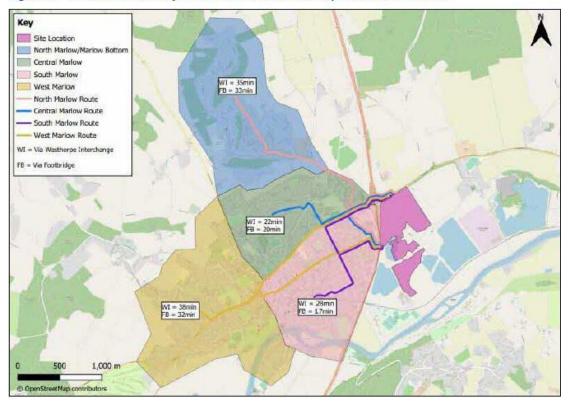


Figure 4: Principal Pedestrian and Cycle Routes Plan

The applicant has considered the walking and cycling journey times from different zones within Marlow and the site via the proposed links to the west of the site. Three main routes

have been identified, the first being from the northern part of the site via the main site access and across the Westhorpe junction and into Marlow. The second is towards the centre of the site and utilises the existing Volvo Footbridge to cross the A404, and the third is to the south of the site via Fieldhouse Lane. Figure 5 in the TAA2 shows the walking time comparisons between the identified routes, which I have included below for confirmation. Figure 5: Pedestrian Journey Times from Marlow via Proposed Access Points



I have reviewed the routes and associated journey times and I have the following points to raise:

- Journey times appear to have been taken from the edge of the site. There is no appreciation of how travelling from different parts of the site to different parts of Marlow would impact on walking/cycling time.
- If a pedestrian was in the north eastern part of the site and wanted to travel to the
 north of Marlow but the only option to them would be to use the Volvo footbridge
 or the Fieldhouse Lane link then this would appear to have a detrimental impact on
 the journey times and is unlikely to be seen as convenient or attractive to
 sustainable forms of transport.
- If an improved safe and convenient option is not available to pedestrians/cyclists then this may result in them trying to use an option which is not safe (i.e. across the Westhorpe junction without any improvements). This could either result in safety issues or result in people not wanting to use sustainable forms of transport and just using the private car instead.
- It would seem that the route via A4155 and Westhorpe Interchange is always going to be a desire line.

The applicant has also carried out a similar exercise for cyclists, however the route via the Volvo Footbridge has not been included as this is not suitable for cyclists. The information is contained in Figure 6 on page 24 of the TAA, which I include below for information. It should be noted that the title of Figure 6 refers to pedestrian journey times, however it is assumed that this has been written in error and the information actually refers to cycling journey times.

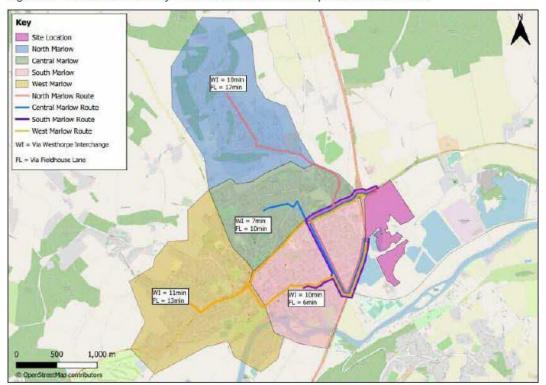


Figure 6: Pedestrian Journey Times from Marlow via Proposed Access Points

I have reviewed the routes and journey times provided and have the following points to raise:

- Similar issues are observed for cycling as highlighted for pedestrians.
- The assessment provided shows that if Fieldhouse Lane was the option for cyclists, then in order to travel from this link to the north of Marlow there would be a 7 minute increase (or roughly a 70% increase) in journey time compared to if the cyclist was to use a route across the Westhorpe junction.
- If someone was looking to travel to the north of Marlow from the north eastern corner of the site via the Fieldhouse Lane link then the difference in time between using either a link via Fieldhouse Lane or the Westhorpe junction would be even greater.
- Currently the route across the Westhorpe junction is not safe or convenient for cyclists and therefore, if no improvements were carried out (i.e. this was not the applicant's chosen route to improve) and cyclists tried to utilise it as a much quicker option then this would unnecessarily increase their chances of conflict with vehicles on what is a very busy part of the network. Either that or they will simply choose to drive rather than use sustainable forms of transport.

The information contained within paragraph 2.30 of the TAA2 suggests that the applicant considers a route via Fieldhouse Lane may present the more attractive and safer route choice for pedestrians and cyclists. The Council does not agree with this position and I shall give further reasoning for this below.

The applicant has reviewed each of the highlighted routes in more detail in paragraph 2.31 onwards in the TAA2 and I will provide comments on information provided for those routes below.

Route to Marlow via Fieldhouse Lane

- This is cited as the applicant's preferred route, however, there has not been any
 confirmation that this route can actually be delivered due to third party land. The
 Council is aware that these issues are outstanding and have not yet been resolved
 and the applicant stated at a recent meeting that they are not able to deliver or rely
 on this route at this stage but were willing to contribution to its improvement
 should it become available.
- It is noted that in the event that the route is secured, it would be as a minimum private and accessible only for future employees and users of the site.
- It is noted that on the western side of the route is the A404 and on the eastern side of the route are trees and a lake. The route is therefore isolated and not overlooked. No assessment has been provided of how attractive this route would be when taking this issue into account.
- In darker winter months it is questionable as to how many people would consider this to be a safe and attractive route. No details are provided to show how the applicant intends to deal with this issue, therefore as presented the Council does not consider this route as an appropriate route to provide the main pedestrian/cycle link between the site and Marlow.

Route via Volvo Footbridge

 It is recognised that this route is not suitable for cyclists and it does not allow for safe and convenient access for people who are mobility impaired. There are currently no detailed proposals to show how access for these people is to be achieved via this option.

Route to Marlow Town Centre Via Westhorpe Junction and A4155 Corridor

- A significant concern regarding this route is getting pedestrians and cyclists across the Westhorpe Roundabout in a safe and suitable way.
- It is noted that the applicant states a preliminary design has been drafted of a
 proposed potential improvement scheme to cater for pedestrians and cyclists
 crossing the Westhorpe Interchange. It is also noted that the applicant states that
 the principle of these improvements needs to be discussed with National Highways
 and Buckinghamshire Council.
- It is stated that the scheme includes the part signalisation of the interchange including controlled pedestrian crossings on the northern slip arms of the junction.

The Council is aware that the pedestrian crossings have now been built into the model and form part of the information that is currently under review by Atkins on behalf of the Council.

 It is also proposed to increase the height of the parapet on the northern circulatory arm to cater for cyclists, however there is concern about the width of footway/cycleway across the junction and whether this is adequate in order to accommodate the pedestrian and cycle movements from the development. A plan containing these improvements has recently been received by the Council and is currently under review.

Concerns remain that the applicant is stating that the route via the Westhorpe Interchange and any improvements to the Volvo footbridge to allow it to cater for cyclists and people with mobility impairments, would be fallback positions should the route via Fieldhouse Lane not be secured. The Council is concerned over the reliance on the Fieldhouse Lane option as the main option and remains of the opinion that all three routes should be improved and available as attractive, safe and convenient options to access the site via sustainable means of transport.

Following a recent meeting on 10th August 2023, the applicant has now confirmed that the principal route for peds/cycles is now proposed to be via improvements to the A4155 route across Westhorpe, with a second pedestrian only route via Volvo footbridge. Given the size of the site and desire lines it seems to the Council that there must be multiple routes available to both pedestrians and cyclists to make this mode of travel an attractive proposition and to meet the aims of the sustainable transport strategy for the site.

I will also now include initial comments on the Pedestrian and Cycle Audit carried out by the applicant, which for confirmation is contained within Appendix C of the TAA2.

Pedestrian and Cycle Audit

Route 1 – Existing Route from Marlow Station to Fieldhouse Lane

- At a meeting on 10th August 2023 the applicant confirmed that they cannot deliver this route as it stands so cannot rely on it for the purposes of the application
- The route has been described, however there are no details on widths of footways, whether they are adequate in order to cater for additional pedestrian movements and how the conditions compare to the requirements of LTN1/20.
- There is a section of footway that passes under the bridge of the A404 and it is noted that this limits pedestrians to single file and may force pedestrians onto the carriageway when passing. This does not appear to be an acceptable situation and while it is stated that the removal of overgrown vegetation may improve the situation there is no detail on what this may improve the width from and to and whether this is an acceptable width when taking into account footway widths cited in Manual for Streets and LTN1/20.
- Part of the highlighted route passes through the Globe Business Park, which is a private development. How is the applicant going to guarantee that pedestrians/cyclists associated with the site can use a route through what is a

- private area that does not form part of the public highway?
- It is stated that signage along the route maybe required to guide pedestrians/cyclists. There is no detail of what signage might be used and where it would be located. It is also not clear how the applicant would provide signage on the private land within the Globe Business Park.
- It is stated that the applicant is committed to upgrading the section of the route adjacent to the A404 in order that it is suitable for both pedestrian and cyclist use in line with LTN1/20, however no details of these improvements have been provided to allow the Council to Condition them as part of any permission and as it stands the land is not within their control.

Route 2 – Proposed Route through Applicant Site via PROW (LMA/20/1)

- It is recognised that this PROW is not currently suitable to provide a safe and suitable route to the site, therefore improvements are mentioned. However, no plans of these improvements have been provided which would allow the Council to secure them as part of any permission.
- It is noted that the applicant states resurfacing of the existing path and the
 provision of low level lighting will deliver a secure and safe connection at all times.
 However the Council has concerns over the attractiveness of what is essentially a
 PROW, which is not overlooked and is remote from built up areas, as a main link to
 provide safe and suitable access to the site.

Route 3 – Existing Route to Town Centre via A404 Footbridge

- As with Route 1, a written description of this route is provided, however no widths
 of any footways or carriageways have been provided to inform the Council on their
 suitability to be used by pedestrians and cyclists associated with the site.
- Information on widths would allow the applicant/Council to identify areas where improvements need to be considered. This has not currently been provided.
- It is noted that the Volvo footbridge provides a route for pedestrians, however this is not an attractive or convenient route for cyclists or people with mobility impairments. No improvements to address this have been proposed.
- A route has been highlighted that passes adjacent to an allotment which appears
 to have a high hedge on one side and a high wall on the other. This part of the route
 is not overlooked and is not likely to be attractive or convenient for pedestrians or
 cyclists to use, especially in darker winter months.
- It is stated that this is the preferred pedestrian route, however there is insufficient detail provided for this route to allow the Council to reach this position. Given the scale of the development and desire lines and the fact that the Fieldhouse Lane route cannot be delivered or relied on, it means that this route and the Westhorpe Roundabout route have much greater importance and multiple safe and suitable routes should be achieved to ensure that walking and cycling is a realistic and attractive choice.

- Two further routes to avoid the footpath adjacent to the allotments are discussed.
- No details are provided on widths of footpaths that are intended to be part of the cycle route so it is not possible at confirm their appropriateness.
- If the route contains a footpath, are cyclists allowed to use it and if so, is there sufficient width to accommodate the cyclists as well as any pedestrians that may be using it? No details have been provided.
- The alternative routes also highlight a number of roads for cyclists to use. Are
 conditions along these roads suitable for cyclists, in terms of the environment being
 as attractive as possible? Are there any improvements that could be made to make
 drivers more alert to the presence of cyclists? This comment would apply to all
 other on-carriageway routes currently highlighted for cyclists.

Route 4 – Existing Route to Town Centre via the Westhorpe Interchange

- It is noted that this route does benefit from existing shared walking and cycling facilities along Little Marlow Road (A4155) heading into Marlow, however the applicant suggests that this route is unfavourable due to the need to cross the Westhorpe Interchange.
- The Council considers that the route along Little Marlow Road into the centre of Marlow should be high priority for focussing improvements to aid the movement of pedestrians and cyclists as it provides a useful 'spine road' along a more central alignment through Marlow, which pedestrians and cyclists can use to then travel to the north and south to access different areas of Marlow.
- The applicant is urged to further consider improvements across the Westhorpe Interchange to aid the safe and convenient route of pedestrians and cyclists in order to facilitate the use of this route into Marlow.
- No detail has been provided to highlight any other areas of this route that may need
 improvements and previous correspondence from the Council has suggested that
 improvements could be made where the route along the A4155 passes over side
 road junctions. An image of a LTN1/20 compliant crossing of side road junctions has
 previously been provided to the applicant; however such improvements are not
 evident in the submitted information.

It is understood that the applicant is currently preparing a further Audit that considers these routes in further detail and the Council is currently awaiting the submission of this further information for consideration.

Car Parking

It is noted that a managed parking regime will be implemented across the site where most of the vehicles arriving at the site will be pre-registered with spaces pre-booked. It is stated that unauthorised vehicles will be turned away from the site. The Council assumes that the vehicles that are turned away will park locally within Marlow and there is concern that this could cause issues within Marlow and beyond as there is no control over how many vehicles might actually do this.

The applicant has stated that in the event that parking restrictions are required offsite to deal with any issues resulting from the parking of vehicles associated with the Film Studio, a contribution will be made to enable the introduction of parking restrictions. However, it is not clear how the applicant would identify any offsite parking issues and the extent of the area that any additional restrictions would need to cover. The applicant is therefore required to provide more information in relation to areas that would be affected within a reasonable walking and cycling distance of the site and put forward proposals for mitigation measures to give the Council confidence that this would be adequately dealt with should overspill parking occur.

Mode Shift Targets

As detailed in previous responses, and as recognised by the applicant, the mode shift targets that the applicant is aiming towards are ambitious. In order to hit the targets the applicant is going to have to achieve a significant shift away from the private car and towards the use of sustainable forms of transport. One way they are proposing to achieve this is by the footway and cycleway connections that I have detailed above notwithstanding their current limitations. The other ways are through a robust parking strategy within the site and reliable and convenient public transport links and control of parking off site. I have detailed the new bus services that they applicant is proposing, which are currently being considered by the Council's Passenger Transport Section with comments to be provided in due course.

With these measures in place the applicant is aiming to achieve a 16.7% uptake in sustainable transport modes and a 24.2% reduction in the use of private cars and vans. They are also targeting a 7.5% uptake in walking and cycling. The full targets are detailed in Table 2 on page 29 of the TAA2, which I will include below for information.

Table 2: Method of Travel to Work - STS Targets

Mode	Mode Share (%)		Change in Mode Share	
Underground, metro, light rail, or tram	0.2%	 Public Transport Mode 		
Train	4.8%	Share 20.0%	+16.7%	
Bus, minibus, or coach	15.0%			
Taxi	0.5%		-	
Motorcycle, scooter, or van	1.0%		-	
Driving a car or van	60.0%		-24.2%	
Passenger in a car or van	3.3%		-	
Bicycle	7.1%	Active Travel Mode	+7.5%	
On foot	8.0%	Share 15.1%		
Other method of travel to work	0.1%		-	
Total	100.0%			

Mode Share Case Studies

The applicant has provided case studies of what they consider to be schemes in which similar sustainable transport strategies to the proposed Monitor and Manage approach have been

implemented and have been successful, measured by a shift in mode share to increased use of sustainable modes. Comments are provided below on each of the case studies;

Wellcome Genome Campus Development, Cambridgeshire

- In terms of the location of this site, it is further away from more significant residential areas when compared to the MFS site, but it is in close proximity to the existing strategic road network.
- This site comprises scientific uses, residential homes for Campus staff, Hotel and Conference, Genome Discovery and associated land uses including Nursery Care, Sports Centre. Community Facilities and Healthcare.
- The operations on the site are not comparable with the film studio activity, therefore it is difficult to determine whether any success in terms of mode shift to sustainable forms will be replicated at the MFS site.
- It is noted that the site includes high quality cycle parking across the site including a
 cycle/mobility hub which includes a mixture of short and long term parking as well
 as cycle maintenance facilities.
- A number of off-site improvements to walking and cycling connections have been referred to, however, apart from the footway/cycleway link to the north of the site along the A1301, it has been difficult to locate these.
- Facilities for cyclists and active travellers, such as changing rooms and showers, are provided for on site.
- Improved cycle connectivity to the local rail station, including signalised (Toucan) crossings on the A505. Other contributions to cycle connectivity improvements have been highlighted.
- The site utilises a dedicated shuttle bus service to the local rail station, with a demand responsive element being referred to, although it is not clear whether this currently operates.
- There is also reference to on-going discussions with nearby business parks to explore opportunities for combined services.
- The site wide Travel Plan seeks to achieve a reduction in single car occupancy vehicle trips to achieve a 40% modal share for Campus workers undertaking external trips.

A table has been included that shows the existing Campus modal share compares to the South Cambridgeshire average.

Table 3: Travel to work modal share comparison – Wellcome Tust Campus

	-	·	
Main Mode of Travel	South Cambridgeshire average	Existing Campus (2017)	
Walk	7%	0.9%	
Cycle	7%	6.0%	
Motorbike /Scooter	1%	0.7%	
Train	1%	1.5%	
Bus	3%	32.2%	
Car Driver Alone	69%	44.2%	
Car Share Driver	4%	10.9%	
Car Share Passenger	4%	3.4%	
Taxi	0%	0.2%	
Total	100%	100%	

- The table does show that there is much greater bus usage for the site than that shown for the average in south Cambridgeshire. The initiatives to reduce car usage also appear to be working, however the walking and cycling share for the campus is shown to be less that the average for the area.
- The table does not provide confirmation on whether or not the mode share targets set out in the Travel Plan have been achieved.
- As mentioned above, it is difficult to determine whether a different use such as the MFS site would be equally as responsive to similar bus service provision.
- Does the applicant know whether the site is relying on a reduction in car
 movements in order to mitigate capacity issues on the network that would
 otherwise result from the development or whether the targets of the Travel Plan
 are purely to achieve a more sustainable development in line with government
 policy.

Milton Park, Oxfordshire

- This is described as a mixed use business park located in Oxfordshire, comprising high specification science, technology, office and industrial space, with 250 different employers.
- It is evident that the use of Milton Park is different to the potential use of the MFS site as this appears to be more office based employment that does not require the transport/movement of set equipment or tools, which may be more reliant on vehicle usage.
- The close proximity of the site to the strategic road network is noted.
- It is noted that the site provides frequent bus connections to local areas with cheap use of buses for people travelling from Didcot using any of the Thames Travel and Oxford Bus Company buses.
- It is stated that the site is located on the Science Vale Cycle Network with excellent connections around Oxfordshire, making cycling the mode of choice for a significant proportion of occupiers.
- The MFS site does not benefit from good cycle network connections at the moment, which is not likely to have the same impact as the cycle connections provided for Milton Park. This shows the importance of good cycle links which is why it is vital for them to be provided for the MFS site.

It is also noted that the Milton Park site does not have a barrier like the A404 for
pedestrians and cyclists to cross to access the site from the main residential area
of Didcot, which may make walking and cycling a more attractive option for Milton
Park when compared to the MFS site where pedestrians and cyclists would have to
cross the A404 to access the main residential areas within Marlow.

A table has been provided to show how the sustainable transport measures have impacted on mode share since 2019.

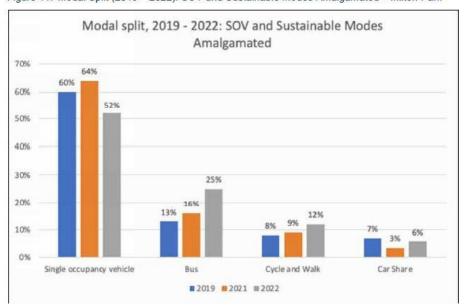


Figure 11: Modal Split (2019 - 2022): SOV and Sustainable Modes Amalgamated - Milton Park

- The table does show that single car occupancy has risen and then fallen, but by only 8% and the use of sustainable forms of transport has risen. However this doesn't really show any long term patterns.
- Due to the difference in usage of this site when compared to the MFS site it is difficult to determine whether such measures would have a similar impact for the MFS site.
- Does the applicant know whether the Milton Park site is relying on the success of the sustainable transport measures to mitigate what would otherwise be an unacceptable impact on the highway network or whether the measures are purely aimed at achieving a sustainable development, consistent with government policy.

Pinewood Studios, Buckinghamshire

- This is another film studio site located in Buckinghamshire so is likely to have uses that are consistent with the proposed uses on the MFS site.
- Key measures of the sustainable transport strategy for the site have been identified as:
 - o Internal street designed with appropriate footways and crossing points.
 - 3m wide footway/cycleway improvements on the highway network.
 - Use of pool bikes for employees to use around the site. Free buses

- operating Monday to Friday between Pinewood Studios, Uxbridge underground Station, Gerrards Cross Station, West Ruislip and Slough Station.
- Shuttle Busses to and from Uxbridge Station available to staff, production, tenants, visitors and also the local community.
- o Use of pool cars for staff to use for business travel.
- Guaranteed lift home scheme.
- Staff travel incentive scheme where staff using sustainable modes are awarded points which can be redeemed on site for exchange for goods or services.
- The applicant has referred to the recent approval at Pinewood Studios for the hybrid application (Ref: PL/22/2657/FA) where the Sustainable Transport Strategy included localised footway and cycleway improvements and a pro-rata expansion of the frequent high quality shuttle bus services connecting the studio with nearby rail stations.
- Reference has been made to the Travel Plan targets where they are looking to achieve 71.3% single occupancy car use by Centre Stage Staff within 5 years (10% reduction on the 2011 Census mode share), a 73% single occupancy car use by staff for the Studio Production floorspace within 5 years (10% reduction from car driver mode share identified by the 2016 Travel Plan surveys). It would appear that these targets are not as great as those proposed at the MFS site and are maybe therefore more realistic.
- Figures for the use of the shuttle bus services have also been provided which does demonstrate that they are used by a significant number of people but no information provided to show whether this meets intended targets.
- Information on whether or not the travel plan targets have been achieved is not currently available so it is not possible to determine how successful the measures have been.
- It is however evident that the Pinewood site does provide significant sustainable transport measures to promote the use of buses and trains to access the site. It also provides footway and cycleway improvements to promote walking and cycling.
- Pinewood does not have the issue of the A404 providing a significant barrier between the site and the nearest residential areas and the station meaning that walking and cycling from local areas to Pinewood is likely to be a more attractive option as it stands when compared to the situation in Marlow.
- Does the applicant know whether the Pinewood Studio site is relying on meeting TP targets in order to mitigate an unacceptable traffic impact on the local highway network?
- Again whilst this information sets out the measures in place and the targets that
 are intended to be met, it does not provide any evidence of whether the measures
 have been successful in meeting targets.

Cambourne, Cambridgeshire

This site is described as a 'free-standing community' of 4250 dwellings, in addition

- to education, retail, community and leisure uses.
- In terms of uses within the site, it is evident that they do not really compare to those proposed on the MFS site, therefore travel characteristics are likely to be different and sustainable transport measures are likely to have a different impact.
- While the measures referred to by the applicant do appear to have resulted in a
 positive shift away from single occupancy car usage to more sustainable forms of
 travel, the fact that this site is effectively a self-contained community to some
 extent, means that it may be significantly easier to convince people to use
 sustainable transport when compared to a standalone employment site with a
 significant barrier to cross in order to access local residential areas, the town centre
 and the station.
- •
- JP Morgan, Bournemouth
- This site is home to more that 4,000 employees and has evolved into a strategic hub for Operations, Technology, Client Services and Corporate groups with worldwide reach.
- Again, it is evident that the uses on this site are not comparable to the uses at the proposed MFS site, therefore they may not react the same to the sustainable travel measures proposed.
- The applicant has stated that the site has well established facilities and measures at the site to support staff commuter travel.
- A table has been provided that shows the impact of the Travel Plan measures.

Table 5: Travel to work modal share comparison (Staff Surveys & Questionnaires) Bournemouth

Dodinionio				
Main Mode of Travel	2002	2017	Change	Cumulative
Public Bus	3%	1%	-2%	+12%
JP Morgan Shuttle Bus	0%	14%	+14%	
Train	1%	1%	0%	
Cycle	4%	12%	+8%	+10%
Walk	7%	9%	+2%	
Car Driver	72%	48%	-24%	-26%
Car Passenger	12%	10%	-2%	
Motorcycle	1%	2%	+1%	+1%
Other	0%	3%	+3%	+3%
Total	100%	100%		

- The table shows that measures to encourage sustainable travel have been successful, however it is unclear whether the objectives that have been set have been met.
- The location of the site is adjacent to substantial residential areas and other facilities within Bournemouth to the south of the site, with no real barrier issues to overcome for cyclists and pedestrians. It would therefore appear to be less of a challenge to attract pedestrians and cyclists from these areas to the site when

compared to the challenges that pedestrians and cyclists currently face at Marlow.

