



Martin Tett,
Leader,
Buckinghamshire Council,
The Gateway Offices,
Gatehouse Road,
Aylesbury
HP19 8FF

20th September 2022

Dear Martin,

**Re: HS2 Schedule 17 Application – Bacombe Lane to Nash Lee
Objections to Technical Submission**

We write in response to the application made 22nd August 2022 and wish to present our community objections, in support of your response to EKFB / HS2 Ltd.

We are deeply concerned that inadequate and non-compliant technical submissions have been made that fundamentally affect Wendover's amenity and environment (including Wendover Arm Canal, Weston Turville SSSI and the Chiltern AONB), which is in direct contravention of undertakings and assurances given in High-Speed Rail (London - West Midlands) Act 2017.

The grounds for objection cover:

- i) The Noise Demonstration Report has erroneously selected a noise mitigation scheme that does not uphold U&A 73 and hence the form of noise screening presented does not provide reasonable abatement for the community;
- ii) The Drainage assessment report is incomplete in that the proposed method of dealing with aquifer has not been designed nor has a hydrogeological impact assessment been completed and published that has been fully accepted by the Environment Agency, nor has any mitigation been presented in direct contravention of U&A 49 and 50;
- iii) That the public recreational area (previously the Wendover Cricket Ground) is not being reinstated in the Landscaping plans;
- iv) That elements of reinstatement (or replacement) of rights of way WEN/11 and WEN/6 and completion of the Greenway cycle path are not incorporated into the scheme and could involve visual features in the AONB.

The details of each objection are attached.

We therefore expect Buckinghamshire Council to relay these objections to EKFB and HS2 Ltd.

We also ask that Buckinghamshire Council relay our deep dis-satisfaction to EKFB and HS2 Ltd. Despite numerous technical meetings led by the Parish and local groups, both EKFB and HS2 Ltd have failed to take into account any of the reasonable alternative schemes regarding noise or



WENDOVER PARISH COUNCIL
The Clock Tower, High Street, Wendover,
Aylesbury, Buckinghamshire, HP22 6DU

Mitigation Action Group

hydrogeological impact mitigation. Furthermore, they have not given reasonable assurances, based on sound technical analysis, regarding the maintenance (or indeed increase) of water supply to the Wendover Arm Canal and protection of the Weston Turville SSSI. These are technical subjects that have been known to EKFB and HS2 Ltd for many years.

We would be grateful for your assurance that our concerns are relayed.

Yours sincerely,

Sheila Bulpett
Chair, Wendover Parish Council

Ron Petersen
Chair, Wendover HS2 Mitigation Action Group

cc.

- Mike Bisset (hs2planning@buckinghamshire.gov.uk)
- Peter Martin, Laura Leech, Toni Chapman, Buckinghamshire Council
- Clark Gordon, Environment Agency
- Rob Butler MP

Encl.



Planning Application PP-11486973 19/8/22 Schedule 17 AVDC P04 Nash Lee. . Objection 1; HS2 Nash Lee Noise Demonstration Report

Objection

Wendover Parish Council (WPC) objects to the determination of the Reference Application as presented in accordance with HS2 Act Schedule 17, Part 1 paragraph 2 sub paragraph (5) on the grounds that the assessment of the design presented in the Noise Demonstration Report (NDR) 1MC06-CEK-TP-REP-CS03_CL06-000002 Rev C01 does not comply with Undertakings and Assurance 73, nor has the assessment been correctly performed.

The NDR Executive Summary states *“The proposed mitigation designs have been selected on the basis that they reduce noise as far as reasonably practicable and represents the optimum balance between acoustic effects, other environmental considerations and costs”*.

However, this assessment will demonstrate why, as far as north Wendover is concerned, this is not the case.

The report considers four options for Wendover Green Tunnel North Portal to Wendover North Cutting:

- | | |
|----------|---|
| Baseline | Landform-only: 228 receptors above LOAEL (the improvement from 306 receptors in the ES is mainly the result of changes in the train specification). |
| 1. | 4m absorptive barrier: 145 receptors above LOAEL. |
| 2. | 5m absorptive barrier: 91 receptors above LOAEL |
| 3. | 6m absorptive barrier: 72 receptors above LOAEL |
| 4. | 10m absorptive barrier/retained cutting: 0 receptors above LOAEL |

No information is provided on the lengths and positions of the proposed noise barriers. No information is provided on the LA_{max} levels by receptor of each option, so it is not possible to tell what actual improvement each option provides. These are significant omissions which should be corrected, as this is essential information to properly assess the proposals.

Notwithstanding the very wide variation in LOAEL exceedance, EKFB assess all five options as being acoustically neutral.

This appears to be at total variance with the actual numbers above, even based on the limited information which is provided.

The NDR recommends the Baseline option.

Based on the ‘optimum balance’ argument (see above) option 2 should have been recommended., on the grounds that:



- Reasonable reduction of LOAEL exceedance is a requirement and this option provides most of the acoustic benefit available.
- Visual impact is minimal.
- As a Common Design Element, cost could be expected to be reasonable.

This is explained below against the headings which EKFB use – acoustic effects, other environmental considerations (visual) and cost.



