Response to points raised by Picture SRL at the GA2 hearing and report by ELMLAW Consulting dated 11<sup>th</sup> November 2020 which was submitted December 2020 on behalf of Picture SRL:

There were a few points raised during the hearing that concerned us; one was that a further report had been compiled that we had no knowledge of. We felt that this should have been submitted in adequate time in order that we could respond and we thank the Inspector for allowing us to submit this report. Another was a statement made by Picture SRL that Natural England had approved GA2, this was stated after we had raised points regarding badgers on the site and we feel that this was slightly misleading in the context in which it was used. Natural England have confirmed that although they would have made comments on impacts to SSSI's and policies they have not approved any sites within the local plan and that includes the site GA2.

In regards to the proposed access road; we are still concerned as to Picture SRL's input during the hearing and 2.3.6 in the submitted report where they have stated the main sett would be 40m from the extent of the roadworks with the outlier being 20m from the extent of the roadworks and yet our records clearly show that the two setts are in line with each other and although one would be closer to the spine road, this would not be the case in regards to the main access road. Although leaving the setts in situ is an improvement, the development would see 3 setts and partial foraging ground totally encompassed by a busy circular vehicle route, drainage and housing with the rest of their foraging ground removed for roads/cycle routes/footpaths or isolated by them. The mitigation for this area alone would need to include corridors, tunnels and a large amount of badger fencing – the whole of New Spring Wood would ideally need to be fenced as there are a number of paths that join the setts/foraging areas and the amount of foraging area lost to this development would be substantial for this clan.

By locating the proposed access road further towards Brooches Wood would result in the loss of their immediate foraging ground south-east of the setts as well as the line of trees that are located between the 2 rows of pylons. We would like to add that we recently observed large amounts of discarded rubbish within the area and removed numerous bottles and plastic from 2 outlier holes and a roll of wire that had been rammed down a third. This is a further issue when developing so close to badger setts and access is possible. This area also has 2 lots of fencing separating the residential area with the surrounding scrub/field – the inner fence has been cut in 2 places and the outer fence cut in 3 places (please see further paragraph on tunnels and fencing).

We believe that should this development continue, it would result in the wilful ill-treatment of badgers and contravene the Badger Act 1992. There are a number of factors that have led us to this conclusion with the main one being we do not believe it is possible to mitigate to the extent needed, in accordance with such a large density of badgers that cover such an expansive area. We have submitted Appendix 1 with examples of activity and Appendix 2 to highlight the situation.

In regards to the submitted report; what concerns us greatly is that the numerous examples given have no comparison to the situation of GA2 and there are a large number of flaws that need to be considered. In 2.3.1 ELMLAW states that their strategy will limit potential conflicts with new residents and provide compensation for lost badger foraging habitat. We are not sure how any strategy would result in limiting conflict when the badgers' habitat covers 60% of the site. The area of the main clan would be fragmented into 4 sections. This is not the case of a main sett and outlier which would need a dark corridor to join them together with a further corridor to access open countryside; this is a multitude of main setts, subsidiary setts, outlier setts (which have not even been fully recorded by the consultancy) with a large number of foraging areas and well used paths. We have seen a large amount of conflict across Hertfordshire where development/persecution has displaced badgers and they have caused considerable damage to residents' gardens and properties. Natural England have received increasing applications for licences to interfere with setts due to

conflict. Climate change is resulting in months of severely dry weather and we have seen numerous issues in the eastern part of Great Ashby, where badgers broke under fencing to access well watered lawns. Unfortunately this can also result in people taking matters into their own hands to rectify the problem and we have seen examples of this on social media.

Richard Meyer, author of The Fate of The Badger advised there will be ingression into gardens whatever precautions are taken, further alienating residents and promoting further anti-badger sentiment which can lead to direct persecution such as noxious substances introduced to setts. He added that disturbance does not relate only to physical manifestations such as their setts, but also to behaviour. Irrespective of precautions taken such as subdued lighting and dark corridors, all physical impedimenta will deteriorate over time as attention wanes and vandalism, fly tipping and other common human activities become more common.