The case studies provided by the applicant do show that providing good quality sustainable transport measures can result in a positive modal shift away from the private car and towards sustainable forms of transport. However, it is not clear whether the measures cited in the examples would have such an impact at the MFS site due to the differences in the uses at the sites and the specific challenges faced at Marlow in terms of walking and cycling connectivity to the site.

The case studies do show that good quality bus services that provide convenient travel to a number of locations do have a positive impact on modal shift. The examples also highlight the importance of excellent pedestrian and cycle links to improve travel to the site by walking and cycling. This also reinforces the Council's position in relation to the walking and cycling improvements at the MFS site, including the provision of a number of routes to allow convenient travel between the site and different areas of Marlow.

There remains concern that the mode share targets proposed by the applicant are still ambitious, which is especially concerning as there is a reliance on these targets in order to mitigate development impacts on the road network and to achieve sufficient parking provision on site.

Further consideration is required when the modelling work currently underway has been finalised and the impacts of the development are fully understood, in order to investigate appropriate mitigation measures should model shift targets not be achieved.

The Council would also like to again point out the requirement for additional information on how the applicant is going to manage the potential for any offsite parking issues on the surrounding highway network as a result of the proposed development. This is an important consideration as if people who are associated with the site drive to the site without the intention, or permission to park on site, are unable to park in the vicinity of the site it will discourage them from driving to the area in the first place and at the same time encourage them to use sustainable forms of travel.

Junction Impact Assessment

Section 4 of the TAA2 looks at the static modelling of three junctions on the network in close proximity to the site. These include the following:

Junction 1: A4155 Little Marlow Road / Parkway Roundabout;

Junction 2: A404 / A4155 'Westhorpe Interchange' Roundabout; and,

Junction 3: A4155 Marlow Road / Pump Lane South / Site Access Crossroads.

Due to the close proximity of these junctions and the coinciding interaction between them, they have all been included in the VISSIM modelling work that is currently under review. I will not therefore provide any further comment on the assessment of these junctions at this stage.

The VISSIM modelling is covered in Section 5 of the TAA2, however as stated near the beginning of this response, the applicant has recently provided the Council with the VISSIM modelling work and associated technical documents that are currently under review by Atkins on behalf of the Council. Further comments will therefore be provided in due course.

Wide Area Network Impact

Following discussions between the applicant, National Highways and the Council, it has been agreed that the applicant carries out detailed junction impact assessments on 11 further junctions on the local highway network. The junctions subject to further assessment are as follows:

A404 Junctions

- M40 Junction 4 Handy Cross Roundabout
- Bisham Roundabout

Marlow Junctions

- Wiltshire Road
- Newtown Road
- Glade Road
- Dean Street
- High Street

Little Marlow / Bourne End Junctions

- Winchbottom Lane
- Sheepridge Lane
- Blind Lane
- Cores End Road

The applicant has very recently provided a Technical Note to the Council that contains the detailed impact assessments of the development traffic at the junctions listed above and this document is currently under review. Further comments will be provided once the Council's review of this document has been finalised.

Site Layout and Vehicle Tracking

As part of the information included in TAA2, the applicant has provided further details of the internal site layout and the tracking of HGV's through areas of the site. While the Council notes that the internal site is to remain in private ownership, it is still considered that the site layout should be safe and suitable, therefore it is considered appropriate for comments on the layout to be provided. This is supported by paragraph 130 of the NPPF, which states the following:

- 130. Planning policies and decisions should ensure that developments:
 - a) will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;
 - are visually attractive as a result of good architecture, layout and appropriate and effective landscaping;
 - are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities);
 - d) establish or maintain a strong sense of place, using the arrangement of streets, spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit;
 - e) optimise the potential of the site to accommodate and sustain an appropriate amount and mix of development (including green and other public space) and support local facilities and transport networks; and
 - f) create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users⁴⁹; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience.

Initial comments on the site layout and vehicle tracking provided are as follows:

- Following a review of the internal site layout and the tracking provided it is evident that further clarification on how the internal layout will operate and how vehicles will travel through the site is required.
- It is noted that the site is to remain private, however the LPA wishes to be satisfied that the layout is safe and suitable, and as this is a full application, there needs to be adequate information submitted for consideration to allow this to be determined. At present it is considered that the information lacks sufficient detail.
- It is currently unclear whether all types of vehicles are able to access all parts of the site? This should be clarified on the plans.
- It is unclear what parts of the site are intended to accommodate two-way traffic flows and what parts are intended to be one-way. This should be clarified on the plans.
- There are cul-de-sacs shown in the eastern section of the site that appear to terminate without any turning area for vehicles. How is it intended for vehicles to turn once entering these cul-de-sacs?
- There are a number of 'large access doors' to many of the buildings shown on the Masterplan drawing (01841-WEA-MP-00-DR-A-0200) and it assumed that materials would be taken into the buildings via these doors. No information has been provided to show how HGV's will service the buildings in terms of where they will stop in order to gain access to these doors.
- The tracking of an HGV exiting the site and onto the new roundabout access junction shows that the vehicles will accommodate much of the carriageway through the bend leading to the roundabout. This has the potential to impact on the ability of other vehicles to utilise the full two lane approach. Has this been taken into account in the VISSIM modelling

- The turn from the main access spine road through the junction to travel down to Westhorpe Park Homes does not look appropriate. What other vehicles are likely to need to utilise this route? If it is intended for a bus to travel this route to the south and into the existing housing area to provide a bus service, has any consideration been given to the appropriateness of this route for buses?
- There is tracking of a number of internal junctions that shows conflict between vehicles. There are comments on the plans to highlight these areas. The layout should be amended so that it better accommodates the movement of HGV's through these junctions.
- There does not appear to be any tracking associated with the western section of the ground floor of the northern car park. This should be provided.
- In the south car park, the ground floor layout appears to show two spaces adjacent to the Car Park Pavilion area, there has been not tracking submitted to show vehicles accessing these spaces. The position of the spaces directly adjacent to the car park wall could make accessing them difficult so tracking should be provided.
- In the same location it is also noted that the Car Park Pavilion doors open out into the car park area, which will have the potential to conflict with cars manoeuvring within the car park. This should be addressed.
- There remains large areas of the site where no tracking of vehicles has been provided, and it is unclear how it is intended for vehicles to use these areas in terms of servicing the site. Further clarification in this respect should be provided.

These points have been discussed with the applicant and it is understood that the applicant is currently preparing a response. Further comments in relation to the internal site layout will therefore follow the receipt of the applicant's response.

It is evident form the contents of this letter that issues relating to traffic impact, car parking, layout, sustainable travel and connectivity and mitigation remain unresolved and outstanding. As such the Highway Authority cannot conclude at this stage that the development is acceptable, well connected with safe and suitable access and would not lead to an unacceptable impact on road safety and network operation. The Highway Authority would welcome the submission of additional information to address the outstanding concerns. However, should the LPA wish to determine this application as submitted then the Highway Authority would recommend refusal of planning permission for reasons that can be advised.

I trust that these comments have been of some assistance.

Transport Assessment Comments:

BC Archaeology:

Thank you for consulting the Buckinghamshire Council Archaeological Service on the above application. We maintain the local Historic Environment Record and provide expert advice

on archaeology and related matters. As you will be aware, Paragraph 194 of the National Planning Policy Framework (NPPF) states that information held in the relevant historic environment record should be consulted and expert advice obtained where necessary. The NPPF recognises that the effect of an application on the significance of a heritage asset (including its setting) is a material planning consideration.

<u>Historic Environment Record (HER) information</u>

We have consulted the Buckinghamshire Historic Environment Record (HER) and note that the following records are relevant:

HER reference	Designation Status*	Description
0847600000	HER	Marlow Airport/RAF Booker/Wycombe Air Park: Civil airfield used as a military airfield from 1939, now in use for recreational flying.
0847603000	HER	RAF Booker: Site of WWII pillbox, now destroyed.
0847601000	HER	RAF Booker: Site of WWII pillbox, now destroyed.
0116500000	HER	BARMOOR: Thirteenth to nineteenth century records of manor of Barmoor

^{*} COA = conservation area; LB = listed building; RPG = registered historic park; SAM = scheduled monument; PLN = planning notification area (undesignated area of archaeological interest); HER = historic environment record

Note: some records relate to extensive areas such as historic landscapes, historic towns and villages or areas of high archaeological potential. For full HER information and a licence for commercial use please contact the Bucks HER Officer.

<u>Archaeological and related interests</u>

We welcome the inclusion of the Archaeological Desk-Based Assessment produced by ORION with the application documents. We largely concur with Section 5.5 of this document, which states:

The site has been the subject of a measured survey which recorded evidence of WWII and modern airfield features. If development will result in the removal of these features a watching brief should be maintained to ensure their preservation by record; this could be secured by a suitably worded condition attached to the planning permission

Whilst we welcome the above there may also be currently buried features relating to the operation of the airfield or earlier phases of activity. We would recommend that a condition is attached to any consent which requires a watching brief during the ground works.

If planning permission is granted for this development then it may harm a heritage asset's significance so a condition should be applied to require the developer to secure appropriate investigation, recording, publication and archiving of the results in conformity with NPPF paragraph 205. With reference to the NPPF we therefore recommend that any consent granted for this development should be subject to the following conditions:

No development shall take place, unless authorised by the local planning authority, until the applicant, or their agents or successors in title have submitted and had approved by the planning authority a written scheme of investigation for an archaeological watching brief on the ground works.

The archaeological investigation should be undertaken by a professionally qualified archaeologist working to the agreed written schemes of investigation which should be based on our on-line template briefs.

If you have any queries regarding this advice, please do not hesitate to contact me.

BC Landscape & Urban Design:

• Introduction

The following appraisal draws together my comments from the initial planning submission and is updated where relevant to respond to additional information subsequently submitted in March 2023 for consideration. My original comments and issues remain substantially unchanged.

Existing Site

The site's history for quarrying and subsequent landfilling is largely confined to memory and the restored landscape comprises lakes, trees/woodlands, scrub, rough grassland, roads and footpaths. While some of the restoration has not been well executed, it is a green and unbuilt landscape with very few remnants of its industrial past. Some areas outside the site have been returned to agricultural use. The open character of much of the site affords some views to the Chilterns AONB to the north and to the wooded slopes of the Thames Valley to the south, both of which in turn overlook the site.

It is my view that the value of the site as a landscape resource is understated by the applicant. Notwithstanding that the site is privately owned, there are public rights of way and permissive footpaths within the site that enable the public enjoyment of the site, its rich wildlife and the views across it to/from the surrounding landscape. The adjacent Chilterns AONB is enjoyed in much the same way.

While the site was in use for quarrying and landfilling, it would have provided separation between the Chiltern hills landscape to the north and the River Thames landscape to the

south. With its restoration, the site and its surroundings are now well integrated into the landscape where lakes, woodlands and grassland provide a natural transition between the Chiltern hills and the River Thames corridor. Both character areas benefit from this continuity, where the mosaic of lakes, woodlands and open space add scale and richness to the spatial and visual experience of the wider landscape. This landscape is also the wider setting to Westhorpe House, a historic building and garden at the centre of the site, and to the residential area of Westhorpe Park.

Proposed Access

The northern part of the site will provide the only vehicular access to the site, using the current point of access for Westhorpe House and Westhorpe Park. Proposals for a new junction have evolved during the planning application stage and a substantial roundabout is now proposed instead of the original signalised T-junction. The consequences of this will be, amongst other things, a significant loss of existing mature trees along the northern boundary, and the introduction of a major urbanising element in the road corridor.

Site Layout

The northern part of the site (Plots 1-3) broadly comprises a dense grid of buildings of various sizes. Smaller buildings are mostly set towards the northern and southern perimeters with larger/taller buildings occupying the centre. This enables a more dynamic frontage and less imposing scale to be achieved at the northern and southern edges. Relatively narrow internal streets and the use of multi-storey car parking facilitates the close spacing of buildings. Principal planting areas are located along the perimeters, mainly to provide screening, and along the central spine to provide a landscaped approach to Westhorpe House and Westhorpe Park. Bio-solar green roofs will be provided on the sound stages.

The proposed site layout makes an efficient use of the northern part of the site, and reflectional the functional needs of the development, but this density of buildings will emphasise the imposing nature of the proposed development. It is located furthest from views from Winter Hill to the south, but lies adjacent to the Chilterns AONB, immediately north of the A4155, and adjacent to the busy A404. The proposed layout seems to have little consideration for its relationship to the A404, with some of the largest buildings presenting a staggered edge towards the western boundary.

Plot 4 comprises open space surrounded by woodland with a 'culture and skills' building occupying a modest area towards the north of this plot. It is a predominantly green space that will provide for public amenity.

To the south lies Plot 5 which serves as a backlot for outdoor filming. The perimeter will be secured by a bund and fencing along with a dense screen of vegetation. A mixture of

reinforced grass and hard surfacing will occupy the centre. The structures and equipment occupying Plot 5 will come and go, often having a part-built and temporary character. The backlot at Plot 5 will at times be intensively used and is likely to have a strong presence in elevated views from the south such as at Winter Hill, to which the backlot lies relatively close.

The proposed site layout permits the retention of most existing trees and other vegetation, which is generally located at the perimeter of the site, with the exception of the northern site boundary. The proposed development will reinforce and manage these areas. I am concerned that the northern and eastern boundaries do not incorporate sufficiently substantial landscape buffers to secure adequate screening or softening of views of the proposed development from some vantage points. Within the limits of the current layout, I am satisfied that the eastern fringe incorporates as much planting as possible, but the amended site access has significantly weakened the landscape buffer along the northern edge.

Building Design

The proposed buildings are mainly functional in form. The sound stages adopt a very simple rectilinear form not unlike large scale modern warehouses. The multi-storey car parks adopt a similar scale and form, though elevations have scope for more distinctive materials and detailing. Workshops/offices adopt pitched roofs and detailed front/rear facades to add variety, visual interest and a degree of activity. Building detailing and material choices serve to break up the mass of buildings as much as possible and minimise the prominence of the proposed development in the wider landscape. Otherwise the functional needs of the buildings are necessarily reflected in their scale, form and detailing.

The proposed Hub building adopts a unique and distinctive form and detailing, with a high degree of transparency. Its location is at the 'back' of the northern site, has a somewhat imposing presence upon the adjacent public footpath and is in close proximity to Westhorpe House and Westhorpe Park. With no meaningful public function or benefit, a more appropriate location elsewhere should be sought.

The proposed culture and skills building in Plot 4 adopts a farm courtyard layout and low-rise architecture inspired by traditional barns, which will sit well within its wooded setting.

Public Art

The original proposal for a 'public art tower' has been removed on account of its likely contribution to adverse visual impacts, and illustrative locations and examples of more discrete artworks have been put forward. The broad principles are acceptable, although

wording should be omitted and visibility from the A404 avoided. Artworks in and around the public areas of the site are a key objective.

Landscape Design

As highlighted in comments above about the site layout, principal soft landscaping within the northern part of the site lies at the perimeters and along the central spine road. I'm broadly satisfied with the quality of hard and soft landscaping suggested in the application, but there are shortcomings in other aspects of the proposed landscaping.

I'm particularly concerned about the amendments to the northern perimeter, to accommodate the site access, where exiting trees will be lost and there is insufficient scope to introduce a robust landscape buffer of trees and shrubs for maximum screening. This will leave the rear of workshops and some of the larger buildings within relatively exposed in views from the north. A significantly more substantial landscape buffer is required and the site layout should be adjusted accordingly.

Planting to the eastern boundary has been discussed and amended during the planning application. I am satisfied that within the limitations of the current site layout that the planting here, including climbing 'green walls', has been maximised, but this remains a narrow buffer within the site where screening continues to rely significantly on semi-ornamental conifer trees within neighbouring land.

I note the incorporation of SuDS swales and basins into some of the landscape buffers. In practice, there is usually a conflict between SuDS features and the provision of trees and shrubs for screening. It is also common for swales and SuDS basins to be underprovided on masterplans, their subsequent enlargement leading to increased conflict between SuDS and planting at the detailed design stage, when SuDS usually prevails.

Planting within Plots 4 and 5 will reinforce and supplement native trees and shrubs to achieve a naturalistic landscape setting to the development and provide a degree of screening from the surrounding area. This approach is satisfactory.

Public Amenity (RUR4 Policy Area)

The RUR4 policy area enjoys a variety of established recreational uses — walking, fishing, nature-watching and water sports, as well as formal sports at the athletics track. These uses are mostly on private land but are also accessible to the public one way or another. It is this established recreational enjoyment of the site and its surrounding landscape that Local Plan Policy RUR4 seeks to capitalise on, even if its formal designation as a Country Park is problematic. With the site's Green Belt status and its intended return to agricultural use following quarrying and landfilling, its contribution to the area's open countryside is entirely reasonable.

The proposed development is likely to conflict with some of these recreational uses. In particular it will urbanise the landscape and views from the public footpath, diminishing the enjoyment of walking this route. New buildings will appear as a backdrop to some of the lakes that currently enjoy a wooded setting. The jet-ski lake lies relatively close to the backlot, where the noise it generates may come into conflict with filming on the backlot.

The landscape design submitted proposes enhancements to the public footpath running west to east between Plots 1-3 and 4 and through the wider RUR4 policy area. It is acknowledged that the existing landscape experience of this route is variable, attractively informal and semi-natural in part, but also having poor surfacing and fencing in other places that are remnants of the site's industrial history.

The proposed landscape enhancements will upgrade the quality of the footpath where it passes through the development site, but in doing so will also take away the informal and somewhat semi-rural character of this route, instead creating a more ornamental and suburban landscape setting to the proposed buildings. Along with the loss of views to the countryside north of the site, this will be a significant and adverse change to the character of this footpath.

A series of workshops will line the northern side of this footpath, with the proposed Hub building, car park and sound stage framing both sides of the footpath at the eastern side of the site. The landscape setting and material change to this footpath will be significantly urbanised by the proposed development, diminishing its appeal as a recreational route through the countryside.

• Impacts upon Landscape Character

The main text addendum says little about the potential/likely landscape and visual effects arising from changes to the scheme. Given the loss of trees at the northern site boundary, changes to the eastern boundary planting and the changes to the proposed public art, a summary of the likely consequences for LVIA would be expected in the main text.

While the Applicant's LVIA identifies significant adverse visual effects likely to arise from the proposed development, I don't agree with some of the detail contained in the LVIA and am of the view that in some instances the landscape and visual effects will be greater and more significant than stated in the LVIA.

The nationally designated Chilterns AONB lies immediately north of the site, with the site itself within an area currently being assessed for inclusion in the expanded AONB. The Wycombe District Local Plan (2019) sets out its AONB policy CP10 and DM30, seeking the conservation and enhancement of the AONB's landscape character and visual amenity, and the avoidance of significant harm to the AONB from development within its setting. The proposed development, by way of its predominantly functional form, density, scale and character, does not satisfy either of these policies. I concur with much of the detail and

conclusions set out by the Chilterns Conservation Board in their consultation response, where this proposed development in the immediate setting of the AONB will cause significant harm to the AONB's landscape character and visual amenity.

The site lies at the northern edge of the River Thames Corridor, where the Royal Borough of Windsor and Maidenhead Local Plan 2013-2033 seeks to conserve and enhance the special character and visual amenity of the River Thames and its setting under its policy QP4. Views extend northwards across the site to the Chilterns AONB from various parts of the River Thames corridor, especially elevated locations with panoramic views such as Winter Hill and parts of the Chiltern Way (southern loop). The return views from the Chilterns AONB and the Thames Valley Floodplain extend to the scarp slope south of the river, including Winter Hill, which is distinctive and provides significant framing and enclosure to the Thames Valley landscape. Again, on account of its predominantly functional form, density, scale and character, the proposed development does not satisfy policy QP4 and is a significant detractor from these views to, from and across the river corridor.

The published Landscape Character Assessments for the site and its surroundings draw attention to the important visual relationship between the site, within LCA 26.1 Thames Floodplain, the AONB to the north, including LCA 21.1 Thames Valley Slope, and the LCAs of Winter Hill, Cookham Dean and Cookham Rise to the south in neighbouring RBWM. The Applicant's LVIA considers landscape sensitivities to be highest to the south in RBWM, outside the Chilterns AONB, which doesn't make sense given the AONB's comparable status to a National Park. It is my view that the LVIA goes on to underplay the effects of the proposed development upon landscape character in some instances e.g. minor adverse effects upon the Thames Floodplain, within which the site sits. Given the profound change to the character of the northern half of the site in particular, and the perception of this change from the surrounding areas, I cannot agree that this will be a minor adverse effect.

• Impacts upon Visual Amenities

The applicant's assessment of key views and the anticipated impacts upon them from the proposed development indicates the scale of development and the magnitude of change to landscape character and selected views within this landscape.

Where the existing urban area of Marlow is tightly contained by the A404, the proposed development will break away from this and extend significantly eastward into the neighbouring countryside. For example, photomontage Views 3, 8, 9, L, Q and S illustrate this clearly. While the existing Marlow International and Globe Business Parks have a small presence in this landscape, mostly at close quarters, these views demonstrate a major expansion of commercial development into the countryside. This intrudes upon or obscures views between the Thames Valley and Chilterns AONB and breaks the continuity of the open rural landscape between them.

Photomontage View 3 illustrates the likely magnitude of change as experienced from the AONB to the northeast. The view encompasses Marlow town nestling in amongst trees centre and right, with the edge of Globe business park partially visible at the centre. The A404 can be seen extending into the distance left of centre, while Westhorpe House lies towards the left amongst the trees. The wireline photomontage indicates the extent of the proposed development and the fully rendered photomontage illustrates the scale, density and character of buildings that will be visible from here. This is a major change to the character of this view where the proposed development interrupts the flow of the landscape from the Chiltern hills into the Thames Valley and strongly urbanises the middle ground.

Photomontage View 8 in the LVIA illustrates a wide panorama which reduces the site to a small part of the image towards the centre. It is a wide-ranging view, but the existing site is perceived as much closer and more clearly visible than Photomontage View 8 would suggest. Appendix A to this response illustrates the LVIA and DAS images compared to a photograph broadly compliant with the Landscape Institute's technical guidance for reproduction at A3.

Nonetheless, considering the images provided in the DAS Addendum, the existing view extends across the fields between the river and the site, taking in a glimpse of Westhorpe House at the centre, with Plots 4 and 5 to the left and Plots 1-3 behind it. The A404 extends to the horizon also at the centre, while Marlow is clearly visible to the left beyond the lake and hotel. The white tents in the foreground are the family camping area associated with Westhorpe Farm / Westhorpe Water Sports Club, which operates at the lakes to the right.

The rendered Photomontage 8 demonstrates the extent and visibility of the proposed development which sits between the AONB and the Thames valley in the foreground. The magnitude of change to this view is major and breaks the sweep of countryside that extends from the Thames Valley up into the Chiltern hills. It appears as a major extension to the business parks at the edge of Marlow and significantly harms the quality and character of this view. The backlot at Plot 5 lies relatively close to the viewer and will at times contribute further to the harm to this view.

The A4155 broadly follows the northern side of the Thames floodplain. From the urban landscape of Marlow, heading east, this quickly changes once past the A404 junction, becoming a much more rural and open landscape character with the Chilterns AONB on the left and the Thames Valley on the right. This begins a sequence of green gaps between settlements heading eastwards to Little Marlow and Well End / Bourne End. The proposed development will significantly diminish the open countryside character and green gap between Marlow and Little Marlow, particularly with the presence of a new roundabout adjacent to a series of new buildings accompanied by the loss of many roadside trees. The major adverse effects upon local landscape character and views in the vicinity of the A4155 are illustrated by the updated photomontages C, D, E and F contained in the LVIA and DAS addendums.