Detail

i) Acoustic effects

EKFB justify their neutral acoustic assessment based on the low priority they assign to LOAEL exceedance:

“The HS2 L_{Amax} LOAEL value of 60dB is defined using WHO recommendations for the onset of effects on sleep. At these levels of exposure however there is a very gradual increase in the probability of sleep disturbance and there needs to be a significant increase in the magnitude of event noise levels before there is a notable increase in the probability of any disturbance. This explains why there is a 20dB difference in the HS2 L_{Amax} LOAEL and SOAEL values.

The predicted L_{Amax} presented in Section 7 of this report show that where the LOAEL values are exceeded, they will only be marginally exceeded. At these levels there will be very little or no difference in the propensity of the HS2 trains to cause disturbance. For example, the difference in the propensity for events of with [sic] L_{Amax} levels of 60 and 63 dB will be undetectable [sic]. As shown in Appendix E, the area covered by this noise demonstration report is already exposed to levels of transportation noise where the L_{Amax} LOAEL value is regularly exceeded. It is therefore likely with the proposed mitigation in place any effects on sleep during the night will continue to be dominated by existing exposure to road and rail noise events.”

This analysis they present of the impact of LOAEL is irrelevant. Information paper E20 explains “The LOAEL is described in PPG as the level above which “noise starts to cause small changes in behaviour and/or attitude... Potential for some reported sleep disturbance. Affects the acoustic character of the area such that there is a perceived change in the quality of life” and adds “HS2’s sustainability policy sets out HS2 Ltd’s commitment to be an exemplar project.”

Hence the commitment “The nominated undertaker will take all reasonable steps to design and construct altered roads, and to design, construct, operate and maintain the operational railway so that the combined airborne noise from these sources, predicted in all reasonably foreseeable circumstances, does not exceed the lowest observed adverse effect levels set out in Table 1 of Appendix B.”

The commitment is quite clear. It does not say “will only exceed by a few dB”, it says “does not exceed”. It does not say “The nominated undertaker will form their own view of how important LOAEL is and use this to decide whether it may be exceeded”, it says “The nominated undertaker will take all reasonable steps...”. The commitment is repeated in U&A 73. The EKFB approach is in clear breach of this. They are allowing their own opinions on the significance of noise levels above LOAEL to take precedence over HS2’s stated policy.

The HS2 policy was not lightly arrived at. On 8/07/2014 Mr Rupert Thornely-Taylor, expert witness, gave a presentation to the HS2 Select Committee on noise, in which he noted “*the thresholds of LOAEL are really quite low, generously low*”. He also explained the detailed process which had gone



into the formulation of the wording, and its authority: *“I will show the way that HS2 has approached the application of LOAEL and SOAEL to the application policy. It has done that through a long process which has included review by a body called the Acoustic Review Group, which included not only members of the HS2 project but Government officials. The LOAEL and SOAEL application also is to be found in the Environmental Statement which, of course, is signed off by the Secretary of State for Transport after he consulted the relevant Departments and officials. The application of LOAEL and SOAEL and the numbers attached to them that are in the published Information Papers are, effectively, the Government's interpretation of its policy, having been signed off in that way.”*

It is therefore clear that the wording of E20 has been carefully considered, signed off, and means exactly what it appears to mean. EKFB are obliged to follow it whatever their own opinions may be.

Oliver Bewes (head of noise assessment, HS2) gave a presentation on “Reducing operational noise as far as reasonably practicable¹”, in which he quotes the West Ruislip Portal S2 noise demonstration report as a model. This evidently takes U&A73 seriously. It evaluates 13 options, and for each provides a sensible assessment of the acoustic benefit (unlike the N for all options in the Wendover NDR). The key paragraph is “Compared to the ES (as amended), the results of The Design indicate a reduction in the number of residential properties exceeding the day time LOAEL (46 fewer), night time LOAEL (29 fewer) and a reduction in moderate and minor impacts (3 and 26 fewer, respectively). Therefore, The Design will provide a material reduction in the adverse noise impacts (using EIA methodologies).” So, they are saying that reduction in the number of properties exceeding LOAEL is material reduction.

EKFB also claim they have demonstrated that LOAEL is regularly exceeded now. They have done no such thing. They quote data from a single measurement device in Bridleways, the point closest to the bypass and hence the noisiest in north Wendover. They quote old data before the vLNS was installed. Their recommended proposal exceeds LOAEL at 228 receptors, most of which are much further from the bypass and where the existing noise levels will be much lower. The data they do present shows that even at this location, LA_{max} is generally below 60dB at night.

ii) Other Environmental Considerations

It is clear from the EKFB report that this refers to the visual impact of barriers. They have overstated the visual impact of (say) a 5m barrier based at the bottom of a 10m cutting. They show one picture, of the 10m barrier option, where only the very top of the barrier is visible. It is clear that had they instead shown a 5m barrier from the same point, it would not have been visible.

They say the barrier would be “visible in some elevated views from the realigned PRow which traverses over the tunnel in proximity to the north portal. It is anticipated that the barrier would not be visible from the wider elevated views at Bacombe Hill and Coombe Hill and from the adjacent A413. Over time planting on the landscape earthworks adjacent to Wendover Cutting would help to contain the structure, but it will continue to be visible from the PRow above the tunnel portal.”

