VINCENT + GORBING

South-west Hertfordshire:

Borehamwood

Secondary School Site Search Report

On behalf of Hertfordshire County Council

August 2021 (Rev 1)

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SECONDARY SCHOOL SITE SEARCH REPORT: BOREHAMWOOD

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1.0 INTRODUCTION

1.1 Vincent and Gorbing have been commissioned by Hertfordshire County Council (HCC) to undertake a search for potential secondary school sites in south-west Hertfordshire in response to confirmed secondary education need arising from potential housing and demographic growth identified during the current preparation of new local plans.

1.2 HCC is working with local planning authorities to ensure that a robust infrastructure strategy is in place for the delivery of new secondary schools where they may be required. It is understood that the site search will help to inform the early stages of plan preparation to identify suitable sites that could be allocated for secondary school use. It is acknowledged that sites identified for education purposes may be suitable for other uses. For example, a site that is suitable for residential development may or may not be suitable for education use. A site suitable for education use may or may not be suitable for residential development. Some sites may be suitable for both uses. The decision as to which sites should be allocated for residential development and which for education use is a matter for the local planning authority based on the evidence available. It is for the local planning authority to resolve competing interests, to liaise with all stakeholders and to ensure the infrastructure needs of the district are fully met in emerging local plans.

1.3 NPPF 2021 (para 15) is clear that up to date plans should “provide a positive vision for the future of each area; a framework for addressing housing needs and other economic, social and environmental priorities” including strategic priorities for education (para 20 c). It is made clear in para 24 that “local planning authorities and county councils (in two tier areas) are under a duty to cooperate with each other”. In relation to education need NPPF (para 95) states that “it is important that a sufficient choice of school places is available to meet the needs of existing and new communities. Local planning authorities should take a proactive, positive, and collaborative approach to meeting this requirement, and to development that will widen choice in education. They should: give great weight to the need to create, expand or alter schools through the preparation of plans…” Therefore, NPPF emphasises the need to ensure that where an education need is identified in communities it is fully met in local plans.

1.4 HCC has identified a need for one 8fe secondary school site to serve potential housing and demographic growth in Borehamwood. This report sets out the conclusions of the site search for this area. It does not detail or justify the education need requirement, that is a matter for HCC. Neither does it seek to make judgements about the proximity of potential school sites in relation to existing school sites. That is a matter for HCC. In parallel a separate secondary school site search report has been prepared for south-east Watford and Bushey.

1.5 Section two sets out the methodology used for identifying potential secondary school sites of the appropriate size and suitability. This methodology is common to all site search areas.

1.6 Section three presents the outcomes for the Borehamwood site search. Site visits were undertaken in July 2020.

1.7 Section four comprises the summary and conclusion.

2.0 SITE SEARCH METHODOLOGY

2.1 This section of the report sets out: the projected need for a new secondary school in Borehamwood; the required site size and site characteristics for a 8fe secondary school; the sequential site search methodology used for searching for a site firstly in the urban area and then secondly in the non-urban area; and, finally the process for individual site analysis followed by site ranking.

EDUCATION NEED

2.2 HCC has several statutory duties in relation to the provision of additional school places, namely:

- Promoting high standards of education and fair access to education
- Planning and commissioning school places in its area
- Extending diversity and choice
- Co-ordinating admissions for all maintained schools and academies in the normal admission round
- Resourcing shared maintenance, improvement to and provision of the built environment and securing value for money

2.3 The role of HCC in ensuring sufficient supply of suitable school places is that of a commissioner rather than as a direct provider of school places. HCC has a duty to secure sufficient school places in its area and to allocate those places to the children of all parents who want one.

2.4 HCC fulfils these planning responsibilities by forecasting the demand for school places to ensure sufficient school places are available to meet demand within mainstream schools. It negotiates the right number of places on an annual basis and undertakes longer term strategic planning.

2.5 HCC produces local forecasts of the demand for secondary school places to anticipate a shortfall or surplus of places by (Education) Planning Areas. Pupil numbers are forecast considering:

- Historic pupil numbers in each school year group
- 0-5-year old children registered with general practitioners
- Primary pupils moving on to secondary school
- Additional pupils arising from new housing developments
- Pupil movement patterns taking account of cross are flows both within planning areas within Hertfordshire and out of the county as well as from the independent sector

2.6 Secondary school forecasts are based on actual children, both in schools and registered with general practitioners for 10 years ahead together with a calculation of additional pupils arising from new housing developments.

2.7 The HCC summer forecast (2020/21) for secondary school places is attached at Appendix 1. The forecast shows that for Borehamwood there is a deficit of places across the plan period from 2025-26 – 2029-30. This deficit underpins a requirement for a secondary school site to be delivered early in the plan period. HCC have identified that this requirement can be met through the provision of a new 8fe[1] secondary school in Borehamwood.

SITE SIZE AND BUILDING SIZE

2.8 School standards have recently changed (School Premises Regulations 2012) and provide a much less stringent approach to school standards. HCC has previously agreed to use the site areas that refer to Building bulleting 103 for primary and secondary guidance as these are deemed a suitable standard for school premises.

Table 1: Site size areas for secondary schools: BB103 compliance

6fe (ha)	8fe (ha)	10fe (ha)	Category/Comments
>8.36	>10.78	>13.20	Preferred – should allow a fully BB103 compliant school to be built on the site, including where there are minor abnormal features or constraints.
6.66 – 8.36	8.58 – 10.78	10.50 – 13.20	Sub-optimal – may allow a fully BB103 compliant school, subject to any constraints or abnormal features which reduce the developable/usable area. May require a DPF.
<6.66	<8.58	<10.50	Would not normally be considered. Should be included in the 'long list' in case they would be viable as detached playing fields (dpf) or as 'split site' solutions.

2.9 The site size requirements set out in Table 1 above indicate that for a **8fe** school there is a preference for a site to be more than **10.78ha** which will allow for any potential abnormal site constraints. Should there be no suitable sites of more than **10.78ha** then a site of between **8.58ha-10.78ha** could be identified but this would be sub-optimal. Sites of under **8.58ha** would not normally be considered but could be part of a split site solution.

2.10 So, the preference for the Borehamwood site search is to identify a **10.78ha** > site which would include a building zone of **3.56ha**. Should a suitable site of this size not be identified then a sub-optimal site of between **8.58ha-10.78ha** could be identified.

[1] School provision is often described in terms of "forms of entry".1 form of entry (fe) equals 30 places per year group. Secondary schools have five-year groups from Year 7 through to Year 11 and Sixth forms with lower and upper year groups.

2.11 Ideally an 8fe secondary school should have all the facilities it requires, including playing fields provided on a single site. There may, however, be situations where a split site is identified as preferential. In this circumstance the site size for a school building zone would be slightly higher because more facilities would be needed in the school buildings location to account for a detached school playing field. In this scenario for an **8fe** secondary school a school building zone of **4.38ha** is required and a playing field of **6.4ha** would be required making up the total site area of **10.78ha**. In the event of a split site scenario there would need to be no more than **400m walking distance** between the two sites to ensure that the detached playing field could be easily accessed during the school day for curriculum use.

2.12 The building zone of any secondary school site needs to be able to accommodate a minimum footprint which is generated from the number of pupils attending the school (based again on school size).

Table 2: Building footprint: BB103 compliance

School size	No. of pupils	Gross area m^2
6fe	1152	9,023
8fe	1535	11,557
10fe	1920	14,014

2.13 Table 2 above shows the building footprint requirements for each size of school which assumes a typical curriculum, standard labs, hall with bleacher seating, 60- minute dining including school hall, 70% staying on rate and classrooms at HCC standard size. These footprint requirements are utilised when a site is identified as preferential and development principles plans are being prepared which shows the extent of the building zone the extent of playing fields and, how the site can be accessed.

SEQUENTIAL SITE SEARCH METHODOLOGY

Study area mapping

2.14 The site search begins with the identification of the study area which is mapped onto an Ordnance Survey base. The broad study area is based on the secondary education planning area in which the education need is identified. The study area boundary is then identified using natural boundaries (e.g., roads/railways/administrative boundaries). As part of the interim meeting held with the local planning authority the study area boundary is explained, discussed, and agreed. Adjustments to the study area boundary may be made after the interim meeting with the local planning authority.

2.15 The local planning authority can supply local information on sites being promoted which can be added to the study area mapping. Some of the sites being promoted for other uses (e.g., residential development) may also be suitable for education use. It is for the local planning authority to assess and weigh the education need alongside other needs and to plan accordingly in line with Government advice.

Urban area site search

2.16 Once the study area is agreed then the sequential site search commences. The sequential site search is a two-stage process: firstly, an urban area site search and secondly a non-urban area site search if the urban area site search does not yield any suitable sites.

2.17 The urban area site search begins with a mapping of all HCC owned land, playing fields and open spaces, open land, allotments, and employment areas. Sites that might be released for development as part of any local plan review are also mapped within the urban area.

2.18 Once this mapping is completed each of the sites identified is measured to determine whether it falls within the site size range, in this case **8.58ha-10.78ha** or whether there are smaller sites of **4.38ha** with sites for a detached playing field of **6.4ha** within a **400m walking distance.** A radius of 400m walking distance is applied to the mapping where sites are **4.38ha** or more. HCC considers it is reasonable in any split site search to identify sites which collectively deliver the preferred site size rather than a sub-optimal solution.

2.19 If there are sites that are more than **4.38ha** with another site of **6.4ha** within a 400m walking distance, then the sites are taken forward for further consideration.

Non-urban area site search

2.20 The non-urban site search begins with a mapping of all the potential environmental constraints where these exist around the settlement boundaries. These constraints fall into two categories: category 1 constraints that preclude development and category 2 constraints that may hinder development. Category 1 constraints comprise: woodland areas, conservation areas, parks/gardens, Scheduled Ancient Monuments, Areas of Outstanding Natural Beauty (AONB), active golf courses (unless identified as potential future housing sites), landscape designations, landscape conservation areas), sites of special scientific interest (SSSI), nature reserves, wildlife sites, environmental agency designated flood zones 2 and 3 (where the majority of the site is covered by this designation). Sites in these locations are not considered suitable for development.

2.21 Category 2 constraints include: areas of archaeological interest (as development mitigation might be sought prior to development), noise sources (which could be mitigated through noise attenuation measures), playing fields (as these might not be in active use), and designated public footpaths, restricted byways and bridleways which may possibly be diverted or may pose a constraint to the way in which the site is developed. These constraints may not necessarily preclude development on the site.

2.22 It should be noted that this methodology does not entirely rule out development constraints since until detailed site investigations are completed, site constraints are not always fully known. It does however provide an initial site sieving mechanism to identify the sites with the best prospect for secondary school use.

2.23 Sites within areas identified by local planning authorities as potential areas of growth were also mapped onto the non-urban area plans. It was agreed with the County Council and in meetings with the local planning authorities that these potential areas of growth could alternatively accommodate secondary school sites along with other uses if the site-specific criteria above could be met.

2.24 Hertsmere Borough Council supplied the HELAA sites which were added to the mapping for both urban and non-urban areas.

Site identification

2.25 Once Category 1 and 2 constraints are mapped, a short list of sites outside of the urban area of more than **8.58ha** (ideally more than **10.78ha**) is prepared excluding any category 1 constraints areas (as set out above). Sites are identified where they: adjoin the urban area or settlement boundary, and adjoin a road (A road, B road and minor road).

2.26 These basic requirements are needed to ensure the site is sustainable: within walking distance of the existing population and/or any proposed expansion that vehicular access can be achieved, and that there is minimum encroachment into the Green Belt. If there are Category 2 constraints a larger site area may need to be identified to ensure there is flexibility to deliver the school should those constraints affect development potential.

Site analysis

2.27 Once the shortlisted sites are identified a planning appraisal is undertaken using a proforma which captures the same information for each site. The proforma includes a standard list of positive and negative site attributes which are applied to all sites to enable a consistent approach to the appraisal. The planning appraisal includes a site visit to assess the site and a record of the site visit is taken through site photographs. This is to ensure that all matters are fully considered on each site. The proforma template is attached at Appendix 2.

2.28 Following the initial site visit and planning appraisal some sites may be rejected if it is considered that the site is unlikely to be suitable for development. These reasons are set out in the conclusion to the planning appraisal for each site.

2.29 Following the completion of the initial site visit and planning appraisal those sites that are not rejected are proposed for a high-level transport appraisal. The high-level transport appraisal examines site compliance to LTP4 (Local Transport Plan) policies, means of access appraisal (to confirm the initial planning appraisal), and an assessment of the local highway network. This highways appraisal is undertaken by Civil Engineering Consultants Stomor Ltd. and prepared in consultation with HCC Highways.

2.30 Sites may then be rejected following transport appraisal if there is no suitable and safe means of access or if sustainable transport modes cannot be achieved.

2.31 It should be noted that all transport appraisals contained in this report were prepared during the period of the Covid-19 pandemic. Therefore, traffic conditions at the time of writing do not reflect former ‘typical’ traffic condition and as such it is not possible to comment upon existing highway conditions in terms of congestion in the vicinity of the sites. Further work would be required when traffic levels return to their pre-Covid-19 levels.

Site ranking

2.32 The final list of potential sites is then ranked according to their planning and highways appraisal performance and a recommendation is made.

3.0 BOREHAMWOOD SITE SEARCH

3.1 This section of the report presents the outcomes for the Borehamwood site search summarising the outcomes from the urban and non-urban site search, and the identification of a preferred site(s).

URBAN AREA SITE SEARCH

3.2 Plan 5309/300/C (attached at Appendix 3) sets out the mapping of sites in the urban area. The study area boundary was discussed at a meeting with Hertsmere Borough Council on 1 July 2020. The boundary of the study area is defined by field boundaries and minor roads to the north, the A1 to the east, the A411, administrative and field boundaries to the south, and Watling Street to the west.

3.3 Plan 5309/300/C identifies: HCC ownership (14 sites), playing fields and play spaces (11 sites), areas of open land (11 sites), allotments (1 site), employment areas (3 sites). All the sites are listed in the key together with the site areas. Those sites in the key listed as being below 4.38ha were rejected.

3.4 The following sites exceeded the site size requirement for a split site with a detached playing field of **4.38ha** and so were evaluated as set out below:

- PF3 Aycliffe Park 5.41ha – there are no sites within 400m walking distance of this site, the closest is PF4 which is just outside the 400m walking distance
- PF4 Aberford Park 6.51ha – PF6 is within 400m walking distance of this site but PF6 currently accommodates Borehamwood FC and this site is not available
- PF6 Meadow Park 8.78ha – this site currently accommodates Borehamwood FC and is not available
- OL9 Denham Way 4.73ha- whilst this site is, in overall site area large enough, it is fragmented and would not provide sufficiently large collective site areas for playing fields or building zone
- E1 Television Studios 6.29ha – this employment site is in active use and there are no sufficiently large site areas at the present time which would be suitable for future use
- E2 Elstree Way 34.49ha - this employment site is in active use and there are no sufficiently large site areas at the present time which would be suitable for future use
- E3 Sterling Way 7.09ha - this employment site is in active use and there are no sufficiently large site areas at the present time which would be suitable for future use

3.5 It was therefore concluded that there are no available suitable sites within the urban area of over **4.38ha** which would provide a site for a school building zone with detached playing fields within a 400m walking distance.

NON- URBAN AREA SITE SEARCH

Site identification

3.6 Plan 5309/301/C (attached at Appendix 3) sets out the mapping of environmental constraints outside the urban area adjoining the settlement boundary of Borehamwood. The mapping shows that large areas of land to the north, south and west of Borehamwood (adjoining the settlement) are designated wildlife sites and so these areas of land are excluded from the site search. This leaves land adjoining the east of the settlement (excluding the wooded belt east of the B5378) and land to the south-west of the settlement.

3.7 Following the mapping of environmental constraints the following potential secondary school sites were shortlisted as being of more than 8.58ha:

- Bore 01: Land west of A1(M)
- Bore 02: Land north of Rowley Lane
- Bore 03: Land east of Green Street (Parcel A)
- Bore 04: Land east of Green Street (Parcel B)
- Bore 05: Land east of Green Street (Parcel C)
- Bore 06: Land north of Allum Lane
- Bore 07: Land south of Allum Lane
- Bore 08: Land south of A411

Site analysis

Town planning appraisals of all these sites were undertaken and are attached at Appendix 4. Some sites were taken forward for transport appraisals. Conclusions of the planning and where appropriate transport appraisal are summarised below.

Bore 01: Land west of A1(M)

3.8 The site is located on land west of the A1(M) and east of Rowley Lane (plan 5309/301/C). The existing use is a car/lorry park. The site is in single ownership and almost entirely level. The site is an optimal size for an 8fe school. Upon further investigation the site is unlikely to be available. Planning permission has been granted for the development of Sky Studios Elstree, a TV and film studio expected to be open in 2022. This site was not recommended for high level transport appraisal or for comparative assessment with other sites.

Bore 02: Land north of Rowley Lane

3.9 The site is located north of Rowley Lane and east of Well End Road (plan 5309/301/C). The existing use is agricultural. The site is in single ownership and is predominantly flat with a very gentle incline from east to west. The site is well enclosed by existing vegetation from all directions. The site is an optimal size for an 8fe school. The site was recommended for transport appraisal.

3.10 The conclusions of the high -level transport appraisal was that there are some reservations on the suitability of increased vehicle movements along the rural section of Rowley Lane and the access onto the A1 from Holmshill Lane. A detailed review of the potential impact of school related traffic along these roads will need to be undertaken and significant improvements to the road layout will be required in order to provide a safe and suitable route, or alternatively, measures to discourage school related travel along this route. There are also potential capacity issues along Potters Lane for vehicles and cyclists, which is likely to be on a key desire line from the northern side of Borehamwood. If the concerns identified above can be mitigated to a suitable standard, then, in principle, the site may be suitable for provision of an 8FE Secondary school, subject to a full review of transport impact and safety as part of a full Transport Assessment. Footways along residential roads to the west and south-west of the site are generally considered suitable. However, new crossing facilities are likely to be required. Bus accessibility to the site from Borehamwood and Elstree is reasonable, with bus stops on Alexandra Road providing access to route B3. However, existing links to the wider area would be from stops available on the B5378 Shenley Road and the A5135 Elstree Way which are over 1km from the school site. Improved accessibility between the site and the local bus stops should be considered as part of proposals. Overall, the site was ranked lowest (6/6) in terms of access and highways suitability. It scored least well of all the sites in terms of providing a safe and suitable vehicular access, its location and proximity to accessible sustainable transport modes, and anticipated mitigation works.

3.11 A development principles plan (5309/322) has been prepared and is attached at Appendix 3. This plan shows the disposition of the building zone, playing fields and the optimal point of access for the site (based on highway conclusions). The most suitable point of access would be from Well End Road, preferably towards the southern end so as to discourage the number of vehicles travelling via Potters Lane, although a suitable distance from the Rowley Lane junction should be allowed. The location of an access from Well End Road would likely impact on an existing ditch, trees and hedgerows and would be directly opposite residential driveways. Visibility in both directions along Well End Road may require removal of hedgerow and trees, subject to further survey.

3.12 It is concluded that because of the highway concerns relating to the suitability of the surrounding highway infrastructure for a school development, lack of nearby public transport infrastructure and the limited potential for highway improvements, this site should not be considered for an 8fe school unless another more sequentially preferable site cannot be identified.