It is my understanding that the A404 typically carries in excess of 100,000 vehicles a day. Both northbound and southbound approaches have limited views of Marlow town in the

vicinity of the site as it lies on the 'inside' of the bend in the road, often screened by intervening trees. However, the same travellers directly overlook the proposed development site in both directions, it being on the 'outside' of the bend with parts of the site directly in front of the drivers on their approach.

Travelling southbound on the A404, the tree-lined vista opens up to extend across the existing site, filtered by the perimeter poplar trees, to the Thames Valley slopes in the vicinity of Winter Hill. Travellers then pass the site with filtered / intermittent views continuing across the floodplain towards the river and Cookham. The proposed development will remove many of the poplar trees from this view and buildings will obscure views of/across the Thames Valley. Photomontage Views B, C and D indicate the degree and character of change that might be expected for road users on the southbound approach.

Northbound travellers experience intermittent views across the Thames Valley to their left, while a tree-lined vista along the road ahead extends directly across the site to the Chilterns AONB beyond. These views across the site broaden and become filtered / intermittent as the viewer passes the site, before becoming enclosed by the road junction and trees and continuing northwards. Approaching and passing the site, the proposed development will substantially intrude upon or obscure views of the Chilterns AONB on this northbound approach. There is no photomontage representing this view; however, Photomontage View L, taken from the pedestrian bridge crossing the A404, illustrates the scale and character of proposed buildings fronting the road on this northbound approach.

Notwithstanding the low sensitivity that might be attributed to road users in general, the experience of an attractive and changing landscape is an important one in terms of local identity for residents and visitors alike; it also helps relieve the monotony of driving. Some of the larger buildings within the proposed development will lie broadly in front of the drivers in both directions and will result in a very evident and harmful change to views of the landscape as experienced by a very large number of motorists and passengers.

The principal right-of-way affected by the proposed development crosses the A404 at Marlow and runs west to east through the site (refs MAW16/2 and LMA/20/1). This is a very popular walking route linking Marlow to Little Marlow, and connects with other permissive routes within/adjoining the site. The LVIA and supporting photomontages demonstrate a profound change to the environment of this footpath where it passes through the site. There will be a major loss of openness and views from the footpath, with a change of character from open rural landscape to a much more enclosed and urban landscape. 'Improvements' to this right of way include surfacing and lighting that are likely to improve accessibility but ultimately diminish any sense of its existing rural character. Figures 6.96 and 6.109 of the Design and Access Statement along with Photomontage Views 11, 12, 14 and 15 all make this abundantly clear.

Such change to the user's experience of the existing landscape is considered a major harmful effect. The applicant suggests this is part of a positive contribution to the RUR4 outdoor recreation objective of a Country Park, but is in fact the opposite. The existing open green landscape experience and visual amenity associated with this part of the route will be

lost, with a major harmful effect as a result. There is also cumulative effect with the neighbouring sports ground which, while retaining a substantially open character, displays elements of an urbanised landscape by way of the sports centre building, athletics track and lighting.

A note on the submitted photomontages: these have been problematic due to the variety of viewing angles, printing sizes and lack of image detail in some instances. It is my view that those images do not accord with the Landscape Institute's current technical guidance. It also makes it difficult for any observer to compare views on a like-for-like basis. Upon request, the applicant provided a printed high-resolution set of photomontages to aid the Council's appraisal of visual impacts upon key/representative views. Other observers will not have had the benefit of these images. Where wide panoramas had been submitted, single-frame images were also requested suitable for printing on A3 in accordance with current Landscape Institute technical guidance. While a set of such images were submitted as additional information, at least some of these remain as wide-angle views and not in accordance with Landscape Institute technical guidance. Most notable amongst these is the key view from Winter Hill, which is illustrated at Appendix A to this response.

• Impacts upon Green Belt

Green Belt is not a landscape designation but shares some common elements with landscape character. Openness is key, as is the broad absence of built development. The proposed development will have a profound impact upon the openness of the site, particularly the northern part of the site which will be substantially occupied by large buildings instead of open grassland. Its proximity adjacent to the A404 and Marlow town will be perceived as the sprawl of Marlow and encroachment into the adjacent countryside.

Conclusion

I cannot support this planning application on account of its significant adverse impacts upon landscape character, visual amenity and recreational amenity. While the quality of the proposed architecture and hard/soft landscape is evidently high, the location of the proposed development is a fundamental problem. It will be a very large, dense and imposing development in a sensitive landscape location, and will be of significant harm to the landscape character and visual amenity of the Chilterns AONB, Thames Valley and the public recreational use of this part of the RUR4 policy area. Mitigation measures incorporated into the design can do very little to change this, as the function, layout and scale of this type of development evidently has very limited scope for flexibility. The proposed development will not be successfully integrated into the landscape. The existing openness of the site is an essential feature of the landscape, providing continuity of views and a sympathetic transition of character from the Chilterns AONB into the Thames Valley landscape, which also reinforces the essential openness of its function as Green Belt. The

principle of landscape mitigation by softening/screening with trees and other vegetation at the edges does not compensate for this, as it creates or reinforces enclosure that obstructs the essential visual relationship between public routes/spaces and the surrounding countryside. The creation of high quality landscape spaces and 'enhancements' to public rights of way are commendable but ultimately urbanising features that change the fundamental character of countryside amenity that is currently enjoyed by members of the public, and which remains a key objective for public recreational use in this location.

Appendix A

Photomontage View 8 as presented in the LVIA and DAS Addendum, compared to single frame view broadly compliant with LI Technical Guidance for Type 4 Visualisations.

View 8 existing

8 frame stitched view | FOV 140 x 50 degrees | Camera height above survey point 1650mm | Nominal Iens rise 0mm | Date 10.02.22 | Time 14:44



LVIA Photography (140 horizontal angle of view on A3 page (with note to print at A1))



Addendum photography (approximately 65 degree horizontal angle of view on an A3 page)



Single frame photograph at same location (approximately 39.6 degrees horizontal angle of view), which is broadly compliant with LI Technical Guidance Note 06/19 for reproduction of Type 4 visualisations at A3.

BC Trees:

Recommendations.

No objection in principle.

Comments

Site layout has been revised to include a new roundabout to access the site from the Marlow Road

The revised internal site layout comprises of access road with various units and studios including workshops. The Roof level GA plan appears to be for the majority of the units covered with solar panels.

The applicant has provided a copy of the canopy cover calculator which is helpful. Amended canopy cover assessment including plan P20514-00-003-GIL-0101 Rev 09 as provided with the total canopy cover area for the site has been calculated as 96,078m2 and the total of 27% and above the baseline 25% in line with the policy requirement DM 34. This is comprised of 12% existing trees, 10% proposed new trees and 4% green infrastructure elements including biodiverse roofs to soundstages and green walls.

Referring to the Tree canopy cover plan P20514-00-003-GIL-0101 Rev. 09 and arboricultural Impact assessment Tree losses will occur for the proposed new roundabout and part of the frontage with the Marlow Road along the top access with the removal of G10 Sycamore, G9 and part of G14 Lombardy poplars T45 to T47 comprising of 2 sycamore and a Goat willow which.

This element would have a significant impact to views in and out of the site. Therefore, any mitigation and replacement planting where required will need to be to provide good visual amenity enhance the overall visual appearance in that area which will be seen from the public realm.

The existing diagonal section of the access road would see the loss G8 wild Cherry, T42 – T44 2 walnut and tree of heaven, T38-T40 3x ash, T32-T36 1x Lombardy poplar 3 ash and 1 walnut, T30-T31 ash, G7 ash, T27-T28 Wild cherry, T16-T18 2x ash 1x horse chestnut and T20 beech.

T31 ash is shown to be retained in the canopy calculator? And also on the Tree protection plan 18037-102-WIE-ZZ-XX-DR-V-77-006 rev 02 (sheet 2 of 3)

Further losses are with the studio block T48 -T50 sycamore G15 sycamore. (Backlot 310 311 Site Block plan MFS-PP-MP-LP-0002 revP060) Area along the ditch from east to west T57 hybrid black poplar, G21 Sycamore, hawthorn, part G22 sycamore, hawthorn, part G24 elder, elm, G25 hawthorn and including access to the south adjoining Westhrope House G18 sycamore, Ww2 oak and ash G19 sycamore, oak, crack willow and alder. Boundary with A404 to the west of the site T79 ash.

Eastern Boundary with Westhrope Road along the boundary is shown for removal on the Tree Protection plan 18037-102-WIE-ZZ-XX-DR-V-77-006 rev 02 (sheet 3 of 3) T4, 8 and T9 horse chestnut T5 and T11 ash, G3 Common Hawthorn, English elm and Blackthorn Also noted hedge H1 will be remove (no detail provided)

Referring to the roof plan and the GI element that equates to 4% of the 27% total and if this can't be delivered than the risk is that it falls below the baseline and would be contrary to policy DM34. Defer to the ecology team for addition comments in regards if there is compatibility between a green roof and the installation of solar panels as this may be in conflict against what remains as a usable green roof.

Green infrastructure is made up Green Wall GI1 GI2, GI4 & GI5 as plants on wall 0.3m³ in irrigated growing medium per 3m² while GI3 is for green roof extensive plus SuDs 6 to 15 cm growing medium combined GI total shown at 4%.

New planting is in the form of native trees with Hawthorn, Hornbeam, Whitebeam, Bird Cherry, and some lesser amounts with elm cultivars, beech and an oak. In addition, there is also scope for a wider selection of other native species such Alder, Crab apple, Field maple, Downey & Silver birch, Goat willow, Spindle, Scots pine, Hazel, Holly, Lime, Rowan, Pear, Native black poplar, Wild cherry, Yew, Wild service tree and also non-natives that naturalise or even some exotics which current work in our landscapes.

Conditions:

- 1. Revised AIA AMS with tree protection plan if approved
- 2. landscape condition as to replacement and new trees that complies or improves with the Canopy cover calculator. Resubmit the calculator when scheme is ready to demonstrate that any changes of species is taken int account
- 3. Full details as to the green walls. (Eco)

Conditions recommended in relation to Arboricultural Impact and Method Statement, planting and green wall details.

BC Ecology:

SUMMARY

It is now considered that the proposals will be able to adequately avoid, compensate, mitigate and provide enhancements for ecology. The details for how this can happen are understood sufficiently to enable the detail to be secured by conditions and through a s106.

COMMENTS

The planning application has potentially multiple ecological implications and as a result a large number of documents have had to be submitted to address these issues. I have categorised issues to aid the structure and understanding of my comments.

- Habitats, Biodiversity Net Gain and metrics

- Species
- Ecological aspects of the new design
- Mitigation, compensation and enhancement.

Habitats

The 'UK Habitat Classification Report' which was produced in June 2023 is an update of previously produced habitat assessments of the site. The latest version contains a more detailed and evidenced based explanation of the habitats present on site. Species lists and photographs are included of the areas assessed and details of transects taken in plot 1 during September 2022 and June 2023 are included.

The historical use of the site for quarrying and then landfill has impacted upon the habitats that have been retained and those that have developed. This has made classification of some areas more complicated. As a result, it is understandable that how the many habitat surveys have returned different result at different times. A key reason for the difficulty in classification of some areas is that they have a shifting mosaic which is evident at different scales. This characteristic has created a debate over whether some areas of the site are best described as 'Open Mosaic Habitat on Previously Developed Land' (OMHPDL) which is a Priority Habitat/Habitat of Principle Importance. To classify an area as OMHPDL there is a requirement for certain criteria to be met which are defined in the JNCC UK Biodiversity Action Plan (BAP) habitat description. The UK Habitat Classification Report considers each of the five criteria in relation to plots 4 and 5. Some of the criteria are clearly met for these plots and the meeting of some of the criteria is more debatable. The report claims that the areas are not OMHPDL, primarily on the basis of a lack of bare ground. However, it also questions how well it meets requirements for spatial variation, size and edaphic (relating to soil) conditions. I agree that the amount of bare ground is limited or lacking in some areas, but they do exist as a result of rabbit activity in some areas and as a result of left over areas of concrete surfacing in others. Therefore, I do consider that there are areas in plot 4 and 5 which meet the bare criteria, but they are not incorporated into the mosaic sufficiently to enable the categorisation of the whole of these areas area as OMHPDL. The meeting of the majority of the criteria for much of the areas of plots 4 and 5 is important. It points the direction of the way these areas should be used and managed into the future and how this could lead to areas of them being more definitively OMHPDL.

Plot 1 has been subject to the most detailed investigations through repeated transect surveying. It has been to a large extent determined to be 'Other Neutral Grassland', however, this assessment does not reflect the presence of some degree of mosaic features and the fact that it is not a clear and easy fit with 'Other Neutral Grassland'. Large areas of plot 1 are dominated by species other than grasses and also do not fit with the Ruderal/Ephemeral type of habitat. Plot 1 includes small patches of bare ground and also some wet areas.

The significance of the categorisation of habitats as OMHPDL or otherwise, is important for a couple of reasons:

• The fact that OMHPDL is a priority habitat means that Wycombe District planning policy DM13 places additional tests which need to be met if it is to be destroyed.

- OMHPDL has high distinctiveness in the metric and therefore requires greater and more specific compensation.
- The habitats which are created to compensated for loss need to be designed to replicate what is lost to the best possible degree.

Therefore, categorising habitats as something other that OMHPDL makes it easier for the proposals to be acceptable from an ecological perspective.

The difficulty in pinning down habitats has also been particularly difficult with regards to the Westhorpe watercourse which runs across the site from the Newt ditch. The difficult in classifying this is related to the fact that it has been heavily modified and so that it has features of a watercourse but also has features more closely associated with a standing water body.

Both perspectives are relevant and so in the absence of the ability to reach a consensus the applicant has been encouraged to, and has put forward mitigation, compensation and enhancement measures which address both perspectives. Details which have been put forward to date are aimed at addressing the impact of the construction of a crossing between plot 4 and plot 5. Proposals seek to both mitigate the impacts and also compensate them through enhancements which have value from a river perspective and the perspective of an area of standing water.

The value of habitats, hedgerows and water courses has been valued using the Defra metric 3 (in line with Defra guidance).

The latest version submitted (04/08/2023) records the overall number of baseline habitat units as 199.68 and the overall number of baseline hedgerow units as 11.48.

The proposals will see the number of on site habitat units fall to 173.72 (net loss of -13%) and hedgerow units increase to 11.77 (net gain of 2.56%).

An offset site has been acquired quite close to the site which has been assessed to have a baseline value of 43.33 habitat units and 0 hedgerow units. The suggestion is to increase the habitat units of the offset site to 182.04 units and increase the hedgerow units to 3.03 units.

With the offset site the total biodiversity net gain of habitat units would be 112.75 (56.47%) and a net gain in hedgerow units of 3.32 (28.94%).

Given that some of the baseline information might be considered to be pessimistic and some of the proposed number of units to be created (both on and off site) could be considered to be optimistic. It is useful to consider what the impact might be of making changes to the metric.

- If 7.02 ha of the baseline was OMHPDL in moderate condition instead of Other Neutral Grassland in poor condition. That area would be valued at 84.2 units rather than 28.07 units. A change of 56.13 units.
- If the 4.0083 ha of proposed extensive green roof were only able to achieve Moderate condition rather than Good condition. This would equate to a reduction of 6 units.
- If the offsite area of Other neutral grassland was only able to achieve moderate rater than good condition, it would achieve approximately 37 units.

If all of these changes are put together then there would be a reduction in the net gain by 99.13 units. This would mean that there could still be an overall biodiversity net gain, but it would not reach the proposed level.

The Preliminary Ecological Design Strategy (Draft) considers 6 different scenarios (Current and A-E) relating to the different classification of the baseline habitats in plots 4 and 5 and the creation of different habitats on the offset site. The scenarios are interesting to consider, but they are quite selective. It would have been just as possible to shuffle the elements presented in the scenarios to achieve less positive outcomes.

Ultimately, I think it is very possible that the level of net gain suggested would not be achieved if the developer does not take the management and monitoring of all retained, enhanced and created habitats very seriously. However, I consider that through careful detailed design of the proposals it can be possible to achieve a net gain of greater than 20%.

The Preliminary Ecological Design Strategy (Draft) also reflects on the ability to create the extent of net gain shown in the metric and the conversations held over likelihood of different scenarios. The fact that strategy takes an optimistic view of what can be achieved is good, if this is ultimately reflected in the outcomes achieved. It is however accepted that the preliminary draft is just a proof of principle, and the final direction of travel will be set through an Ecological Design Strategy (EDS) and Habitat Management and Monitoring Plan (HMMP).

An issue which was discussed early on in the proposals was that of how new trees are assessed in the metric. On the whole new trees need to be included as a small size (per the tree helper tool) and as poor condition as it is very difficult for them to be anything else. Rather than showing proposed trees in a suitable way, they have been removed entirely from the metric.

Trees have a wide range of benefits and have been included in the design for the site and therefore it is appropriate for them to be included in the designs for both on and off site and included in the metric in an appropriate way.

The Preliminary Ecological Design Strategy (Draft), The Westhorpe Watercourse: Biodiversity Net Gain Feasibility Assessment and the four different copies of metric 4 set out different scenarios for addressing the impacts upon the Westhorpe watercourse crossing. These include onsite measures in the form of reprofiling and increasing marginal vegetation adjacent to the crossing and the proposed bridge spans. They also include off site enhancements on a section of heavily shaded watercourse on the offset site adjacent to council owned land.

The suggestions are not detailed at this point, but they are shown in the metric that they would have the potential to ensure that there can be a biodiversity net gain on the river metric of up to 0.237 river units (81.72%).

Suggested enhancements in the Preliminary Ecological Design Strategy (Draft) also look to address the requirements of the Environment Agency for enhancements to Westhorpe Lake floating rafts on the edge of the Lake.

The enhancements proposed will not only benefit wildlife but will probably also have a positive impact upon the amenity/landscape value of these locations which ties in with wider objectives.

Species

Issues relating to the way in which notable, protected and priority species have been surveyed assessed have been covered in previous iterations of comments and have been addressed through additional surveying or through clarifications.

The proposals will have an impact upon some species through loss of their habitat but some of the onsite proposals will at least in part compensate for the impacts. Green roofs will provide some compensatory habitats for invertebrate species. Wherever possible, plant species which are associated with the priority or rare invertebrates should be included in the green roof plant mixes.

Enhancements to some of the areas on site should help benefit reptiles and may benefit other species.

The loss of wide areas of floristically diverse habitat, which is known to be used by species such as foraging and commuting bats, foraging barn owls, ground nesting birds such as sky lark and many other species (which may not be priority species and so have not been identified), will be lost from the site and will not be adequately compensated for unless the offsetting area is designed to accommodate them.

Other impacts of the development (both through construction and operation) on species (and to some extent on habitats) will need to be addressed through detailed mitigation measures. It is already proposed to include green roofs on many of the buildings and also some green walls, however there are many other ecological enhancement features which can be included to help ensure there are biodiversity net gains for species as well. It is understood that since the updated surveys of the waterbodies on site have shown no indication of the presence of Great Crested Newts, there is considered to be no need for district licencing and Reasonable Avoidance measures will be sufficient.

RECOMMENDATIONS

The potential of the development site and the offset site to achieve a significant biodiversity net gain has been proven to my satisfaction. However, it is by no means guaranteed. The conditions and s106 which will be required, and adherence to them, will dictate the success of the scheme from a BNG perspective.

The loss of features on site which are akin to OMHPDL is to be partially compensated for through the enhancement of some less distinctive habitats to create OMHPDL. However, I do not consider that this is the full compensation that would be required by tests in policy DM13 and therefore, OMHPDL features will need to be included on the offset site to meet the policy requirement.

There is a need for clear and detailed ecological design information to cover both the onsite habitats and those to be created offsite. The offsite habitats can consist primarily of other neutral grassland as has been suggested, but they also need to take into account the mosaic nature of the habitats to be lost. The habitat to be created offsite needs to include a variety of vegetation types including clumps of trees, scrub and wetter areas, it could also include some slight amendments to the localised topography to create temperature differences (as some surfaces are warmed by the sun more than others) and also create areas of bare ground and potential hibernacula features.

Together these areas can form an informal mix of OMHPDL type features and more parkland type features which would tie the previous historic landscape of Westhorpe House and the new use partially contributing to a SANG together with a more ecologically interesting mix of habitats.

The proposed hedgerows on the offset site can ensure that there will be a net gain in hedgerow units of greater than 20%, however the proposed arrangement of hedgerows

will need to be designed to maximise there connective benefits and also ensure that landscape benefits are also maximised. The current suggested locations would block views from the path across the area used for biodiversity offsetting and also to the hills to the north. This will need to be amended in the final design.

New trees should be included in the design of both on and off-site areas and can be included in the metric. They will however need to be shown as small and almost certainly of poor condition, given the limitation of their potential to achieve anything more within 30 years.

The impacts the proposals will have upon the Westhorpe watercourse from a BNG perspective are considered to be sufficiently compensated for in the scenario where goth on and off site enhancements would occur.

Although it is considered that policy DM15 can apply to this crossing, it is accepted that, given:

- the relatively short length of culverts,
- the use of several sections of box culvert to minimise the impact on movement of water and wildlife,
- the use of other ecological compensation and enhancement measures associated with the satisfaction of biodiversity net gain for the river metric,
- the fact that the policy would not have had this sort of scenario in mind when it was developed,

it would not be appropriate for this policy to form a reason for objecting to the proposal. It will however be necessary for the final design have minimisation of ecological impact and maximisation of value as a core objective.

The design of both on and off site habitats and features will need to be comprehensive and detailed to ensure that species which are currently found on site do not lose out as a result of the development. The off site area needs to accommodate good ground nesting for skylark, the right conditions to enable foraging for barn owl and bats, habitats for small mammals and reptiles and nesting birds. On site the green roofs need to include plant species which accommodate a range of invertebrates, including those currently found on site. The green walls can also accommodate bird and bat boxes and insect hotel features to increase their diversity.

Reptiles can be accommodated particularly well in the areas which will be enhanced OMHPDL.

A Construction Environmental Management Plan (Biodiversity) will be required to address ecological mitigation measures during the construction phase of the development.

An Ecological Mitigation Management Plan will be required to set out mitigation measures which will be required through the ongoing use of the site, such as lighting, use of the back lot and use of other areas where the successful provision of biodiversity units would be threatened by other uses of an area.

Alongside the submission of the finalised proposals for the on and off site habitats (by condition) there will be an need for a submission of a complete and final biodiversity metric (Defra 3) which includes the habitat, hedgerow and river aspects of the metric.

S106 AGREEMENT

A s106 agreement will need to secure:

- the whole of the offsite area shown on 'Figure 2: Off-Site Proposed Enhancements' (WIE18037-127_GIS_17TN_3A) for Biodiversity Net Gain for this application for a minimum of 30 years or longer to provide for the
- maximising the Biodiversity Net Gain delivered on the off set site and securing a minimum of 20% net gain of habitat, hedgerow and river units.
- areas to be managed to compensate for loss and provide a net gain in ground nesting bird (skylark in particular) habitat.
- a Habitat Management and Monitoring Plan (HMMP) which will include the provision of reports to cover the 30 years
- payment to the council to review the monitoring reports keep and return records to government and undertake occasional site visits.
- The submission of an updated Defra metric, to coincide with the submission of updated details proposals.

Legal have suitable BNG template wording which covers much of this.

CONDITIONS

Ecological Design Strategy

No development shall take place until an ecological design strategy (EDS) addressing mitigation, compensation and enhancement has been submitted to and approved in writing by the local planning authority.

The EDS shall include the following.

- a) Purpose and conservation objectives for the proposed works linked to requirements for identified species and for Biodiversity Net Gain Calculations.
- b) Review of site potential and constraints.
- c) Detailed designs and/or working method(s) to achieve stated objectives.
- d) Extent and location/area of proposed works on appropriate scale maps and plans.
- e) Specification and source of materials (plants and otherwise) to be used where appropriate, e.g. native species of local provenance.
- f) Timetable for implementation demonstrating that works are aligned with the proposed phasing of development.
- g) Persons responsible for implementing the works.
- h) Details of initial aftercare and long-term maintenance.
- i) Details for monitoring and remedial measures.
- Details for disposal of any wastes arising from works.
- k) Retention and protection of existing habitats during construction.
- I) Habitat removal and reinstatement.
- m) Provision for wildlife corridors, linear features and habitat connectivity.