¹ <https://www.environmental-protection.org.uk/wp-content/uploads/2020/12/oliver-bewes-hs2-reducing-noise-as-far-as-reasonably-practicable.pdf>



This appears to be a very minor problem. The barrier is invisible from Coombe Hill and the A413, which is where most observers will be. It is only visible from a short section of one footpath above the portal. However, the portal structure itself, which is a considerably taller and more massive structure, will also be visible from here, as will the track and its power lines, and the addition of a barrier hardly makes the problem significantly worse. Visibility from a short section of one footpath seems to be a very minor issue compared with noise mitigation.

iii) Cost

The report does not set out the cost of the barrier options. However, these are Common Design Element barriers widely used along the entire track, so the cost is evidently acceptable in other contexts. It is difficult to see why the cost is not acceptable in north Wendover once the importance of the LOAEL commitment is accepted. A standard Common Design Element barrier would appear therefore to be a “reasonable step” to take to meet the commitment.

Benefits are assessed using a modified WebTag methodology created by HS2. WebTag only considers average noise (LA_{eq}) but HS2 have added a calculation to take account of LA_{max} . However, this ascribes no benefit unless LA_{max} is above 65dB and more than 20dB above LA_{eq} . Since LOAEL for LA_{max} is 60dB, this calculation is totally inappropriate for assessing whether all reasonable steps have been taken to ensure noise is kept below LOAEL.

Remedy

It is understood that Buckinghamshire Council is not able to refuse approval for a Schedule 17(3) proposal on noise grounds, but may request further information and make comments, and may refuse a subsequent Schedule 17(9) proposal on noise grounds. We therefore propose and request that Buckinghamshire Council:

- i) Request the essential information missing from this report, namely the exact position and length of the noise barriers in each option which includes a noise barrier and the LA_{max} values at each receptor for each option.
- ii) By way of comments, indicate that it is not in agreement with the proposal on the grounds explained in this report.
- iii) Request that EKFB bring forward a further mitigation scheme in advance of submission of a Schedule 17(9) proposal which complies with Undertaking and Assurance 73, for example the noise barriers proposed under Option 2.
- iv) Indicate that in the absence of such a further mitigation scheme, Buckinghamshire Council would be minded to refuse any Schedule 17(9) proposal on the grounds that all reasonable steps have not been taken to ensure that noise does not exceed the lowest observed adverse effect levels.



Planning Application PP-11486973 19/8/22
Schedule 17 AVDC P04 Nash Lee. .
Objection 2; Hydrogeology

Objection

Wendover Parish Council (WPC) objects to the determination of the Reference Application as presented in accordance with HS2 Act Schedule 17, Part 1 paragraph 2 sub paragraph (5) on the grounds that the assessment of the design presented of the hydrogeological impact has neither been completed nor accepted (nor any derogation to the Water Framework directive given) by Environment Agency and that the proposed scheme as presented diverts ground water and surface water from their current natural runaway locations , including Weston Turville SSSI to Stoke Brook and its tributaries.

This is directly contrary to undertakings and assurance numbers 49 and 50.

Introduction

The area of development covers an area with various chalk bedrock formations with aquifer properties situated in the upper Thames catchment. The Coombe Hill aquifer feeds various springs in Castle Park and Wendover Brook that in turn feed the Weston Turville SSSI, as shown in Fig 1. The ecology of the SSSI is particularly sensitive to maintenance of water levels and any reduction in water fed by the current stream system would have to be drawn from the Wendover Canal (and trust) at Blue Sky Brook.

The railway cutting in this section bisects the aquifer below the level of the natural water table and the scheme proposed shows a “low permeability wall” and a shallow filter drain that will divert aquifer water and discharge it into Stoke Brook.

Schedule 17 AVDC P4 Nash Lee Drainage Mitigation Report 1MC06-CEK-TP-REP-CS03_CL06-000010 Rev.C02, Section 2.1.3.1 Groundwater, states *“At the time of writing this report the design for the low permeability wall is being developed and the applicability assessment is being discussed with the Environment Agency “.*

The report further states that the amount of water diverted is calculated at 21 l/s .

WPC have previously been briefed by HS2 Ltd/ EKFB and had reviewed Wendover Green Tunnel and Wendover North Cutting 3D Groundwater Modelling 1MC06-CEK-EV-REP-CS03_CL06-000019 Rev P01 and provided a detailed response 17th March 2001 which pointed basic flaws in the analysis,



including the assumed flow state of Wendover Brook and the need to calibrate the model before demonstrating the impact of the railway cutting.

Following the response technical meetings involving WPC, Buckinghamshire Council, Environment Agency and HS2 Ltd/EKFB confirmed the need for the modelling to be produced to the satisfaction of the Environment Agency.

WPC and Buckinghamshire Council Flood team further received a report Wendover Green Tunnel and Wendover North Cutting 3D Groundwater Modelling: Stage 2 1MC06-CEK-EV-REP-CS03_CL06-000056 Rev P01.1 on 26th October 2021 from HS2 Ltd, however this version of the detailed report was incomplete without a numerical model or calibration results, nor any conclusion.