Bore 03: Land east of Green Street (Parcel A)

3.13 The site is located east of Green Street, Borehamwood (plan 5309/301/C) extending north-east away from Green Street. The existing use is agricultural. The site is in single ownership and is flat. The site is an optimal size for an 8fe secondary school. The site was recommended for transport appraisal.

3.14 The conclusions of the transport appraisal were that: in principle, it would appear that the road network and potential for sustainable access to the site would be suitable for provision of an 8FE Secondary school, subject to a full review of transport impact and safety as part of a full Transport Assessment. It is suggested that adequate pedestrian crossings are provided along Green Street and at suitable locations within the residential area to the south-west, in order to provide a safe and suitable route for pupils to access the school. The footway network along residential roads to the south-west of the site is generally considered suitable. Bus services in the vicinity of the site appear to be infrequent. Therefore, additional services may be required to ensure that bus access to the site is feasible. Overall, the site was ranked 4/6 in terms of access and highways suitability. Whilst it scored high on providing a safe and suitable vehicular access, it scored less favourably in terms of its location and access by sustainable forms of transportation.

3.15 A development principles plan (5309/332) has been prepared and is attached at Appendix 3. The plan shows the disposition of the building zone, playing fields and the optimal point of vehicular access to the site (based on transport appraisal conclusions). The tree line in the centre of the site splitting the 2 land parcels could be retained although there would be poor supervision and intervisibility between the school building and the playing fields.

3.16 It is concluded that that because poor intervisibility between the school building zone and the playing fields and the comparatively undesirable location of the site in terms of its access by sustainable forms of transport, this site should not be considered for an 8fe school unless another more sequentially preferable site cannot be identified.

Bore 04: Land east of Green Street (Parcel B)

3.17 The site is located east of Green Street, Borehamwood (plan 5309/301/C) extending north-west in parallel to Green Street. The existing use is agricultural, and the site is in 3 ownerships. The site is an optimal size for an 8fe secondary school. The site was recommended for transport appraisal.

3.18 The conclusions of the high-level transport appraisal were that: in principle, it would appear that the road network and potential for sustainable access to the site would be suitable for provision of an 8FE Secondary school, subject to a full review of transport impact and safety as part of a full Transport Assessment. It is suggested that adequate pedestrian crossings are provided along Green Street and at suitable locations within the residential area to the south-west, in order to provide a safe and suitable route for pupils to access the school. The footway network along residential roads to the south-west of the site is generally considered suitable. Bus services in the vicinity of the site appear to be infrequent. Therefore, additional services may be required to ensure that bus access to the site is feasible. Overall, the site was ranked 3/6 in terms of access and highways suitability. Whilst it scored high on providing a safe and suitable vehicular access, it scored less favourably in terms of its location and access by sustainable forms of transportation.

3.19 A development principles plan (5309/342) has been prepared and is attached at Appendix 3. The plan shows the disposition of the building zone, playing fields and the optimal point of vehicular access to the site (based on transport appraisal conclusions). The location of the playing fields would require the removal of a significant tree belt in the centre of the site.

3.20 It is concluded that because of the need to remove mature vegetation on site and the comparatively undesirable location of the site in terms of its access by sustainable forms of transport, this site should not be considered for an 8fe school unless another more sequentially preferable site cannot be identified.

Bore 05: Land east of Green Street (Parcel C)

3.21 The site is located east of Green Street, Borehamwood (plan 5309/301/C) extending north-east away from Green Street. The existing use is agricultural, and the site is in 3 ownerships. The site was recommended for transport appraisal.

3.22 The conclusions of the transport appraisal were that: in principle, it would appear that the road network and potential for sustainable access to the site would be suitable for provision of an 8FE Secondary school, subject to a full review of transport impact and safety as part of a full Transport Assessment. It is suggested that adequate pedestrian crossings are provided along Green Street and at suitable locations within the residential area to the south-west, in order to provide a safe and suitable route for pupils to access the school. The footway network along residential roads to the south-west of the site is generally considered suitable. Bus services in the vicinity of the site appear to be infrequent. Therefore, additional services may be required to ensure that bus access to the site is feasible. The site was ranked 5/6 in terms of access and highways suitability. Whilst it scored high on providing a safe and suitable vehicular access, it scored less favourably in terms of its location and access by sustainable forms of transportation and issues with parking on Green Street.

3.23 A development principles plan (5309/352) has been prepared and is attached at Appendix 3. The plan shows the disposition of the building zone, playing fields and the optimal point of vehicular access to the site (based on transport appraisal conclusions). The playing fields would be split into two parcels unless the tree line between them is removed. The tree lines around the building zone boundaries to the playing fields could be retained although there would be poor supervision and intervisibility between the school building and the playing fields.

3.24 It is concluded that because of the need to remove mature vegetation on site, the poor supervision and intervisibility between the building zone and the playing fields and the relatively undesirable location of the site in terms of its access by sustainable forms of transportation, this site should not be considered for an 8fe school unless another more sequentially preferable site cannot be identified.

Bore 06: Land north of Allum Lane

3.25 The site is located north of Allum Lane, Borehamwood (plan 5309/301/C). The existing uses are grassland and part of Radlett Park Golf Club which is identified as site HEL514 in the HELAA 2019 Report. The site is in 2 ownerships. The site is an optimal size for an 8fe secondary school.

3.26 The site is moderately sloped, inclining to the east meaning which would necessitate some regrading. Site development may be exposed to long distance views in the wider landscape. There is a significant area of large mature trees within the site that would require removal to accommodate the development. Part of the site is in an area of archaeological importance adding a further potential constraint. Whilst the site is in the HELLA as a potential housing site it was found to be still in use as a golf course.

3.27 For the above reasons, the site was too heavily constrained and was not therefore recommended for a transport appraisal or for comparative assessment with other sites.

Bore 07: Land south of Allum Lane

The site is located south of Allum Lane, Borehamwood (plan 5309/301/C). The existing use is agricultural pastureland. The site is in 3 ownerships. The site is an optimal size for an 8fe secondary school.

3.28 Although the site is undulating with a gentle slope upwards towards the centre of the side and downwards on either side to the east and west it is relatively enclosed, and the site is known to be available. There are two potential points of access from The Rise or Allum Lane which could potentially be utilised. The site was recommended for a transport appraisal.

3.29 The conclusions of the transport appraisal were that: in principle, it would appear that the road network and potential for sustainable access to the site would be suitable for provision of an 8FE Secondary school, subject to a full review of transport impact and safety as part of a full Transport Assessment. The current width of Allum Lane is considered sufficient for the amount of traffic present as well as an additional access for a school. However, the access location and associated impact on the B5378 Allum Lane would need to be carefully considered in order to minimise the impact on the free flow of traffic along the road while also providing a suitable access arrangement for the school site. It is suggested that adequate pedestrian crossings are provided along Allum Lane and at suitable locations within the residential area to the east, in order to provide a safe and suitable route for pupils to access the school. The footway network along residential roads to the east and north-east of the site is generally considered suitable. Bus accessibility to the site from Borehamwood and Elstree is reasonable, with bus stops on the B5378 Allum Lane. Improved accessibility between the site and the local bus stops should be considered as part of proposals. Overall, the site was ranked 2/6 in terms of highways and access.

3.30 Two development principles plans (5309/372 and 5309/373) have been prepared and are attached at Appendix 3.

3.31 Plan 5309/372 shows the retention of the possible housing allocation (hatched) with a school building zone to the south accessed from The Rise and playing fields to the west of the site. The location of the school would necessitate the diversion of a footpath along the tree line boundary (as shown), locating the playing fields on significantly undulating land (particularly the farthest western parcel) requiring significant re-grading and the use of The Rise which, at this stage has been identified in the transport appraisal as a sub-optimal access solution. Overall, the site area for the school would be slightly sub-optimal being 10.54ha which is just below the 10.78ha requirement for an 8fe secondary school.

3.32 Plan 5309/373 shows the removal of the possible housing allocation with a school building zone to the north accessed from Allum Lane and the playing fields to the south of the school building zone. The location of the school would not necessarily require the diversion of the footpath if a secure line through the playing field could be established with the use of fencing. However, the footpath could be diverted if required along the tree line as shown on plan 5309/392. This site arrangement would not require the farthest western parcel of the site thus reducing potential re-grading requirements. This option proposes the use of Allum Lane which at this stage has been identified in the transport appraisal as the preferred access solution. There may be a requirement for a landscape buffer to manage the relationship between the building zone and adjoining residential dwellings on the eastern site boundary. Overall, the site area for the school would be 12.58ha which is above the 10.78ha requirement for an 8fe secondary school.

3.33 At this stage, given the constraints currently identified (including regrading) the preferred land use option would be the development principles layout shown on plan 5309/373.

3.34 The site it is concluded would be suitable for an 8fe secondary school subject to further technical and environmental investigations.

Bore 08: Land south of A411 (Barnet Lane)

3.35 The site is located south of A411 (Barnet Lane), Borehamwood (plan 5309/301/C). The existing use is agricultural. The site is in single ownership. The site is an optimal size for an 8fe secondary school. The site is an optimal size for an 8fe secondary school site. The site lies part in the administrative borough of Hertsmere and part in the administrative borough of Barnet. The site is almost entirely level. The site was recommended for a transport appraisal.

3.36 The conclusions of the transport appraisal were that: in principle, it would appear that the road network and potential for sustainable access to the site would be suitable for provision of an 8FE Secondary school, subject to a full review of transport impact and safety as part of a full Transport Assessment. Although the Highway Authority usually resists new accesses onto 'A' roads, the A411 Barnet Lane to the west of Furzehill Road appears to be a suitable location for a school access to be established, provided an acceptable junction arrangement can be achieved. There may be potential for park and stride arrangements from nearby car parks associated with Morrisons and other commercial properties on Stirling Way, which would help to discourage travel by car and avoid provision of parent drop off facilities on site. The local footway and cycleway network appear to be generally good and suitable for school related movements. However, upgraded crossing facilities will be required, particularly on the A411 Barnet Lane. It is recommended that measures to manage traffic speed would be required in the vicinity of the school such as a reduction in speed limit to 30mph in the immediate vicinity of the site. Bus accessibility to the site is considered good, with bus stops adjacent to the site and within close proximity. Access between the site and the local bus stops should be considered as part of the proposals. Overall, the site was ranked 1/6 (receiving the top ranking) when compared with other sites.

3.37 A development principles plan (5309/382) has been prepared and is attached at Appendix 3. The plan shows the disposition of the building zone, playing fields and the optimal point of vehicular access to the site (based on transport appraisal conclusions). The highways appraisal identified 2 potential points of access from Barnet Lane to the east and west of the roundabout adjoining the site. The eastern point of access has been identified to allow for the building zone to be located away from the area of potential high-risk surface water flooding at the eastern part of the site. The playing fields may impact on a tree line running east west through the site but depending on layout the tree line may be retained. Some vegetation along the site frontage and scattered trees may require removal.

3.38 The site it is concluded would be suitable for an 8fe secondary school subject to further technical and environmental investigations.

Site ranking

3.39 Eight potential secondary school sites were initially identified in Borehamwood:

- Bore 01: Land west of A1(M)
- Bore 02: Land north of Rowley Lane
- Bore 03: Land east of Green Street (parcel A)
- Bore 04: Land east of Green Street (parcel B)
- Bore 05: Land east of Green Street (parcel C)
- Bore 06: Land north of Allum Lane

- Bore 07: Land south of Allum Lane
- Bore 08: Land south of A411(Barnet Lane)

3.40 Initial planning appraisals were completed on eight sites which concluded in two sites being rejected: Bore 01 Land west of A1(M) and Bore 06 Land north of Allum Lane.

3.41 High level transport appraisals were undertaken on the remaining 6 sites.

- Bore 02: Land north of Rowley Lane
- Bore 03: Land east of Green Street (parcel A)
- Bore 04: Land east of Green Street (parcel B)
- Bore 05: Land east of Green Street (parcel C)
- Bore 07: Land south of Allum Lane
- Bore 08: Land south of A411(Barnet Lane)

3.42 None of the sites were found to be unsuitable, in transport terms for an 8fe secondary school (subject to further analysis in a post COVID situation).

3.43 Development principles plans were then prepared for the 6 sites which demonstrated where access could be taken (using the transport appraisals) and consequently where building zones and playing fields might be located.

3.44 As a consequence of the transport concerns relating to the suitability of the surrounding highway infrastructure for a school development, lack of nearby public transport infrastructure and the limited potential for highway improvements, it was concluded that Bore 02 Land north of Rowley Lane should not be considered for an 8fe school unless another more sequentially preferable site cannot be identified.

3.45 As a consequence of poor intervisibility and supervision between the school building zone and the playing fields and the comparatively undesirable location of the site in terms of its access by sustainable forms of transport, it was concluded that Bore 03 Land east of Green Street (parcel A) should not be considered for an 8fe school unless another more sequentially preferable site cannot be identified.

3.46 As a consequence of the need to remove mature vegetation on site and the comparatively undesirable location of the site in terms of its access by sustainable forms of transport, it was concluded that Bore 04 Land east of Green Street (parcel B) should not be considered for an 8fe school unless another more sequentially preferable site cannot be identified.

3.47 As a consequence of the need to remove mature vegetation on site, the poor supervision and intervisibility between the building zone and the playing fields and the relatively undesirable location of the site in terms of its access by sustainable forms of transport, it was concluded that Bore 05 Land east of Green Street (parcel C) should not be considered for an 8fe school unless another more sequentially preferable site cannot be identified.

3.48 This leaves Bore 07 Land south of Allum Lane and Bore 08 Land south of London Road for further consideration. The high-level transport ranking appraisal at Appendix 5 ranks Bore 7 as second preferred and Bore 8 as first preferred. Further technical and environmental investigations are required to determine which of these sites is more sequentially suitable for development prior to a final recommendation.

4.0 SUMMARY AND CONCLUSION

4.1 A site search of the urban areas of Borehamwood resulted in no suitable or available sites being identified within the urban area. Consequently, the site search extended to the non-urban area searching for sites that adjoin the urban area.

4.2 Initially eight sites were identified. Planning appraisals were completed comprising a site visit, photographic appraisal, site appraisal and the completion of a proforma using the common template. Completion of the planning appraisals resulted in 6 sites being identified as suitable for further investigation.

4.3 A high-level transport appraisal was completed for Bore sites 02,03,04,05,07 and 08 which concluded that Bore 02, Bore 03, Bore 04 and Bore 05 were considered sub-optimal in transport terms. The high-level transport ranking appraisal ranked Bore 07 Land south of Allum Lane in second position and Bore 08 Land south of London Road in first position.

4.4 Development principles plans were prepared for each of the 6 sites. In addition to the sub-optimal transport status above Bore 03 and Bore 05 would have poor intervisibility and supervision between the school building zone and the playing fields and development of Bore 04 would necessitate the removal of mature vegetation on site as well as there being poor intervisibility and supervision between the building zone and the playing fields.

4.5 Consequently Bore 07 and Bore 08 remain for further investigation. Further comparative investigations would enable a more rigorous decision to be taken on which of these sites is more sequentially preferable to be allocated as an 8fe secondary school site.

4.6 Although further technical and environmental investigations would provide a more informed analysis of the site constraints for Bore 07 and Bore 08, it is ultimately a matter for the local planning authority to determine which site may be allocated for secondary education use, by resolving competing interests and liaising with all stakeholders (including HCC) to ensure the infrastructure needs of the district are fully met in the local plan.

APPENDIX 1

2020/21 SUMMER FORECAST – SECONDARY

Berkhamsted

18.0.0	Berkhamsted														
School Code	School Name	Places Available 2020-21	Actuals			Forecast									
			2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
5406	Ashlyns School	240	239	244	242										
	Total Year 7 Pupil Demand		**239**	**244**	**242**	**261**	**270**	**267**	**245**	**261**	**248**	**252**	**266**	**268**	**275**
	Total Year 7 Places Available	**240**				**240**	**240**	**240**	**240**	**240**	**240**	**240**	**240**	**240**	**240**
	Surplus or Shortage of Year 7 Places (No.)					**-21**	**-30**	**-27**	**-5**	**-21**	**-8**	**-12**	**-26**	**-28**	**-35**
	Surplus or Shortage of Year 7 Places (%)					**-8.8%**	**-12.5%**	**-11.3%**	**-2.1%**	**-8.8%**	**-3.3%**	**-5.0%**	**-10.8%**	**-11.7%**	**-14.6%**
	Surplus or Shortage of Year 7 Places (FE)					**-0.7**	**-1.0**	**-0.9**	**-0.2**	**-0.7**	**-0.3**	**-0.4**	**-0.9**	**-0.9**	**-1.2**

Hemel Hempstead

19.0	Hemel Hempstead														
School Code	School Name	Places Available 2020-21	Actuals			Forecast									
			2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
4005	The Hemel Hempstead School	217	186	186	218										
[4029]	*[Adeyfield School]*	*0*	*94*	*0*	*0*										
4032	The Adeyfield Academy	150	0	117	113										
[4100]	*[The Cavendish School]*	*0*	*112*	*0*	*0*										
4033	Laureate Academy	210	0	145	138										
4080	Longdean School	240	229	240	240										
4096	Kings Langley School	190	186	185	185										
4499	The Astley Cooper School	180	132	130	174										
4619	John F Kennedy Catholic School	180	180	180	180										
	Total Year 7 Pupil Demand		**1119**	**1183**	**1248**	**1266**	**1334**	**1386**	**1389**	**1324**	**1428**	**1455**	**1488**	**1551**	**1537**
	Total Year 7 Places Available	**1,367**				**1,367**	**1,363**	**1,363**	**1,363**	**1,363**	**1,363**	**1,363**	**1,363**	**1,363**	**1,363**
	Surplus or Shortage of Year 7 Places (No.)					**101**	**29**	**-23**	**-26**	**39**	**-65**	**-92**	**-125**	**-188**	**-174**
	Surplus or Shortage of Year 7 Places (%)					**7.4%**	**2.1%**	**-1.7%**	**-1.9%**	**2.9%**	**-4.8%**	**-6.7%**	**-9.2%**	**-13.8%**	**-12.8%**
	Surplus or Shortage of Year 7 Places (FE)					**3.4**	**1.0**	**-0.8**	**-0.9**	**1.3**	**-2.2**	**-3.1**	**-4.2**	**-6.3**	**-5.8**

Watford

21.0	Watford													
School Code	School Name	Places Available 2020-21	Actuals			Forecast								
			2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
4111	Westfield Academy	240	167	178	230										
5401	Watford Grammar School for Boys	224	197	225	224										
5403	Watford Grammar School for Girls	210	182	210	210										
5404	Parmiter's School	208	208	211	209										
5417	Saint Michael's Catholic High School	180	182	181	182										
6905	Francis Combe Academy	210	206	222	231										
	Total Year 7 Pupil Demand		**1142**	**1227**	**1286**	**1278**	**1325**	**1385**	**1375**	**1319**	**1341**	**1364**	**1397**	**1345**	**1333**
	Total Year 7 Places Available	**1,272**				**1,272**	**1,272**	**1,272**	**1,272**	**1,272**	**1,272**	**1,272**	**1,272**	**1,272**	**1,272**
	Surplus or Shortage of Year 7 Places (No.)					**-6**	**-53**	**-113**	**-103**	**-47**	**-69**	**-92**	**-125**	**-73**	**-61**
	Surplus or Shortage of Year 7 Places (%)					**-0.5%**	**-4.2%**	**-8.9%**	**-8.1%**	**-3.7%**	**-5.4%**	**-7.2%**	**-9.8%**	**-5.7%**	**-4.8%**
	Surplus or Shortage of Year 7 Places (FE)					**-0.2**	**-1.8**	**-3.8**	**-3.4**	**-1.6**	**-2.3**	**-3.1**	**-4.2**	**-2.4**	**-2.0**