- n) Woodland, tree, hedgerow, shrub, wetland and wildflower planting and establishment.
- o) Proposed new landforms associated with habitat creation.
- p) Soil handling, movement and management.
- q) Creation, restoration and enhancement of semi-natural habitats.
- r) Species rescue and translocation, for reptiles.
- s) Plans designs and specifications for a floating raft system (FloraFloat® system, or equivalent)
 - to be included on Westhorpe Lake showing a minimum of 5 rafts, each of which is 10 metres long.
- t) Plans designs and specifications of the ecological elements of the green roof and green wall, including species to be included (responding to the needs of invertebrates recorded on site) and any additional ecological features included within them.
- u) Ecological aspects of the design of the crossing of Westhorpe watercourse.
- v) Plans, and specifications for new wildlife features, including bat roosts structures, bird nesting features within buildings, reptile hibernacula, an artificial otter holt, barn owl boxes and insect hotels.
- w) Provision and control of access and environmental interpretation facilities, e.g. bird hides, paths, fences, bridges, stiles, gates and signs/information boards.

The EDS shall where appropriate be cross reference in other relevant details (e.g. landscape plans, detailed building design, construction environmental management plan), and it shall be implemented in accordance with the approved details and all features shall be retained and maintained in that manner thereafter for the life of the development.

Reason:

To ensure that habitats and ecological features which are appropriately designed, created and installed in accordance with expectations and to ensure that identified protected, priority and notable species are adequately catered for, in accordance with policy DM13, DM34 and the NPPF.

Landscape and ecological management plans (LEMPs)

A landscape and ecological management plan (LEMP) shall be submitted to, and be approved in writing by, the local planning authority prior or occupation of the development. The content of the LEMP shall include the following.

- i) Description and evaluation of features to be managed.
- ii) Ecological trends and constraints on site that might influence management.

- iii) Aims and objectives of management.
- iv) Appropriate management options for achieving aims and objectives.
- v) Prescriptions for management actions.
- vi) Preparation of a work schedule (including an annual work plan capable of being rolled forward over a five-year period).
- vii) Details of the body or organisation responsible for implementation of the plan.
- viii) Ongoing monitoring and remedial measures.

The LEMP shall also include details of the legal and funding mechanism(s) by which the long-term implementation of the plan will be secured by the developer with the management body(ies) responsible for its delivery.

The plan shall also set out (where the results from monitoring show that conservation aims and objectives of the LEMP are not being met) how contingencies and/or remedial action will be identified, agreed and implemented so that the development still delivers the fully functioning biodiversity objectives of the originally approved scheme.

The approved plan will be implemented in accordance with the approved details.

Reason:

To ensure appropriate protection and enhancement of biodiversity, to make appropriate provision for natural habitat within the approved development and to provide a reliable process for implementation and aftercare.

Construction Environmental Management Plans (Biodiversity)

No development shall take place (including demolition, ground works, vegetation clearance) until a Construction Environmental Management Plan (CEMP: Biodiversity) has been submitted to and approved in writing by the local planning authority. The CEMP (Biodiversity) shall include the following.

- a) Risk assessment of potentially damaging construction activities.
- b) Identification of "biodiversity protection zones".
- c) Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (this must include Reasonable Avoidance Measures Method Statement (RAMMS)) on protected species.
- d) The location and timing of sensitive works to avoid harm to biodiversity features.
- e) The times during construction when specialist ecologists need to be present on site to oversee works.
- f) Responsible persons and lines of communication.
- g) The role and responsibilities on site of an ecological clerk of works (ECoW) or similarly competent person.

h) Use of protective fences, exclusion barriers and warning signs.

The approved CEMP shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details, unless otherwise agreed in writing by the local planning authority.

Reason:

To ensure that development is undertaken in a manner which ensures important wildlife is not adversely impacted by construction.

Lighting

Prior to commencement the following shall take place:

- an ecological analysis shall be undertaken of the proposed lighting in coordination with lighting engineers.
- Appropriate amendments to lighting proposals (including lighting locations, type, intensity and timing) shall thereafter be incorporated into the amendments with explanations of where and why changes have been made.

The analysis, and amendments shall then be submitted to and approved in writing by the LPA and thereafter implemented.

Reason:

Many species active at night (e.g. bats, badgers and otters) are sensitive to light pollution. The introduction of artificial light might mean such species are disturbed and/or discouraged from using their breeding and resting places, established flyways or foraging areas. Such disturbance can constitute an offence under relevant wildlife legislation. Limiting negative impacts of light pollution is also in line with paragraph 185 of the NPPF.

Habitat Creation, Management and Monitoring Plan

A Habitat Creation, Management and Monitoring Plan for the offset site area shown on 'Figure 2: Off-Site Proposed Enhancements' (WIE18037-127_GIS_17TN_3A), shall be submitted to, and be approved in writing by, the local planning authority prior commencement of the development. The content shall include the following.

- i) Description and evaluation of the baseline site including: the soils characteristics, the existing vegetation and any other constraints or features or the land which impact upon the habitats which can be created and the way in which they can be created and managed.
- ii) Ecological trends and constraints on site that might influence creation and/ormanagement.

- Detailed plans and specifications for the retention, enhancement or creation of habitats on site. These must be produced in coordination with landscape architects and consider amenity value, views through and beyond the site. Habitats provided must ensure metric trading rules are met and must also compensate for the varied mosaic style of habitat lost (which are more complex than the description 'Other Neutral Grassland' would imply). Designs should seek an informal mix of grassland, trees, scrub and some wetter areas, some slight changes in soil levels will be appropriate for aesthetic and or ecological reasons.
- iv) Detailed plans, specifications, prescriptions and timescales for initial creation or enhancement.
- v) Aims and objectives of management, including the achievement of habitat, hedgerow and river biodiversity units.
- vi) Chosen appropriate management options for achieving aims and objectives.
- vii) Prescriptions for management actions.
- viii) Preparation of a work schedule (including an annual work plan capable of being rolled forward over a five-year period and longer term works which are expected within the next 30 years).
- ix) Details of the body or organisation responsible for implementation of the plan.
- x) Ongoing monitoring and remedial measures.

The Habitat Creation, Management and Monitoring Plan shall also include details of the legal and funding mechanism(s) by which the long-term implementation of the plan will be secured by the developer with the management body(ies) responsible for its delivery.

The Habitat Creation, Management and Monitoring Plan shall also set out (where the results from monitoring show that conservation aims and objectives of the Plan are not being met) how contingencies and/or remedial action will be identified, agreed and implemented so that the development still delivers the fully functioning biodiversity objectives of the originally approved scheme.

The approved Plan will be implemented in accordance with the approved details and the s106 agreement.

Reason:

To ensure appropriate protection and enhancement of biodiversity in line with the expectations of the development and policy DM34.

Time limit on development before further surveys are required.

If the development hereby approved does not commence (or, having commenced, is suspended for more than 12 months) within 18 months from the date of the planning consent, the approved ecological measures secured through Condition shall be reviewed and, where necessary, amended and updated. The review shall be informed by further ecological surveys commissioned to:

- i) establish if there have been any changes in the presence and/or abundance of protected species which could be impacted by the proposals and which would not be adequately protected by the measures in place, and
- ii) identify any likely new ecological impacts that might arise from any changes. Where the survey results indicate that changes have occurred that will result in ecological impacts not previously addressed in the approved scheme, the original approved ecological measures will be revised and new or amended measures, and a timetable for their implementation, will be submitted to and approved in writing by the local planning authority prior to the commencement (or recommencement) of development. Works will then be carried out in accordance with the proposed new approved ecological measures and timetable.

Reason:

To provide protection to legally protected or rare species to comply with the requirements of The Conservation of Habitats and Species Regulations 2017, and the Wildlife and Countryside Act 1981 (as amended) and in accordance with para 99 of ODPM Circular 06/2005.

BC Drainage:

The LLFA has no objection to the proposed development subject to the following planning conditions listed below being placed on any planning approval.

Groundwater Flood Risk

Further groundwater level data has been submitted up until March 2023, the data demonstrates that groundwater levels which shows that multiple locations reached their peak groundwater levels in February 2023. The highest groundwater level was encountered in BH110 at a level of 2.49m below ground level.

Bridge from Plot 4 to 5

In this area, the flooding mechanism appears to be complicated by interactions between the pond networks, and whilst a description of potential flood impacts has been provided for the culverted

road crossing, at detailed design the LLFA require hydraulic modelling of the bridge crossing to

demonstrate that there are no interactions that increase flood risk. Environment Agency flood levels including climate change allowances (Appendix F of the FRA) indicate potentially significant changes in water level. The modelling assessment should consider climate change impacts on design and flood risk. The Applicant should also confirm any scour related issues around the structure that need to be considered as part of modelling works. Drawings submitted as part of the Plot 4 to 5 Crossing Structure Technical Note show the proposed scheme. We note that the details surrounding construction will need to be dealt with as part of the Land Drainage Consent (further information can be found in the informative below).

However, there has been no consideration of any temporary works required to install the culverts. This will be dependent on the proposed working methodology for installation and silt removal without increasing pollution risk. If this is based on the use of temporary cofferdams, there may be impacts that will need to be confirmed as part of modelling for temporary works. Based on available flood mapping, there would appear to be a significant variance in water levels and presumably flows between connecting waterbodies. Evaluation should be made for both temporary and permanent works for a range of flood conditions.

Surface Water Drainage

As previously discussed, the site has been divided into six plots: Plots 1, 2A, 2B and 3 to the north of the site, Plot 4 to the east of Westhorpe Lake and Plot 5 to the south of Westhorpe Lake.

Plot 5 - Backlot and Bridge

Within the AECOM Response – LLFA Planning Response 22 August 2022 (22nd August 2022, AECOM), it is stated that the road which connects the bridge to the Backlot will be constructed with permeable materials and will be shaped 'to shed run-off to the adjacent soft landscaping providing irrigation and biodiversity benefits'. Therefore, it has been concluded that a drainage system is not required for this section of road. However, this does not correspond what is shown on the Illustrative Plot 4/5 Crossing Alignment (60654980-ACM-XX-XX-SK-HW-000033 Revision P07, 02.03.2023, AECOM). It must be reiterated that if the road from the bridge is to be constructed by impermeable materials then a surface water drainage system must be installed to ensure that there is not an increase in flooding offsite.

It should also be noted that, no details of how the bridge structure itself will manage runoff has been provided, and therefore this information must also be submitted.

Water Quality Assessment

In order to meet the Water Quality assessment criteria, the applicant must demonstrate their

compliance in reducing the risk of pollutant run off into natural water systems, including the track

from the Bridge to Plot 5. Often a combination of various controls to mitigate pollutant run off will be sufficient enough to meet the criteria. Controls or SuDS on the ground surface are preferable as they help to not exceed the pollution hazard index. These methods can consist of permeable paving, green roofs and SuDS which prevent potentially harmful pollutants in all forms from entering eco-systems or our own water ways.

Calculations

At detailed design surface water drainage calculations must be resubmitted, these calculations must demonstrate that the proposed drainage system can contain up to the 1 in 30 storm event without flooding must be provided. Any onsite flooding between the 1 in 30 and the 1 in 100 plus 40% climate change storm event should be safely contained on site. These calculations must include details of critical storm durations and demonstrate how the proposed system as a whole will function during different storm events. If any flooding occurs for the 1 in 100 year plus 40% climate change event, then we require details of where this flooding will occur and the volume of the flooding.

Climate change allowances

The Environment Agency updated the climate change allowances for peak rainfall intensity in 2016. When designing a surface water drainage system, the LLFA encourage that 40% climate change allowance is used. A climate change allowance of 20% will be accepted if the system has been sensitivity checked for the 1 in 100 plus 40% climate change allowance event.

Exceedance

If any flooding occurs for the 1 in 100 year plus 40% climate change event, details of where this

flooding will occur and the volume of the flooding must be provided. For rainfall events over the 1 in 100 plus 40% climate change allowance event, a drawing showing the direction of exceedance flows must be provided.

Factor of safety

A factor of safety must be applied to any calculations for the proposed surface water drainage

scheme in accordance with best guidance.

Submerged Outfall

Calculations must also be provided which shows how the surface water system would function when the outfall to either the lake or the watercourse is submerged.

Floatation Calculations

It should be noted that due to the anticipated high groundwater, flotation calculations will be

required. These calculations must be informed by the highest observed groundwater levels (over the winter period).

Construction Drawings

At detailed design, construction drawings for all surface water drainage components are required.

Drawings should include cover and invert levels along with details of materials.

Maintenance

A maintenance schedule for the surface water drainage system needs to be provided. It should

include the maintenance tasks which are required, the persons responsible for undertaking maintenance and frequency by which these will be undertaken.

I would request the following conditions be placed on the approval of the application, should this

be granted by the LPA:

Condition 1

Development shall not begin until a surface water drainage scheme for the site, based on sustainable

drainage principles and an assessment of the hydrological and hydro-geological context of the

development, has been submitted to and approved in writing by the Local Planning Authority. The

scheme shall subsequently be implemented in accordance with the approved details before the

development is completed. The scheme shall also include:

- Hydraulic Modelling to demonstrate the impact of the proposed bridge on the watercourse
- Water quality assessment demonstrating that the total pollution mitigation index equals or

exceeds the pollution hazard index; priority should be given to above ground SuDS components

- Confirmation of the road material between the bridge and plot 5 (Backlot)
- Details of how the bridge structure will manage surface water runoff
- Full construction details of all SuDS and drainage components
- Detailed drainage layout with pipe numbers, gradients and pipe sizes complete, together with

storage volumes of all SuDS components

• Calculations to demonstrate that the proposed drainage system can contain up to the 1 in 30

storm event without flooding. Any onsite flooding between the 1 in 30 and the 1 in 100 plus climate change storm event should be safely contained on site. Calculations must also include:

- o Floatation calculations based on groundwater levels encountered during winter monitoring
- o Submerged outfall calculations
- Details of proposed overland flood flow routes in the event of system exceedance or failure,

with demonstration that such flows can be appropriately managed on site without increasing

flood risk to occupants, or to adjacent or downstream sites.

Reason

The reason for this pre-start condition is to ensure that a sustainable drainage strategy has been

agreed prior to construction in accordance with Paragraph 167 and 169 of the National Planning

Policy Framework to ensure that there is a satisfactory solution to managing flood risk.

Condition 2

Prior to the occupation of the development a whole-life maintenance plan for the site must be

submitted to and approved in writing by the Local Planning Authority. The plan shall set out how and when to maintain the full drainage system (e.g. a maintenance schedule for each

drainage/SuDS component), with details of who is to be responsible for carrying out the maintenance. The plan shall also include as as-built drawings and/or photographic evidence of the drainage scheme carried out by a suitably qualified person. The plan shall subsequently be implemented in accordance with the approved details.

Reason

The reason for this prior occupation condition is to ensure that arrangements have been arranged

and agreed for the long term maintenance of the drainage system as required under Paragraph 169of the NPPF.

NB: We would recommend that the "whole-life" maintenance and management plan for the surface water drainage system is secured by a Section 106 Planning Agreement. The use of a planning obligation (as opposed to a planning condition) would help to safeguard the maintenance and management of these features over the lifetime of the development. The BC Strategic Flood

Management team are of the opinion that this is a reasonable approach due to the residual risk of

fluvial, surface water and groundwater flooding to the site should the systems not be adequately maintained.

Advice to the Applicant:

Land Drainage Consent

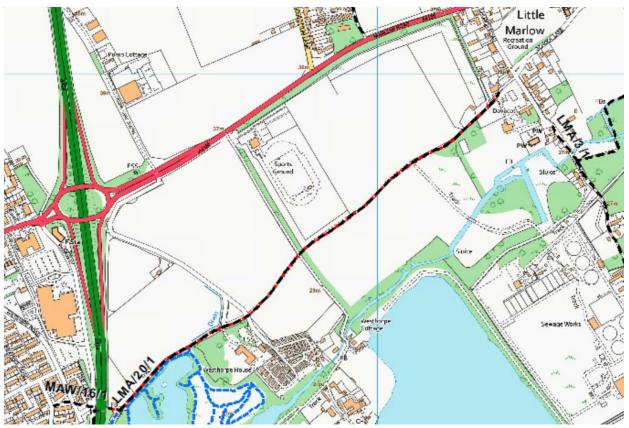
Under the terms of the Land Drainage Act 1991 and the Floods and Water Management Act 2010, the prior consent of the Lead Local Flood Authority is required for any proposed works or structures in the watercourse. After planning permission has been granted by the LPA, the applicant must apply for Land Drainage Consent from the LLFA, information and the application form can be found on our website. Please be aware that this process can take up to two months.

BC Rights of Way:

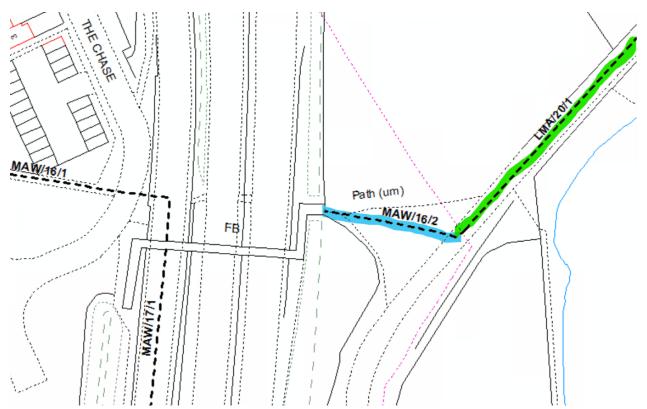
The rights of way network in the vicinity of the development is shown in Plan 1.

Footpath LMA/20/1 passes between the end of the publicly maintained vehicular highway along Pound Lane, Little Marlow and finishes about 32m east of the Volvo footbridge.

Footpath MAW/16/2 completes the final 32m link to the bottom of the eastern steps of the Volvo footbridge – see blue highlight on Plan 2; slightly at variance to the walked alignment picked up on the OS base map [marked 'path (um)'] forming a triangle of connecting de facto paths.



Plan 1



Plan 2

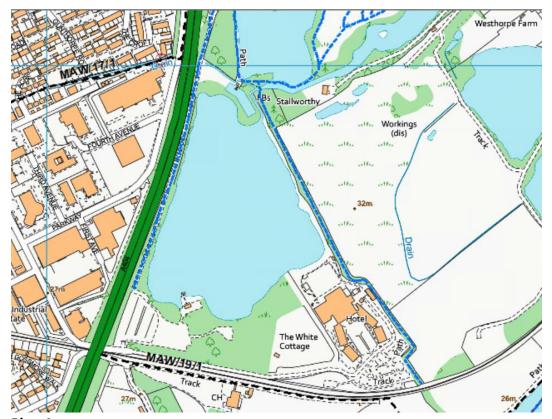
Claimed rights of way

The red-dashed lines sitting against the black dashed lines on Plans 1 and 3 [LMA/20/1 and MAW/16/2] indicate the council is in receipt of a definitive map modification order under Section 53 Wildlife & Countryside Act 1981 to record a public *bridleway* along the existing footpath alignment.

The blued-dashed lines on Plans 3 and 4 indicate the council is in receipt of a definitive map modification order under Section 53 Wildlife & Countryside Act 1981 to record public *footpaths* along alignments where no rights of way currently exist.



Plan 3



Plan 4

To note from Plan 4:

[i] the more westerly of the claimed blue routes [parallel to the A404] falls short of the publicly maintained highway along Fieldhouse Lane; and

[ii] on the more easterly of the claimed blue routes, some submitted evidence forms continue to the Thames Path, while others cease at the railway line, as illustrated.

[iii] the more easterly of the claimed blue routes, beside and running north of the hotel up to a footbridge [marked 'FBs' on the OS plan], sits outside the red edge and is unaffected by Plot 5 of the development.

Volvo Footbridge

To the west of the proposed development, the Volvo footbridge provides an important connection between town and country, as well as connecting Marlow residents with a traffic-free corridor to Little Marlow and Bourne End. It seems likely the footbridge has been in place since around 1986 – Photo 1.

Photo 1

PHOTO REMOVED (VIEWABLE ON PUBLIC ACCESS)

There are no *recorded* public rights of way up the steps and across the span of the bridge and I'm unclear if rights are secured elsewhere, such as within a planning permission. I have

confirmed with National Highways they own and maintained it, but they don't confirm access in perpetuity. They state they are:

"...not in a position to confirm that NH will maintain in perpetuity, however it stands we maintain the bridge and will continue to do so unless the A404 is detrunked should that ever occur."

The footbridge connects to the existing pedestrian network on the west side of Marlow along relatively quiet roads [attractive for cycling]. Pedestrians benefit from a 2m-wide deck and steps [Photos 2, 3 and 4].

Photo 2

PHOTO REMOVED (VIEWABLE ON PUBLIC ACCESS)

Photo 3

PHOTO REMOVED (VIEWABLE ON PUBLIC ACCESS)

Photo 4

PHOTO REMOVED (VIEWABLE ON PUBLIC ACCESS)

Staying with the footbridge, I have enquired with National Highways [July 2022] if they would support installation of wheeling ramps, as illustrated in Photo 5, to facilitate cyclists crossing the bridge from Marlow to the development, thus avoiding the Westhorpe roundabout.

Photo 5 - example wheeling ramp PHOTO REMOVED (VIEWABLE ON PUBLIC ACCESS)

National Highways state they have previously investigated an application from Marlow residents for such an improvement, but it has been discounted by their Safety and Engineering Standards [SES] team who were reluctant to approve as it was considered a trip hazard. They state wheeling ramps have been:

"...rejected by SES twice and will not be considered".

Existing footpath condition and issues to be resolved

Continuing east from the footbridge, Footpath MAW/16/2 passes through an open grassed area, before joining LMA/20/1, which for 340m provides a relatively attractive corridor of around 6m width between barbed wire fences and benefits partly from a loose stone surface in the centre. I enclose Photos 6 and 7 to illustrate, though the 6m width is obscured somewhat by seasonal nettle and hedge growth.

Photo 6

PHOTO REMOVED (VIEWABLE ON PUBLIC ACCESS)

Photo 7

PHOTO REMOVED (VIEWABLE ON PUBLIC ACCESS)

Photo 8 - evidence of existing cycling use PHOTO REMOVED (VIEWABLE ON PUBLIC ACCESS)

On reaching the respective private vehicular crossings to Westhorpe House and Westhorpe Park, the width is restricted by locked gates, with pedestrians diverted around the side [Photo 9].

Photo 9

PHOTO REMOVED (VIEWABLE ON PUBLIC ACCESS)

A sign stating 'PRIVATE PROPERTY KEEP OUT' also sits within the footpath [Photo 9], which isn't ideally located as it could be misleading to the public if they are unsure of their rights at this location. Some form of erroneous stile step exists to the side.

Continuing east, another step [in shadow – Photo 10] prevents disabled access and is an inconvenience to others. However, the link between roads is good, being surfaced and unfenced.

Photo 10

PHOTO REMOVED (VIEWABLE ON PUBLIC ACCESS)

Progressing to the next vehicle crossing, further width restrictions are evident [field gate, vehicle barrier, concrete blocks – Photos 11 and 12], though passage for walkers is relatively convenient to the side.

Photo 11

PHOTO REMOVED (VIEWABLE ON PUBLIC ACCESS)

Photo 12

PHOTO REMOVED (VIEWABLE ON PUBLIC ACCESS)

Once the second road is crossed, walkers enjoy a good surface between fences measuring variously between 6m and 9m wide, obscured somewhat in Photo 13 by seasonal vegetation.

Photo 13

PHOTO REMOVED (VIEWABLE ON PUBLIC ACCESS)

Finally, a broken vehicle barrier narrows the path width at the private road crossing to Westhorpe Cottage [Photo 14], perhaps even taking walkers off the formal right of way.

Photo 14

PHOTO REMOVED (VIEWABLE ON PUBLIC ACCESS)

The application provides the opportunity to resolve all the above issues and obstructions to ensure the route is more accessible, welcoming and attractive. For example, the concrete blocks and gates could be replaced with suitable bollards [there are examples in Department for Transport advice LTN 1/20, p.86, Fig 8.3].

The planning application

Turning to the application itself, all comments relating to access along on the vehicular highway network, in particular pedestrian and cycle movements across the Westhorpe roundabout and along the A4155, will be provided by Highways Development Management.