It is not known whether this report has now been updated to the full satisfaction of the Environment Agency, whether the calculation of the volume of water of 20 l/s has been accepted and whether the assessment of the impact of the proposed low permeability wall has been accepted.

Remedy

- i) HS2 Ltd should complete the design of the Low Permeability wall;
- ii) HS2 Ltd should provide the detailed ground water modelling and risk assessment to demonstrate impacts of the cutting and low permeability wall and demonstrate that mitigations have been built into the scheme design, in accordance with Undertakings and Assurances 49 and 50.
- iii) The proposed a scheme of mitigation, by diverting storm water to Hampden Pond via holding ponds, South of the Green Tunnel portal and from there to be discharged into the Wendover Arm canal, should be considered. There is a sluice which already discharges into Blue Sky Brook that could be used to provide replenishment water to the Weston Turville SSSI reservoir. The mitigation proposal would therefore reduce the risk of increased storm flows in to Stoke Brook which is already susceptible to flooding risk in the Aylesbury conurbation.
- iv) In either case, HS2 Ltd should secure appropriate Water Frame Work directive compliance notice and Schedule 33 acceptance from Environment Agency.

We do not consider that Buckinghamshire Council can consider the form of drainage and the scheme cross sections presented in this this schedule 17 application without a parallel schedule 33 submission acceptable to the Environment Agency, being confirmed.

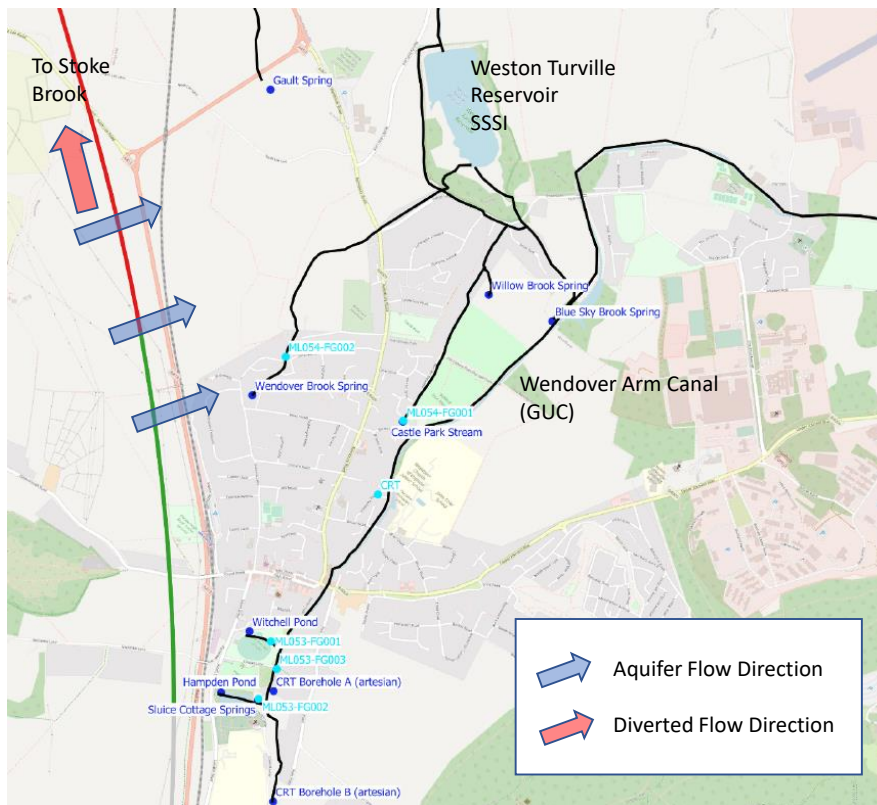


Figure 1; Coombe Hill Aquifer Diversion

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Schedule 17 AVDC P04 Nash Lee.
Objection 3; Recreational Space

Objection

Wendover Parish Council (WPC) objects to the Landscaping proposal as presented in accordance with HS2 Act Schedule 17, Part 1 paragraph 2 sub-paragraph 5(a)i and Part 1 paragraph 12 sub paragraph (1) on the grounds that the land previously used by the Wendover Cricket Club does not appear to be reinstated as a public recreational space.

Introduction

The area of land previously occupied by the Wendover Cricket Club was considered during development of the Act, recognizing its importance to the local community both as a cricket ground and for a variety of other purposes with easy access from the village from the bridge from the Station forecourt over the Chiltern Line and A413 Wendover Bypass. The area is shown highlighted in the marked-up extract from the May 2017 “HS2 Planning Context Report for AVDC” shown in Figure 1.



Figure 1; Marked up extract from HS2 Planning Context Report for AVDC, May 2017

However, the landscape design in the submitted proposal has significantly reduced the area available due to extension of the eastern face of the Green Tunnel and presence of a surface drain, as shown in Figure 2 below. This restricts the reinstatement of the land as a levelled community amenity, allowing creation of a football pitch, netball or tennis courts; or a flexible event space.