Bushey and Radlett

22.0	Bushey & Radlett													
School Code	School Name	Places Available 2020-21	Actuals			Forecast								
			2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
[6906]	*[The Bushey Academy]*	*0*	*214*	*216*	*0*										
4036	Bushey Academy	210	0	0	189										
5408	Bushey Meads School	200	198	202	195										
5410	Queens' School	270	264	270	270										
	Total Year 7 Pupil Demand		**676**	**688**	**654**	**664**	**682**	**723**	**699**	**682**	**703**	**707**	**745**	**725**	**709**
	Total Year 7 Places Available	**680**				**680**	**680**	**680**	**680**	**680**	**680**	**680**	**680**	**680**	**680**
	Surplus or Shortage of Year 7 Places (No.)					**16**	**-2**	**-43**	**-19**	**-2**	**-23**	**-27**	**-65**	**-45**	**-29**
	Surplus or Shortage of Year 7 Places (%)					**2.4%**	**-0.3%**	**-6.3%**	**-2.8%**	**-0.3%**	**-3.4%**	**-4.0%**	**-9.6%**	**-6.6%**	**-4.3%**
	Surplus or Shortage of Year 7 Places (FE)					**0.5**	**-0.1**	**-1.4**	**-0.6**	**-0.1**	**-0.8**	**-0.9**	**-2.2**	**-1.5**	**-1.0**

Rickmansworth

20.0	Rickmansworth													
School Code	School Name	Places Available 2020-21	Actuals			Forecast								
			2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
4007	The Reach Free School	120	113	120	118										
4025	Croxley Danes School	180	120	179	178										
5400	Rickmansworth School	226	196	228	225										
5418	Saint Joan of Arc Catholic School	210	212	223	223										
5421	St Clement Danes School	240	240	240	238										
	Total Year 7 Pupil Demand		**881**	**990**	**982**	**969**	**981**	**1025**	**1012**	**1006**	**952**	**991**	**979**	**973**	**919**
	Total Year 7 Places Available	**976**				**976**	**976**	**976**	**976**	**976**	**976**	**976**	**976**	**976**	**976**
	Surplus or Shortage of Year 7 Places (No.)					**7**	**-5**	**-49**	**-36**	**-30**	**24**	**-15**	**-3**	**3**	**57**
	Surplus or Shortage of Year 7 Places (%)					**0.7%**	**-0.5%**	**-5.0%**	**-3.7%**	**-3.1%**	**2.5%**	**-1.5%**	**-0.3%**	**0.3%**	**5.8%**
	Surplus or Shortage of Year 7 Places (FE)					**0.2**	**-0.2**	**-1.6**	**-1.2**	**-1.0**	**0.8**	**-0.5**	**-0.1**	**0.1**	**1.9**

Rickmansworth is included for information. Following the opening of two new schools in this area, The Reach Free School and Croxley Danes School, there is a closer match between supply and demand.

Borehamwood

16.0	Borehamwood													
School Code	School Name	Places Available 2020-21	Actuals			Forecast								
			2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
4001	Hertswood Academy	270	242	234	222										
4802	Yavneh College	150	150	151	180										
	Total Year 7 Pupil Demand		**392**	**385**	**402**	**394**	**396**	**414**	**423**	**413**	**437**	**440**	**465**	**451**	**454**
	Total Year 7 Places Available	**420**				**420**	**420**	**420**	**420**	**420**	**420**	**420**	**420**	**420**	**420**
	Surplus or Shortage of Year 7 Places (No.)					**26**	**24**	**6**	**-3**	**7**	**-17**	**-20**	**-45**	**-31**	**-34**
	Surplus or Shortage of Year 7 Places (%)					**6.2%**	**5.7%**	**1.4%**	**-0.7%**	**1.7%**	**-4.0%**	**-4.8%**	**-10.7%**	**-7.4%**	**-8.1%**
	Surplus or Shortage of Year 7 Places (FE)					**0.9**	**0.8**	**0.2**	**-0.1**	**0.2**	**-0.6**	**-0.7**	**-1.5**	**-1.0**	**-1.1**

APPENDIX 2

SOUTH -WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH: SHORTLISTED POTENTIAL SCHOOL SITE		
SITE DETAILS		
Site Reference and address	[insert Settlement name]: Site [insert site ref A-Z] [Site address] Site identification plan: [5309/] Aerial photograph: [5309/] Development principles plan: [5309/]	
Site area	[insert] ha Building zone: [insert] ha Playing Fields zone: [insert] ha	
Existing use/occupiers	[insert land use/ any occupation]	
Land ownership	[insert Land Registry details – all owners] [insert any known information about site ownership/availability]	
Site availability	[insert any known information about site availability]	
Brownfield Land Register	[insert Y/N]	
Planning history	[insert any previous planning applications on the site]	
Buildings	[insert all buildings on the site, including number of storeys]	
Adjoining uses	North:	[insert land uses]
	East:	[insert land uses]
	South:	[insert land uses]
	West:	[insert land uses]
Topography	[insert description of any changes in levels, falls and direction of]	
Water courses	[Insert description] from aerial photographs, OS maps or public vantage points.	
Vegetation	[insert description of principal tree groups, locations of tree groups, hedgerows]	
ACCESSIBILITY		
Vehicular access	[Insert description of any existing access points major or minor and the road they take access/egress from] Comment on road type ie A road /B road / unclassified road / narrow country lane / suburban residential road etc?)	

Cycle access	[Insert description of any existing cycle routes along the site boundaries / adjoining site]
Pedestrian access	[Insert description of any existing footways routes along the site boundaries / adjoining site]
Public transport	[insert description of bus stop locations, distance from site and bus routes]
High level transport appraisal	A high level transport appraisal prepared by Stomor Civil Engineering Consultants concludes that [insert conclusions from high level transport appraisal]
ENVIRONMENTAL IMPACT	
Landscape and visual impact	[insert a description of whether the site is: - Exposed to long distance views to the [insert compass directions] - Partially exposed to long distance views to the [insert compass directions] - Enclosed from long distance views to the [insert compass directions] [insert a description of any landscape character designations]
Impact on residential amenities:	[insert any adjacent or nearby residential areas that may be affected by a school, noise, loss of privacy, overbearing mass]
Ecology:	[Insert a description of any vegetation or land uses that may be of ecological interest e.g. hedges, trees, grassland, ponds] [Insert any known ancient woodland/veteran trees]
Noise sources	[Insert any nearby roads, railways, airfields or other noise generating sources]
Flood risk	[Insert flood zone]
Surface water flooding	[Insert surface water flooding information if available]
Groundwater source protection area	[Confirm whether the site is in a groundwater source protection zone]
Air quality	[Confirm whether the site is in an Air Quality Management Area or close to source of poor air quality such as major road]
Minerals	[Confirm whether the site lies in a Minerals Consultation Area - Sand and Gravel Belt]
Agricultural land quality	[Insert Agricultural land grade if relevant if not then N/A]
Rights of way	[insert any public rights of way that run through the site, adjoin the site and their type e.g. footpath, bridleway]
EXISTING PLANNING AND DESIGNATION CONSTRAINTS	
Existing and emerging local plan site specific	[Insert planning designations from adopted local plan proposals map and any plan nearing adoption and insert any SHELLA designation]

designations	
Heritage assets: archaeology	[Insert any archaeological designations on the adopted Local Plan Proposals Map]
Designated heritage assets	[Insert a description of any world heritage site, Scheduled monument, listed buildings, Conservation areas, Registered Park or Garden, Registered battlefield, either on the site itself or adjacent to the site] and note boundary adjacency
Designated rural areas	[insert a description of National Park, Areas of Outstanding Natural Beauty]
International, National and locally designated sites of importance for biodiversity and habitat sites	[insert a description of Special Areas of Conservation, Sites of Community Importance, Special Protection Areas, RAMSAR sites, national sites (Sites of Special Scientific Interest) and locally designated sites including wildlife sites) and wildlife corridors]

SITE EVALUATION

Positive site attributes [delete as necessary from this section]:

1. The site is of optimal / sufficient size for 6fe/8fe/10fe.
2. The site is in single ownership.
3. The site is available.
4. The site is [flat/gentle level changes] and re-grading would be minimal/limited.
5. Vehicular access [could be achieved from – insert adjoining road] with suitable mitigation/improvements.
6. Pedestrian/cycle access [could be achieved from – insert adjoining road] with suitable mitigation/improvements.
7. The site lies adjacent/within xm walking distance of bus stops and bus routes.
8. Site development would not be exposed to long distance views in the wider landscape.
9. The site has [no significant/relatively small] areas of vegetation that would require removal to accommodate a secondary school.
10. The site lies adjacent to the urban area of [insert settlement].
11. There would be no impacts on preserved trees.
12. There would be minor ecological impact [subject to further investigations].
13. The site is not at risk of flooding [subject to further investigations].
14. The site is not located near any noise sources.
15. The site lies outside the Green Belt.
16. The site lies outside an AQMA.
17. The site does not lie in a Minerals Consultation Area.
18. The site is not in an Area of Archaeological Importance.
19. There would be no impacts on designated heritage assets.
20. The site is not in a designated rural area.
21. The site does not have any international, national or local wildlife, habitat or biodiversity designations.

22. The site is does not have any local plan allocation.
23. The site is not an identified HELAA site.
24. The site has low grade agricultural land classification [if relevant].
25. The site is not traversed by rights of way.
26. The site has a single landowner/is in the ownership of HCC.

Negative site attributes [delete as necessary from this section]:

1. The site is not of optimal / sufficient size for 6fe/8fe/10fe.
2. The site is in more than one ownership.
3. The site is not known to be available.
4. The site is [sloping/significant level changes] and re-grading would be [required/significant].
5. Vehicular access [could not be achieved from – insert adjoining road] with suitable mitigation/improvements.
6. Pedestrian/cycle access [could not be achieved from – insert adjoining road] with suitable mitigation/improvements.
7. The site does not lie within [x km] walking distance of bus stops and bus routes.
8. Site development would be exposed to long distance views in the wider landscape.
9. The site has [significant/relatively large] areas of vegetation that would require removal to accommodate a secondary school.
10. The site does not lie adjacent to the urban area of [insert settlement].
11. There would be impacts on preserved trees.
12. There would be more than minor ecological impact [subject to further investigations].
13. The site is at risk of flooding [subject to further investigations].
14. The site is located near noise sources.
15. The site lies in the Green Belt.
16. The site lies in an AQMA.
17. The site lies in a Minerals Consultation Area.
18. The site is in an Area of Archaeological Importance.
19. There would be impacts on designated heritage assets.
20. The site is in a designated rural area.
21. The site has an international, national or local wildlife, habitat or biodiversity designations [insert].
22. The site has a local plan allocation.
23. The site does have an HELAA allocation [insert description].
24. The site has high grade agricultural land classification [if relevant].
25. The site is traversed by rights of way.
26. The site more than one landowner/is not in the ownership of HCC.

SITE LAYOUT PRINCIPLES

A BB103 compliant 6fe/8fe/10fe secondary school site [could/could not] be accommodated on this site:

1. Development principles plan 5309/
2. Total site area: [ha]
3. Build zone: [ha]
4. Building footprint: [sqm]
5. Vehicular access/egress: [road]
6. Pedestrian access: [road]

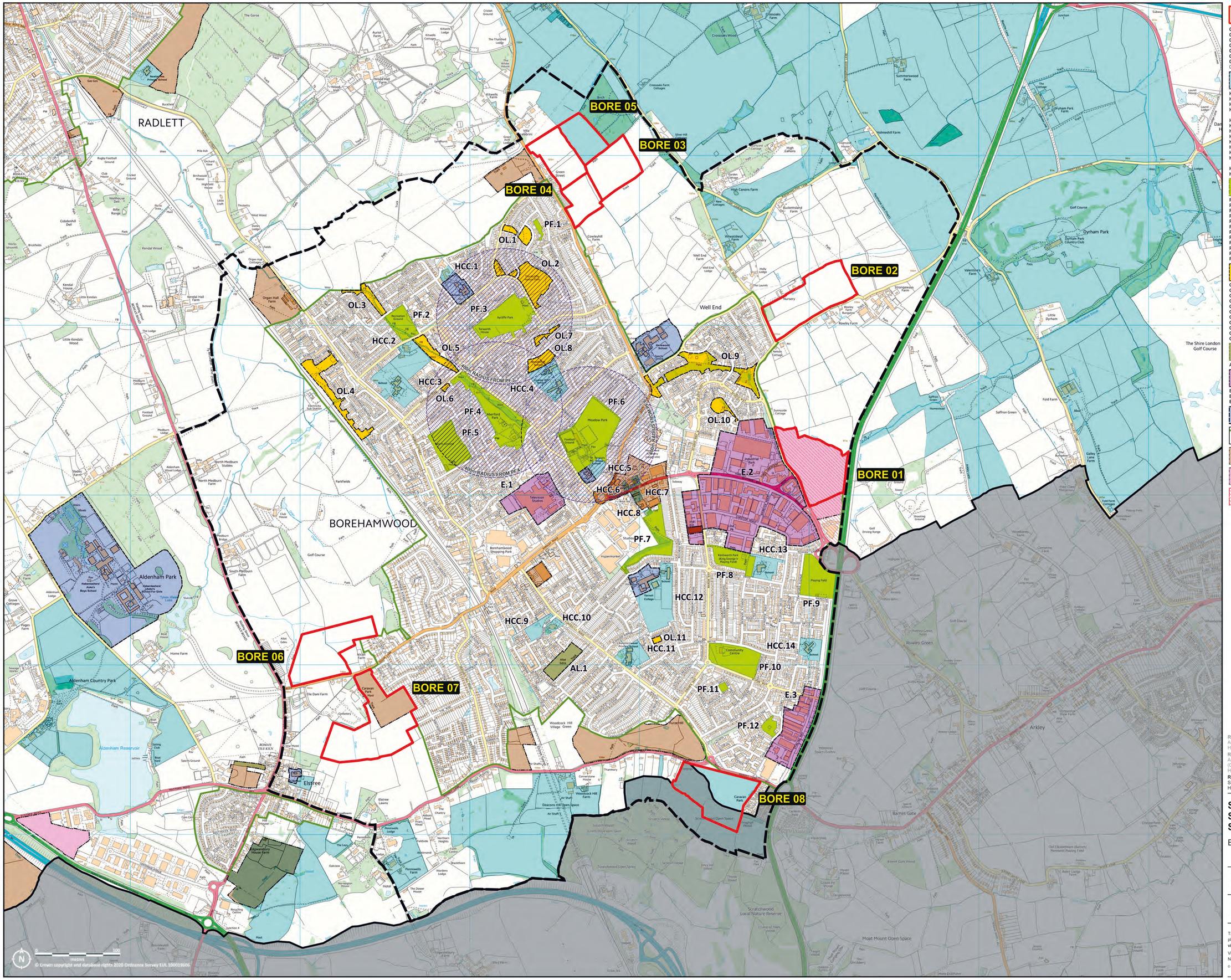
CONCLUSION

This site is/is not recommended for comparative assessment with other sites.

Further site investigations are recommended comprising:

[insert list of technical /environmental investigations]

APPENDIX 3



BOREHAMWOOD OPTION SITES

01	LAND WEST OF A1(M)	11.34ha
02	LAND NORTH OF ROWLEY LANE	11.64ha
03	LAND EAST OF GREEN STREET [PARCEL A]	11.22ha
04	LAND EAST OF GREEN STREET [PARCEL B	10.71ha
05	LAND EAST OF GREEN STREET [PARCEL C]	10.98ha
06	LAND NORTH OF ALLUM LANE	10.97ha
07	LAND SOUTH OF ALLUM LANE	16.00ha
08	LAND SOUTH OF BARNET LANE	11.18ha

HERTFORDSHIRE COUNTY COUNCIL OWNERSHIP

HCC.1	THE MEAD	0.49ha
HCC.2	DAY CENTRE	3.13ha
HCC.3	MERYFIELD COMMUNITY SCHOOL	3.77ha
HCC.4	COWLEY HILL & WOODLANDS PRIMARY SCHOOLS	3.13ha
HCC.5	ST TERESA'S RC SCHOOL PLAYING FIELDS	0.74ha
HCC.6	CHEEKY MONKEYS DAY NURSERY	0.46ha
HCC.7	BOREHAMWOOD FIRE STATION	0.37ha
HCC.8	MAXWELL PARK COMMUNITY CENTRE	0.16ha
HCC.9	MARTINS WALK PLAYSPACE	1.06ha
HCC.10	STARJUMPS NURSERY	0.60ha
HCC.11	SUMMERSWOOD PRIMARY SCHOOL	1.98ha
HCC.12	YAVNEH COLLEGE/MONKSMEAD SCHOOL PLAYING FIELDS	5.65ha
HCC.13	KENILWORTH SCHOOL	1.90ha
HCC.14	SAFFRON GREEN PRIMARY SCHOOL	1.58ha

PLAYING FIELDS/PLAY SPACE

PF.1	WALSHFORD WAY	0.29ha
PF.2	BELFORD ROAD	2.30ha
PF.3	AYCLIFFE PARK	5.41ha
PF.4	ABERFORD PARK	6.51ha
PF.5	OLD HABERDASHERS SPORTS GROUND	4.09ha
PF.6	MEADOW PARK	8.78ha
PF.7	MAXWELL PARK	3.56ha
PF.8	KENILWORTH PARK	2.67ha
PF.8	WANSFORD PARK	3.91ha
PF.9	RIPON PARK	4.16ha
PF.10	GRANTHAM GREEN	0.20ha
PF.11	FARRIERS WAY	0.66ha

OPEN LAND

OL.1	WALSHFORD WAY	0.84ha
OL.2	THIRSKCLIFFE NATURE PARK	2.87ha
OL.3	HAGGERSTON ROAD	1.06ha
OL.4	ORGAN HALL ROAD	3.07ha
OL.5	ABERFORD PARK	1.49ha
OL.6	GATESHEAD ROAD	0.12ha
OL.7	CROWN ROAD	0.39ha
OL.8	GROVE ROAD	1.07ha
OL.9	DENHAM WAY	4.73ha
OL.10	BANKS ROAD	0.81ha
OL.11	LEMSFORD COURT	0.16ha

ALLOTMENTS

AL.1	FURZEHILL ROAD ALLOTMENTS	2.01ha

EMPLOYMENT AREAS

E.1	TELEVISION STUDIOS	6.29ha
E.2	ELSTREE WAY	37.49ha
E.3	STERLING WAY	7.09ha

OTHER PRIMARY AND SECONDARY SCHOOLS

GREEN BELT BOUNDARY

HOUSING SITES UNDER CONSIDERATION

EMPLOYMENT SITES UNDER CONSIDERATION

POLICY SADM9 - SAFEGUARDED LAND FOR EMPLOYMENT
HERTSMERE LOCAL PLAN 2012-2027
POLICY MAP NOVEMBER 2016

REVISION A:
Amendments to potential sites following client discussions
HNA/26-06-2020