The Framework Travel Plan sets transport targets for sustainable modes by bus [15%], rail [4.8%], walking [8%] and cycling [7.1%]. In the context of walking and cycling, the Framework Travel Plan [para 2.25 & 2.32] and Transport Assessment [3.25 & 3.30] mentions an "emerging mitigation strategy".

Clearly the A404 is a substantial barrier to walking and cycling movements from Marlow. The application mentions two alternatives to the Westhorpe roundabout from a westerly direction, illustrated by green and purple arrows on the Active Mobility Plan [Extract 1].



Figure 6.95 Active Mobility Plan

Extract 1 – Active Mobility Plan from Design & Access Statement [p. 128] and Fig. 11 Transport Assessement [p. 29].

GREEN unbroken line = 'Main PROW'; PURPLE unbroken = 'Cycling Connection'; and PURPLE broken = 'Potential New Cycling Connection'.

The green arrow passes across the Volvo Footbridge [this isn't PROW, though is marked as such] and is for walking only. You'll note I have made enquiries with National Highways as to the public rights across the bridge. While not guaranteed, there seems to be some assurance of future maintenance and provision by National Highways and further enquiries by the applicant may reveal an obligation to provide pedestrian access across the bridge in perpetuity, thus ensuring the development's future sustainability.

Ideally, this bridge would be upgraded for cycling and disabled access through developer contributions, but this is a decision for Highways Development Management, looking at the site's sustainability as a whole, including suggested enhancements for vulnerable users to safely negotiate the Westhorpe roundabout. Nevertheless, developer-funded bridge upgrades for use by cyclists and disabled users is something I would support.

The broken purple line and arrow is summarised in the DAS [p.122] as follows:

 Contribute to the provision of a new cycling connection to Fieldhouse Lane and Marlow's train station from the Public Right of Way with the permission of the neighbouring landowners.

However, this route doesn't reach the publicly maintained highway at Field House Lane on land in control of the applicant, therefore, the route is undeliverable.

I would support construction of a 3m-wide bitumen-surfaced route [dedicated as bridleway] on land within the applications control, and this could be secured by condition. However, the short connection to Fieldhouse Lane is missing without the neighbour's consent, compromising sustainability. For example: 1] Marlow train station is only a 2-minute cycle ride from where cyclists would emerge on Fieldhouse Lane; 2] the route would be attractive for disabled users wishing to avoid the Westhorpe roundabout and unable to use the stepped Volvo footbridge; and 3] would mean the site is more accessible from the southern part of Marlow town.

Submitted plans continue the dotted line to Fieldhouse Road, suggesting connections into London via Maidenhead and Crossrail are available. My blue highlight indicates the missing link.



Extract 2 – from Design & Access Statement [p. 123]; Framework Travel Plan Fig. 6 [p. 29] and Transport Assessment [p. 30] to illustrate public transport accessibility [my blue highlighting].

Further information is required confirming the neighbour's consent to create this transport link.

In anticipation of permission being provided, I have recommended a <u>condition [1]</u> securing an appropriate path surface and dedicating public walking and cycling rights.

A further route is proposed as follows:

 Provide new cycling and walking connection parallel to the A404 connecting the Public Right of Way and the A4155.

This is illustrated below [my blue highlight on Extract 3].



Extract 3

This could connect cyclists and walkers to Winchbottom Lane, situated north of the A4155 Marlow Road, with wider cycling links to Flackwell Heath and High Wycombe. While welcome, this highlights the strategic importance of a connecting to the southern part of Marlow via Fieldhouse Lane.

There are no details of the route or proposed public opening times, so I would recommend details are secured by way of <u>condition [2]</u>.

I have overlayed the development plan onto the rights of way map in Plan 5, which illustrates a 655m length of Footpath MAW/16/2 and LMA/20/1 passing through the proposed development.



Plan 5 - rights of way [black] and claimed routes [red and blue] overlaid onto 'Site / Block Plan'

This south-west to north-east corridor potentially benefits the development by providing a route for employees travelling to work by foot or cycle from Bourne End, Little Marlow and Marlow, albeit the connection across the Volvo footbridge restricts use to walkers only.

I understand cyclists carry their bikes over the Volvo bridge, which is unsatisfactory. The community application for wheeling tracks to National Highways and the Definitive Map Modification Order application, at least indicate an existing cycling demand, which only increases with employment situated at this location.

In order to facilitate these movements and provide certainty for cyclists wishing to commute to work, additional cycling rights need to be provided and improvements made to the surface, secured as part of recommended <u>condition [3A]</u>. Moreover, dedication of rights for cycling will contribute to wider aspirations to improve access for existing residents to the proposed country park and links between Bourne End and Marlow.

The application suggests a resin bonded gravel surface and low-level lighting, which I would support. The 'Hardscape' section of the Landscape Masterplan seems to indicate the upgraded PROW is 'Type 1 self-binding gravel', but this surface doesn't provide the longevity of a resin bonded material. I have included as part of <u>condition [3B]</u> a recommendation to ensure resin bonded gravel is provided.

A review of the existing gate/concrete block/cross rail/private sign arrangements are also needed, to be replaced with more attractive and accessible [lockable] bollards that [for

example] prevent unauthorised vehicles and tipping [see above reference to LTN 1/20]. These will maintain convenient public access and at the same time overcome legislative restrictions [s147 Highways Act 1980] authorising gates on rights of way. I have included as part of condition [3C] a recommendation to ensure appropriate vehicular barriers are provided, as necessary.

There is one additional vehicular crossing of Footpath LMA/20/1 into Plot 4 to make a total of four in the vicinity. There is also additional traffic proposed to Plot 2a over an existing vehicular crossing of the same footpath. I have assumed these additional vehicle movements will be relatively light and not significant compared to the existing, but in light of the additional crossing, it would be worth consideration to allow pedestrian and cycling priority at the junction with the vehicular access to Plot 4, with adequate visibility. I have recommended this is included as part of <u>condition 3C</u>.

Turning to the Culture & Skills Academy building [Plot 401], the DAS [p. 285] describes Plot 4 being largely retained for nature, 'with new permissive footpaths providing enhanced public amenity'.

p. 122 of the DAS states that Marlow Film Studios will:

 Maintain and enhance the existing lakeside walk in plot 4.

Part of the claimed public footpath route sits atop Plot 401 [Plan 6].



Plan 6

Investigation of the submitted evidence provided to the council in support of the Definitive Map Modification Order claim hasn't yet commenced, but the priority will be raised upon granting of planning permission.

Nevertheless, the development couldn't be implemented until this matter is concluded, which if the claim was successful, may require the path being diverted under s257 TCPA 1990 or Building 401 relocated. I have recommended an informative [1].

The Design & Access Statement mentions venue 401 would be used by school children, requiring the paths to be closed 'at some times'. Other plans indicate provision of permissive paths, to a lesser spatial extent than those claimed [Extract 3 above].

There remains some uncertainty over the extent of the aforementioned restrictions. For example, do they relate to the immediate surroundings of Building 401 or the whole of Plot 4 and what is the temporal extent of closures? I have a concern the proposed permissive access would be overly restrictive compared with the existing *de facto* access, which [to my knowledge] is temporally and spatially unrestricted and doesn't appear to 'maintain and enhance', as the DAS suggests.

In the absence of certainty around the proposed access arrangements in Plot 4 and pending the Definitive Map Modification Order process, I would suggest the laying out of proposed permissive paths and their opening times are secured by condition [4], to ensure no worse situation than the existing.

Once construction commences any public footpaths will need closing temporarily and an informative is recommended [2].

Condition 1

No part of the development shall be occupied until a bridleway is dedicated under section 25 Highways Act 1980, between the adopted vehicular highway along Fieldhouse Road and Footpath LMA/20/1. The route shall be provided with a 3m wide resin bonded gravel surface, the layout and specification of which will be agreed in advance with the LPA.

Reason 1

In order to facilitate safe and convenient walking and cycling as a means of access for employees to the southern part of Marlow and the train station; to provide a lasting recreational legacy for the local community for improved connectivity between Marlow, Bourne End and to the proposed Little Marlow Country Park; and to accord with Local Plan Policy DM33, DM34, LTP4 and para 100 NPPF [2021].

Condition 2

Prior to first occupation details of the surface construction and alignment of the cycling connection running parallel with the A404 from the A4155 to Footpath MAW/16, shall be submitted to and approved by the LPA. Thereafter the route shall be constructed in accordance with the approved drawings and be publicly available for walking and cycling at all times following commencement of the development.

Reason 2

In order to facilitate safe and convenient walking and cycling as a means of access for employees; to provide a lasting recreational legacy for the local community; improve wider strategic cycling connections between south Marlow and High Wycombe; enhance links to the proposed Little Marlow Country Park; and to accord with Local Plan Policy DM33, DM34, LTP 4 and para 100 NPPF [2021].

Condition 3

No part of the development shall be occupied until the following is provided:

A] dedication of those lengths of Footpaths LMA/20/1 and MAW/16/2 passing through the application site as public bridleway under Section 25 Highways Act 1980;

B] details of cycling surface specifications along the lengths of Footpaths LMA/20/1 and MAW/16/2 within the applicant's control, detailing a 3m-wide resin bonded gravel surface passing within a corridor between fences at least 6m wide and with surface lighting, thereafter implanted in accordance with the agreed plans prior to first occupation.

C] a scheme illustrating details of a walking and cycling priority junction with the vehicular access to Plot 4 and the provision of appropriate vehicular barriers along the right of way, thereafter implanted in accordance with the agreed plans prior to first occupation.

Reason 3

In order to facilitate safe and convenient walking and cycling as a means of access for employees; to provide a lasting recreational legacy for the local community for improved connectivity between Marlow and Bourne End and to the proposed Little Marlow Country Park; and to accord with Local Plan Policy DM33, DM34, LTP 4 and para 100 NPPF [2021].

Condition 4

Prior to first occupation, a scheme detailing the provision of pedestrian footpaths through Plot 4 shall first be agreed in writing by the LPA. Thereafter the footpaths shall be laid out according to the submitted details and be available at all times following commencement of the development.

Reason 4

In order to maintain and enhance existing de facto pedestrian access within Plot 4 and to provide a lasting recreational legacy for the local community within the proposed Little Marlow Country Park; and to accord with Local Plan Policy DM33, DM34, LTP 4 and para 100 NPPF [2021].

Informative 1

Any proposed development in Plot 4 impacting upon a claimed route under Section 53 Wildlife & Countryside Act 1981, will need to await the conclusion of the Definitive Map Modification Order process before construction commences. This may in turn require a diversion under Section 257 of the Town and Country Planning Act 1990.

<u>Informative 2</u>

This permission shall not be deemed to confer any right to obstruct the public footpaths crossing the site which shall remain open and available unless legally stopped up or diverted under Section 257 of the Town and Country Planning Act 1990 or temporarily closed by Traffic Regulation Order under Section 14 Road Traffic Regulation Act 1984.

BC Economic Growth and Regeneration Team:

Introduction

As an Economic Growth and Regeneration Service, our aim is to support the prosperity and diversity of our local economy, encouraging business, promoting the vibrancy of our town and village centres, and supporting the provision of employment and skills opportunities for Buckinghamshire residents.

The comments that follow are solely based on our interpretation of the local economic benefits of the proposal and do not take into account any wider planning considerations.

Fit with Local Economic Strategy

As the supporting documents clearly articulate, the proposed Marlow Film Studios will support the creative and cultural sector, a key economic asset for Buckinghamshire. It will bring investment and employment to the county and will support local strategic economic ambitions around growth sectors, employment creation and skills development.

Buckinghamshire is recognised as having a strong creative sector, which has the potential to grow and help drive economy recovery and growth. The Buckinghamshire Local Industrial Strategy (2019) identifies Pinewood and the wider creative and digital sector as one of four priority economic assets. The Buckinghamshire Economic Recovery Plan (2020) emphasises the role of these assets in driving recovery and with respect to the creative and digital sector states "An important strand and future strength of economic recovery is to build upon these assets with a target of being at the forefront of screen-based production particularly for the growing streaming sector." Specific reference is also made to supporting opportunities for new studio development, including those proposed in Marlow.

The Buckinghamshire Local Skills Report (2022) further makes reference to the importance of the film and television sector to the county as well as to the potential for employment creation through the Marlow proposals. It also however, highlights skills shortages within the sector.

The Strategic Vision for Buckinghamshire (2021) emphasises the importance of a thriving economy, with opportunities for businesses and individuals. It talks of employment creation, training and investment in skills and emphasises the role of key sectors with an aim to "capitalise on our specialisms and economic hubs to grow our economy in MedTech, space, high—tech engineering, creative industries, energy and carbon reduction and food processing."

In response to the government's Levelling Up White Paper, Opportunity Bucks – Succeeding for All (2022) is a new programme aimed at addressing disparities across the county and ensuring that all residents have access to a good quality of education, skills, employment, health and living standards. The programme will be focusing on wards in Aylesbury, Chesham and High Wycombe. Opportunities for skills development, employment and career progression as offered through the film studios development, particularly given the proximity to High Wycombe, will help support the levelling up agenda.

In addition, the Economic Case for Development clearly articulates the importance of the proposal to the sector not only locally, but across the West London Cluster and the UK as a whole.

Local Economic Benefits

Employment and Skills

The Economic Case for Development forecasts that there will be an average of 2,490 construction jobs on-site throughout the construction period. In the operational phase, it suggests between 1,780 and 2,415 FTE jobs will be created.

Traditionally, unemployment in Buckinghamshire has been relatively low and consistently below regional and national averages. The Covid-19 pandemic resulted in a significant increase in unemployment levels locally, and whilst the current claimant count is on a downward trend, it still remains higher than pre-pandemic levels.

The overall county figure also conceals local variations in unemployment levels. In June 2022, for example, the claimant count rate in Buckinghamshire stood at 2.7%. Some wards in Wycombe however, experience rates significantly above this, with the claimant count reaching 7.5% in one particular ward. There remains a need for new employment opportunities to be created across Buckinghamshire and as such, we would encourage the applicants to consider how they can work with the likes of DWP/Jobcentre Plus, Restart providers, Adult and Community Learning, and other appropriate organisations to raise awareness of the opportunities available at the film studios and to support the work-readiness of individuals. The Skills and Workforce Development Plan is strong on potential efforts to encourage those already in employment to consider a career in the film and television sector and it would be good to see this level of detail applied to those currently out of work too.

Skills shortages and recruitment challenges are common in the construction and creative sectors locally (and nationally), and it is to be accepted that a number of the positions created in both the construction and operational phases will be attractive to residents from outside of the county. Consequently, the efforts proposed in the Skills and Workforce Development Plan to try and address these challenges, and thus support local opportunities, are essential. It is encouraging to see that the applicant is already in discussions with the Construction Industry Training Board (CITB) with proposals for a construction training hub onsite, and with the Bucks Skills Hub and local schools and education providers on a range of engagement spanning primary, secondary, further and higher education. To aid local

engagement, it is good to see the provision of a dedicated space onsite, the Culture and Skills Academy, to be available to local organisations to deliver education, skills and cultural programmes and activity. Ongoing outreach, partnership working and consideration to the delivery of some training and skills development within local communities and local partner facilities (in addition to onsite), will be key.

As the Buckinghamshire Local Industrial Strategy highlights, at the time of its publication the population aged 20-30 years in Buckinghamshire was 10% below the national average. Many young people leave for university and do not come back to the county. It is important that there are local opportunities available to young people, that they are aware of such opportunities and that they have the opportunity to access these. It is also accepted that efforts are needed within the film and high end television sector to increase the diversity of the workforce. The activities detailed in the Skills and Workforce Development Plan clearly support this. The engagement with primary and secondary schools and Studio Bootcamps will help to raise awareness of the opportunities in the sector whilst the work with the National Film and Television School, Bucks New University and other further and higher education providers will help equip our young people with the skills they need to succeed in the sector. It is particularly encouraging to see a commitment to working with both the schools closest to the film studios and those with more diverse and lower socio-economic cohorts.

The recent BFI Skills Review (2022) identified a number of actions that need to be undertaken to create and maintain the workforce required by the film and high end television sector. Encouragingly, a number of these are reflected in the Skills and Workforce Development Plan, including more comprehensive careers information, profiles and pathways; stronger bridges into the industry from education and other sectors; more formalised approach to hiring, workplace management and professional development and an industry led approach to investment and training.

Furthermore, it is important to not only focus on supporting people into work, but on supporting individuals into quality employment that contributes to a good standard of living and offers opportunities for progression and career development. The Economic Case highlights the highly skilled nature of many of the roles in the sector: 61% of jobs in the film and high end television sector are held by people with a degree level qualification or higher, compared to 36% for all UK industries. The creation of new traineeships, bursaries to fund ongoing training and continuing professional development will help with career progression. Brief reference is made to apprenticeships in the Skills and Workforce Development Plan, but it would be good to see the potential for apprenticeships expanded upon.

In addition to the employment to be directed created by the film studios, it is estimated that between 1,120 and 1,520 indirect FTE jobs will be created.

Local Business

There is a significant amount of expenditure associated not just with the construction of the film studios, but also in the operational phase and with each production made at the site. The Economic Case for Development, for example, forecasts the development would

generate between £130m - £155m of production expenditure for businesses in the West London Cluster (including Buckinghamshire) each year. Suggestions are put forward to encourage local procurement (directory of local suppliers, 'meet the buyer' programmes) but we would welcome further discussion around broader supply chain opportunities; monitoring and potential targets; and the scope to develop a programme of tailored support for local small and medium sized enterprises that could help them grow and succeed in the sector.

The Economic Case further highlights the advantages accruing to businesses from clustering and the economic potential of the West London Cluster, of which the Marlow Film Studios would be part. It would be beneficial to see further exploration of how, as well as the sectoral clustering, advantages could arise from proximity to key industrial sites, notably Globe Business Park and Cressex Business Park. Opportunities for collaboration between the film studios and businesses on these sites would be good to explore, not only in relation to procurement, but also around shared access, transport and mobility measures.

Impact on Town Centres and Placemaking Considerations

The proposed film studios will generate increased traffic movements across the local area and we will be looking to engage with colleagues in Transport to ensure the measures proposed to secure greater access by public transport (introduction of east-west and north-south bus routes) and more active travel (improvements to footpaths for shared use by pedestrians and cyclists) are sufficient.

Our aim will be to ensure that the potential benefits to those town centres in close proximity to the development are not outweighed by the disadvantages resulting from increased traffic generation and any loss of green space. We are interested in exploring how connectivity between the site and the town centres be enhanced, in a way that not only increases mobility but contributes to wider and longer term ambitions and regeneration strategies for these centres. For example, the much needed proposals to improve public transport links between High Wycombe and Marlow along the A404 will enhance mobility across the area, benefitting not just those working at the studios, but also those looking to travel into the area for other employment and recreational purposes, and the businesses they work for or spend in.

We would like to see consideration given to how employees at the studios can be encouraged to play a more active and sustainable role in the local area, including supporting high street businesses. Also, how can we understand and capitalise on the needs and aspirations of those working in the film and TV sector to influence our approach to place making and vibrant town centres? With a specialist Regeneration team now in place within Economic Growth and Regeneration, we would request involvement in wider discussions around place making and connectivity.

Tourism and the Visitor Economy

The opportunity to visit locations used in film and television is a major draw for tourists. As such, the Marlow Film Studios are likely to encourage increased visits to the county. We

would encourage the applicant to work with Visit Buckinghamshire to exploit the county's screen heritage in place promotion and to maximise the potential benefits to the tourism sector and local tourism businesses.

We also recognise the appeal of good quality green space for visitors to the area. Whilst the development will result in the loss of some Green Belt land there may be opportunities to explore how alternative open spaces could be further enhanced as a mitigation measure. We would be happy to liaise with colleagues in Ecology to consider how the development might be able to contribute to improvements at, for example, Spade Oak Lake Nature Reserve.

Other

The Economic Case forecasts that the Studios will generate approximately £338m in GVA each year; support annual tax revenues of up to £105m and increase exports by up to a projected £102m annually.

We would also encourage the applicants to explore potential linkages with the newly established Buckinghamshire Film Office. Utilising opportunities for those using the studios to also take advantage of the other filming locations available across Buckinghamshire would help to support economic and social benefits across the wider county.

Summary & Recommendations

The Marlow Film Studios proposal:

- Represents a significant investment in one of Buckinghamshire's key economic sectors
- Supports the delivery of the aims and ambitions of local economic strategies
- Creates a number of employment opportunities
- Offers opportunities for entry into, and progression within, the film and high end television sector
- Offers opportunities for local young people to engage with the sector and to consider, and take advantage of, opportunities that might not otherwise be available
- Supports local businesses, the tourism sector and an increase in GVA

As an Economic Growth and Regeneration Service we are keen to see the local employment, skills and business benefits associated with new developments maximised. We welcome the comprehensive Skills and Workforce Development Plan that has been submitted as part of the application and are encouraged that engagement is already underway with the Bucks Skills Hub, local schools, Bucks New University, CITB, ScreenSkills and other key stakeholders. We note the support that these organisations have expressed and would add our full support to the application also.

We would welcome the opportunity to work with the applicant moving forward, as a member of the proposed Local Education Taskforce and in aiding further development of elements of the Skills and Workforce Development Plan, to help ensure the local economic benefits that this proposal can generate are realised.

We also appreciate that the proposal, and the increased traffic movements it will create, will have an impact on nearby town centres. As such, the Service will be looking to participate in further conversations with colleagues in Planning, Transport and others as appropriate, to ensure that appropriate mitigation measures are in place and to capitalise on some of the wider place making opportunities that could arise.

BC Climate Response:

The following comments have been prepared by the Climate Response team in response to the Energy Statement and Sustainability Statement submitted as part of the above planning application.

Energy Statement

The Climate Response Team has the following comments on the Energy Statement. We would refer the applicant to the following Figure in terms of the steps and descriptions for the Energy Hierarchy:



Figure 1: The Energy Hierarchy

1

The "Be lean" step is correctly identified as reducing demand within the Energy Statement. However, we disagree with the explanations for "Be clean" and "Be green" within the ES, preferring the Tier 2 and Tier 3 descriptions above to deploy energy efficiently and source energy from renewable or low carbon sources respectively.

As explained within Section 3.2 (Calculating CO_2 Emissions and Savings) and Section 4 (Baseline CO_2 Emissions and Annual Energy Demand) of the Energy Statement, a representative sample of the buildings that would make up the proposed development site were modelled to estimate baseline and actual regulated CO_2 emissions. This involved the

¹ The Energy Hierarchy: a powerful tool for sustainability (imeche.org) (accessed 26th Sep. 2022)

modelling of 5 buildings, covering the major building types proposed. It is explained within the ES that:

"Where an exact match of building type was not available, the most suitable model was selected for each building based on construction type and building function. Whilst modelling was not undertaken for some building uses, such as retail buildings in the proposed pavilion and transport hub buildings, these uses are small compared to the Site as a whole and are expected to have similar specifications to the modelled buildings."

Whilst this method of calculation is considered to be acceptable as part of an initial, high-level assessment of the development's proposed CO_2 emissions, if the planning application were approved, more detailed modelling/ assessments would be required by the Climate Response Team prior to construction. This would need to involve the modelling of all buildings proposed on site as opposed to relying on estimated baseline and actual figures and CO_2 savings and can be addressed as part of a condition.

It is acknowledged that policy CP12 (Climate Change) of the Wycombe Local Plan states that the Council promotes mitigation and adaptation to climate change through the use of district heating or combined heat and power on larger scale developments. However, the exclusion of combined heat and power (CHP) from the proposed energy strategy, as stated within Section 6 ("Be Clean" – Decentralised Energy) is welcomed. This is because whilst CHP may have previously been considered a suitable technology, given the decarbonisation of the electricity grid, the consensus has now moved on. Moreover, considering the unabated emissions from CHP and the current oil and gas prices, it is the Climate Response Team's position that very robust assessment would have been required to justify its use.

The Climate Response Team welcomes the proposed installation of photovoltaic panels and air source heat pumps given the Government's targets to decarbonise the UK's electricity system and policies CP12 and DM33 of the Wycombe Local Plan.