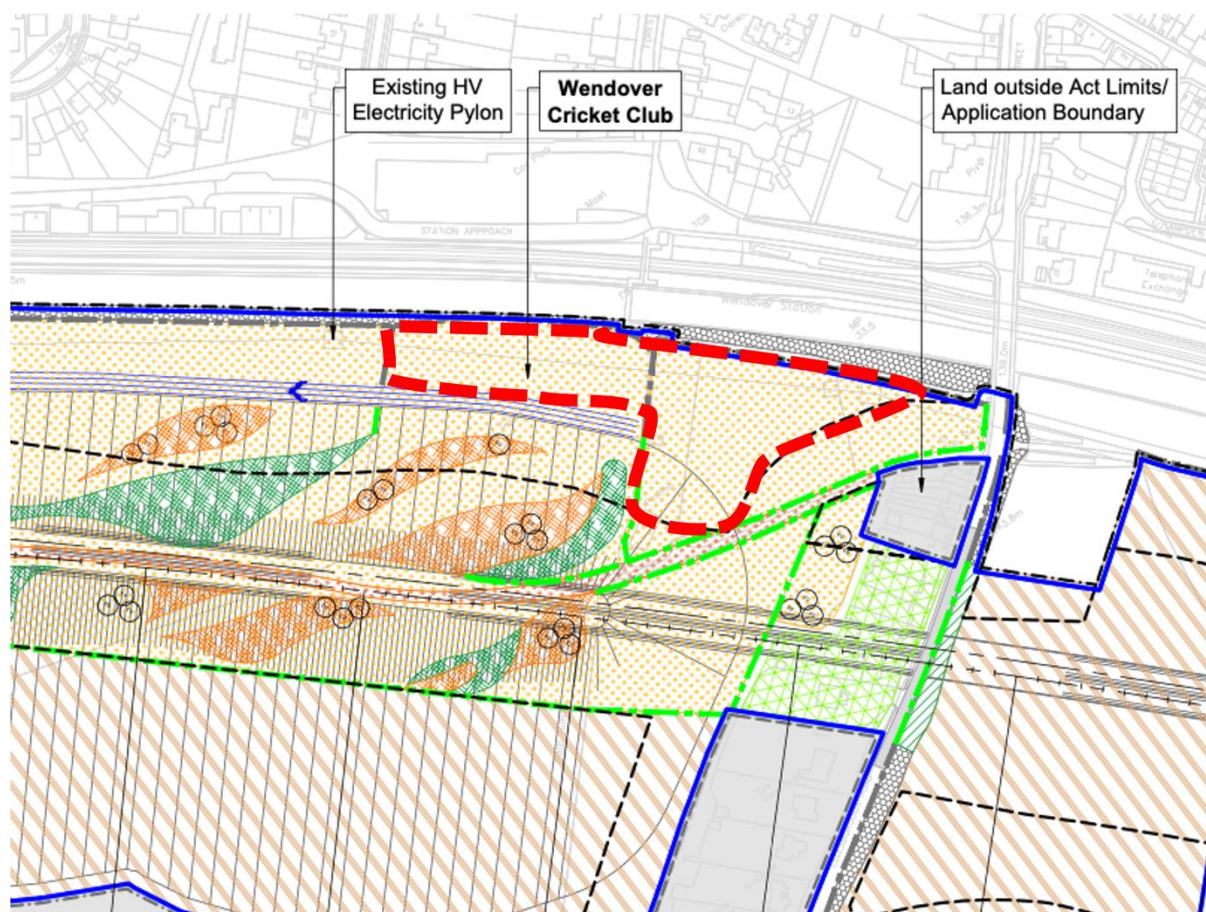


Figure 2; Marked up extract from Landscape_Planting_Plan_Sheet_2_OF_2-2419788.pdf

This is a considerable change from the expectations set in the HS2 Chilterns AONB Detailed Design Principles where the majority of the 10.4 hectare area between Ellesborough Road and Folly Bridge could be usable as shown in Figure 3. In the submitted plans this whole area is bisected by a surface drainage ditch, which could potentially be relocated to maximise the space usable by the community; redesigned to form a feature; or moved underground.

The Environmental Master Plan Indicative Mitigation letter (AVDC_P4_NASH_LEE_EMP_LETTER2420017) identifies the proposed provision of the “Wendover North Link” section of the Greenway cycle path, but it is not clear how this is accommodated in the submitted plans.



Figure 3; Marked up extract from HS2 Chilterns AONB Design Group DDP Part 1 Report, November 2017

Remedy

- i) Recognising that the Indicative Mitigation plans are currently for consultation and should be subject to future Schedule 17(9) submissions; the Council has powers under Schedule 17(8) for land restoration; that the council should demand that HS2 Ltd reinstate a recreational amenity in a similar location to the land previously used by the Cricket Club. We note that a new Cricket Ground is planned at Tring Road, but this is not a suitable replacement for the other non-cricketing users of the recreation ground close to the village.
- ii) That the recreational space should incorporate vehicular access for grounds maintenance and car parking; in addition to the existing pedestrian access route over the bridge from the Station forecourt.
- iii) Re-instatement of the previous Clubhouse and Grounds maintenance buildings to provide a community facility incorporating toilets, a kitchen, and a flexible meeting room space suitable for alternative use as a badminton court or playgroup facility.