REVISION B:
Amendments following further information received from HBC (09-07-2020)
HNA/10-07-2020

REVISION C:
Study area amended, BORE08 site added
HNA/29-07-2020

SOUTH WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH

Borehamwood: Urban area

PROJECT NO	DRAWING NO	REV
5309	300	C
DRAWN	DATE	SCALE
HNA	JUNE 2020	1:10000

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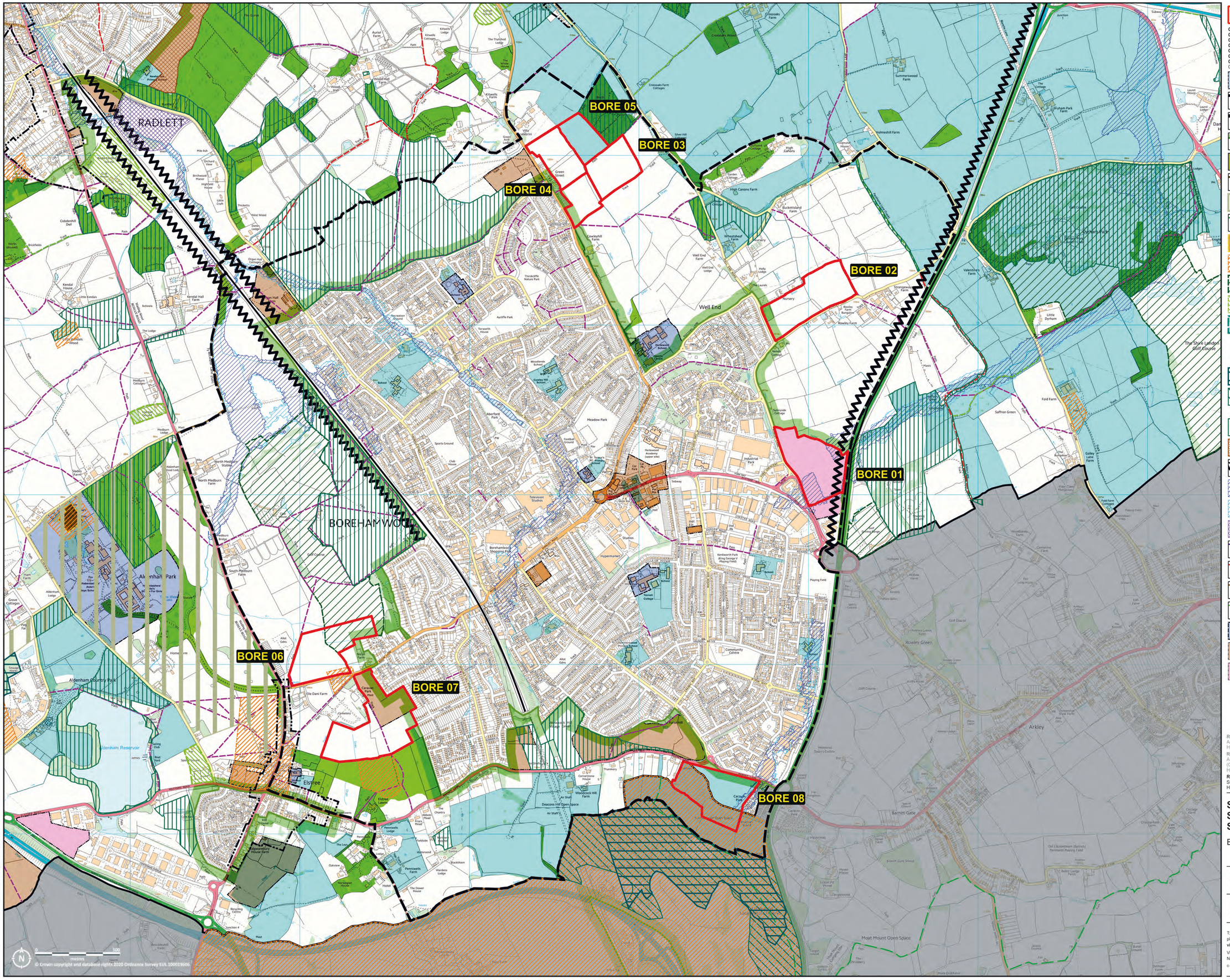

BORE 00 BOREHAMWOOD OPTION SITES

01	LAND WEST OF A1(M)	11.34ha
02	LAND NORTH OF ROWLEY LANE	11.64ha
03	LAND EAST OF GREEN STREET [PARCEL A]	11.22ha
04	LAND EAST OF GREEN STREET [PARCEL B	10.71ha
05	LAND EAST OF GREEN STREET [PARCEL C]	10.98ha
06	LAND NORTH OF ALLUM LANE	10.97ha
07	LAND SOUTH OF ALLUM LANE	16.00ha
08	LAND SOUTH OF BARNET LANE	11.18ha

- HERTFORDSHIRE COUNTY COUNCIL OWNERSHIP
- STUDY AREA
- LOCAL AUTHORITY BOUNDARY
- GREEN BELT BOUNDARY
- WOODLAND AREAS
- CONSERVATION AREA
- PARK/GARDEN
- GREEN CHAIN (LONDON BOROUGH of BARNET)
- SCHEDULED ANCIENT MONUMENT
- AREA of ARCHAEOLOGICAL INTEREST
- GOLF COURSE
- PLAYING FIELDS
- LANDSCAPE DESIGNATIONS
  - **LCA:** LANDSCAPE CONSERVATION AREA
  - **LDA:** LANDSCAPE DEVELOPMENT AREA
  - **CLA:** CHILTERNS LANDSCAPE AREA
  - **CRVLA:** CHILTERN RIVER VALLEYS LANDSCAPE AREA
- SSSI/NATURE RESERVE
- SITE OF METROPOLITAN IMPORTANCE FOR NATURE CONSERVATION (LONDON BOROUGH of BARNET)
- WILDLIFE SITES
- REGIONALLY IMPORTANT GEOLOGICAL SITE SITES
- NOISE SOURCE
- ENVIRONMENT AGENCY FLOOD ZONE 2
- ENVIRONMENT AGENCY FLOOD ZONE 3
- ENVIRONMENT AGENCY FLOOD STORAGE AREA
- PUBLIC FOOTPATHS
- RESTRICTED BYWAY
- BYWAY
- BRIDLEWAY
- OTHER PRIMARY AND SECONDARY SCHOOLS
- HOUSING SITES UNDER CONSIDERATION
- EMPLOYMENT SITES UNDER CONSIDERATION

REVISION A:
Amendments to potential sites following client discussions
HNA/26-06-2020

REVISION B:
Amendments following further information received from HBC (09-07-2020)
HNA/10-07-2020

REVISION C:
Study area amended, BORE08 site added
HNA/29-07-2020

SOUTH WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH

Borehamwood: Non urban area

PROJECT NO	DRAWING NO	REV
5309	301	C
DRAWN	DATE	SCALE
HNA	JUNE 2020	1:10000

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APPENDIX 4

SOUTH -WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH: SHORTLISTED POTENTIAL SCHOOL SITE

SITE DETAILS

Site Reference and address	Borehamwood Site: BORE01 Land west of A1(M), Borehamwood Site identification plan: [5309/310] Aerial photograph: [5309/311]	
Site area	11.12 ha	
Existing use/occupiers	The site was historically used as a private sports ground for cricket and tennis and is currently partly in use as a car/lorry park	
Land ownership	LEGAL AND GENERAL ASSURANCE SOCIETY LIMITED (Co. Regn. No. 166055) of Temple Court, 11 Queen Victoria Street, London EC4N 4JP.	
Site availability	Unlikely to be available. Planning application has been granted permission for the development of Sky Studios Elstree, a state-of-the-art TV and film studio. The development is expected to be open in 2022.	
Brownfield Land Register	No.	
Planning history	An outline planning application for a Centre for Sporting Excellence was submitted in October 2014 (ref. 14/1735/OUT). The scheme was not implemented and has subsequently expired. 20/0315/FULEI | Development of film/production studios (Use Class B1b) and ancillary floorspace, new access arrangements, car parking, landscaping, infrastructure and associated works. | Land East Of Rowley Lane Borehamwood Hertfordshire – Granted.	
Buildings	There are existing single storey containers and structures scattered throughout the site.	
Adjoining uses	North:	To the north of the site are agricultural fields.
	East:	The site is bounded to the east by the A1(M), beyond which is agricultural land and a golf course.
	South:	An area of woodland abuts the site to the south, beyond this is a large Holiday Inn hotel.
	West:	The site is bounded to the west by Rowley Lane. There are buildings of various uses fronting onto Rowley Lane including residential flats, office space and a BP petrol station and convenience shop.
Topography	The site is almost entirely level.	
Water courses	The Mimmshall Brook runs through the site.	

Vegetation	There is a mature hedgerow/tree belt between the site and Rowley Lane and the A1(M). Within the site vegetation is predominantly limited to the eastern half of the sire where there are further hedgerows.
ACCESSIBILITY	
Vehicular access	Rowley Lane (Principal A road) runs along the site to the west and connects to the A1 via Elstree Road further to the south. Vehicular access to the site is via Rowley Lane.
Cycle access	Rowley Land and Elstree Way have dedicated cycle lanes.
Pedestrian access	There is a pedestrian footpath opposite the site on the western side of Rowley Lane.
Public transport	The closest rail station to the site is Elstree and Borehamwood Station, situated to the west of the site. This station lies approximately 2.4km (30min walking distance or 9min cycle distance) from the centre of the site. A total of five bus stops are situated in close proximity to the application site. The closest bus stop to the site (Borehamwood, Rowley Lane, southbound) lies approximately 0.16km (3min walking distance) to the south of the site. This stop is served by bus routes 398 (Potters Bar – Borehamwood). Bus route 107 (Edgeware – New Barnet) can be accessed via bus stops on Elstree Way.
High level transport appraisal	A high-level transport appraisal is not recommended.
ENVIRONMENTAL IMPACT	
Landscape and visual impact	The site is well screened from all directions due to intervening vegetation and the level nature of the land. There will be private views of the site from the west due to the high scale of the adjacent buildings.
Impact on residential amenities:	None likely.
Ecology:	Ecological value is likely limited to the watercourse within the site and the hedgerows and trees. AN ecological appraisal submitted with the pending planning application found that bats are utilising the mature trees and the existing buildings on site.
Noise sources	Rowley Lane and the A1(M) are both adjacent to the site and represent significant noise sources. There is also a depot to the west of the site.
Flood risk	Much of the site is within Flood Zone 1. However, areas to the south and west of the site are within Flood Zone 3, reflecting the route of the Mimmshall Brook.
Surface water flooding	Most the of the site is at very low risk. However, there are areas of low-high risk across the site, predominantly to the south and west.
Groundwater source protection area	None.

Air quality	Adjacent to Rowley Lane, A1(M) and petrol station.
Minerals	Sand and Gravel Belt
Agricultural land quality	3a/3b
Rights of way	There are no public rights of way through the site. Elstree and Borehamwood Footpath 019 is just west of the site.
EXISTING PLANNING AND DESIGNATION CONSTRAINTS	
Existing and emerging local plan site specific designations	To the north of the site is Green Belt land, however the site itself has been removed from the Green Belt and is now identified as 'Safeguarded Land for Employment Development' under Policy SADM9 Identified as site HEL206 in HELAA 2019 Report. (Not formal allocation)
Heritage assets: archaeology	None.
Designated heritage assets	None.
Designated rural areas	None.
International, National and locally designated sites of importance for biodiversity and habitat sites	None.

SITE EVALUATION

Positive site attributes:

1. The site is of optimal / sufficient size for 8fe
2. The site is in single ownership.
3. The site is flat and re-grading would be minimal.
4. Vehicular access could be achieved from Rowley Lane with suitable mitigation/improvements.
5. Pedestrian/cycle access Rowley Lane with suitable mitigation/improvements.
6. The site lies adjacent/within 400m walking distance of bus stops and bus routes.
7. Site development would not be exposed to long distance views in the wider landscape.
8. The site has relatively small areas of vegetation that would require removal to accommodate a secondary school.
9. The site lies adjacent to the urban area of Borehamwood
10. There would be no impacts on preserved trees.
11. There would be minor ecological impact [subject to further investigations].
12. The site lies outside the Green Belt.
13. The site lies outside an AQMA.
14. The site is not in an Area of Archaeological Importance.

15. There would be no impacts on designated heritage assets.
16. The site is not in a designated rural area.
17. The site does not have any international, national or local wildlife, habitat or biodiversity designations.
18. The site is does not have any local plan allocation.
19. The site is not traversed by rights of way.
20. The site has a single landowner/is in the ownership of HCC.

Negative site attributes:

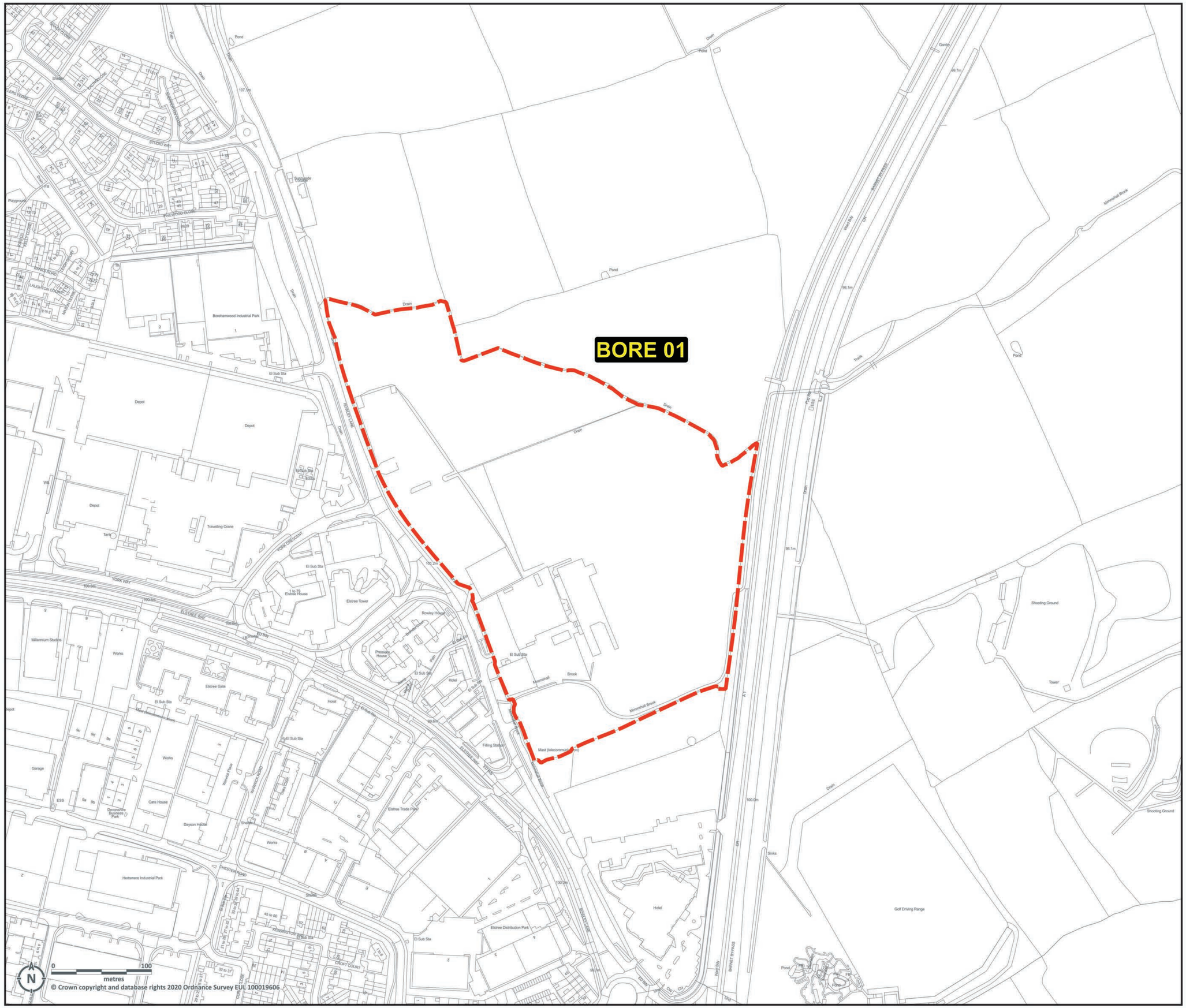
1. The site is unlikely to be available due to ongoing planning application
2. The site is at risk of flooding [subject to further investigations].
3. The site is located near noise sources.
4. The site lies in a Minerals Consultation Area.
5. The site does have an HELAA allocation [HEL206].
6. The site has moderate-good grade agricultural land classification [if relevant].

SITE LAYOUT PRINCIPLES

A BB103 compliant 8fe secondary school site could not be accommodated on this site.

CONCLUSION

The site is located on land west of the A1(m) and east of Rowley Lane (plan 5309/301/C). The existing use is a car/lorry park. The site is in single ownership and almost entirely level. The site is an optimal size for an 8fe school. Upon further investigation the site is unlikely to be available. Planning permission has been granted for the development of Sky Studios Elstree, a TV and film studio expected to be open in 2022. This site was not recommended for high level transport appraisal or for comparative assessment with other sites.



SITE BOUNDARY
11.12ha

SOUTH WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH

Site identification: BORE01

PROJECT NO	DRAWING NO	REV
5309	310	
DRAWN	DATE	SCALE
HNA	JUNE 2020	1:2500 @A2

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SOUTH WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH

Aerial photograph: BORE01

PROJECT NO	DRAWING NO	REV
5309	311	
DRAWN	DATE	SCALE
HNA	JUNE 2020	1:2500 @A2

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SOUTH -WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH: SHORTLISTED POTENTIAL SCHOOL SITE

SITE DETAILS

Site Reference and address	Borehamwood Site: BORE02 Land north of Rowley Lane, Borehamwood Site identification plan: 5309/320 Aerial photograph: 5309/321 Development principles plan: 5309/322	
Site area	11.74 ha	
Existing use/occupiers	Agricultural pasture land	
Land ownership	WROTHAM PARK SETTLED ESTATES of Estate Office, Wrotham Park, Barnet EN5 4SB.	
Site availability	Site in HELAA 2019 report.	
Brownfield Land Register	No	
Planning history	None.	
Buildings	None.	
Adjoining uses	North:	To the north is agricultural land.
	East:	To the east is agricultural land.
	South:	The site is bounded to the south by Rowley Lane. Fronting Rowley Lane are farm buildings and The Mops and Broops Public House.
	West:	The site is bounded to the west by Well End Road. There is a row of dwellings fronting onto the road.
Topography	The site is predominantly level with a very gentle incline from east to west.	
Water courses	None.	
Vegetation	The site is bounded entirely by hedgerow scattered with mature trees. There are hedgerows within the site defining the field boundaries.	