The above points notwithstanding, the Energy Statement (ES) that has been provided is suitable only as an initial, high-level estimate – as recognised within the first paragraph of Sub-Section 3.2. A detailed ES must be supplied providing a re-calculated baseline and savings based upon the final, individual building designs rather than a representative, estimated sample. This is included in Condition 1 under "Recommended Conditions".

As recognised within the Sustainability Statement, energy use when in operation is often higher than that predicted at the design stage. This can be due to certain assumptions on occupation patterns used in modelling during the design phase being different to those in practice, or due to systems not being installed or controlled as intended. As such, if the planning application were to be approved, following construction but prior to first occupation or use, the applicant should provide a verification report demonstrating the "as built" energy performance of the development. This should provide details on the final U-values, air tightness, g-values etc. This is to verify that the development has been constructed such that it performs at least as well as laid out in the submitted Energy Statement, is compliant with Part L of the Building Regulations and because the "Performance Gap" between the design performance and as built performance presents a

serious challenge to the credibility of the UK construction industry's sustainable ambition. The Local Planning Authority must approve this verification report prior to first occupation. This is dealt with in Condition 2 under "Recommended Conditions".

Overall, subject to the above points being addressed through the proposed Conditions, the Climate Response Team has no objections to the Energy Statement.

Sustainability Statement

It is acknowledged that Section 3 of the Sustainability Statement (Climate Mitigation) is largely a repetition of that contained within the Energy Statement and so, the Climate Response Team have no further comments to make on this section of the document.

Consideration of 'Resource Efficiency and [the] Circular Economy', as demonstrated in Section 7 is welcomed. It is noted that "the detailed design will consider the use of:

- Modern methods of construction (MMC);
- Pre-fabricated materials, standardised modulation components, or low waste fabrication techniques where feasible;
- Pre-cast concrete options; and
- Recyclable or second-hand materials (rather than non-recyclable materials) from local or sustainable sources where available."

If the application were approved, the Climate Response Team would require the applicants to provide evidence of waste reduction throughout the entire development, prior to occupation. Again, this could be addressed by way of condition. It is also requested that the council's waste team is consulted on the proposal.

The Climate Response Team requests that the information on transport, ecology, arboriculture, waste collection, pollution (to also include noise and lighting), drainage/ flood risk is directed to the relevant specialists as we have no comments to make on these sections of the Sustainability Statement.

Recommended Conditions

If you are minded to recommend approval, we recommend imposition of the following conditions:

If you are minded to recommend approval, we recommend imposition of the following conditions:

Condition 1

No building shall be occupied until a detailed Energy Statement has been submitted to and approved in writing by the LPA. The statement shall include a robust, detailed assessment of the feasibility of measures to utilise decentralised, renewable or low-carbon sources of energy.

Reason: To ensure the development is sustainable and to comply with the requirements of Policies CP12 & DM33 within the Wycombe District Local Plan (2019).

Condition 2

No building shall be occupied until suitable evidence has been submitted to the LPA and approved in writing that the buildings have been constructed and performs in line with the Energy Statement approved through Condition 1.

 Reason: To ensure the success of the Local Plan and fulfil the monitoring requirements outlined within Chapter 7 of the Wycombe District Local Plan.

Concluding Remarks

We have reviewed the Energy & Sustainability Statements and provided comments where relevant, including proposals for conditions where necessary. We have no objection to these statements.

BC Minerals & Waste:

Summary:

Policy 1 of the Buckinghamshire Minerals and Waste Local Plan (BMWLP) sets out the Mineral

Safeguarding policy stance for the county. Proposals for development within Mineral Safeguarding

Areas (MSAs) other than which constitutes exempt development, must demonstrate that:

- prior extraction of the mineral resource is practicable and environmentally feasible and does not harm the viability of the proposed development; or
- the mineral concerned is not of any value or potential value; or
- the proposed development is of a temporary nature and can be completed with the site restored to a condition that does not inhibit extraction within the timescale that the mineral is likely to be needed; or
- there is an overriding need for the development.

The policy also requires the submission of a Mineral Assessment detailing a number of matters.

Discussion:

Policy 1 of the BMWLP in summary seeks to prevent needless sterilisation of mineral resources

of local and national importance by non-minerals development.

In consideration of the criteria listed in Policy 1, the applicant's proposals do not fulfil the requirements of the first bullet as they are not seeking prior extraction.

The case of the applicant pertaining to the second bullet point is put forward within the mineral

assessment accompanying the application. The assessment concludes that the mineral underlying the proposal is not of any value or potential value by virtue of the costs associated

with extraction and other complications. Further to this, prior extraction is argued to be likely to

harm the viability of the proposal were it to be required.

The applicant also makes the case of an overriding need for the development in reference to the

fourth bullet point of policy 1. Within the Planning Statement, the applicant further adds that

the need for the film studio development and the early delivery of the development (which the

applicant states would be delayed by prior extraction and associated infilling) outweighs the benefits of extracting any remaining mineral.

Comment:

Further information regarding the costs associated with extraction in the areas referred to as

Plot 3 North, Plot 3 East and Plot 5 East is requested prior to determination. In particular it is requested that costings for mineral extraction were inert wastes imported not under CL:AIRE

protocol is provided. Further, it is requested that further information is provided regarding how

the cost of extraction would impact the overall viability of the proposal.

The quantum of mineral identified within Plot 3 North, Plot 3 East and Plot 5 East is not insignificant with circa 351,000 tonnes of sand and gravel potentially available. It is considered

that at this time it has not been adequately demonstrated that the mineral is of no value. Therefore, the proposal would likely lead to the unnecessary sterilisation of mineral. Arguments

of overriding need are a matter for the case officer to consider.

Other matters:

Internal discussions with regards to handling the overlap of the proposal area with ROMP consent ref: WR/2784/61 are ongoing at this time.

Statutory Consultees:

Department for Levelling Up, Housing & Communities:

No comments to make on the Environmental Statement.

Royal Borough of Windsor & Maidenhead (RBWM):

The Local Planning Authority does not wish to raise any objections to the proposed development, as the consideration of the application in accordance with relevant development plan policies is carried out by the neighbouring Local Planning Authority in determining the application. However, the Local Planning Authority would like to note that the technical assessment of the proposals, carried out by the neighbouring Local Planning Authority, should consider any highways data submitted regarding the roundabout junction (A308 Marlow Road) and Cookham Bridge (Ferry Lane), to ensure that the development would not impact these RBWM junctions and the surrounding highways network. Furthermore, your attention is drawn to the comments raised by the Cookham Society in their representation on the application.

Highways England:

Referring to the consultation on a planning application dated 23rd June 2022 referenced above, in the vicinity of the A404 that forms part of the Strategic Road Network, notice is hereby given that National Highways' formal recommendation is that we:

- a) -offer no objection (see reasons at Annex A); recommend that conditions should be attached to any planning permission that may be granted (see Annex A National Highways recommended Planning Conditions & reasons);
- b) recommend that planning permission not be granted for a specified period (see reasons at Annex A);
 - c) -recommend that the application be refused (see reasons at Annex A)

Highways Act 1980 Section 175B is not relevant to this application.¹

This represents National Highways' formal recommendation and is copied to the Department for Transport as per the terms of our Licence.

Should the Local Planning Authority not propose to determine the application in accordance with this recommendation they are required to consult the Secretary of State for Transport, as set out in the Town and Country Planning (Development Affecting Trunk Roads) Direction 2018, via transportplanning@dft.gov.uk and may not determine the application until the consultation process is complete.

The Local Planning Authority must also copy any consultation under the 2018 Direction to PlanningSE@nationalhighways.co.uk.

Annex A National Highways' assessment of the proposed development

National Highways has been appointed by the Secretary of State for Transport as a strategic highway company under the provisions of the Infrastructure Act 2015 and is the highway authority, traffic authority and street authority for the Strategic Road Network (SRN). The SRN is a critical national asset and as such we work to ensure that it operates and is managed in the public interest, both in respect of current activities and needs as well as in providing effective stewardship of its long-term operation and integrity.

In the case of this development proposal, our interest is in the A404, specifically the Westhorpe Interchange (A4155/ A404) and Bisham Roundabout (A404/A308/Marlow Road) and the M40 including Handy Cross Roundabout (M40/A404/Wycombe Road/A4010/Marlow Road).

Following the initial review of information available on the Buckinghamshire Council planning portal, we raised concerns regarding the Transport Assessment methodology and expected impact of the proposed development on the SRN. This was set out in our previous holding responses dated 13th July 2022, 7th September 2022, 1st November 2022, 21st December 2022, 6th April 2023, 25th May 2023, 20th July 2023 and 14th September 2023. We requested for the applicant to provide model files used to model the Westhorpe Interchange (A4155/ A404) and also advised that further information will be requested once a detailed review has taken place.

Since then, we have been in contact with the applicant's consultants and held meetings on the 29th July 2022, 18th August 2022, 22nd September 2022, 12th October 2022 and 20th December 2022. We provided information to the applicant's consultants in relation to the Volvo pedestrian footbridge (map of PRoW in the vicinity of the bridge, general arrangements drawing and the General Inspection report). We also responded to the consultation dated 10 March 2023 regarding the Amended Plans. Following this, we have held further meetings with SLR Vectos who have more recently been appointed as Transport and Mobility Planning consultants for the scheme. This includes meetings on the 8th June 2023, 29th June 2023, 20th July 2023, 7th August 2023, 10th August 2023 and 20th September 2023.

Additional Information Consultation (ref: 22/06443/FULEA)

A formal consultation for additional information associated with the application (ref: 22/06443/FULEA) was received by Buckinghamshire Council on 11th September 2023. The key additional documents of relevance to National Highways includes the following:

- Supplementary Transport Assessment dated 4th September 2023;
- VISSIM Modelling Briefing Note dated 11th September 2023.

It is noted that the VISSIM Modelling Briefing Note supersedes Section 4 and Appendices G, H and I of the Supplementary Transport Assessment. These documents have been reviewed and comments and actions are provided below under key topic headings.

Supplementary Transport Assessment

The Supplementary Transport Assessment (STA) follows a Second Transport Assessment Addendum dated June 2023, which National Highways provided feedback and actions to the applicant as set out in our previous NHPR dated 20th July 2023.

Junction Design – Westhorpe Interchange (A4155/ A404)

Up to date geometric compliance drawings for the proposed mitigation scheme at the Westhorpe Interchange and the new site access roundabout have been provided in the STA at Appendix B.

National Highways has reviewed the supplied drawings and requires the following information to confirm compliance with DMRB:

- The circulatory carriageway width downstream of the three lane entry arms (Option 1 east arm, Option 2 east and west arms);
- The entry radius for the A4155 Little Marlow Road (west) arm (Option 1 only); and
- The effective flare length for all arms (Options 1 & 2).

<u>The Applicant is requested to provide missing geometric measurements in order to confirm DMRB compliance.</u>

The entry path radii for all arms are categorised as departures (deviating significantly) from the DMRB compliant maximum of 100m. For the north and west arm entries the departure can be attributed to the current design of the junction, although it is noted the departures are exacerbated by the amended design. The east (169.64m) and south (137.5m) arm entry radii departures are attributed to the proposed design and present a safety risk, with vehicles potentially being encouraged to approach the roundabout at excessive speeds. The entry path radii on the east (A4155 Marlow Road) and south arms (A404 Northbound onslip) should be revised, to a maximum of 100m in order to comply with DMRB requirements.

The circulating carriageway width for Option 1 is categorised as a departure from the DMRB compliant range of 1.0-1.2 times the arm entry widths. The narrowest point of the circulatory is measured at 8.0m on the northern section, which is below the 8.36m entry width of the south arm. The entry width for the south arm (A404 Northbound on-slip) must be amended to a value within 1.0-1.2 times the circulatory carriageway width.

The proposed signalised crossings over the A404 southbound off-slip and A404 northbound off-slip are connected by a shared use walking and cycling footway. In the Walking Cycling and Horse Riding Assessment and Review (WCHAR) the applicant notes that the footway width will be increased to 3m and parapet height to

1.5m. <u>A dimension drawing demonstrating compliance with the principles set out in LTN 1/20 must be provided.</u>

VISSIM Modelling Assessment - Westhorpe Interchange (A4155/ A404) – Covered in the VISSIM Modelling Briefing Note

National Highways previously requested swept path analysis to be conducted for a bus or similar-sized HGV for the site exit, which has been provided in Appendix C of the STA. It is noted that the bus/HGV straddles both the main lane and flare of the site exit arm at the site access roundabout, therefore the priority rules for this arm in the model should be set accordingly.

The Applicant must ensure priority rules reflect bus/HGV block all other vehicles on site exit arm at site access roundabout.

The proposed mitigation scheme which signalises the Westhorpe Interchange roundabout is proposed to operate under MOVA control. The applicant has replicated MOVA by updating the signal plans in every 15 -minute period and providing additional time (1-2 seconds) to the A404 off -slips during the time intervals of highest flow (after 08:30 in the AM peak and after 17:30 in the PM peak). This has resulted in lower levels of queuing reported for both the northbound and southbound off slips compared to the previous iterations of the model. It is noted that the reported levels of queuing from the VISSIM modelling implementing MOVA does not result in blocking back past either the northbound or southbound merge points with the A404 mainline.

It should be noted that any changes to the geometric design of the proposed mitigation at Westhorpe Interchange in response to earlier design compliance actions, would need to be reflected in the VISSIM modelling assessment.

Travel Plan

A Travel Plan has been prepared to support the sustainable objectives of the development, which targets mode shares of 60% for single occupancy vehicle, 20% for public transport and 15% for active modes. This represents a 24% reduction from the 84% single occupancy vehicle mode share reported for Wycombe 020 MSOA in the 2011 UK Census.

These target mode shares are considered highly ambitious, given the site's location on the fringes of Marlow and the nature of work conducted at a typical film studio which is anticipated to require a niche, specialist workforce, a significant proportion of whom will likely not reside locally. It is however noted that the sustainable mode share target may be more realistic for non-specialist staff who will be more likely to reside locally. The applicant is required to demonstrate evidence validating the proposed sustainable travel mode share target, this should be linked to measures set out in an Operational Management Plan for the site.

Operational Management Plan

The Applicant states that an Operational Management Plan will be provided to set out how the site will be operated to minimise car usage especially during peak traffic periods. <u>An Operational Management Plan must be provided to National Highways for sign off, it should set out the measures intended to reduce the level of traffic using the SRN as a mechanism to mitigate development impact to an acceptable level.</u>

Walking Cycling and Horse-Riding Assessment and Review

Within the WCHAR the applicant commits that as part of the Travel Plan mode share monitoring, if additional improvements are required to achieve active mode share targets the applicant would be willing to provide a financial contribution to provide accessibility compliant ramps and stairs for the approaches to the Volvo Footbridge. Whilst a financial contribution is welcome, it should be noted that any subsequent improvement scheme to

the Volvo footbridge would be subject to agreement with National Highway and would need to be designed in line with the latest industry design standards.

M40 Junction 4 Handy Cross Roundabout

National Highways previously noted that the development flows (Unmanaged scenario) entering the junction from the A404 south arm amounts to 182 PCUs in the PM peak. It is noted that the agreed flows which were presented by the Applicant in the TA Addendum Appendix H present an equivalent figure of 238 PCUs, resulting in a discrepancy of 56 PCUs on the A404 south arm. Clarification is required on the discrepancy in PM peak development traffic on the A404 south arm (Handy Cross).

The Handy Cross model outputs shows the A404 northbound arm operating above capacity with development traffic. Whilst it is recognised that the junction currently experiences congestion during the peak periods, the reported level of increase of queue and delay on the A404 requires careful consideration. The applicant must consider ways to mitigate the impact of development traffic to an acceptable level at the junction. The applicant is required to prepare an Operational Management Plan, setting out measures intended to reduce the level of traffic using the SRN as a mechanism to mitigate development impact to an acceptable level.

A404 Bisham Roundabout

In response to National Highways comments on the Second Transport Assessment Addendum, the applicant has undertaken queue surveys at Bisham Roundabout in September 2023. This data and commentary of base model validation is outstanding.

<u>Applicant to provide queue data and accompanying commentary demonstrating the A404 Bisham Roundabout has been appropriately validated.</u>

Additionally, the Operational Management Plan identified as a previous action will be a useful mechanism to support with mitigating development impact to an acceptable level.

GG119 Compliant Road Safety Audit 1

Following the design checks identified in the actions set out within the Westhorpe Interchange Junction Design section of this NHPR, a GG119 Compliant Road Safety Audit 1 will be required in due course to fully assess the safety of any design proposals. Given the complexity of the scheme, interaction between the local and strategic road network and importance of walking and cycling connections in conjunction with assessment of vehicular impacts, collaboration between National Highways, the applicant and Buckinghamshire Council will be very important for the progression of the application.

Next Steps and Process

Should the identified actions be resolved we envisage the following steps being required for an agreement to be reached regarding determination of the planning application:

- 1. Resolution of the outstanding actions identified within the NHPR;
- 2. GG19 Compliant Road Safety Audit of the Westhorpe Interchange—any actions derived from this assessment will require a designer response and could result in subsequent iterations of the VISSIM modelling assessment depending on the level of design changes;
- 3. Agreement on appropriate planning conditions at this stage we are minded that this will include a Framework Travel Plan, Operational Management Plan, Construction Environmental Management Plan and any subsequent assessments derived from reaching agreement of actions identified in point 1.

Recommendation:

National Highways recommends that the Local Planning authority does not grant planning permission for the application (Ref: 22/06443/FULEA) for a period of 56 days (until 24 November 2023).

Reason: To allow National Highways to understand the impact of the development on the safe and efficient operation of the Strategic Road Network and provide the Local Planning Authority with fully informed advice.

Standing advice to the local planning authority

The Climate Change Committee's <u>2022 Report to Parliament</u> notes that for the UK to achieve net zero carbon status by 2050, action is needed to support a modal shift away from car travel. The NPPF supports this position, with paragraphs 73 and 105 prescribing that significant development should offer a genuine choice of transport modes, while paragraphs 104 and 110 advise that appropriate opportunities to promote walking, cycling and public transport should be taken up.

Moreover, the build clever and build efficiently criteria as set out in clause 6.1.4 of <u>PAS2080</u> promote the use of low carbon materials and products, innovative design solutions and construction methods to minimise resource consumption.

These considerations should be weighed alongside any relevant Local Plan policies to ensure that planning decisions are in line with the necessary transition to net zero carbon.

<u>Supplementary Transport Assessment and VISSIM Modelling Briefing Note Review (reviewed by National Highways):</u>

Introduction

- Marlow Film Studios (the Applicant) are proposing a new development on the land located along the A4155 to the east of the A404 Westhorpe Interchange near Marlow.
- The Applicant submitted a Supplementary Transport Assessment (STA) directly to National Highways on 4th September 2023 in support of the proposals which is the subject of this review. This was subsequently followed by a formal consultation letter (dated 11th September) from Buckinghamshire Council regarding planning reference 22/06443/FULEA, requesting comments on the STA by 11th October 2023. The STA follows a 2nd Transport Assessment Addendum dated June 2023. Additionally, the applicant submitted a VISSIM Modelling Briefing Note on the 11th September 2023 which supersedes Section 4 and Appendices G, H and I of the STA.
- In addition, modelling work has been submitted in August 2023, which included both VISSIM microsimulation modelling covering the Westhorpe Interchange and standalone junction modelling covering the M40 Junction4 Handy Cross (LinSig) and A404 Bisham roundabout (Junctions 10) junctions. National Highways provided two technical responses to the Applicant for both of these workstreams

- on 25th August 2023.
- 4 The STA covers the following topics:
- Sustainable Transport Strategy, including details of the Walking Cycling and Horse-riding assessment and review (WCHAR), Travel Plan and Monitor & Manage Strategy;
- Baseline & Future Traffic Flows;
- Junction Impact Assessment, conducted using a VISSIM microsimulation model, with the results focusing on the following three key junctions of the study area including A404/A4155 Westhorpe Interchange Roundabout, A4155 Little Marlow Road / Parkway Roundabout and the Site Access Roundabout (A4155 Marlow Road / Pump Lane South / Site Access); and
- Wide Area Network Impact Assessment, conducted using individual junction models, includes additional PIA data assessment.
- This Technical Note reviews and provides comment on the contents of the STA and VISSIM Modelling Briefing Note that are relevant to National Highways. A list of technical items that are considered to remain outstanding have been presented in **bold underline text.**

Junction Design

- 6 Up to date geometric compliance drawings for the proposed mitigation scheme at the Westhorpe Interchange and the new site access roundabout have been provided in the STA at Appendix B. These have been included for reference in **Appendix A** of this Technical Note.
- 7 National Highways has reviewed the supplied drawings and requires the following information to confirm compliance with DMRB:
 - The circulatory carriageway width downstream of the three lane entry arms (Option 1 – east arm, Option 2 east and west arms);
 - The entry radius for the A4155 Little Marlow Road (west) arm (Option 1 only); and
 - The effective flare length for all arms (Options 1 & 2).

8 ACTION: Applicant to provide missing geometric measurements in order to confirm DMRB compliance.

- 9 The exit widths for all arms are categorised as relaxations (deviating slightly) from the DMRB compliant ranges of 7.0-7.5m for single lane exits and 10.0-11.0m for dual lane exits. For the north, south and west exits the relaxation can be attributed to the current design of the junction. For the east arm the exit width of 7.55m is 0.05m higher than the highest compliant width of 7.5m. It is noted that this exit arm carriageway could be narrowed slightly with wider hatching should the junction design require updating.
- 10 The entry path radii for all arms are categorised as departures (deviating significantly) from the DMRB compliant maximum of 100m. For the north and west arm entries the departure can be attributed to the current design of the junction, although it is noted the departures are exacerbated by the amended design. The east (169.64m) and south (137.5m) arm entry radii departures are attributed to the proposed design and present a safety risk, with vehicles potentially being encouraged to approach the roundabout at excessive speeds.
- 11 The applicant is therefore required to revise the design to result in entry radii which

- fall below 100m and comply with DMRB. Where possible, the mitigation scheme should look to address the existing departures.
- 12 ACTION: The entry path radii on the east (A4155 Marlow Road) and south arms (A404 Northbound on-slip) should be revised, to a maximum of 100m in order to comply with DMRB requirements.
- 13 The circulating carriageway width for Option 1 is categorised as a departure from the DMRB compliant range of 1.0-1.2 times the arm entry widths. The narrowest point of the circulatory is measured at 8.0m on the northern section, which is below the 8.36m entry width of the south arm. The entry width should be revised to a value within the DMRB compliant range.
- 14 ACTION: The entry width for the south arm (A404 Northbound on-slip) must be amended to a value within 1.0-1.2 times the circulatory carriageway width.
- 15 The remaining geometric measurements are confirmed to comply with DMRB requirements. The proposed signalised crossings over the A404 southbound off-slip and A404 northbound off-slip are connected by a shared use walking and cycling footway. In the Walking Cycling and Horse Riding Assessment and Review (WCHAR) the applicant notes that the footway width will be increased to 3m and parapet height to 1.5m.
- 16 ACTION: A dimension drawing demonstrating compliance with the principles set out in LTN 1/20 must be provided.
- 17 Following the design checks identified in the actions set out within the Westhorpe Interchange Junction Design section of this NHPR, a GG119 Compliant Road Safety Audit 1 will be required in due course to fully assess the safety of any design proposals.
- 18 Given the complexity of the scheme, interaction between the local and strategic road network and importance of walking and cycling connections in conjunction with assessment of vehicular impacts, collaboration between National Highways, the applicant and Buckinghamshire Council will be very important for the progression of the application.