We are aware that Picture SRL is looking to ensure the most up-to-date data is gathered at the appropriate time so that they can ensure their mitigation strategy addresses legal and ecological requirements, but surely with the multitude of the situation the appropriate time should have been before the Local Authority agrees to the area being suitable. As stated by Dr Jenny Jones in recent communication; mitigation strategies of dark corridors, fencing with tunnels under roads and improved foraging areas makes it sound very easy to accommodate badgers into development - but in reality when dealing with such a dense population of badgers; with the increased disturbance during the construction works, increased disturbance from new residents and extent of badger fencing that would be required, this would result in serious issues for the badgers and residents.

In 2.3.2 Stephen Harris has been cited as acknowledging that urban badgers happily persist in towns and cities and that they can comprise of relic rural populations as result of new development but Stephen's main study was in regards to the city of Bristol and urban and rural badgers are very different in regards to their behaviour and ecology and the situation also depends a lot on the location and area surrounding it. The badger clans in GA2 are rural – even those that reside in a sett 30ft from housing do not access the gardens, instead they use arable land in between Brooches Wood and Nine Acre Wood and the second clan use New Spring Wood and the arable land to the west; this would then be a completely different scenario if this development was to go ahead.

We are aware of urban setts that have done exceedingly well over the years but these clans are often able to access large expanses of open land – hillside, or scrubland and allotments in which not all is accessible by local people and have a lack of roads. We are also aware of a large number of setts that are now obsolete due to the loss of foraging ground and the badgers being killed on the roads or being persecuted, such as a large sett in Stevenage and another that was on the edge of Great Ashby.

ELMLAW have advised that where potential conflicts would occur fencing would be used, but in most proposed developments, there may possibly be only 1 or 2 setts not a dozen or more with a large number of well used badger paths. They have cited 2 examples where badger corridors have been used by other local authorities. The sett at Kings Langley is still in use and a badger corridor exists into the residential area, but behind the sett is a large field and woodland so the badgers have plenty of foraging and open space. Unfortunately the setts on the former Old Merchant Taylor School site are obsolete and there is no evidence of badgers whatsoever. This could be the result from the construction and/or post development or rta's/possible persecution. This shows that just because mitigation is implemented; the result can vary substantially.

Tunnels and fencing: Our main concern regarding GA2 is the main clan which covers a vast area. It would need a monumental amount of mitigation; corridors, tunnels, fencing, foraging areas and we do not believe this is achievable.

In 2.3.3, ELMLAW has cited examples of badger tunnel studies that have been carried out in the UK and Portugal. (Grilo, Bissonette and Santos-Reis 2008) demonstrated the effectiveness of badger tunnels (culverts and underpasses) but this study was carried out on 252km of highway which simply does not equate to the situation in GA2. It also stated that the frequency of use varied due to a number of features 'including human disturbance' – they then went on to state that a 'low disturbance by humans' was one of the key features into the tunnels being regularly used. ELMLAW also highlighted the study by (Eldridge and Wynn 2011) who had reported the successful use of badger tunnels by the Highways Agency on nine new road and bypass schemes, but these schemes were carried out on dual carriageways and motorways; again this simply does not equate to the situation in GA2. Their final example was the use of badger tunnels with appropriate fencing on the proposed realignment of the A602; yet again this has no significance on the situation of the proposed site as it is a major A road where there are no houses or residents in the vicinity or any pedestrian crossings.