ACCESSIBILITY

Vehicular access	Well End Road is situated to the west of the site and is an Unnumbered C Road with 30mph restriction. To the south is Rowley Lane, an unclassified U Road. Access may be possible from either road with adequate improvements.

Cycle access	None.
Pedestrian access	There is a pedestrian footpath on the western side of Well End Road.
Public transport	Alexandra Road bus stop is the nearest bus stop to the site, a 0.16km walk (2 minutes). This provides access to route B3 which connects to Borehamwood Town Centre.
High level transport appraisal	A high-level transport appraisal prepared by Stomor Civil Engineering Consultants concludes that there are some reservations on the suitability of increased vehicle movements along the rural section of Rowley Lane and the access onto the A1 from Holmshill Lane. A detailed review of the potential impact of school related traffic along these roads will need to be undertaken and significant improvements to the road layout will be required in order to provide a safe and suitable route, or alternatively, measures to discourage school related travel along this route. There are also potential capacity issues along Potters Lane for vehicles and cyclists, which is likely to be on a key desire line from the northern side of Borehamwood. If the concerns identified above can be mitigated to a suitable standard, then, in principle, the site may be suitable for provision of an 8FE Secondary school, subject to a full review of transport impact and safety as part of a full Transport Assessment. Footways along residential roads to the west and south-west of the site are generally considered suitable. However, new crossing facilities are likely to be required. Bus accessibility to the site from Borehamwood and Elstree is reasonable, with bus stops on Alexandra Road providing access to route B3. However, existing links to the wider area would be from stops available on the B5378 Shenley Road and the A5135 Elstree Way which are over 1km from the school site. Improved accessibility between the site and the local bus stops should be considered as part of proposals. Due to the Covid-19 pandemic, traffic conditions at the time of writing this High-Level Assessment do not reflect former 'typical' traffic conditions. However, a desktop review of available traffic information has been undertaken which indicates that the main local roads to the south of the site experience a level of congestion at peak times.
ENVIRONMENTAL IMPACT	
Landscape and visual impact	The site appears to be well enclosed by existing vegetation from all directions.
Impact on residential amenities:	Limited impact.
Ecology:	There are trees and hedgerows surrounding the perimeter of the site and dispersed throughout. These are likely to provide habitats for birds and invertebrates.
Noise sources	None significant.
Flood risk	Flood Zone 1 – Very low risk

Surface water flooding	Very low risk
Groundwater source protection area	None
Air quality	None
Minerals	Sand and Gravel Belt
Agricultural land quality	3a/3b
Rights of way	Shenley footpath 016 runs along the eastern boundary of the site.
EXISTING PLANNING AND DESIGNATION CONSTRAINTS	
Existing and emerging local plan site specific designations	Green Belt HELAA site – HEL376a
Heritage assets: archaeology	None.
Designated heritage assets	To the south of the site is a Grade II listed building known as Nelson Cottage and another Grade II listed barn at Rowley Farm.
Designated rural areas	None.
International, National and locally designated sites of importance for biodiversity and habitat sites	None.
SITE EVALUATION	

Positive site attributes:

1. The site is of optimal / sufficient size for 8f/e
2. The site is in single ownership.
3. The site is available.
4. The site has gentle level changes and re-grading would be minimal.
5. Vehicular access could likely be be achieved from Well End Road with suitable mitigation/improvements.
6. Pedestrian/cycle access could likely be achieved from Well End Road with suitable mitigation/improvements.
7. The site lies adjacent/within 400m walking distance of bus stops and bus routes.
8. Site development would not be exposed to long distance views in the wider landscape.
9. The site has relatively small areas of vegetation that would require removal to accommodate a secondary school.
10. The site lies adjacent to the urban area of Borehamwood.
11. There would be no impacts on preserved trees.

12. There would be minor ecological impact [subject to further investigations].
13. The site is not at risk of flooding [subject to further investigations].
14. The site is not located near any noise sources.
15. The site lies outside an AQMA.
16. The site is not in an Area of Archaeological Importance.
17. The site is not in a designated rural area.
18. The site does not have any international, national or local wildlife, habitat or biodiversity designations.
19. The site is does not have any local plan allocation.
20. The site is not traversed by rights of way.
21. The site has a single landowner.

Negative site attributes:

1. The site lies in a Minerals Consultation Area.
2. There would be impacts on designated heritage assets.
3. The site does have an HELAA allocation [HEL376a].
4. The site has moderate-good grade agricultural land classification [if relevant].
5. There are power lines running across the site which would require burying.

SITE LAYOUT PRINCIPLES

A BB103 compliant 8fe secondary school site could be accommodated on this site:

1. Development principles plan 5309/322
2. Total site area: [11.74ha]
3. Build zone: [3.56ha]
4. Playing Field zone: [8.18ha]
5. Building footprint: [11,557sqm]
6. Vehicular access/egress: Well End Road
7. Pedestrian access: Well End Road

CONCLUSION

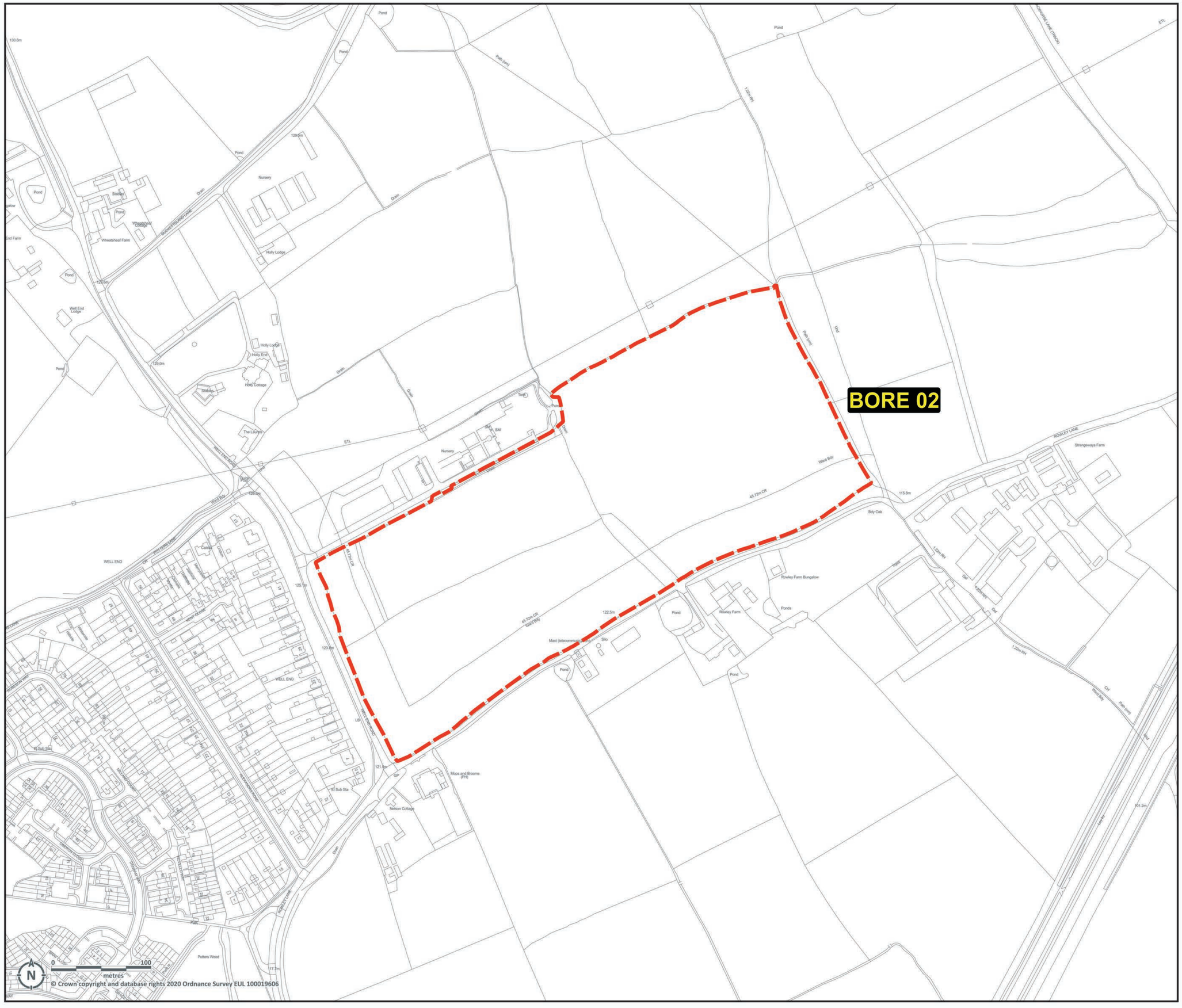
The site is located north of Rowley Lane and east of Well End Road (plan 5309/301/C). The existing use is agricultural. The site is in 1 ownership and is predominantly flat with a very gentle incline from east to west. The site evaluation in the planning appraisal identified 23 positive site attributes and 5 negative site attributes. The site is well enclosed by existing vegetation from all directions. The site is an optimal size for an 8fe school.The site was recommended for highway appraisal.

The conclusions of the high-level transport appraisal were that there are some reservations on the suitability of increased vehicle movements along the rural section of Rowley Lane and the access onto the A1 from Holmshill Lane. A detailed review of the potential impact of school related traffic along these roads will need to be undertaken and significant improvements to the road layout will be required in order to provide a safe and suitable route, or alternatively, measures to discourage school related travel along this route. There are also potential capacity issues along Potters Lane for vehicles and cyclists, which is likely to be on a key desire line from the northern side of Borehamwood. If the concerns identified above can be mitigated to a suitable standard, then, in principle, the site may be suitable for provision of an 8FE Secondary school, subject to a full review of transport impact and safety as part of a full Transport Assessment. Footways along residential roads

to the west and south-west of the site are generally considered suitable. However, new crossing facilities are likely to be required. Bus accessibility to the site from Borehamwood and Elstree is reasonable, with bus stops on Alexandra Road providing access to route B3. However, existing links to the wider area would be from stops available on the B5378 Shenley Road and the A5135 Elstree Way which are over 1km from the school site. Improved accessibility between the site and the local bus stops should be considered as part of proposals. The site was ranked 6/6 for highways and accessibility due to there being no bus stop in the immediate vicinity of the site and limited potential for footway/ cycleway improvements along the desire line. Overall, the site was ranked lowest (6/6) in terms of access and highways suitability in comparison with other sites. It scored least well of all the sites in terms of providing a safe and suitable vehicular access, its location and proximity to accessible sustainable transport modes, and anticipated mitigation works.

A development principles plan (5309/322) has been prepared and is attached at Appendix 3.

It is concluded that because of the highway concerns relating to the suitability of the surrounding highway infrastructure for a school development, lack of nearby public transport infrastructure and the limited potential for highway improvements, this site should not be considered for an 8fe school unless another more sequentially preferable site cannot be identified.



SOUTH WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH

Site identification: BORE02

PROJECT NO	DRAWING NO	REV
5309	320	
DRAWN	**DATE**	**SCALE**
HNA	JUNE 2020	1:2500 @A2

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SOUTH WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH

Aerial photograph: BORE02

PROJECT NO	DRAWING NO	REV
5309	321	
DRAWN	DATE	SCALE
HNA	JUNE 2020	1:2500 @A2

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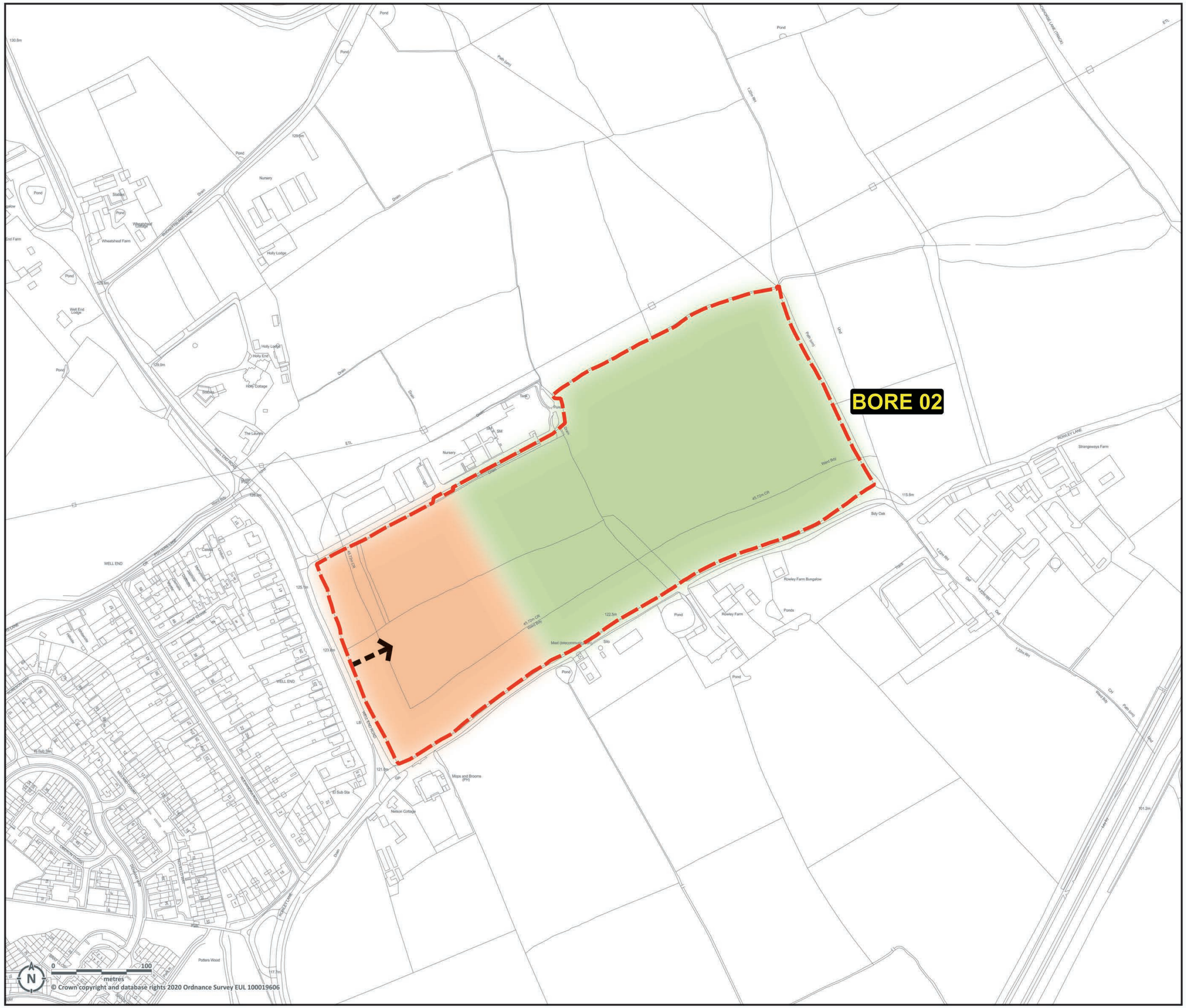

SOUTH WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH

Development principles: BORE02

PROJECT NO	DRAWING NO	REV
5309	322	
DRAWN	DATE	SCALE
HNA	SEPT 2020	1:2500 @A2

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South West Hertfordshire Secondary School Site Search

High Level Transport Appraisal for Site 02 Borehamwood

Land to the East of Well End Road

This High-Level Transport Appraisal (HLTA) is to consider the suitability of access for a new 8 Form of Entry (8FE) secondary school on land to the east of Well End Road, Berkhamsted.

1. Site Background

1.1 Location

The site is located on the north eastern side of Borehamwood and currently comprises three parcels of arable land.

The western boundary is defined by Well End Road, with Rowley Lane defining the southern site boundary. A plant nursery abuts the western half of the northern boundary, while arable land abuts the remainder of the northern boundary and also the eastern boundary.

1.2 Local Road Network

Well End Road runs north west to south east along the north eastern side of Borehamwood. At its north western end, Well End Road becomes London Road at a junction with High Cannons. London Road continues north to Shenley. Well End Road is generally 5.5m wide and is subject to a 30mph speed limit in the vicinity of the site. The speed limit increases to 40mph to the north of its junction with Potters Lane, to the north of the site. The road is lit and the centrelines are double white lines.

At its south eastern end, Well End Road becomes Rowley Lane adjacent to the south western corner of the site, which continues along the eastern edge of Borehamwood to the A1 Barnet Bypass. This section Rowley Lane is an approximately 6m wide road, with street lighting and double white lines along its centreline.

Rowley Lane continues south eastwards from the A1 to connect to the A411 Barnet Road. There is a 7.5tonne weight limit along Rowley Lane to the north of its junction with Studio Way.

Rowley Lane also runs east from Well End Road along the southern boundary of the site, linking to the northbound carriageway of theA1 Barnet Bypass at Holmshill Lane to the northeast of Borehamwood. This section of Rowley Lane is rural in nature, with no lighting, a narrow road width in places (approximately 3m) and is subject to the national speed limit.

Well End Road and Rowley Lane meet at a sharp bend as the road changes direction. Rowley Lane would have originally been the priority route, but this has been altered to form a bend between Well End Road and the southern section of Rowley Lane, with the eastern section of Rowley Lane becoming the minor arm of the junction.

Potters Lane connects to Well End Road to the north east, via a Y-junction and to the B5378 Shenley Road via a mini-roundabout at its south western end. Between Well End Road and Denham Way to

the west, the width of Potters Lane varies and narrows to approximately 3m in places. The width increases to approximately 6m wide between Denham Way and the B5378 Shenley Road. There is a 7.5tonne weight limit upon entry to Potters Lane from the B5378. The road is lit and is subject to a 30mph speed limit along its length.

The A1 is located approximately 350m to the east of the site. This section of the A1 runs between the A411 and the M25. There are two points of access to the A1 between the A411 and the M25; one at the southern end of Rowley Lane, the other via the Holmshill Lane access to the north east.

1.3 Existing Access

There are currently three agricultural accesses to the site along Rowley Lane, although only two of these accesses appear to be in use. All accesses are gated and are located approximately 230m, 340m and 525m from Well End Road, respectively.

There is currently no access from Well End Road, with a drainage ditch running in the grass verge between the road and the site.

2. Walking Accessibility

2.1 Local Pedestrian Provision

The north eastern section of Rowley Lane does not currently have a footway on either side of the road.

There is a footway on the south western side of Well End Road. This footway continues south west to run along the northern side of Rowley Lane (west). At its north western end, this footway connects to the footway on the southern side of Potters Lane. There is a footway on the southern side of Potters Lane until its junction with Denham Way, from which point there are footways on both sides of the road up to the B5378.

The residential streets linking off Potters Lane and Rowley Lane, such as Alexandra Road and Denham Way, all currently have footways on both sides of the road.

The footway network in the residential area to the west of the site is comprehensive and provides good permeability in the area for access on foot to the site from the centre of Borehamwood.

There are no formal pedestrian crossing facilities in the vicinity of the site. Current pedestrian crossing provision across junctions is in the form of a dropped kerb.

There is a toucan crossing at the southern end of Potters Lane, catering for a segregated foot/cycleway which runs along the north eastern side of the B5378.

Public Right Of Way (PROW) Footpath 16 runs along the eastern boundary of the site, between Rowley Lane, to the south, and Buckettsland Lane, to the north. On the south side of Rowley Lane, opposite PROW Footpath 16, PROW Footpath 28 runs south eastwards to the A1.