Sustainable Transport Strategy

- 🛽 Travel Plan
- **19** An updated Framework Travel Plan has been included within the submitted STA appendices. The key elements of this document include:
 - Appointment of a Travel Plan Coordinator once the site is operational;
 - Monitoring through Travel Plan Surveys and the 'Monitor & Manage' approach; and
 - Provision of a Mode Share Incentive Scheme to incentivise use of sustainable transport. This will be secured through a Section 106 Agreement.
- 20 The following Travel Plan objectives are relevant to National Highways:
 - To influence travel behaviour;
 - To encourage a modal shift in travel towards more sustainable methods of travel;
 - To reduce the need for unnecessary journeys;
 - Reduction in overall mileage; and
 - Accommodating those journeys that need to be made by car.
- 21 The Travel Plan objectives are considered appropriate from the perspective of National Highways and comply with the overall aim of maintaining the

- safety and operation of the Strategic Road Network.
- The Travel Plan targets aim for a mode share of 20% for public transport and 15% for active modes (walking and cycling). For reference, the mode shares reported for the Wycombe 020 MSOA in the 2011 UK Census were 3.3% for public transport and 7.6% for active modes.
- 23 The single occupancy vehicle driver target mode share is 60%, a reduction of 24% from the 84% reported in the 2011 UK Census.
- 24 These target mode shares are considered highly ambitious, given the site's location on the fringes of Marlow and the nature of work conducted at a typical film studio which is anticipated to require a niche, specialist workforce, a significant proportion of whom will likely not reside locally. It is however noted that the sustainable mode share target may be more realistic for non-specialist staff who will be more likely to reside locally.
- 25 ACTION: The applicant is required to demonstrate evidence validating the proposed sustainable travel mode share target, this should be linked to measures set out in an Operational Management Plan for the site.
- 26 The Travel Plan's Monitor & Manage strategy includes the provision of a Mode Share Incentive Scheme, which will be secured through a Section 106 Agreement, comprising a financial penalty to incentivise achievement of mode share targets within identified timeframes. The value of the scheme and specific timeframes for delivery of mode share targets will be agreed with the Local Authority as part of the planning process. This approach is welcomed by National Highways.
 - Public Transport
- 27 The Applicant has proposed two new public bus routes within the Sustainable Transport Strategy, both of which would serve the site.
- The first route is proposed to link High Wycombe and Maidenhead rail stations via the site, addressing an identified gap in local north-south links. A minimum service frequency of half an hour would apply during working hours. The second route, termed a "hopper" service, is proposed to link Marlow and Bourne End via the site, Marlow Station and Globe Business Park.
- 29 Evidence showing how the proposed bus service can contribute to the target sustainable mode share for a development of this nature should be provided, potentially as part of the forthcoming Mode Share Incentive Scheme.
 - 2 Operational Management Plan
- 30 The Applicant states that an Operational Management Plan will be provided to set out how the site will be operated to minimise car usage especially during peak traffic periods, the OMP was recommended to the applicant in National Highways Wider Highway Assessment Review Note dated 24th August 2023.
- 31 The Applicant is required to provide evidence showing that the nature of the operational measures proposed have an impact on vehicle trips during peak periods.
 - ACTION: An Operational Management Plan must be provided to National Highways for sign off, it should set out the measures intended to reduce the level

of traffic using the SRN as a mechanism to mitigate development impact to an acceptable level.

- Walking & Cycling
- 32 The Applicant has presented a Walking, Cycling & Horse Riding Assessment & Review (WCHAR) which sets out the proposed improvements for pedestrians and cyclists for selected routes between the site and key destinations.
- 33 The primary proposed walking and cycling route is via the Westhorpe Interchange, with signalised pedestrian crossings provided on both north-facing off slip arms. The footway would be widened to a minimum of three metres, with the bridge parapet height increased to 1.5 metres, subject to structural assessments.
- 34 In addition to the primary walking and cycling route, the applicant proposes using the Volvo Footbridge crossing the A404 as part of a secondary route between Marlow and the site. It is noted that the footbridge structure is maintained by National Highways. A route on this alignment would be desirable for site users travelling from the southern areas of Marlow, as well as the station.
- 35 The applicant proposes that if the Mode Share Incentive Scheme monitoring shows that additional improvements are required to achieve the active mode share targets, a financial contribution will be provided to provide accessibility compliant ramps and stairs for the approaches to the Volvo Footbridge. This will both enhance the footbridge route for pedestrians and make it available for cyclists.
- 36 It should be noted that National Highways will require any improvement scheme to the Volvo Footbridge to be compliant with the latest design and industry standard guidelines.
- 37 An alternative route to that utilising the Volvo Footbridge is noted within the STA, via a walking and cycling link to Fieldhouse Lane. Although this route is not proposed as part of the development proposals, the STA states there is a reasonable chance this link will be achieved in the near future and enhance the walking and cycling connections between the site and Marlow.
- 38 The WCHAR provides a detailed summary of the pedestrian facilities for the respective routes via the Westhorpe Interchange, Volvo Footbridge and Fieldhouse Lane. Opportunities for additional signage and footway widening are identified.

Baseline & Future Network Traffic Flows

- **39** The applicant has conducted additional traffic surveys in July 2023 at a number of junctions along the A4155 corridor.
- **40** It is noted that all junctions covered by the July 2023 traffic surveys are on the local highway network under the responsibility of Buckinghamshire Council.

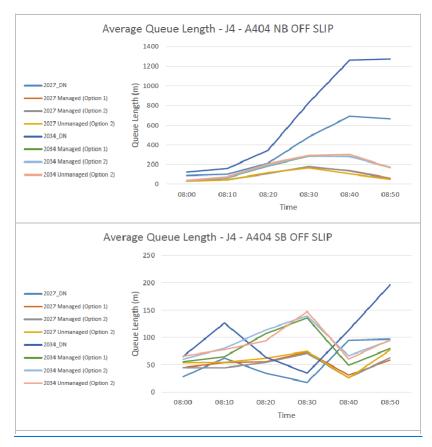
Junction Impact & VISSIM Model Assessment

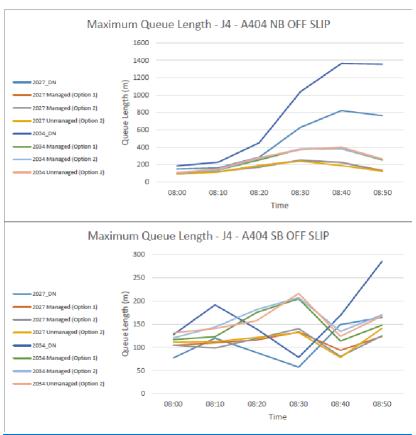
41 National Highways previously requested swept path analysis to be conducted for a bus or

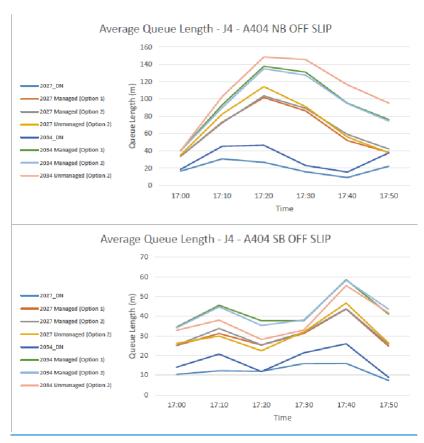
similar-sized HGV for the site exit, which has been provided in Appendix C of the STA. It is noted that the bus/HGV straddles both the main lane and flare of the site exit arm at the site access roundabout, therefore the priority rules for this arm in the model should be set accordingly.

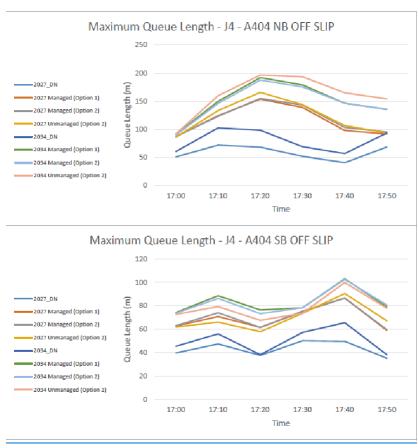
42 ACTION: Applicant to ensure priority rules reflect bus/HGV block all other vehicles on site exit arm at site access roundabout.

- 43 The VISSIM Modelling Briefing Note presents an updated summary of the VISSIM model assessment, which covers the Westhorpe Interchange, proposed site access roundabout and the adjacent Little Marlow Road/ Parkway Roundabout. The model updates include an approach to model Westhorpe Interchange under MOVA signal timing control, which is in response to a previous action identified by National Highways.
- The applicant has replicated MOVA by updating the signal plans in every 15 -minute period and providing additional time (1-2 seconds) to the A404 offslips when the flows are higher (after 08:30 in the AM peak and after 17:30 in the PM peak). This method is acceptable to replicate the complex MOVA roundabout operation in a simplified manner. In this way, the queues have improved for both the NB and SB offslips (2034 Unmanaged scenarios Option 2), especially in the AM peak that were approaching the mainline in the previous model version.
- 45 As requested, following earlier modelling reviews, the applicant has tested the same design, named Option 2 (three-lane approach on Little Marlow Road between the Parkway Roundabout and Westhorpe Interchange), for both the managed and unmanaged scenarios, providing comparable results between the two scenarios.
- 46 Similarly in response to previous comments, the applicant has applied the same intergreen (5s) between the west circulatory and northbound off-slip approach to both the managed/ unmanaged scenarios. These two changes allow for comparison between the managed and unmanaged scenario. It is noted that the unmanaged scenario has been the key focus of our review.
- **47** Overall there has been an improvement in queues on both A404 SRN off-slips following representation of MOVA control into the VISSIM model.
- 48 The stacking capacity for the NB offslip is around 370 meters and for the SB offslip around 250 meters (measured from the model). As seen in the graphs below for maximum and average queue lengths, in the AM peak 2034 Unmanaged Option 2 scenario, the queues are much lower than the reference case, especially for the NB offslip, and remain below capacity. In the PM peak 2034 Unmanaged Option 2 scenario, the queues are higher than the reference case but remain well within stacking capacity of the offslips.









Wide Area Network Impact

- 49 The STA presents an updated summary of the wider highway network assessment, which covers the M40 Junction 4 Handy Cross and the A404 Bisham roundabouts.
- 50 It is noted that since the 2nd Transport Assessment Addendum, the applicant has issued an updated set of results and commentary. National Highways issued comments on these outputs on the 25th August 2023.
- 51 The applicant has now presented an updated assessment for the two junctions. National Highways has provided comments on any outstanding elements of this assessment as well as the material that has been updated since the previous response.
 - M40 Junction 4 Handy Cross Roundabout

A404 South Arm

- **52** The Applicant has presented PM model scenarios for this arm, due to development traffic flows being higher when compared to the AM peak. This approach was previously accepted.
- 53 The signal data, queue length data for validation and the 2027 model outputs commentary were all previously accepted by National Highways.
- 54 National Highways previously noted that the development flows (Unmanaged scenario) entering the junction from the A404 south arm amounts to 182 PCUs in the PM peak. It is noted that the agreed flows which were presented by the Applicant in the TA Addendum Appendix H present an equivalent figure of 238 PCUs, resulting in a discrepancy of 56 PCUs on the A404 south arm. Clarification on this discrepancy from the Applicant was previously requested.
- **55** No explanation has been provided in the STA, therefore this point is considered outstanding.

56 <u>ACTION: Clarification is required on the discrepancy in PM peak development</u> traffic on the A404 south arm

- 57 National Highways previously noted that the 2034 model outputs were outstanding. The STA now provides the 2034 model outputs and accompanying commentary. It is noted that commentary on the 2027 model outputs was provided in the previous National Highways response issued 25th August 2023.
- 58 The 2034 Reference Case model outputs show a DoS value of 96% with a MMQ of 19 PCUs for the offside lane. The addition of development traffic increases the DoS to 106% and the queue to 58 PCUs. It is confirmed that a queue of this length would extend past the diverge point of the A404 northbound off slip connecting to the M40 westbound, which is located approximately 300m upstream of the stop line. It should be noted that the nearside lane MMQ would increase to 14 PCUs which would not extend as far as the diverge point.
- 59 The STA considers a queue of this length acceptable, as the nearside lane would remain clear at the diverge point.
- 60 Notwithstanding the above comments, the model outputs shows the A404 northbound arm operating above capacity with development traffic. Whilst it is recognised that the junction currently experiences congestion during the peak periods, the reported level of increase of queue and delay on the A404 requires careful consideration. The applicant must consider ways to mitigate the impact of

- development traffic to an acceptable level at the junction, it is recommended that the forthcoming Operational Management Plan sets out measures intended to reduce the level of traffic using the SRN.
- 61 ACTION: The applicant is required to prepare an Operational Management Plan, setting out measures intended to reduce the level of traffic using the SRN as a mechanism to mitigate development impact to an acceptable level.

M40 Eastbound Off Slip Arm

- The applicant has presented AM model scenarios for this arm, due to development traffic flows being higher when compared to the PM peak. Only the outermost three lanes at the stopline, which are fed by the offside lane further upstream, have been modelled as these are the only lanes which traffic is permitted to route towards Marlow via the A404. This approach was previously accepted by National Highways.
- The signal data, queue length data for validation and the 2027 model outputs commentary were all previously accepted by National Highways.
- The 2034 Reference Case AM model outputs show a DoS value of 48% for this arm, resulting in a Mean Max Queue of 4 PCUs. The addition of development flows increases the DoS value to 51%, resulting in a Mean Max Queue of 4 PCUs. This increase is considered minimal and unlikely to have an effect on the two outside lanes on this arm. The applicant's conclusion for this arm is therefore accepted for the 2034 scenarios.

M40 Westbound Off Slip Arm

- The applicant has presented AM model scenarios for this arm, due to development traffic flows being higher when compared to the PM peak. Only the innermost two lanes at the stopline, which are fed by the nearside lane further upstream, have been modelled as these are the only lanes which traffic is permitted to route towards Marlow via the A404. This approach was previously accepted by National Highways.
- The signal data, queue length data for validation and the 2027 model outputs commentary were all previously accepted by National Highways.
- 67 The 2034 Reference Case AM model outputs show a DoS value of 51% for this arm, resulting in a Mean Max Queue of 6 PCUs. The addition of development flows increases the DoS value to 55%, resulting in a Mean Max Queue of 6 PCUs. This increase is considered minimal and unlikely to have an effect on the two inside lanes on this arm. The applicant's conclusion for this arm is therefore accepted for the 2034 scenarios.

A404 Bisham Roundabout

- The applicant previously presented model outputs for the A404 Bisham roundabout in the Second Transport Assessment Addendum, for which National Highways provided comments dated 25th August 2023.
- **69** It should be noted that the following actions raised in the National Highways response issued 25th August remain outstanding.
- 70 ACTION: Applicant to provide queue data and accompanying commentary demonstrating the junction has been appropriately validated.

71 Additionally, the Operational Management Plan identified as a previous action will be a useful mechanism to support with mitigating development impact to an acceptable level.

PIA Data

- 72 The applicant previously presented PIA data for the SRN junctions subject to assessment in a Technical Note. National Highways provided comments with associated actions for the applicant to address in the response dated 25th August 2023. The applicant has subsequently provided supplementary information in the STA to address these actions.
- 73 National Highways previously requested that junction maps clearly showing the locations of PIA incidents are presented by the applicant. The STA now includes this information, therefore this action is considered addressed.
- 74 National Highways previously identified incident clusters at the Handy Cross roundabout, specifically on the south east section of the roundabout circulatory (in the vicinity of the M40 westbound off slip approach and the A404 southbound exit) and the roundabout circulatory just north of the M40 westbound on slip arm, which required further detailed commentary. The STA now includes this information and concludes that the recorded incidents are typically a result of driver error and do not represent a safety concern when compared to the level of traffic passing through the junction.
- 75 A total of 14 incidents were recorded on the southern section of the roundabout (including the two clusters identified by National Highways) over the study period, 13 of which were classified as "Slight" and one as "Serious".
- 76 Three incidents classed as "Slight" were recorded on the south west section of roundabout circulatory, immediately north of the M40 westbound on slip arm. One incident consisted of a motorcycle rider losing control. One incident consisted of a side wipe collision between a car and HGV. One incident consisted of a nose to tail collision between two cars.
- 77 Three incidents classed as "Slight" were recorded on the south section of roundabout circulatory, in the immediate vicinity of the A404 northbound and Wycombe Road arms. Two incidents consisted of a side wipe collision between two cars. One incident consisted of a collision between two cars.
- 78 It is considered that the recorded incidents are typically a result of driver error and do not represent a safety concern when compared to the level of traffic passing through the junction. It is therefore not considered that the addition of traffic as a result of the proposed development would exacerbate the number or severity of traffic collisions at this junction.

Summary

- Supplementary Transport Assessment
- **79** The actions arising from the review of the STA and VISSIM Modelling Briefing Note are listed below.
- 80 <u>ACTION: Applicant to provide missing geometric measurements in order to confirm DMRB compliance.</u>
- 81 ACTION: The entry path radii on the east (A4155 Marlow Road) and south arms (A404 Northbound on-slip) should be revised, to a maximum of 100m in order

- to comply with DMRB requirements.
- 82 ACTION: The entry width for the south arm (A404 Northbound on-slip) must be amended to a value within 1.0-1.2 times the circulatory carriageway width.
- 83 ACTION: A dimension drawing demonstrating compliance with the principles set out in LTN 1/20 must be provided.
- ACTION: The applicant is required to demonstrate evidence validating the proposed sustainable travel mode share target, this should be linked to measures set out in an Operational Management Plan for the site.

 ACTION: An Operational Management Plan must be provided to National Highways for sign off, it should set out the measures intended to reduce the level of traffic using the SRN as a mechanism to mitigate development impact to an acceptable level.
- 85 ACTION: Applicant to ensure priority rules reflect bus/HGV block all other vehicles on site exit arm at site access roundabout.
 - 12 Wider Highway Assessment
- 86 The previous actions identified by National Highways in the Wider Highway Assessment review for the Applicant still considered to be outstanding are listed below.
- 87 <u>ACTION: Applicant to provide clarification on the discrepancy in PM peak</u> <u>development traffic on the A404 south arm (Handy Cross).</u>
- 88 ACTION: The applicant is recommended to prepare an Operational

 Management Plan, setting out measures intended to reduce the level of traffic

 using the SRN as a mechanism to mitigate development impact to an

 acceptable level (Handy Cross).
- 89 <u>ACTION: Applicant to provide queue data and accompanying commentary demonstrating the A404 Bisham Roundabout has been appropriately validated.</u>

Appendix A – Geometric Compliance Drawing – A404 Westhorpe Interchange Proposed Mitigation (available to view on Public Access)

Environment Agency:

The information submitted has satisfactorily addressed our earlier concerns and subject to the *conditions* below we therefore *withdraw our previous objections*, dated 15 September 2022.

The information now submitted has provided further detail relating to risk of pollution to controlled waters and has demonstrated that this can be adequately mitigated. Further ecological information has been provided and various broad areas of ecological enhancement works are now proposed to mitigate and compensate the impacts of the proposals including the Westhorpe Watercourse crossing. This provides us with sufficient information to be satisfied that the impacts of the proposals can and will be adequately addressed through any development. It is critical that the details of these proposals are secured in any planning consent.

The Preliminary Ecological Design Strategy (DRAFT) states that the additional ecological enhancements for betterment at Westhorpe Lake and in the area that surrounds Westhorpe Watercourse are 'available, deliverable and under the applicant's control and therefore securable'. Should planning permission be granted, the local planning authority must ensure that the measures being proposed, including long term monitoring, maintenance and management (and where necessary replacement), are adequately secured through relevant planning mechanisms including legal agreements where necessary.

Condition 1

No development shall take place until a detailed ecological design strategy (EDS) detailing mitigation, compensation and enhancement measures has been submitted to and approved in writing by the local planning authority.

The EDS shall be based on the submitted Preliminary Ecological Design Strategy (DRAFT) (Waterman, 4th September 2023) – ref: WIE18037-127-17-1-7 and its appendices and shall include (but not necessarily be limited to) the following.

- a) Purpose and conservation objectives for the proposed works linked to requirements for identified species and for Biodiversity Net Gain Calculations.
- b) Review of site potential and constraints.
- c) Detailed designs and/or working method(s) to achieve stated objectives.
- d) Extent and location/area of proposed works on appropriate scale maps and plans.
- e) Specification and source of materials (plants and otherwise) to be used where appropriate, e.g. native species of local provenance.
- f) Timetable for implementation demonstrating that works are aligned with the proposed phasing of development.
- g) Persons responsible for implementing the works.
- h) Details of initial aftercare and long-term maintenance.
- i) Details of a scheme for monitoring and remedial measures, including those for the floating vegetated raft systems
- j) Details for disposal of any wastes arising from works.
- k) Retention and protection of existing habitats during construction.
- l) Habitat removal and reinstatement.
- m) Provision for wildlife corridors, linear features and habitat connectivity.
- n) Woodland, tree, hedgerow, shrub, wetland and wildflower planting and establishment.
- o) Proposed new landforms associated with habitat creation.
- p) Soil handling, movement and management.
- q) Creation, restoration and enhancement of semi-natural habitats.
- r) Plans, designs and specifications for a floating raft system (FloraFloat® system, or equivalent) to be included on Westhorpe Lake showing a minimum of 5 rafts, each of which is a minimum of 10 metres in length. The width, shape and location of each raft to be clearly indicated along with the anchoring mechanism.
- s) Ecological aspects of the design of the crossing of Westhorpe watercourse.
- t) Details of the proposed bank reprofiling alongside the Westhorpe Watercourse (including details of how impacts to bankside trees are managed), marginal planting

shelves and the proposed semi-natural wetland platforms/ vegetated central islands in the Westhorpe Watercourse channel (including location, extent, materials and construction method, and interaction with the proposed crossing including impacts of shading).

- u) Details of the proposed clearance of vegetative matter from the offsite watercourse to the east and installation of features to its banks to create a varied flow profile.
- v) Proposed treatment/eradication of Japanese knotweed (<u>Reynoutria japonica</u>) within the site.

The EDS shall, where appropriate, be cross-referenced in other relevant details (e.g. landscape plans, detailed building design, construction environmental management plan), and it shall be implemented in accordance with the approved details and all features shall be retained and maintained in that manner thereafter for the life of the development.

Reason 1

To ensure that the proposed habitats and ecological features are appropriately designed, created and installed in accordance with expectations and to ensure that identified protected, priority and notable species are adequately catered for, in line with paragraphs 174 and 180 of the National Planning Policy Framework.

Condition 2

No development shall take place until a Landscape and Ecological Management Plan, including long-term design objectives, management responsibilities and maintenance schedules for all landscaped areas (except privately owned domestic gardens), has been submitted to, and approved in writing by, the local planning authority. The landscape and ecological management plan shall be carried out as approved and any subsequent variations shall be agreed in writing by the local planning authority. The scheme shall include the following elements:

- 1. Description and evaluation of features to be managed.
- 2. Ecological trends and constraints on site that might influence management.
- 3. Aims and objectives of management.
- 4. Appropriate management options for achieving aims and objectives.
- 5. Prescriptions for management actions.
- 6. Preparation of a work schedule (including an annual work plan capable of being rolled forward over a five-year period).
- 7. Details of the body or organisation responsible for implementation of the plan.
- 8. Ongoing monitoring and remedial measures.

The LEMP shall also include details of the legal and funding mechanism(s) by which the long-term implementation of the plan will be secured by the developer with the management body(ies) responsible for its delivery.

The plan shall also set out (where the results from monitoring show that conservation aims and objectives of the LEMP are not being met) how contingencies and/or remedial

action will be identified, agreed and implemented so that the development still delivers the fully functioning biodiversity objectives of the originally approved scheme.

The approved plan will be implemented in accordance with the approved details.

Reason 2

To ensure the protection of wildlife and supporting habitat. Also, to secure opportunities for enhancing the site's nature conservation value in line with national planning policy and adopted policies DM14 and DM15 of the Wycombe District Local Plan, adopted August 2019. This approach is supported by paragraphs 174 and 180 of the National Planning Policy Framework (NPPF) which recognise that the planning system should conserve and enhance the environment by minimising impacts on and providing net gains for biodiversity. If significant harm resulting from a development cannot be avoided, adequately mitigated, or as a last resort compensated for, planning permission should be refused.

Condition 3

No development shall take place (including demolition, ground works, vegetation clearance) until a Construction Environmental Management Plan (CEMP: Biodiversity) has been submitted to and approved in writing by the local planning authority. The CEMP (Biodiversity) shall include the following.