Planning Application PP-11486973 19/8/22
Schedule 17 AVDC P04 Nash Lee.
Objection 4; Public Rights of Way

Objection

Wendover Parish Council (WPC) objects to the Landscaping proposal as presented in accordance with HS2 Act Schedule 17, Part 1 paragraph 2 sub-paragraph 5(a)i and Part 1 paragraph 12 sub paragraph (1) on the grounds that the designs submitted do not include adequate definition of the Public Rights of Way [PRoW] with potential visual impact in this Area of Outstanding Natural Beauty [AONB].

Introduction

The designs as submitted exclude any definition of the PRoWs affected by the construction of the line (other than ELL/20) on grounds of “not needing a new structure/building and reinstatement of the green tunnel grassland once constructed”.

The pre-HS2 arrangement of local PRoWs is shown in Figure 1 below, taken from the Council’s online PRoW map (<https://prow.buckscc.gov.uk/standardmap.aspx>).

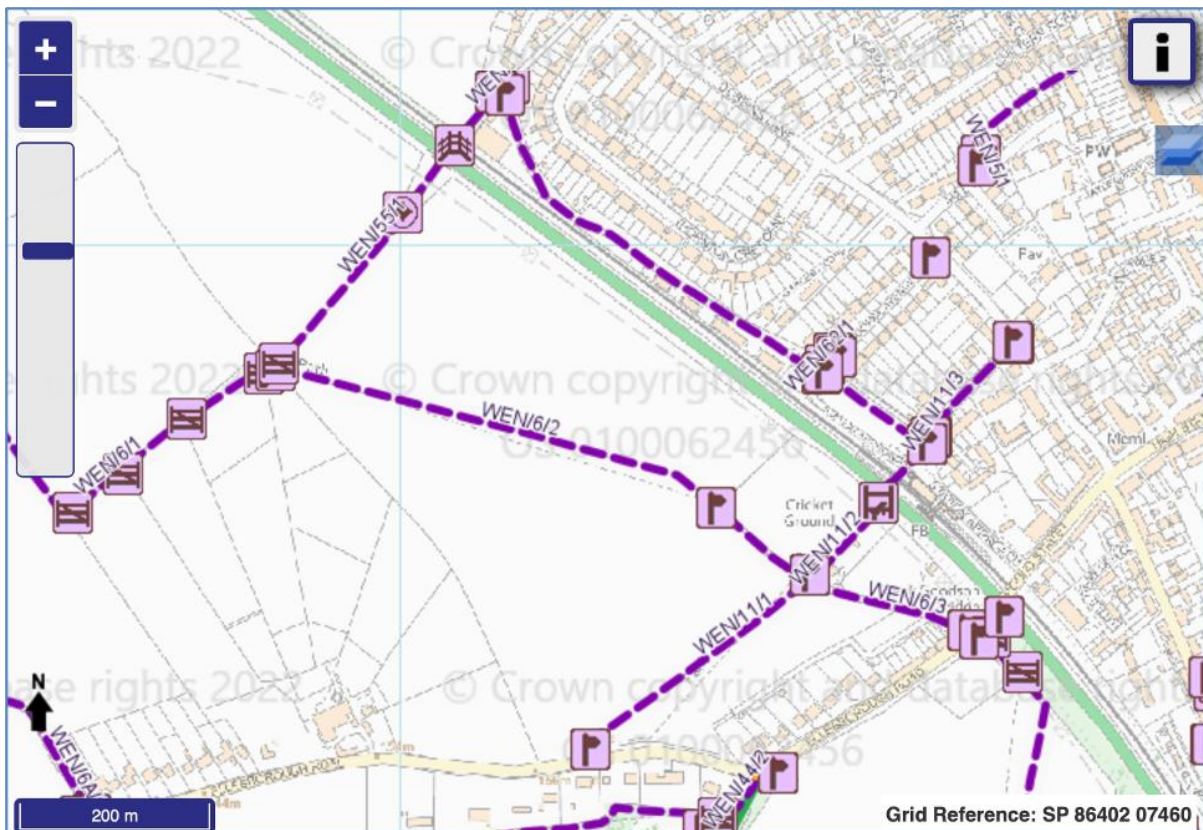


Figure 1; Local routes defined on the BC online PRoW map.

Our understanding of HS2's intentions are based on pre-submission scheme design documentation provided by EKFB in 2019 (shown in Figure 2 below), and consideration of the green dotted hedgerow lines shown on the now submitted Landscape Planting Plan given in Figure 3.