PROW Footpath 15 runs between Rowley Lane and the B5378 through the residential area to the west of the site. This route is lit.

PROW Footpath 3 and 1 provide pedestrian links between Well End Road and the B5378 through arable fields to the north west of Potters Lane.

2.2 Existing Pedestrian Access

There are no existing formal pedestrian accesses into the site.

2.3 Proposed Improvements

Pedestrian access is limited to the west and south west of the site, with access either via Well End Road or Rowley Lane. There is a reasonable network of pedestrian routes through the residential area to the west of the site. However, as it is anticipated that all pedestrian movements will travel through this area, it is recommended that improvements to linkages are undertaken to ensure the footway network is suitable for the anticipated number of pupil movements. This would include, but not limited to, the following:

- Pedestrian provision on part of the eastern side of Well End Road, linking to the school pedestrian access. A pedestrian crossing facility will also be required on Well End Road, in the vicinity of the access.
- PROW Footpath 15 is likely to be a well-used pedestrian route. Therefore, a suitable pedestrian crossing facility would be required where the Footpath crosses Denham Way.
- The footway along Potters Lane may need widening in places to ensure the footway is of an adequate width to cater for school related pedestrian movements.
- Pedestrian crossings at junctions will need to be established including dropped kerbs, tactile paving and possible parking restrictions where necessary.

An assessment of the likely catchment of the school would need to be carried out as part of the Transport Assessment to determine pedestrian desire lines and where any additional improvements are required to the local footway network in relation to the impact of the proposed school.

3. Cycling Accessibility

3.1 Local Cycle Provision

There are no existing designated cycle routes in the vicinity of the site or linking the site to the wider area of Borehamwood.

There are off-road cycle routes along the B5378 Shenley Road and the A5135 Elstree Way, which are located approximately 800m and 820m away from the site, respectively.

2.2 Existing Cyclist Access

There are no existing cycle accesses into the site.

3.3 Proposed Improvements

There appears to be sufficient width to provide off-road cycle facilities along parts of Rowley Lane, although there may be third party land issues between the site and Alexandra Road, which would be a key part of the link. Most of the major residential roads within the area to the west of the site have footways and verges with potential for widening.

Cycle facilities would be beneficial along Potters Lane between Well End Road and the B5378. However, the section of Potters Lane between Alexandra Road and Denham Way has a very narrow footway in places with no verge and steep banks, which would be a significant constraint.

Consideration should also be taken to making PROW Footpath 15 a bridleway or foot/cycleway to cater for potential cycle movements.

Hertfordshire County Council (HCC) Roads in Hertfordshire Design Guidance states that the preferred priority provision for cyclists would be to cater for them on the road network, with dedicated cycle lanes being considered in the second instance. Therefore, traffic calming measures along Rowley Lane, Denham Way, Studio Way and Potters Lane in the vicinity of the school site may be sufficient to reduce vehicle speeds and create an attractive on-road route for cyclists. However, any proposed on-road cycle route will need to be assessed in tandem with the potential traffic impact also generated by the school.

4. Bus Accessibility

4.1 Local Bus Provision

The closest bus stops are on Alexandra Road, located approximately 125m to the west of the site. These stops are served by route B3 which is a circular route through this area, running counter clockwise from Studio Way; along Rowley Lane, Alexandra Road, Potters Lane and Denham Way.

Route B3 is a Borehamwood Town service, providing access to the town centre and Elstree & Borehamwood railway station.

There are additional stops available on the B5378 Shenley Road and the A5135 Elstree Way, which provide links to the wider area including Elstree, Watford, Radlett and Chipping Barnet, among others.

4.2 Existing Connectivity

In terms of connectivity, the B3 route provides at least two services to the local bus stops between 7:30am and 9:00am which would suit school travel, with similar frequencies during the afternoon to cater for travel home from school.

There are several routes serving bus stops on the B5378 Shenley Road and the A5135 Elstree Way which provide regular services during the school travel times. However, these stops are over 1km from the site. Therefore, bus services for pupils travelling in from other towns are limited.

4.3 Proposed Improvements

A bus access strategy for the site would depend on the likely catchment area and whether pupils from further afield would use scheduled bus services or school specific services. The latter would be more likely to deliver pupils directly to the school, the former would use existing stops. However, nearby bus stops only serve Borehamwood and Elstree, not other surrounding areas.

If existing services near to the site are to be used, it is recommended that a strategy for upgrading stops would be required. Depending on which stops would serve the school, this would require the provision of a shelter, flag, appropriate kerb types and information boards.

Pedestrian facilities between existing stops and the site are considered to be of a reasonable quality to allow access on foot, although proposed improvements to the footway provision should be provided, as identified in Section 2.3.

5. Rail Accessibility

5.1 Local Rail Provision

The nearest railway station is Elstree & Borehamwood Station, located approximately 2.4km south west of the site.

5.2 Existing Connectivity

Elstree & Borehamwood Station is on the Thameslink route between Radlett and Mill Hill Broadway. Connections are also available to St. Albans, Luton and London, among others.

Walking time between the site and Elstree & Borehamwood Railway Station is approximately 35 minutes.

5.3 Proposed Improvements

The Transport Assessment would need to consider the likely number of pupils using trains as part of their journey to/from the school site and whether any improvements can be proposed to improve the connectivity of the railway stations to the school.

6. Vehicular Accessibility

6.1 Existing Highway Conditions

Due to the Covid-19 pandemic, traffic conditions at the time of writing this High-Level Assessment do not reflect former 'typical' traffic condition. Therefore, it is not possible to comment upon existing highway conditions in terms of congestion in the vicinity of the site.

'Typical traffic' information from Google Maps appears to show typical traffic conditions over recent periods and is therefore not a reliable source of information for identifying likely congestion hotspots due to reductions in traffic during the recent lockdown period. This has been assumed

based upon the fact that several known congestion hotspots in the area are showing up as having no congestion during the AM and PM peak periods on the current 'typical traffic' mapping.

However, previous experience indicates that traffic on the A5135 Elstree Way is likely to be significant at peak times.

Figure 3.1.1 of the Hertfordshire Traffic and Transport Data Report 2018 identifies that the junction between the B5378 Shenley Road and the A5135 Elstree Way, and the junction between the Rowley Lane and the A1, are congested junctions on the key network.

Further assessment of traffic congestion in the vicinity of the site will need to be carried out in due course in consultation with the Highway Authority.

7. Proposed Vehicular Access

7.1 Proposed Vehicular Access

The most suitable point of access would be from Well End Road, preferably towards the southern end as to discourage the amount of vehicles travelling via Potters Lane, although a suitable distance from the Rowley Lane junction should be allowed.

The location of an access from Well End Road would likely impact on an existing ditch, trees and hedgerows and would be directly opposite residential driveways. Visibility in both directions along Well End Road may require removal of hedgerow and trees, subject to further survey.

An access from the south western end of Rowley Lane has been considered. However, there would likely be a significant amount of improvements required to ensure a safe vehicular access could be obtained from this location. The improvements would likely include, but not be limited to, road widening, junction upgrade between Rowley Lane and Well End Road and relocation of the 30mph speed limit extent. There are also potential issues with regard to the removal of hedgerow to obtain the required visibility and junction spacing.

It may be feasible to introduce a new roundabout at the junction between Well End Lane and Rowley Lane, with the Rowley Lane eastern arm rearranged to provide access to the site and a continuation of the lane. However, this would have a significant impact on hedgerows, trees and the existing ditch and would likely require a sizable amount of land. In addition, the existing accesses to the adjacent Mop and Brooms pub and the driveways along Well End Lane would also be impacted upon, which would need consideration.

A school in this location may encourage school related traffic to travel along the rural section of Rowley Lane and via the A1 access onto Holmshill Lane, both of which should be discouraged as far as possible due to safety concerns.

School access arrangements would need to be determined by analysis of typical traffic conditions and the impact of school traffic on the flow of vehicles along congested areas, which would be undertaken as part of the Transport Assessment.

7.2 Proposed Improvements

Well End Road is subject to a 30mph speed limit adjacent to the site. Consideration would need to be given to reducing the speed limit to 20mph in the vicinity of the vehicular and pedestrian accesses to maximise safety adjacent to the school.

Rowley Lane is currently subject to the national speed limit. It is recommended that the speed limit is reduced in the vicinity of the school site to reduce vehicle speeds on approach to Well End Road.

It is noted that there is a looped access on the north site of Rowley Lane, in the vicinity of PROW Footpath 15. It is likely that parents would utilise this access as a convenient drop off location, which would be detrimental to the adjacent dwellings, as it would appear that they have no off-street parking. Therefore, parking restrictions may need to be implemented within this access to deter school related parking.

Road widening may be required along Potters Lane between Well End Road and Denham Way to cater for an increased volume of traffic. However, there appears to be very little space to achieve this.

There is likely to be increased traffic demand along B5378 Shenley Road and the A5135 Elstree Way, which both appear to have a level of congestion. Therefore, subject to a detailed assessment of the school traffic impact, it may be necessary to consider localised improvements along these roads to minimise the risk of accidents.

It is likely that traffic calming measures and parking restrictions will need to be provided along Well End Road and Rowley Lane to manage vehicle speeds and ensure free flowing traffic along these roads, particularly as there are limited pedestrian routes to the school which would result in a significant number of pupils travelling to the school site along Rowley Lane.

It may be necessary to allow parent drop off in the site to prevent parking along Well End Road and Rowley Lane, which would cause traffic flow issues and safety concerns.

Careful consideration would need to be given to the impact of school related traffic on the rural section of Rowley Lane and the existing access onto the A1 from Holmshill Lane. The rural nature of Rowley Lane along this section makes it unsuitable to cater for large volumes of traffic. The existing junction onto the A1 is also unlikely to cater for any increase in volume of traffic.

A full Transport Assessment would be required to determine the predicted impact of traffic in comparison to typical flows in the area.

8. Vehicular Trip Generation

8.1 Potential Vehicle Generation and Impact

Full analysis of potential vehicle trip generation and impact would be considered as part of a full Transport Assessment.

Initial assumptions for secondary school traffic would be that around 20% of pupils travel to/from school by car during the AM and PM peak periods. Most staff are likely to travel to school by car, although arrival times can start from 7am (or earlier), with departure times also spread across a wide period minimising the impact on peak periods.

However, car travel would be considered in conjunction with the likely catchment area of the school and resulting travel distances, proposed school facilities such as before school and after school clubs, potential for improved bus services and implementation of sustainable travel routes.

It may be necessary to allow parent drop off in the site to prevent parking along Well End Road, Rowley Lane or adjacent residential roads, which would cause traffic flow issues and safety concerns.

8.2 Proposed Mitigation

A School Travel Plan will need to be prepared for the school to promote walking, cycling and public transport for travel rather than car use.

An assessment of vehicle and pedestrian desire lines will be undertaken as part of the Transport Assessment which will identify any potential Park and Stride facilities, which the school could utilise.

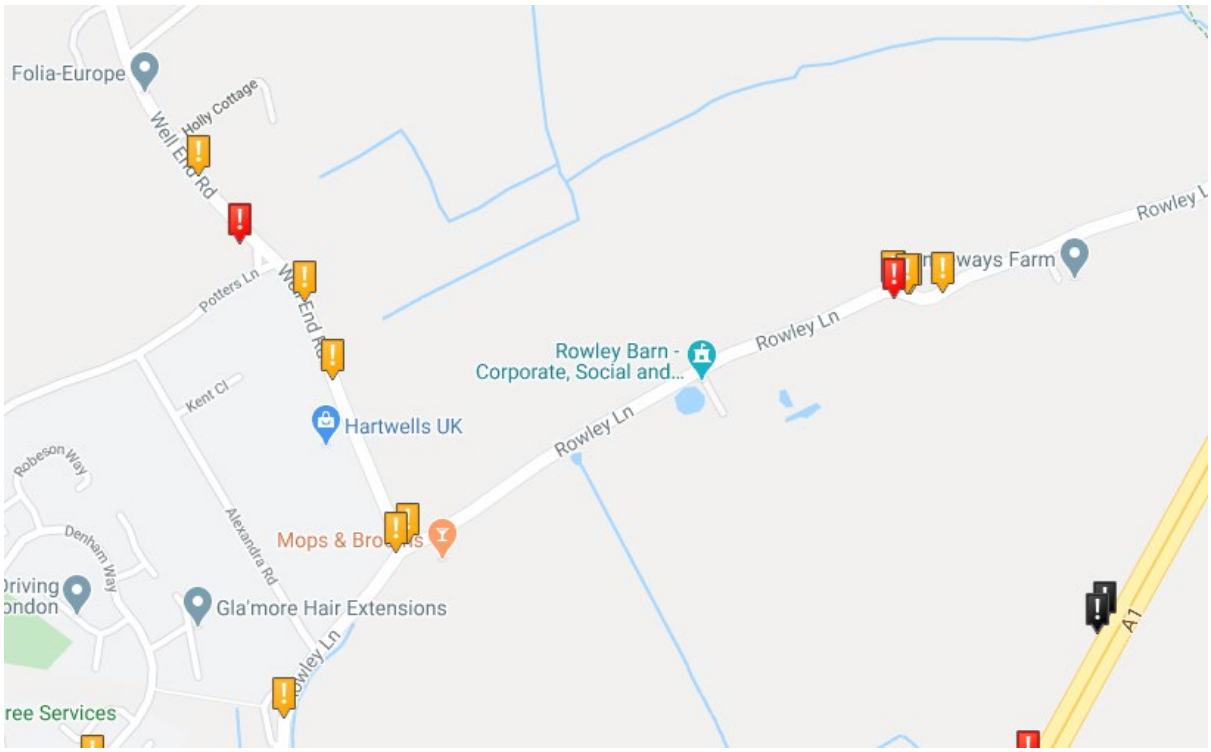
9. Highway Safety

9.1 Existing Accident Data

Data from crashmap.co.uk for the last 5 years has been obtained which identifies personal injury accidents received from the Department of Transport. The data identifies two 'serious' accidents in the vicinity of the site in the last 5 years. One of these was on Well End Road, to the north of the junction with Potters Lane, which involved a vehicle hitting a tree. The other occurred on the rural section of Rowley Lane, at a sharp bend in the road, where a vehicle entered a ditch.

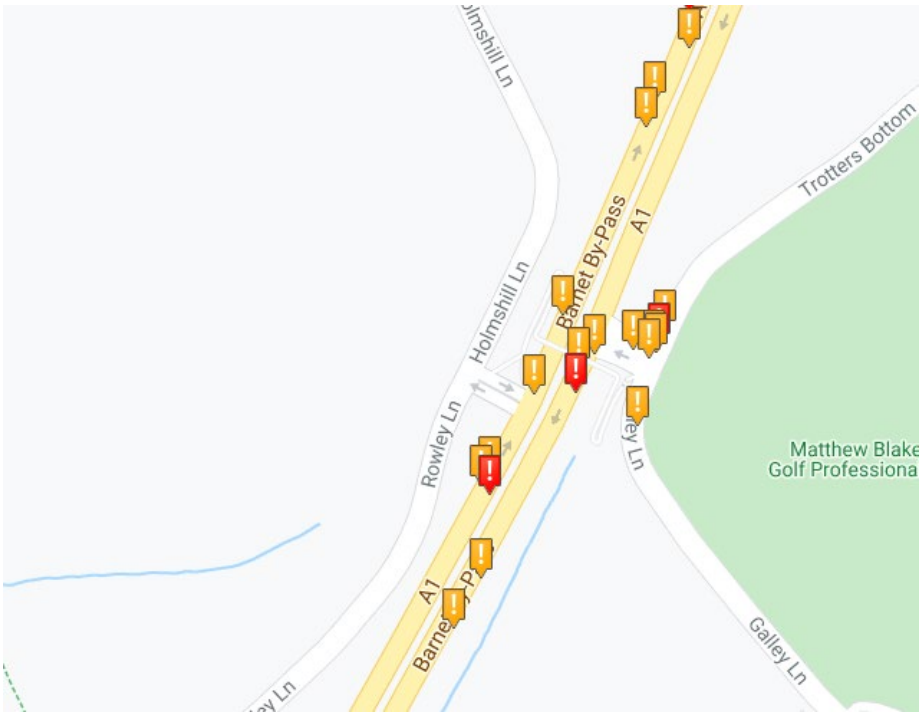
There are two 'slight' incidents at the junction between Rowley Lane and Well End Road, and two further 'slight' incidents on Well End Road between Rowley Lane and Potters Lane. The majority of these incidents involved a single vehicle.

There is also a cluster of incidents at the bend along the rural section of Rowley Lane.



Source: www.crashmap.co.uk

In addition to the above, the accident data for the junction between Holmshill Lane and the northbound carriageway of the A1 identifies 4 slight and 1 serious accidents in the vicinity of the junction.



Source: www.crashmap.co.uk

9.2 Proposed Improvements

An influx of cyclists, pedestrians, and traffic due to the school development may cause additional pressures and increased accidents. Therefore, mitigation measures will need to be considered.

It is recommended that safety along the bend on the rural section of Rowley Lane and the access onto the A1 from Holmshill Lane are reviewed, considering any increased traffic and pedestrian movements.

10. Conclusions

We have some reservations on the suitability of increased vehicle movements along the rural section of Rowley Lane and the access onto the A1 from Holmshill Lane. A detailed review of the potential impact of school related traffic along these roads will need to be undertaken and significant improvements to the road layout will be required in order to provide a safe and suitable route, or alternatively, measures to discourage school related travel along this route.

There are also potential capacity issues along Potters Lane for vehicles and cyclists, which is likely to be on a key desire line from the northern side of Borehamwood.

If the concerns identified above can be mitigated to a suitable standard, then, in principle, the site may be suitable for provision of an 8FE Secondary school, subject to a full review of transport impact and safety as part of a full Transport Assessment.

Footways along residential roads to the west and south west of the site are generally considered suitable. However, new crossing facilities are likely to be required.

Bus accessibility to the site from Borehamwood and Elstree is reasonable, with bus stops on Alexandra Road providing access to route B3. However, existing links to the wider area would be from stops available on the B5378 Shenley Road and the A5135 Elstree Way which are over 1km from the school site. Improved accessibility between the site and the local bus stops should be considered as part of proposals.

Due to the Covid-19 pandemic, traffic conditions at the time of writing this High-Level Assessment do not reflect former 'typical' traffic conditions. However, a desktop review of available traffic information has been undertaken which indicates that the main local roads to the south of the site experience a level of congestion at peak times.

BORE 02

POSSIBLE PED/CYCLE AND VEHICULAR ACCESS

POSSIBLE VEHICULAR ACCESS

BUS STOP

POTTERS LANE

DENHAM WAY

ALEXANDRA ROAD

WELL END ROAD

ROWLEY LANE

SHENLEY ROAD

STUDIO WAY

A1 BARNET BYPASS

A1

A5178

0 50 100 150 200 250m

SCALE BAR 1:5000

KEY

- SITE BOUNDARY
- FOOTPATH
- BRIDLEWAY
- UNCLASSIFIED COUNTRY ROAD
- BYWAY OPEN TO ALL TRAFFIC
- WATERCOURSE
- POTENTIAL ACCESS LOCATION

Rev	Description	Date	Drawn	Checked	Apvd.