For a clan of this scale with the amount of setts and paths would need a considerable amount of tunnels under the roadways and this would mean a considerable amount of badger fencing. When a badger tunnel is implemented, the whole length of roadway has to be fenced and where as this may be possible on motorway, dual carriageway or a development site where there is one or two setts and a badger tunnel is implemented under a roadway with traffic calming measures and fencing so that a wildlife corridor can access the countryside; this simply would not be possible in the situation of GA2 for the following reasons:

- People cross roads within estates at various locations and not just a specified crossing specified crossings would also need to be fenced
- We have already seen fencing around Great Ashby intentionally cut as residents like to take short cuts and this would be no different with large amounts of badger fencing in an estate
- Every time badger fencing is damaged, cut or removed more badgers are killed on the road and this takes time to be replaced
- Replacing stolen or damaged badger fencing is expensive and would need to be the responsibility of the local authority/highways
- Studies have proven that human disturbance can effect the success of tunnels
- Tunnels need to be monitored and using them within a housing estate could result in them becoming blocked with discarded rubbish they would need to be cleared and vegetation maintained, becoming a further responsibility for the local authority

We are not aware of any other development within Hertfordshire or Bedfordshire that have incorporated numerous tunnels within a new development with badger fencing lining all of the roads.

Paragraph 2.3.5 states that some arable land would be lost around the woodlands. We feel this is an understatement; a large amount of foraging area would be lost due to the development. Although woodland foraging would still be available; as stated in Badgers by (Michael Clark 2017) 'a badger has a daily need of around 200 earthworms', although woodlands are valuable they only have 3 or 4 worms per square metre where as arable land has approximately 9 worms. Losing large amounts of foraging will increase human/badger conflict even further although Picture SRL have stated new areas of grassland would mitigate this loss; unfortunately this would also result in further issues during long periods of dry weather. The sett we referred to previously in this report confirmed that the badgers had not entered residents' gardens over the last few years – they use the strip of woodland in front of the sett and the field beyond for their foraging. Another sett is located in a strip of woodland between numerous gardens and grassland – during the very dry weather over the last 2 years, the badgers have forced their way into residents' gardens causing considerable damage to lawns and has increased the conflict.

ELMLAW have also mentioned that a preliminary badger territory mapping exercise using the Dirichlet Tessellation method (Roper 2010) suggested that no badger territories would be wholly encapsulated within the proposed GA2 built development and that all four badger clan territories extend outside the GA2 boundary into the arable fields and woodlands beyond – we are unsure as to how any mapping exercise has been carried out efficiently when a number of the setts have not been identified. We believe that one part of the main clan would be isolated as well as the second clan in its entirety.

The Badger Act 1992 was put in place to stop the wilful ill-treatment/cruelty to badgers. Closing down setts, fragmenting a clan's habitat into numerous sections by roads and housing, isolating an area of that clan and a second clan and being aware that it is simply not be feasible to mitigate fully to the extent necessary and even if this was the case; there is the likelihood that setts would be interfered with, badger fencing would be destroyed resulting in numerous rta's and the loss of important arable foraging areas would increase conflict between badgers and new residents and all of these factors together could be conceived as ill-treatment as both the local authority and developer are fully aware of the density of badgers and their widespread activity within the area. We have raised our concerns regarding this site with a number of agencies and as we believe going ahead with this development would contravene the Badger Act 1992, we are therefore requesting the removal of this site from the Local Plan.

N Hamilton Development Co-Ordinator Herts & Middx Badger Group

## References:

Clark, M. (2017). Badgers The British Natural History Collection Volume 6. Whittet Books

Correspondence from Jones, Dr Jenny, (MCIEEM)

Correspondence from Meyer, Richard M, author of The Fate of The Badger 1<sup>st</sup> Edition (1986) Batsford Ltd

Elbridge, B & Wyn, J. (2011). Use of badger tunnels by mammals on Highway Agency Schemes in England. Conservation Evidence. 8: 53-57 2347\_paper1522badgertunnelmonitoringengland[2011,8,53-57]\_docx.pdf

Grilo, C. Bissonette, J. A. & M, Santos-Reis. (2008) Response of carnivores to existing highway culverts and underpasses: Implications for road planning and mitigation. Biodiverse Conserv 17: 1685-1699 Response of carnivores to existing highway culverts and underpasses: implications for road planning and mitigation | SpringerLink