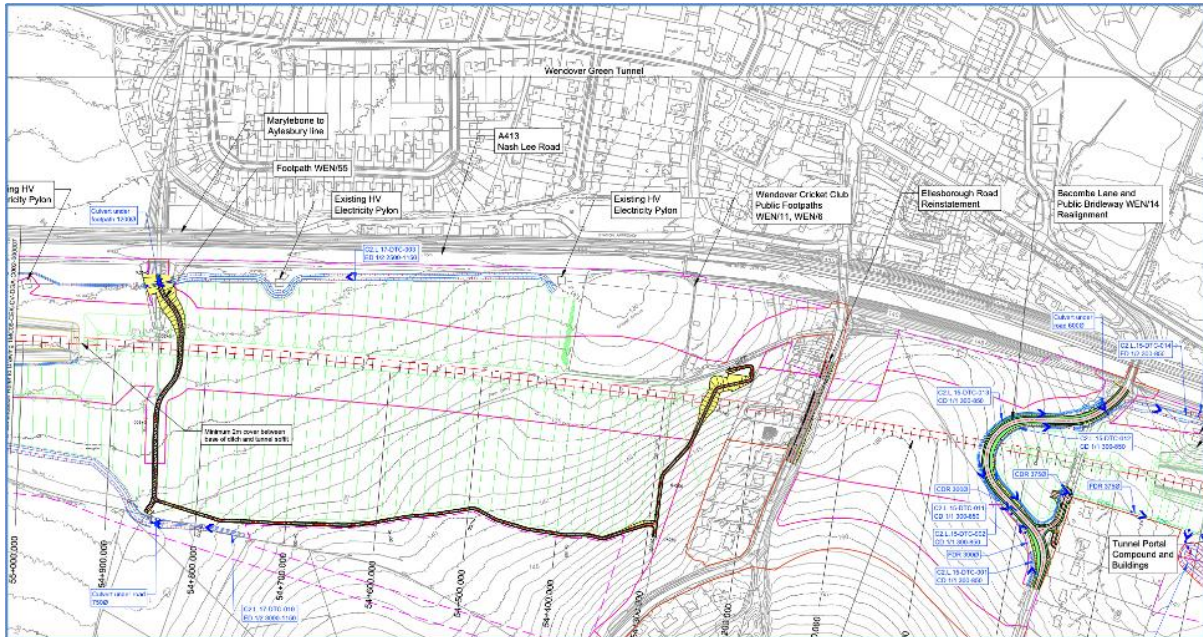


Figure 2, EKFB PRoW diversion, from Scheme Design "Earthworks and Drainage Layout", Rev C01, October 2019.

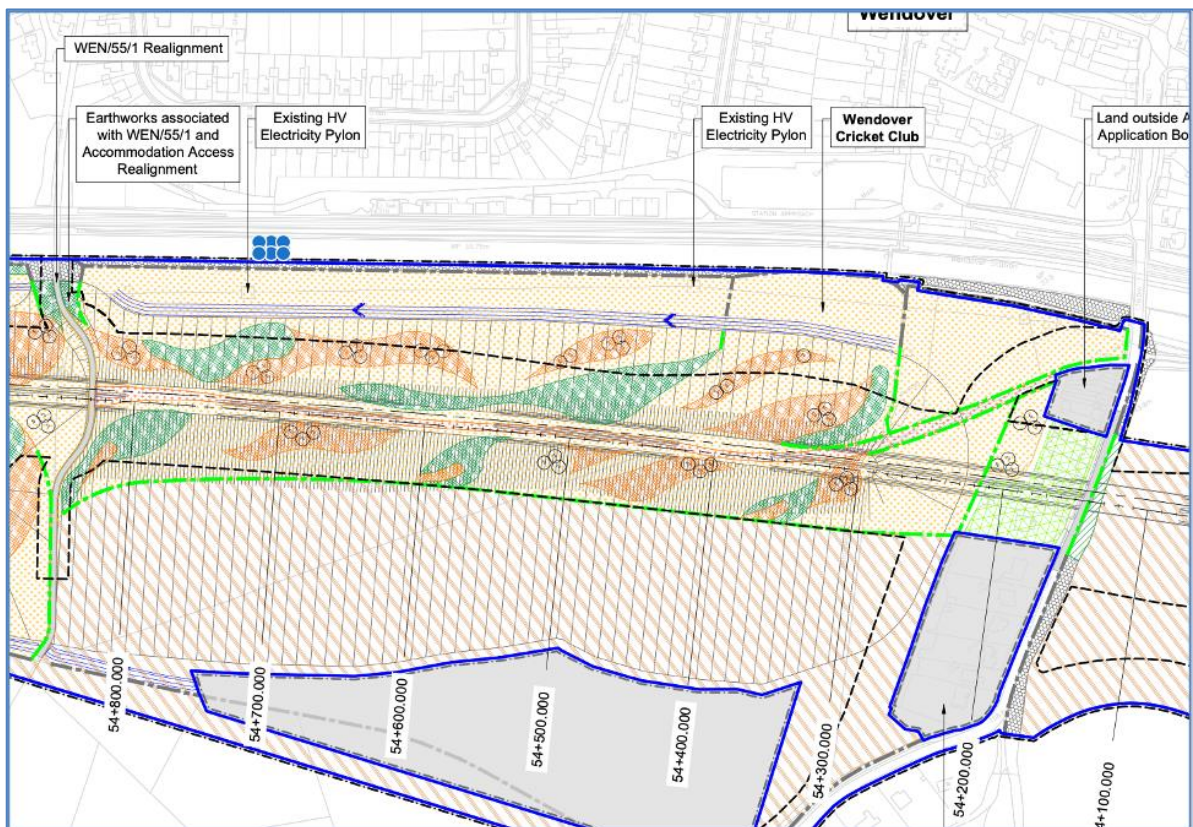


Figure 3; Extract from the “Landscape Planting Plan, sheet 2 of 2 - 2419788”

Concerns

From these drawings, Wendover Parish Council has the following concerns.