Project

SOUTH WEST HERTS SECONDARY SCHOOLS

Drawing Description

BOREHAMWOOD SITE 02

Drawing Number	Scale	Date	Drawn	Checked	Approved
ST-2995-06	1:5000@A3	17.08.20	JJN	SJB	

Client

Architect

stomor
CIVIL ENGINEERING CONSULTANTS
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SOUTH -WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH: SHORTLISTED POTENTIAL SCHOOL SITE		
SITE DETAILS		
Site Reference and address	Borehamwood Site: 03 Land east of Green Street, Borehamwood Site identification plan: 5309/330 Aerial photograph: 5309/331 Development principles plan: 5309/332	
Site area	11.26 ha	
Existing use/occupiers	Agricultural	
Land ownership	WROTHAM PARK SETTLED ESTATES of The Estate Office, Wrotham Park, Barnet, Herts., EN5 4SB.	
Site availability	Site HEL347 in HELAA 2019 Report	
Brownfield Land Register	No.	
Planning history	TP/98/0459 - Creation of access road to Green Street - Granted	
Buildings	None.	
Adjoining uses	North:	To the north of the site is agricultural land.
	East:	To the east of the site is agricultural land.
	South:	To the south of the site is agricultural land.
	West:	To the west of the site are residential dwellings fronting onto Green Street.
Topography	The site is almost completely level.	
Water courses	None.	
Vegetation	The site is formed of two agricultural field parcels. Each are bounded by hedgerows and tree belts, particularly along the northern boundary and the boundary with Green Street. There is no vegetation within the central areas of the site.	
ACCESSIBILITY		
Vehicular access	Cowley Hill/Green Street bound the site to the west. The road is a classified B road with 30mph speed restriction.	
Cycle access	None.	
Pedestrian access	Green Street features footpaths on both sides of the road. There are	

	informal footpaths within the site.
Public transport	Stapleton Road and Stanborough Avenue bus stops are both a 0.3km walk from the site (2min). They both provide access to routes 357 (Harpenden to Borehamwood via Batford, Wheathampstead, St Albans, London Colney and Shenley) and 358 (Borehamwood – Oaklands).
High level transport appraisal	A high-level transport appraisal prepared by Stomor Civil Engineering Consultants concludes that, in principle, it would appear that the road network and potential for sustainable access to the site would be suitable for provision of an 8FE Secondary school, subject to a full review of transport impact and safety as part of a full Transport Assessment. It is suggested that adequate pedestrian crossings are provided along Green Street and at suitable locations within the residential area to the south-west, in order to provide a safe and suitable route for pupils to access the school. The footway network along residential roads to the south-west of the site is generally considered suitable. Bus services in the vicinity of the site appear to be infrequent. Therefore, additional services may be required to ensure that bus access to the site is feasible. Due to the Covid-19 pandemic, traffic conditions at the time of writing this High-Level Assessment do not reflect former 'typical' traffic condition. Therefore, it is not possible to comment upon existing highway conditions in terms of congestion in the vicinity of the site. It is likely that any congestion issues occur at junction with London Road, which may cause school related traffic to use the network of residential roads near the school to avoid delays. A further review of the accidents around the Stapleton Road/Cowley Hill junction is recommended to investigate whether any safety improvements are required.
ENVIRONMENTAL IMPACT	
Landscape and visual impact	The site is relatively well screened from all directions.
Impact on residential amenities:	Residential amenity to dwellings fronting onto Green Street could be affected including, noise impact, loss of sunlight/daylight, outlook etc.
Ecology:	Due to the intensive agricultural nature of the site ecology is likely limited to the surrounding trees and hedgerows which may provide habitats for bats, birds and other invertebrates. A large area of woodland (local nature reserve) abuts the site to the north.
Noise sources	None significant.
Flood risk	Flood zone 1 – very low risk
Surface water flooding	Mostly very low risk – some scatted areas of low risk and patch of high risk adjacent to Green Street.
Groundwater source	None.

protection area	
Air quality	No.
Minerals	Sand and Gravel Belt.
Agricultural land quality	3a/3b.
Rights of way	Shenley footpath 004 runs along the northern boundary of the site. Shenley footpath 001 starts at the southern tip of the site.
EXISTING PLANNING AND DESIGNATION CONSTRAINTS	
Existing and emerging local plan site specific designations	Green Belt.
Heritage assets: archaeology	None.
Designated heritage assets	None.
Designated rural areas	None.
International, National and locally designated sites of importance for biodiversity and habitat sites	None. A local wildlife site bounds the site to the north.

SITE EVALUATION

Positive site attributes:

1. The site is of optimal / sufficient size for 8fe
2. The site is known to be available and has been proposed for use by the landowner for C3 residential and a School.
3. The site is in single ownership.
4. The site is flat and re-grading would be minimal.
5. Vehicular access could likely be achieved from Green Street with suitable mitigation/improvements.
6. Pedestrian/cycle access could likely be achieved from Green Street with suitable mitigation/improvements.
7. The site lies adjacent/within 400m walking distance of bus stops and bus routes.
8. Site development would not be exposed to long distance views in the wider landscape.
9. The site lies adjacent to the urban area of Borehamwood.
10. There would be no impacts on preserved trees.
11. The site is not at risk of flooding [subject to further investigations].
12. The site is not located near any noise sources.
13. The site lies outside an AQMA.

14. The site is not in an Area of Archaeological Importance.
15. There would be no impacts on designated heritage assets.
16. The site is not in a designated rural area.
17. The site does not have any international, national or local wildlife, habitat or biodiversity designations.
18. The site is does not have any local plan allocation.
19. The site is not an identified HELAA site.
20. The site has a single landowner.

Negative site attributes:

1. The site lies in the Green Belt.
2. There is potential for more than minor harm to occur to ecology.
3. The site lies in a Minerals Consultation Area.
4. The site has moderate-good grade agricultural land classification [if relevant].
5. The site is partially traversed by rights of way.
6. The site is split into two field parcels separated by mature vegetation. It is likely that this would result in poor supervision/safeguarding visibility.

SITE LAYOUT PRINCIPLES

A BB103 compliant 8fe secondary school site could be accommodated on this site:

1. Development principles plan 5309/332
2. Total site area: [11.26 ha]
3. Build zone: [3.57 ha]
4. Playing Field zone: [7.69 ha]
5. Building footprint: [11,557 sqm]
6. Vehicular access/egress: [Green Street]
7. Pedestrian access: [Green Street]

CONCLUSION

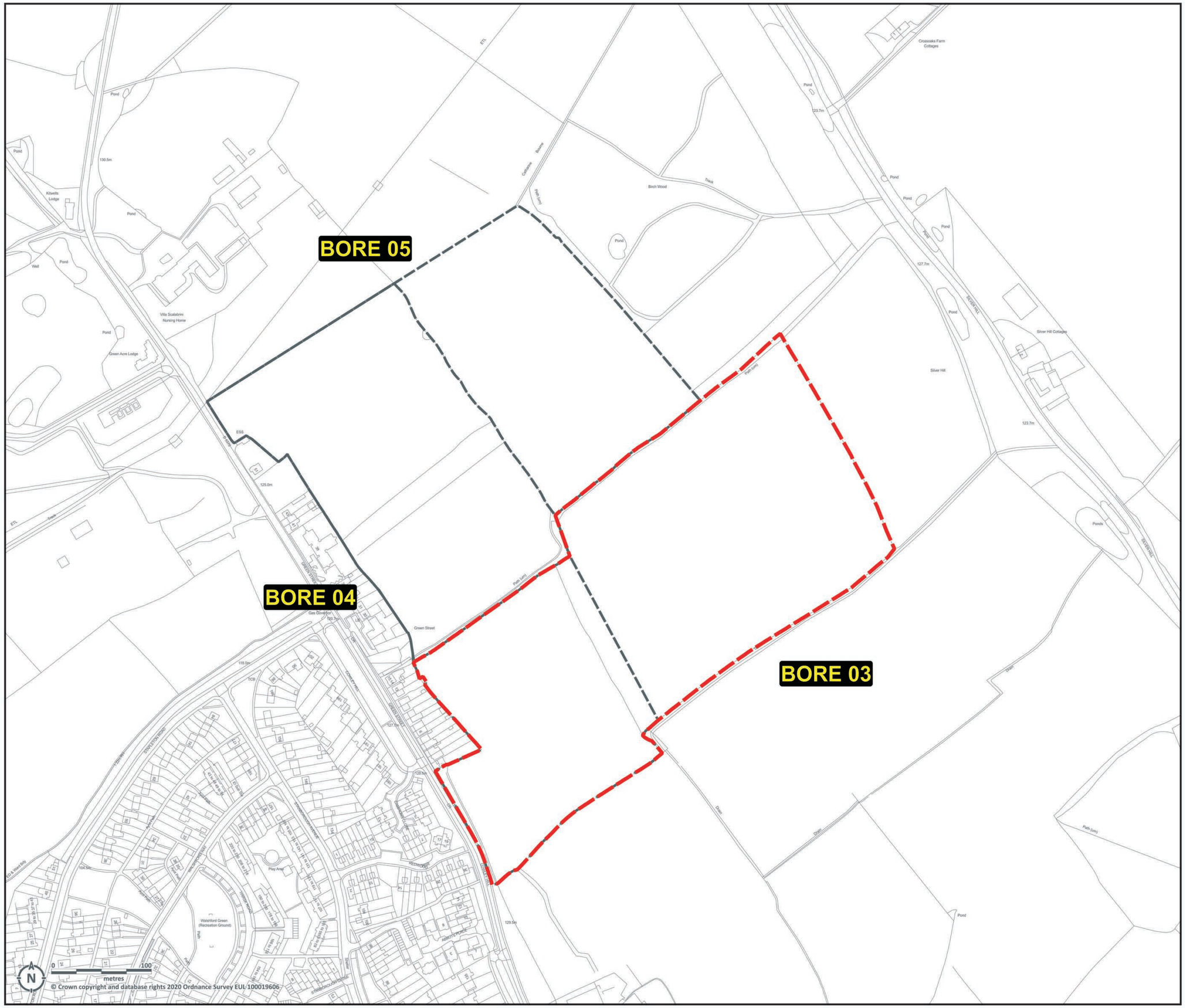
The site is located east of Green Street, Borehamwood (plan 5309/301/B) extending north-east away from Green Street. The existing use is agricultural. The site is in 1 ownership and is flat. The site is an optimal size for an 8fe secondary school. The site was recommended for highway appraisal.

The conclusions of the highway appraisal were that in principle, it would appear that the road network and potential for sustainable access to the site would be suitable for provision of an 8FE Secondary school, subject to a full review of transport impact and safety as part of a full Transport Assessment. It is suggested that adequate pedestrian crossings are provided along Green Street and at suitable locations within the residential area to the south-west, in order to provide a safe and suitable route for pupils to access the school. The footway network along residential roads to the south-west of the site is generally considered suitable. Bus services in the vicinity of the site appear to be infrequent. Therefore, additional services may be required to ensure that bus access to the site is feasible. The site was ranked 4/6 in terms of access and highways suitability in comparison with other sites. Whilst it scored high on providing a safe and suitable vehicular access, it scored less favourably in terms of its location and access by sustainable forms of transportation.

A development principles plan (5309/332) has been prepared and is attached at Appendix 3. The plan shows the disposition of the building zone, playing fields and the optimal point of vehicular

access to the site (based on highway appraisal conclusions). The tree line in the centre of the site splitting the 2 land parcels could be retained although there would be poor supervision and intervisibility between the school building and the playing fields.

It is concluded that because of the poor intervisibility between the two land parcels and the comparatively undesirable location of the site in terms of its access by sustainable forms of transport, this site should not be considered for an 8fe school unless another more sequentially preferable site cannot be identified.



SOUTH WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH

Site identification: BORE03

PROJECT NO	DRAWING NO	REV
5309	330	
DRAWN	**DATE**	**SCALE**
HNA	JUNE 2020	1:2500 @A2

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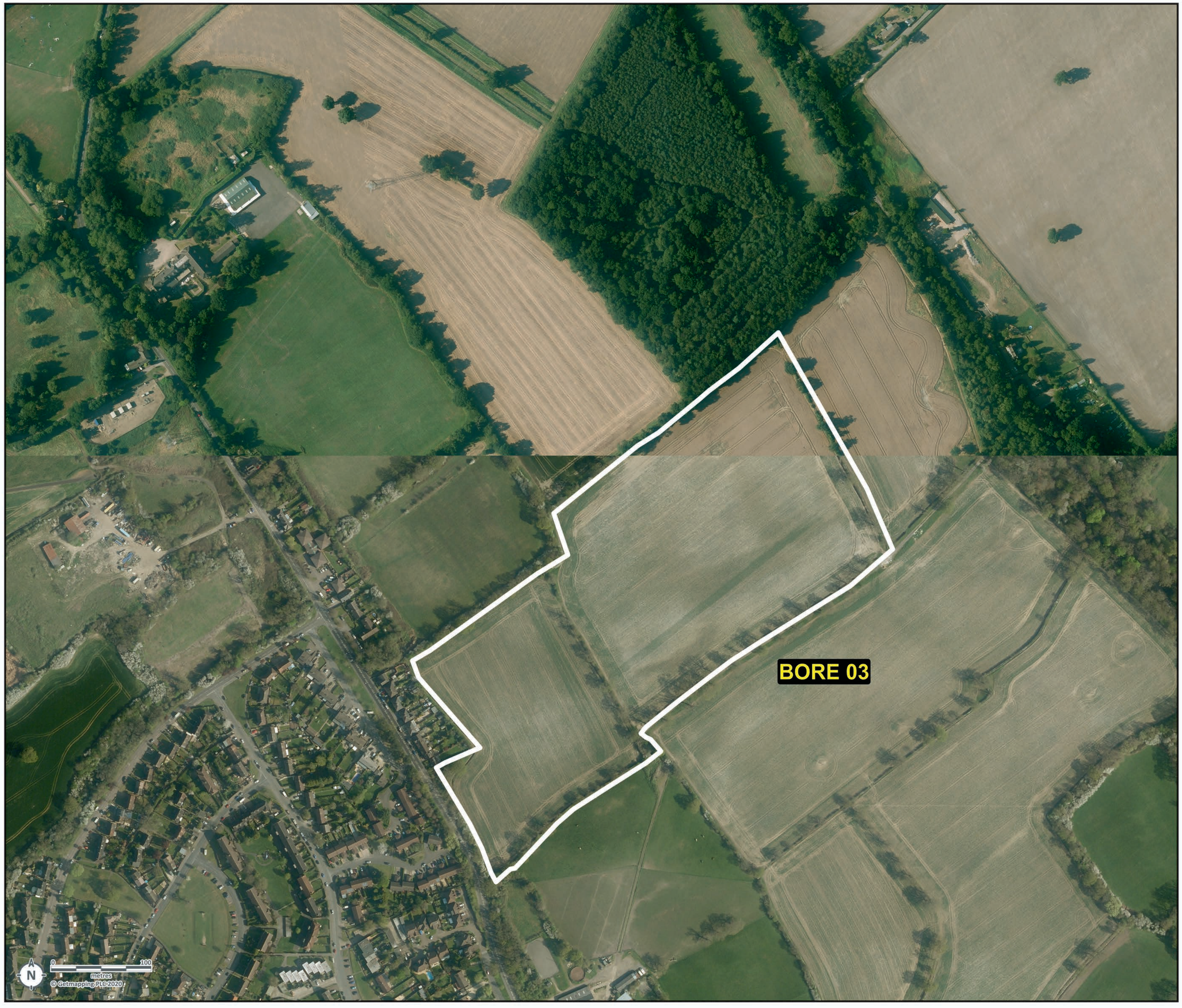

SOUTH WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH

Aerial photograph: BORE03

PROJECT NO	DRAWING NO	REV
5309	331	
DRAWN	DATE	SCALE
HNA	JUNE 2020	1:2500 @A2

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SITE BOUNDARY
11.26ha

BUILDING ZONE
3.57ha

PLAYING FIELD ZONE
7.69ha

SITE ACCESS

BORE 03

0 100 metres

SOUTH WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH

Development principles: BORE03

PROJECT NO	DRAWING NO	REV
5309	332	
DRAWN	DATE	SCALE
HNA	SEPT 2020	1:2500 @A2

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South West Hertfordshire Secondary School Site Search

High Level Transport Appraisal for Sites 03, 04 and 05 Borehamwood

Land to the East of Green Street/Cowley Hill

This High-Level Transport Appraisal (HLTA) is to consider the suitability of access for a new 8 Form of Entry (8FE) secondary school on land to the east of Green Street/Cowley Hill, Borehamwood.

1. Site Background

1.1 Location

Sites 3, 4 and 5 are all located on the northern side of Borehamwood. The sites are next to each other, and overlap in parts. Therefore, this HLTA considers the suitability of all three sites.

The proposed sites comprise parcels of agricultural land which are separated by hedgerows. The western boundary is defined by the B5378 Green Street/Cowley Hill, or properties fronting onto Green Street. The southern and eastern boundaries follow the hedgerow boundaries of the fields, whilst the northern boundary runs through fields, perpendicular to Green Street.

To the north of the site is a care home and Rowley Hill Livery lies directly to the south.

A Public Right Of Way (PROW), Footpath 4 runs through or alongside the proposed sites; along the northern boundary of Site 3, through the centre of Site 4 and along the southern boundary of Site 5.

1.2 Local Road Network

The B5378 runs south from the A414 North Orbital Road at St Albans, through Shenley and Borehamwood to the northern side of Elstree. As it passes the site the B5378 is named Green Street which runs between Shenley and its junction with Campions Close/Cowley Hill. To the south of here, the B5378 is named B5378 Cowley Hill until Potters Lane, where the road continues south as the B5378 Shenley Road. The B5378 runs to the centre of Borehamwood and then continues west towards Elstree and Borehamwood Railway Station.

750m south of the site is Hertswood Academy.

Opposite the southern portion of the site there are a number of residential roads to the west of Green Street, accessed from Gateshead Road and Stapleton Road.

Properties on the eastern side of Green Street generally have individual or shared access. However, there are a number of properties with no vehicular access, which results in on-street parking that partially blocks the footway on the eastern side of the road.

Green Street is a two-way road, varying slightly in width with a minimum width of 6.5m. However, it is generally wider than this with large stretches of central hatching separating the vehicle lanes. Vehicles greater than 7.5tonnes are prohibited from travelling north on the B5378, from the north of the junction with Stapleton Road.

Stapleton Road runs westwards from the B5378 Green Street, becoming Brampton Terrace before connecting to Aycliffe Road, which in turn provides a link to Theobald Street and Gateshead Road. Stapleton Road is approximately 5.5m wide, lit and lies within a 30mph speed limit zone.

There are sections of road named Cowley Hill which connect to and run parallel to the B5378 Green Street. These roads are approximately 5.5m wide, lit and lie within a 30mph speed limit zone.

1.3 Existing Access

Vehicular/agricultural access to the Sites 3 and 4 is currently provided through the adjacent fields or via a gated agricultural access which is located at the connection between PROW Footpath 4 and Green Street. This agricultural access is in the form of a dropped kerb.

Sites 3 and 4 abut the B5378 Cowley Hill to the south of existing properties on Green Street. However, there appears to be no existing vehicular access to the site from this location.