- a) Risk assessment of potentially damaging construction activities.
- b) Identification of "biodiversity protection zones".
- c) Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (this must include Reasonable Avoidance Measures Method Statement (RAMMS)) on protected species.
- d) The location and timing of sensitive works to avoid harm to biodiversity features.
- e) The times during construction when specialist ecologists need to be present on site to oversee works.
- f) Responsible persons and lines of communication.
- g) The role and responsibilities on site of an ecological clerk of works (ECoW) or similarly competent person. Use of protective fences, exclusion barriers and warning signs.
- h) Pollution prevention measures to be put in place to protect the water features on and adjacent to the site.
- i) Details of a sensitive lighting scheme for use during the construction phase to minimise the impacts of light spill on the waterbodies and their adjacent habitats.
- j) Proposed treatment/eradication of Japanese knotweed (Reynoutria japonica) within the site.

The approved CEMP shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details, unless otherwise agreed in writing by the local planning authority.

Reason 3

To ensure that development is undertaken in a manner which ensures important wildlife and habitats are not adversely impacted by construction, in line with paragraphs 174 and 180 of the National Planning Policy Framework.

Condition 4

Prior to the commencement of the development, an ecologically sensitive lighting scheme shall be submitted to and approved in writing by the local planning authority. This shall be informed by the Bat Conservation Trust/Institution of Lighting Professionals Guidance Note 08/23 – Bats and Artificial Lighting at Night.

Reason 4

To minimise impacts on wildlife using the lakes and watercourse adjacent to the site and the wildlife corridors associated with them, in accordance with paragraphs 174 and 180 of the National Planning Policy Framework.

Condition 5

No development shall take place until a detailed scheme for the crossing over the Westhorpe Watercourse between Plots 4 and 5 have been submitted to and approved in writing by the local planning authority. The scheme shall include the following:

- Detailed design drawings of the crossing structure;
- Details of the materials to be used in the construction;
- Details of measures to be taken to protect the environment adjacent to the proposed crossing, both terrestrial and aquatic;
- An environmental risk assessment including details of pollution prevention measures to be employed among other measures.

Reason 5

To ensure that the crossing is designed and built to minimise its impacts on the ecological value of the Westhorpe Watercourse and the adjacent land in line with paragraphs 174 and 180 of the National Planning Policy Framework.

Condition 6

No development approved by this planning permission shall commence until the results of a Site Investigation relating to plot 4 in respect of the development hereby permitted, has been submitted to, and approved in writing by, the local planning authority. This Site Investigation report shall provide information to inform a detailed assessment of the risk to all receptors that may be affected, including those outside plot 4. It shall include (not exclusively) a minimum of three rounds of background monitoring for Per- and

polyfluoroalkyl substances (PFAS) unless otherwise agreed in writing. The monitoring will be completed up and down hydraulic gradient of Plot 4.

Reason 6

To ensure that the development does not contribute to, and is not put at unacceptable risk from or adversely affected by, unacceptable levels of water pollution in line with paragraph 174 of the National Planning Policy Framework.

Condition 7

No development approved by this planning permission shall commence until a detailed site-wide Revised Remediation Scheme in respect of the development hereby permitted, has been submitted to, and approved in writing by, the local planning authority. This Revised Remediation Scheme shall be based on the Remediation Strategy ref WIE18037-100-S-2-3-2-RMS issue 2-3-2 dated October 2022 (Waterman Infrastructure & Environment Ltd), as updated by the findings of the updated Site Investigation relating to plot 4, and shall include (not exclusively):

- a) A Remediation Strategy which uses the results of the Site Investigations to carry out a detailed risk assessment, provides an options appraisal, and sets out full details of the remediation measures required and how they are to be undertaken.
- b) A Groundwater Sampling Plan to monitor groundwater prior to, during and following any groundworks to be undertaken.
- c) A Verification Plan providing details of the data that will be collected in order to demonstrate that the works set out in the remediation strategy in part (a) are complete and identifying requirements for monitoring of pollutant linkages, maintenance and arrangements for contingency action. This shall also include groundwater monitoring results and actions taken.

Any changes to these components require the written consent of the local planning authority. The scheme shall be implemented as approved.

Reason 7

To ensure that the development does not contribute to, and is not put at unacceptable risk from or adversely affected by, unacceptable levels of water pollution in line with paragraph 174 of the National Planning Policy Framework.

Condition 8

Prior to any part of the permitted development being brought into use, a Verification Report demonstrating the completion of works set out in an approved site-wide Revised Remediation Scheme and the effectiveness of the remediation shall be submitted to, and approved in writing, by the local planning authority. The report shall include results of

sampling and monitoring carried out in accordance with the approved verification plan to demonstrate that the site remediation criteria have been met.

Reason 8

To ensure that the site does not pose any further risk to the water environment by demonstrating that the requirements of the approved verification plan have been met and that remediation of the site is complete. This is in line with paragraph 174 of the National Planning Policy Framework.

Condition 9

If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the local planning authority) shall be carried out until a remediation strategy detailing how this contamination will be dealt with has been submitted to, and approved in writing by, the local planning authority. The remediation strategy shall be implemented as approved.

Reason 9

To ensure that the site does not pose any further risk to the water environment by demonstrating that the requirements of the approved verification plan have been met and that remediation of the site is complete. This is in line with paragraph 174 of the National Planning Policy Framework.

Condition 10

A scheme for managing any borehole installed for the investigation of soils, groundwater or geotechnical purposes shall be submitted to and approved in writing by the local planning authority. The scheme shall provide details of how redundant boreholes are to be decommissioned and how any boreholes that need to be retained, post-development, for monitoring purposes will be secured, protected and inspected. The scheme as approved shall be implemented prior to the occupation of any part of the permitted development.

Reason 10

To ensure that redundant boreholes are safe and secure, and do not cause groundwater pollution or loss of water supplies in line with paragraph 174 of the National Planning Policy Framework.

Condition 11

Piling and/or other foundation techniques using penetrative methods shall not be carried out other than with the written consent of the local planning authority following submission of a Foundation Works Risk Assessment. The development shall be carried out in accordance with the approved details.

Reason 11

To ensure that the proposed foundations do not harm groundwater resources in line with paragraph 174 of the National Planning Policy Framework.

Advice to applicant - Ecological aspects of the proposals

Should planning permission be granted and ecological measures be secured through conditions or other appropriate planning mechanisms, we would advise that the following comments are taken into account within the detailed proposals.

Figure 4.3 of the Plot 4 to 5 Crossing Structure Technical Note shows an Illustrative Image of the Proposed Structure with 3 large culverts and two smaller ones, all of which are within the wetted channel. If the outer culverts are proposed to allow dry access for mammals under the structure, then they would have to be placed further up the bank above the 1 in 100 year level plus climate change allowance. Having mammal shelves through sections of culvert that are within the channel and not connected to riverbank serves no useful purpose; the shelves are usually in place to allow dry access, but mammals would have to be in the channel to reach them. These comments apply to drawing number 60654980-ACM-XX-XX-SK-HW-000033 Rev P07 (Illustrative Plot 4/5 Crossing Alignment).

Within the Westhorpe Lake, five 10m long narrow sections of floating vegetated platform (FloraFloat system, or similar) of unknown width at various points along the eastern lake shore, are proposed. It may be preferable to install larger, less linear areas of marginal habitat, which should be possible given the modular nature of the product. It will need to be clear how these platforms will be physically secured in place.

For the proposed off-site watercourse enhancement, work is proposed along a 140m length of a watercourse on the southern boundary of the proposed off-site terrestrial enhancement area to the east of the site. In order to allow more light into the channel to encourage growth of marginal plants, thinning would be required to the trees to the south of the watercourse. Large pieces of wood could be pinned into the channel in places to act as flow deflectors. Any seed mix to be used in this area would have to have some shade tolerance; it is not clear if the suggested mix would thrive in this location. The use of plant plugs of shade tolerant plant species should be considered.

Some smaller, more discreet areas of native scrub may be appropriate planting adjacent to the off-site watercourse, rather than hedging/scrub indicated on Appendix 3 – Figure 3: Off-site Proposed Enhancements, given the levels of shade that already exist in that area. All planting and seed mixes must consist of locally native species of UK genetic provenance.

Advice to applicant – Waste to be taken off site

Contaminated soil that is (or must be) disposed of is waste. Therefore, its handling, transport, treatment and disposal are subject to waste management legislation, which includes:

- Duty of Care Regulations 1991
- Hazardous Waste (England and Wales) Regulations 2005
- Environmental Permitting (England and Wales) Regulations 2016
- The Waste (England and Wales) Regulations 2011

Developers should ensure that all contaminated materials are adequately characterised both chemically and physically in line with British Standard BS EN 14899:2005 'Characterization of Waste - Sampling of Waste Materials - Framework for the Preparation and Application of a Sampling Plan' and that the permitting status of any proposed treatment or disposal activity is clear. If in doubt, the Environment Agency should be contacted for advice at an early stage to avoid any delays.

If the total quantity of hazardous waste material produced or taken off-site is 500kg or greater in any 12 month period, the developer will need to register with us as a hazardous waste producer. Refer to the hazardous waste pages on GOV.UK for more information.

Advice to LPA/applicant – Environmental Permit

This development may require an environmental permit under the Environmental Permitting (England and Wales) Regulations 2016, Regulation 12.

In circumstances where an activity/operation meets certain criteria, an exemption from permitting may apply. More information on exempt activities can be found here: https://www.gov.uk/guidance/register-your-waste-exemptions-environmental-permits

The applicant is advised to find out more information about the permit application process online and to send a pre-application enquiry form via the gov.uk website: https://www.gov.uk/government/publications/environmental-permit-pre-application-advice-form

Natural England:

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

SUMMARY OF NATURAL ENGLAND'S ADVICE OBJECTION:

Natural England objects to this proposal. As submitted we consider it will:

• Have an adverse effect on the integrity of Burnham Beeches Special Area of

Conservation (SAC).

• Undermine the proposed mitigation for Allocation BE2 - Hollands Farm.

The proposed development is located within Little Marlow Lakes Country Park (LMLCP), the identified mitigation for Allocation BE2 - Hollands Farm within Wycombe District Local Plan (Adopted August 2019).

Natural England provided comments to application 21/06215/OUT on the 10th February 2022 agreeing financial contributions towards improvements at LMLCP in line with the Burnham Beeches SAC Mitigation Document produced by The Environmental Dimension Partnership Ltd (dated February 2022).

Please note that if your authority is minded to grant planning permission contrary to the advice in this letter, you are required under Section 28I (6) of the Wildlife and Countryside Act 1981 (as amended) to notify Natural England of the permission, the terms on which it is proposed to grant it and how, if at all, your authority has taken account of Natural England's advice. You must also allow a further period of 21 days before the operation can commence.

Natural England's further advice on other natural environment issues is set out below.

Burnham Beeches Special Area of Conservation

When there is sufficient scientific uncertainty about the likely effects of the planning application under consideration, the precautionary principle is applied to fully protect the qualifying features of the European Site designated under the Habitats Directive.

Due to new evidence on the impacts of recreational and urban growth at Burnham Beeches SAC carried out by Footprint Ecology in 2019, Natural England recognises that new housing within 5.6km of the internationally designated Burnham Beeches Special Area of Conservation (SAC) can be expected to result in an increase in recreation pressure.

The 5.6km zone proposed within the Adopted Avoidance and Mitigation strategy SPD and evidence base carried out by Footprint Ecology represents the core area around the SAC where increases in the number of residential properties will require Habitats Regulations Assessment. Mitigation measures will be necessary to rule out adverse effects on the integrity of the SAC from the cumulative impacts of development.

Impacts to the SAC as a result of increasing recreation pressure are varied and have long been a concern. These impacts, which have the potential to adversely affects its interest features, include:

- Contamination (e.g. dog fouling, litter, spread of plant pathogens);
- Increased fire risk;
- Trampling/wear (e.g. loss of vegetation, soil compaction, erosion, damage to trees from climbing);
- Harvesting (e.g. fungi, wood);
- Difficulties in managing the site (e.g. maintaining the grazing regime);
- Disturbance (e.g. affecting the distribution of livestock and deer).

In light of the new evidence relating to the recreation impact zone of influence, planning authorities must apply the requirements of Regulation 61 of The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, to housing development within 5.6km of the SAC boundary. The authority must decide whether a particular proposal, alone or in combination with other plans or projects, would be likely to have a significant effect on the SAC.

Wycombe District Local Plan (Adopted August 2019) Policy BE2 - Hollands Farm, Bourne End and Wooburn states that the development will "provide S106 contributions to mitigate recreational impacts at Burnham Beeches SAC".

Natural England provided comments to application 21/06215/OUT Hollands Farm on the 10th February 2022 agreeing financial contributions towards improvements at LMLCP in line with the Burnham Beeches SAC Mitigation Document produced by The Environmental Dimension Partnership Ltd (dated February 2022).

However the proposed development is located within the red line boundary for Little Marlow Lakes Country Park and therefore will undermine the mitigation for application 21/06215/OUT. As a result the above application would be likely to have a significant effect on the SAC, either alone or in combination with other plans and projects. In accordance with Regulation 61, before granting planning permission for such a proposal, the planning authority must undertake an appropriate assessment of the implications of the development on the SAC, in light of the site's conservation objectives. The conservation objectives are to maintain and, where not in favourable condition, to restore, the Atlantic acidophilous beech forest habitat.

Consequently, it is Natural England's view that the planning authority will not be able to ascertain that this proposed development as it is currently submitted would not adversely affect the integrity of the SAC. In combination with other plans and projects, the development would be likely to contribute to a deterioration of the quality of the habitat by reason of increased access to the site including access for general recreation and dogwalking. There being alternative solutions to the proposal and there being no imperative reasons of overriding public interest to allow the proposal, despite a negative assessment, the proposal will not pass the tests of Regulation 62.

Protected Landscapes

The proposed development is located adjacent to a nationally designated landscape namely Chilterns AONB. Natural England advises that the planning authority uses national and local policies, together with local landscape expertise and information to determine the proposal. The policy and statutory framework to guide your decision and the role of local advice are explained below.

Your decision should be guided by paragraphs 176 and 177 of the National Planning Policy Framework which gives the highest status of protection for the 'landscape and scenic beauty' of AONBs and National Parks. For major development proposals paragraph 177 sets

out criteria to determine whether the development should exceptionally be permitted within the designated landscape.

Alongside national policy you should also apply landscape policies set out in your development plan, or appropriate saved policies.

We also advise that you consult the relevant AONB Partnership or Conservation Board. Their knowledge of the site and its wider landscape setting, together with the aims and objectives of the AONB's statutory management plan, will be a valuable contribution to the planning decision. Where available, a local Landscape Character Assessment can also be a helpful guide to the landscape's sensitivity to this type of development and its capacity to accommodate the proposed development.

The statutory purpose of the AONB is to conserve and enhance the area's natural beauty. You should assess the application carefully as to whether the proposed development would have a significant impact on or harm that statutory purpose. Relevant to this is the duty on public bodies to 'have regard' for that statutory purpose in carrying out their functions (S85 of the Countryside and Rights of Way Act, 2000). The Planning Practice Guidance confirms that this duty also applies to proposals outside the designated area but impacting on its natural beauty.

Chilterns AONB boundary review

The proposed development is located within an area which Natural England is assessing as a boundary variation to the Chilterns Area of Outstanding Natural Beauty (AONB). Whilst this assessment process does not confer any additional planning protection, the impact of the proposal on the natural beauty of this area may be a material consideration in the determination of the development proposal.). Natural England considers the Chilterns to be a valued landscape in line with paragraph 174 of the National Planning Policy Framework (NPPF). Furthermore, paragraph 176 of the NPPF states that development in the settings of AONBs should be sensitively located and designed to avoid or minimise impacts on the designated areas. An assessment of the landscape and visual impacts of the proposal on this area should therefore be undertaken, with opportunities taken to avoid or minimise impacts on the landscape and secure enhancement opportunities. Any development should reflect or enhance the intrinsic character and natural beauty of the area and be in line with relevant development plan policies.

An extension to an existing AONB is formally designated once a variation Order, made by Natural England, is confirmed by the Defra Secretary of State. Following the issue of the designation order by Natural England, but prior to confirmation by the Secretary of State, any area that is subject to a variation Order would carry great weight as a material consideration in planning decisions.

Further general advice on the protected species and other natural environment issues is provided at Annex A.

Should the developer wish to explore options for avoiding or mitigating the effects described above with Natural England, we advise they seek advice through our <u>Discretionary Advice</u> Service.

Should the proposal change, please consult us again.

Therefore this development would undermine the proposed mitigation for BE2 - Hollands Farm and result in an adverse impact upon Burnham Beeches SAC. A Habitats Regulations Assessment will be required to assess the impact and identify compensation measures.

Natural England (Habitat Regulations Assessment Comments):

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

Habitats Regulations Assessment

Based on the information submitted, Natural England are currently not in a position to agree with the conclusion of the Habitats Regulations Assessment (HRA).

Burnham Beeches Special Area of Conservation (SAC):

The proposed development is located within Little Marlow Lakes Country Park (LMLCP), the identified mitigation for Allocation BE2 - Hollands Farm within Wycombe District Local Plan (Adopted August 2019).

Natural England provided comments to application 21/06215/OUT on the 10th February 2022 agreeing financial contributions towards improvements at LMLCP in line with the Burnham Beeches SAC Mitigation Document produced by The Environmental Dimension Partnership Ltd (dated February 2022). Natural England acknowledge that the council are currently in the process of allocating their own land as Suitable Alternative Natural Greenspace (SANG). However this strategy is not yet formally agreed.

The proposed development still has the potential to impact the reduced SANG through visual and noise impacts and therefore has potential for LSE and should be screened into the Appropriate Assessment (AA).

We undertook DAS with the applicant on the 25th September 2022. It was advised that the following measures would need to be secured:

- Sufficient screening on the east boundary to ensure that the development does not detract from the semi-natural feel of the SANG. The screening will be required to be managed inperpetuity (minimum 80 years) to ensure that the development remains well screened in the long term.
- Noise surveys/modelling will be required. The maximum acceptable noise limit on a SANG is 60dB and therefore the development should not be contributing to noise levels above this limit on the adjacent SANG.

South Bucks adopted Core Strategy's Core policy 9 Natural Environment states "where a specific development could result in significant effects on the SAC, a Project level (regulation

48) HRA will need to be carried out by the developer when the planning application is submitted to determine whether mitigation measures are required."

When there is sufficient scientific uncertainty about the likely effects of the planning application under consideration, the precautionary principle is applied to fully protect the qualifying features of the European Site designated under the Habitats Directive.

Due to new evidence on the impacts of recreational and urban growth at Burnham Beeches SAC carried out by Footprint Ecology in 2019, Natural England recognises that new housing within 5.6km of the internationally designated Burnham Beeches Special Area of Conservation (SAC) can be expected to result in an increase in recreation pressure.

The 5.6km zone proposed within the Adopted Avoidance and Mitigation strategy SPD and evidence base carried out by Footprint Ecology represents the core area around the SAC where increases in the number of residential properties will require Habitats Regulations Assessment. Mitigation measures will be necessary to rule out adverse effects on the integrity of the SAC from the cumulative impacts of development.

Impacts to the SAC as a result of increasing recreation pressure are varied and have long been a concern. These impacts, which have the potential to adversely affects its interest.

been a concern. These impacts, which have the potential to adversely affects its interest features, include:

- Contamination (e.g. dog fouling, litter, spread of plant pathogens);
- Increased fire risk;
- Trampling/wear (e.g. loss of vegetation, soil compaction, erosion, damage to trees from climbing);
- Harvesting (e.g. fungi, wood);
- Difficulties in managing the site (e.g. maintaining the grazing regime);
- Disturbance (e.g. affecting the distribution of livestock and deer).

In light of the new evidence relating to the recreation impact zone of influence, planning authorities must apply the requirements of Regulation 61 of The Conservation of Habitats and Species(Amendment) (EU Exit) Regulations 2019, to housing development within 5.6km of the SAC boundary. The authority must decide whether a particular proposal, alone or in combination with other plans or projects, would be likely to have a significant effect on the SAC. Development in accordance with the adopted South Bucks Core Strategy's Core policy 9 and Adopted Avoidance and Mitigation Strategy SPD would not be likely to have a significant effect on the SAC because they will provide, or make an appropriate contribution to, acceptable avoidance and mitigation measures. The planning authority can grant planning permission to such developments in accordance with the Regulations. However, development proposals which are not in accordance with the above would be likely to have a significant effect on the SAC, either alone or in combination with other plans and projects.

In accordance with Regulation 61, before granting planning permission for such a proposal, the planning authority must undertake an appropriate assessment of the implications of the development on the SAC, in light of the site's conservation objectives. The conservation objectives are to maintain and, where not in favourable condition, to restore, the Atlantic acidophilous beech forest habitat.

Consequently, it is Natural England's view that the planning authority will not be able to ascertain that this proposed development as it is currently submitted would not indirectly adversely affect the integrity of the SAC. In combination with other plans and projects, the

development would be likely to contribute to a deterioration of the quality of the habitat by reason of increased access to the site including access for general recreation and dogwalking. There being alternative solutions to the proposal and there being no imperative reasons of overriding public interest to allow the proposal, despite a negative assessment, the proposal will not pass the tests of Regulation 62.

Chilterns Beechwoods Special Area of Conservation

Natural England notes that the Air Quality assessment provided with the consultation has screened the proposal to check for the likelihood of significant effects from aerial emissions on the Chilterns Beechwoods SAC.

The assessment concludes that the proposal can be screened out from further stages of assessment because significant effects are unlikely to occur, either alone or in combination. On the basis of information provided, Natural England concurs with this view.

Protected Landscapes

The proposed development is located adjacent to a nationally designated landscape namely Chilterns AONB. Natural England advises that the planning authority uses national and local policies, together with local landscape expertise and information to determine the proposal. The policy and statutory framework to guide your decision and the role of local advice are explained below.

Your decision should be guided by paragraphs 176 and 177 of the National Planning Policy Framework which gives the highest status of protection for the 'landscape and scenic beauty' of AONBs and National Parks. For major development proposals paragraph 177 sets out criteria to determine whether the development should exceptionally be permitted within the designated landscape.

Alongside national policy you should also apply landscape policies set out in your development plan, or appropriate saved policies.

We also advise that you consult the relevant AONB Partnership or Conservation Board. Their knowledge of the site and its wider landscape setting, together with the aims and objectives of the AONB's statutory management plan, will be a valuable contribution to the planning decision. Where available, a local Landscape Character Assessment can also be a helpful guide to the landscape's sensitivity to this type of development and its capacity to accommodate the proposed development.

The statutory purpose of the AONB is to conserve and enhance the area's natural beauty. You should assess the application carefully as to whether the proposed development would have a significant impact on or harm that statutory purpose. Relevant to this is the duty on public bodies to 'have regard' for that statutory purpose in carrying out their functions (S85 of the Countryside and Rights of Way Act, 2000). The Planning Practice Guidance confirms that this duty also applies to proposals outside the designated area but impacting on its natural beauty.

Chilterns AONB boundary review

The proposed development is located within a proposed area of search which Natural England is considering as a possible boundary variation to the Chilterns Area of Outstanding Natural Beauty (AONB). Although the assessment process does not confer any additional planning protection, the impact of the proposal on the natural beauty of this area may be a material consideration in the determination of the development proposal). Natural England considers the Chilterns to be a valued landscape in line with paragraph 174 of the National Planning Policy Framework (NPPF).

Furthermore, paragraph 176 of the NPPF states that development in the settings of AONBs should be sensitively located and designed to avoid or minimise impacts on the designated areas. An assessment of the landscape and visual impacts of the proposal on this area should therefore be undertaken, with opportunities taken to avoid or minimise impacts on the landscape and secure enhancement opportunities. Any development should reflect or enhance the intrinsic character and natural beauty of the area and be in line with relevant development plan policies.

An extension to an existing AONB is formally designated once a variation Order, made by Natural England, is confirmed by the Defra Secretary of State. Following the issue of the designation order by Natural England, but prior to confirmation by the Secretary of State, any area that is subject to a variation Order would carry great weight as a material consideration in planning decisions.

For more information about the boundary review process, please read these Frequently Asked Questions.

Further general advice on the consideration of protected species and other natural environment issues is provided at Annex A.

Cadent Gas:

No objection from a planning perspective. An informative is requested.

Thames Water:

No comments to make at this time.

Historic England:

No comments to make.

Crime Prevention & Design Advisor (non- statutory):

Having read the Security Needs Assessment produced for this application, I ask that the recommendations set out in the section of the Security Strategy (Points 1-26) are required to be met as a condition of planning consent.