1. There does not appear to be any provision to reinstate the link between Wendover Station and Ellesborough Road, previously formed by WEN/11/1 and WEN/11/2.

Prior to its closure by HS2 in February, this formed a well-used, off-road route travelled by school children and commuters accessing the Wendover Campus schools and Station from the Ellesborough Road area. It was also frequently used by visitors to the area seeking to access Coombe Hill or the “Aylesbury Ring” from the Station.

2. The WEN/11/1 and WEN/11/2 route needs to have a suitable gradient to rise up the side of the green tunnel at chainage 54+280 or thereabouts. In the scheme design this was anticipated as a hairpin diversion with a potentially visible cutting, presumably to provide a flat surface route.

However, (noting that the bridges over the A413 bypass and Chiltern Line on the WEN/11/2 route have staircases) the natural direct route for pedestrians will be straight up the gradient of the green tunnel. Consequently, some sort of staircase structure would be appropriate at that point.

3. The WEN/6/2 (Aylesbury Ring) route diagonally across the field (from the junction with WEN/55/1 to the Cricket Ground) has been diverted across the western edge of the Land Available for Use which is appropriate during the works. However, retaining this as a permanent feature (as suggested by the Scheme Design) is unlikely to be effective as the natural route used by walkers between the two points will be a diagonal path due to the contours of the eventual landform as shown in Figure 4 .

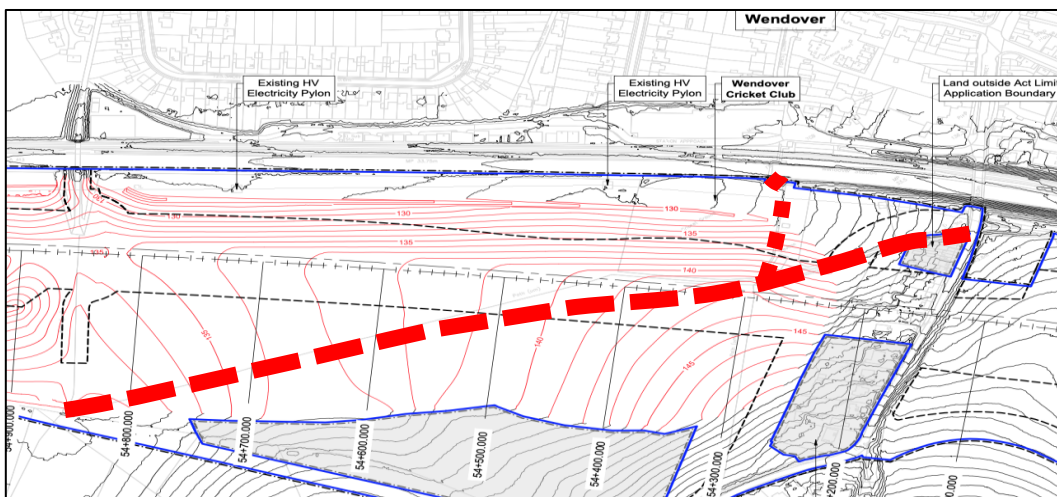


Figure 4; Anticipated natural routes for WEN/6/2, WEN/6/3 (dashed), and WEN/11/2 (dotted)

4. There are several issues regarding the design near Folly Bridge at Chainage 54+850.

It is not clear why there is a need for any realignment of WEN/55/1 at Folly Bridge. This is

thought to be an after effect of the desire of the Select Committee to maintain the WEN/55/1 route while the line is built. However, EKFB have concluded that it is impracticable to keeping this route open during the construction of the Green Tunnel and associated cutting works and haul road activity. Consequently, it may be preferable to keep the PRoW on the pre-HS2 alignment.

Consideration is also needed for the observation platform now proposed in the submitted “Environmental Master Plan Indicative Mitigation Letter – 2420017”, and also the interchange with the new Wendover Link “Greenway” North and South junctions as proposed in the HS2 Chilterns AONB Design Review Group Detailed Design Principles (as shown in Figure 5). The actual design of the Wendover Link is not detailed in the Landscape Plan shown in Figure 3 above.



Figure 5; Junction of WEN/55/1 and the Greenway at chainage 54+850, from the HS2 Chilterns AONB Design Review Group DDP, November 2017

The combination of these four factors suggests that the design of this area could result in structures with visual impact inside the AONB which should be considered at this time.

Remedy

- i) The Council should demand further design detail to ensure that all the existing PRoW routes will be re-instated and construction of the new “Wendover Link” committed as components of the project funded by HS2 Ltd.
- ii) While the Indicative Mitigation plans are currently only for consultation; the Council should be aware of the potential for Visual Impacts in the AONB associated with the reality of the impact of the line on the local PRoWs. The Council should demand further design detail for landscape visual impact assessment during this Schedule 17(3) process rather than attempting remediation during future Schedule17(9) submissions.

ENDS