Sites 4 and 5 abut the B5378 Green Street to the north of the existing properties on Green Street. An existing gated agricultural access from Green Street is located approximately 100m south of Kitwells Lodge. This access is in the form of a dropped kerb.

Access to Site 5 is also available via the adjacent fields.

2. Walking Accessibility

2.1 Local Pedestrian Provision

A footway is provided on both sides of the B5378 in front of existing properties which abut the site. However, to the north of the properties, there is no footway along the eastern side of the road, only on the western side. The footway along the eastern side of Green Street appears to be narrow in parts.

There is a significant volume of on street parking adjacent to properties which front Green Street. This parking is largely on the footway, meaning that in many locations the footway is partially blocked.

The footway network in the residential area to the west of the site is comprehensive and provides good permeability in the area for access on foot to the school from the centre of Borehamwood.

There are no formal pedestrian crossings in the vicinity of the site on Green Street or within the residential area to the south.

PROW Footpath 1 runs from southwest to northeast between the B5378 and Well End Road. This footpath runs alongside the southern corner of Sites 3 and 4 as it connects to the B5378.

PROW Footpath 4 runs from southwest to northeast between the B5378 Green Street and Silver Hill. This Footpath runs along the northern boundary of Site 3, through the centre of Site 4 and along the southern boundary of Site 5.

2.2 Existing Pedestrian Access

Access into the site is available via Footpath 4 (all sites) or via Footpath 1 (Sites 3 and 4 only).

2.3 Proposed Improvements

Pedestrian access should be provided from Cowley Hill or Green Street. Improvements to linkages between the site and surrounding residential areas will be necessary as follows:

- New crossing facilities would be required near to the school site on Green Street and/or Cowley Hill, dependent upon the location of the proposed access. Footways between the crossing point and the school access would need to be improved on the eastern side of the road.
- Footway provision along the B5378 to the south of the sites should be reviewed with improvements provided where necessary.
- Suitable pedestrian crossing provision through the residential area to the south and south west of the site.
- Pedestrian crossings at junctions will need to be established including dropped kerbs, tactile paving and possible parking restrictions where necessary.

Due to the on-pavement parking adjacent to properties fronting Green Street, and lack of footways further to the north, our initial view is that a pedestrian access in the south west corner of Sites 3 and 4 would be preferable over an access via Footpath 4 or further north. This would avoid potential displacement of existing resident's parking and would be closest to the main residential areas of Borehamwood.

Access from Shenley by pedestrians would be via the footway on the west side of Green Street which is likely to require widening in parts, with a formal crossing in the vicinity of the school site away from the existing parked cars.

PROW Footway 04 crosses through Site 4 and along the boundary of Site 3 and 5. A publicly accessible route through a school site is unlikely to be acceptable. Therefore, it is likely that this route will need to be diverted or access managed via a physical boundary (i.e. fence and gates) if Site 4 is the preferred site.

An assessment of the likely catchment of the school would need to be carried out as part of the Transport Assessment to determine pedestrian desire lines and where any additional improvements are required to the local footway network in relation to the impact of the proposed school.

Existing speed limits should be reviewed in relation to access points, pedestrian desire lines and proposed crossing points.

3. Cycling Accessibility

3.1 Local Cycle Provision

There are no existing cycle routes in the vicinity of the site or linking the site to the wider area of Borehamwood. The existing network of residential roads to the south and southwest provide good permeability and accessibility to Green Street and traffic volumes are likely to be relatively light in these areas.

However, cycle travel from areas to the south of the site would be via the B5378 Cowley Hill and Green Street and improvements may be necessary to maximise cyclist safety.

There is an existing segregated cycle route along the western side of Cowley Hill between Palmers Road and Gateshead Road. There is also a segregated cycle route along the eastern side of Cowley Hill and Shenley Lane between Hertswood Academy and the roundabout junction with Elstree Way to the south.

2.2 Existing Cyclist Access

There are no existing cycle accesses into the site.

3.3 Proposed Improvements

It would be preferable to extend the existing foot/cycleways on Cowley Hill to the site in order to maintain a continuous cycle route and avoid the need for cyclists to switch onto the carriageway between Gateshead Road and the site, or between Hertswood Academy and the site.

Widening on the eastern side of the road between Hertswood Academy and the site would be preferable in terms of continuation of the route from the south. Widening on the western side of the road would be preferable in terms of serving the residential areas to the west and south west. However, widening on the eastern side of the road is constrained by existing hedges, trees and a ditch, while widening on the western side of the road is constrained by existing properties.

Road narrowing may be necessary to facilitate continuation of existing cycle routes and while this would be expensive, there does appear to be sufficient carriageway width to enable this.

4. Bus Accessibility

4.1 Local Bus Provision

The nearest bus stops are located on Green Street to the north of Stapleton Road. Northbound and southbound stops serve routes 357/358 which run between Harpenden and London Colney via Wheathampstead, St Albans, London Colney and Shenley on an hourly basis. These stops are located approximately 150m north of PROW Footpath 4, accessible from all three sites subject to footway improvements.

Bus route 306 provides a service between Watford and Borehamwood via Bushey, providing a circular bus route around the northern part of Borehamwood. The nearest stops on this route are

located on Stanborough Avenue to the west of Green Street, approximately 250m from Sites 3 & 4 via Redwood Rise.

4.2 Existing Connectivity

There are existing bus services serving both the local and wider areas, arriving/departing during peak school traffic periods in the vicinity of the site, which could cater for travel to and from school. However, these services appear to be infrequent.

4.3 Proposed Improvements

A bus access strategy for the site would depend on the likely catchment area and whether pupils from further afield would use scheduled bus services or school specific services. The latter would be more likely to deliver pupils directly to the school, the former would use existing stops.

If existing services near to the site are to be used it is recommended that a strategy for upgrading stops would be required. Depending on which stops would serve the school, this would require provision of a shelter, flag, appropriate kerb types and information boards.

Pedestrian facilities between existing stops and the site will need to be improved with wider footways and new crossing points to reflect the proposed access arrangements for the school.

5. Rail Accessibility

5.1 Local Rail Provision

The nearest railway station is Elstree and Borehamwood Station, located approximately 3km from PROW Footpath 4 in the centre of the sites, accessed on foot or by bicycle via Shenley Road (2.75km from the south west corner of Sites 3 & 4).

5.2 Existing Connectivity

Elstree and Borehamwood Station is on the Thameslink route between Radlett and Mill Hill Broadway. Connections are also available to St. Albans, Luton and London, among others.

Walking time between the site and Elstree and Borehamwood Railway Station is between 35 and 40 minutes.

5.3 Proposed Improvements

The Transport Assessment would need to consider the likely number of pupils using trains as part of their journey to/from the school site and whether any improvements can be proposed to improve the connectivity of the railway stations to the school.

6. Vehicular Accessibility

6.1 Existing Highway Conditions

Due to the Covid-19 pandemic, traffic conditions at the time of writing this High-Level Assessment do not reflect former 'typical' traffic condition. Therefore, it is not possible to comment upon existing highway conditions in terms of congestion in the vicinity of the site.

'Typical traffic' information from Google Maps appears to show typical traffic conditions over recent periods and is therefore not a reliable source of information for identifying likely congestion hotspots due to reductions in traffic during the recent lockdown period. This has been assumed based upon the fact that several known congestion hotspots in the area are showing up as having no congestion during the AM and PM peak periods on the current 'typical traffic' mapping.

Despite the lowered traffic rates it appears that the junction between Green Street and Stapleton Road may suffer from congestion during peak times of the day.

Previous experience suggests that traffic in the centre of Borehamwood is likely to be significant at peak times while traffic on residential roads immediately adjacent to the site is likely to be light.

Figure 3.1.1 of the Hertfordshire Traffic and Transport Data Report 2018 identifies that the following junctions within the vicinity of the site are highlighted as congested junctions on the key network:

- Junction between the B5378 Shenley Lane, A5183 Elstree Way and Brook Road.
- Junction between the B5378 Allum Lane, B5378 Shenley Lane, Station Road and Theobald Street,

Further assessment of traffic congestion in the vicinity of the site will need to be carried out in due course in consultation with the Highway Authority.

7. Proposed Vehicular Access

7.1 Proposed Vehicular Access

Site 3 & 4: Access to Site 3 and 4 could be taken from a position just north of Redwood Rise, which would provide a relatively central entrance, maximise visibility at the junction and avoid existing large trees on the site boundary.

Site 4 & 5: The existing agricultural access to the site located north of existing properties on Green Street could be upgraded to form the main access for vehicles entering the site, minimising the impact on existing vegetation and the existing ditch. Visibility splays may impact upon existing hedgerows although minimal trimming back may be sufficient to achieve suitable splays. Visibility to the left would need to be confirmed by topographical survey due to the potential constraint of an existing fence line just to the south of the access. There is a large tree and an electric sub-station directly south of the existing access which would also need to be taken into consideration.

Overhead power lines are present immediately to the north of the site, which may impact upon construction processes and should be considered in the design.

Vehicular access to the sites along the route of PROW Footpath 4 is not currently considered suitable due to width constraints and visibility past parked cars to the south. However, further investigation and land ownership confirmation may identify this as a potential option.

7.2 Proposed Improvements

It is likely that traffic calming measures will need to be provided along Green Street to manage vehicle speeds and ensure free flowing traffic. Parking restrictions may need to be introduced to prevent school related parking along Green Street and Cowley Hill, but existing residents' parking would need to be retained or re-provided elsewhere.

Parking restrictions may also be required along the nearby residential roads which provide attractive drop off locations for parents, particularly Cowley Hill and Redwood Rise.

It will be necessary to allow parent drop off in the site to prevent parking along Green Street, which would cause traffic flow issues and safety concerns.

Green Street is currently subject to a 30mph speed limit, increasing to a 40mph speed limit at the south west corner of Site 5. Depending upon the location of the proposed access, it is recommended that the speed limit is reduced to at least 30mph, with consideration taken to reducing to 20mph in the vicinity of the school to help manage vehicle speeds and maximise safety.

A full Transport Assessment would be required to determine the predicted impact of traffic in comparison to typical flows in the area.

8. Vehicular Trip Generation

8.1 Potential Vehicle Generation and Impact

Full analysis of potential vehicle trip generation and impact would be considered as part of a full Transport Assessment.

Initial assumptions for secondary school traffic would be that around 20% of pupils travel to/from school by car during the AM and PM peak periods. Most staff are likely to travel to school by car, although arrival times can start from 7am (or earlier), with departure times also spread across a wide period minimising the impact on peak periods.

However, car travel would be considered in conjunction with the likely catchment area of the school and resulting travel distances, proposed school facilities such as before school and after school clubs, potential for improved bus services and implementation of sustainable travel routes.

It would be necessary to allow parent drop off in the site to prevent parking along Green Street or adjacent residential roads, which would cause traffic flow issues and safety concerns.

8.2 Proposed Mitigation

A School Travel Plan will need to be prepared for the school to promote walking, cycling and public transport for travel rather than car use.

An assessment of vehicle and pedestrian desire lines will be undertaken as part of the Transport Assessment which will identify any potential Park and Stride facilities further afield, which the school could utilise.

9. Highway Safety

9.1 Existing Accident Data

Data from crashmap.co.uk for the last 5 years has been obtained which identifies personal injury accidents received from the Department of Transport. The data identifies that within the 5 year period there have been a small number of accidents within the vicinity of the site, all of which have been 'slight' in severity.

Source: www.crashmap.co.uk

9.2 Proposed Improvements

The accident data does not give rise to any safety concerns along the local road network within the vicinity of the sites. However, the two 'slight' incidents occurring at the junction between Cowley Hill and Stapleton Road may warrant the need to review the manoeuvres into and out this junction, particularly as Cowley Hill would potentially be an attractive drop off location for parents.

10. Conclusions

In principle, it would appear that the road network and potential for sustainable access to the site would be suitable for provision of an 8FE Secondary school, subject to a full review of transport impact and safety as part of a full Transport Assessment.

It is suggested that adequate pedestrian crossings are provided along Green Street and at suitable locations within the residential area to the south west, in order to provide a safe and suitable route for pupils to access the school.

The footway network along residential roads to the south west of the site is generally considered suitable.

Bus services in the vicinity of the site appear to be infrequent. Therefore, additional services may be required to ensure that bus access to the site is feasible.

Due to the Covid-19 pandemic, traffic conditions at the time of writing this High-Level Assessment do not reflect former 'typical' traffic condition. Therefore, it is not possible to comment upon existing highway conditions in terms of congestion in the vicinity of the site. It is likely that any congestion issues occur at junction with London Road, which may cause school related traffic to use the network of residential roads near the school to avoid delays.

A further review of the accidents around the Stapleton Road/Cowley Hill junction is recommended to investigate whether any safety improvements are required.

BORE 05

BORE 04

BORE 03

POSSIBLE PED/CYCLE AND VEHICULAR ACCESS - SITES 4 & 5

POSSIBLE PED/CYCLE ACCESS - SITES 3, 4 & 5

POSSIBLE PED/CYCLE AND VEHICULAR ACCESS - SITES 3 & 4

SHENDISH

GREEN STREET

STAPLETON ROAD

COWLEY HILL

STANBOROUGH AVENUE

HEATHFIELD WAY

THIRSK ROAD

BRAMPTON TERRACE

AYCLIFFE ROAD

GATESHEAD ROAD

BUS STOP

0 50 100 150 200 250m

SCALE BAR 1:5000

KEY

- SITE BOUNDARY
- FOOTPATH
- BRIDLEWAY
- BYWAY OPEN TO ALL TRAFFIC
- WATERCOURSE
- POTENTIAL ACCESS LOCATION
- SITE 03
- SITE 04
- SITE 05

Rev	Description	Date	Drawn	Checked	Apvd.

Project

SOUTH WEST HERTS SECONDARY SCHOOLS

Drawing Description

BOREHAMWOOD SITE 3,4,5

Drawing Number	Scale	Date	Drawn	Checked	Approved
ST-2995-13	1:5000@A3	17.08.20	JJN	NJM	SJB

Client

Architect

stomor
CIVIL ENGINEERING CONSULTANTS
Suite 2, First Floor, Portmill House,
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www.stomor.com | 01462 615433 | info@stomor.com

SOUTH -WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH: SHORTLISTED POTENTIAL SCHOOL SITE

SITE DETAILS

Site Reference and address	Borehamwood Site: 04 Land east of Green Street, Borehamwood Site identification plan: 5309/340 Aerial photograph: 5309/341 Development principles plan: [5309/342]	
Site area	10.73 ha	
Existing use/occupiers	Agricultural	
Land ownership	WROTHAM PARK SETTLED ESTATES of The Estate Office, Wrotham Park, Barnet, Herts., EN5 4SB. & JOHN MOORE of 5 Anderson Road, Shenley, Radlett, Herts., and HERBERT JAMES MARTIN of 1 The Pines, Rectory Lane, Shenley, Herts. & VILLA SCALABRINI (Co. Regn. No. 04750130) of Villa Scalabrini, Green Street, Shenley, Radlett WD7 9BB.	
Site availability	The northern part of the site is unknown. The southern half is available and is listed as site HEL347 in the HELAA 2019 report.	
Brownfield Land Register	No.	
Planning history	None.	
Buildings	None.	
Adjoining uses	North:	To the north of the site is agricultural land and Villa Scalabrini, a retirement home.
	East:	To the east of the site is agricultural land.
	South:	To the south of the site is agricultural land.
	West:	To the west of the site are residential dwellings fronting onto Green Street.
Topography	The site is almost completely level. There is a slight incline from south-east to north-west.	
Water courses	None.	
Vegetation	The site is formed of three agricultural field parcels. Each are bounded by hedgerows and tree belts. There is no vegetation within the central	

	areas of the site, although the hedgerow between fields is relatively dense.
ACCESSIBILITY	
Vehicular access	Cowley Hill/Green Street bound the site to the west. The road is a classified B road with 30mph speed restriction.
Cycle access	None.
Pedestrian access	Green Street features footpaths on both sides of the road. There are informal footpaths within and around the site.
Public transport	Stapleton Road bus stop is a 0.1km walk from the site (1min) and Stanborough Avenue bus stop is 0.3km. They both provide access to routes 357 (Harpenden to Borehamwood via Watford, Wheathampstead, St Albans, London Colney and Shenley) and 358 (Borehamwood – Oaklands).
High level transport appraisal	A high-level transport appraisal prepared by Stomor Civil Engineering Consultants concludes that, in principle, it would appear that the road network and potential for sustainable access to the site would be suitable for provision of an 8FE Secondary school, subject to a full review of transport impact and safety as part of a full Transport Assessment. It is suggested that adequate pedestrian crossings are provided along Green Street and at suitable locations within the residential area to the south-west, in order to provide a safe and suitable route for pupils to access the school. The footway network along residential roads to the south-west of the site is generally considered suitable. Bus services in the vicinity of the site appear to be infrequent. Therefore, additional services may be required to ensure that bus access to the site is feasible. Due to the Covid-19 pandemic, traffic conditions at the time of writing this High-Level Assessment do not reflect former 'typical' traffic condition. Therefore, it is not possible to comment upon existing highway conditions in terms of congestion in the vicinity of the site. It is likely that any congestion issues occur at junction with London Road, which may cause school related traffic to use the network of residential roads near the school to avoid delays. A further review of the accidents around the Stapleton Road/Cowley Hill junction is recommended to investigate whether any safety improvements are required.
ENVIRONMENTAL IMPACT	
Landscape and visual impact	The site is relatively well screened from all directions.
Impact on residential amenities:	Residential amenity to dwellings fronting onto Green Street could be affected including, noise impact, loss of sunlight/daylight, outlook etc.
Ecology:	Due to the intensive agricultural nature of the site and mowing regime in

	grassed areas, ecology is likely limited to the surrounding trees and hedgerows which may provide habitats for bats, birds and other invertebrates. As there is a significant amount of vegetation on site, the ecological value could be high.
Noise sources	None significant.
Flood risk	Flood zone 1 – very low risk
Surface water flooding	Mostly very low risk – some scatted areas of low risk and patch of high risk adjacent to Green Street.
Groundwater source protection area	None.
Air quality	No.
Minerals	Sand and Gravel Belt.
Agricultural land quality	3a/3b.
Rights of way	Shenley footpath 004 runs through the centre of the site. Shenley footpath 001 starts at the southern tip of the site.
EXISTING PLANNING AND DESIGNATION CONSTRAINTS	
Existing and emerging local plan site specific designations	Green Belt.
Heritage assets: archaeology	None.
Designated heritage assets	None.
Designated rural areas	None.
International, National and locally designated sites of importance for biodiversity and habitat sites	None. A local wildlife site is just east of the site.
SITE EVALUATION	

Positive site attributes:

1. The site is of optimal / sufficient size for 7fe
2. The site is flat and re-grading would be minimal.
3. Vehicular access could likely be achieved from Green Street with suitable mitigation/improvements.
4. Pedestrian/cycle access could likely be achieved from Green Street with suitable mitigation/improvements.
5. The site lies adjacent/within 400m walking distance of bus stops and bus routes.

6. Site development would not be exposed to long distance views in the wider landscape.
7. The site lies adjacent to the urban area of Borehamwood.
8. There would be no impacts on preserved trees.
9. The site is not at risk of flooding [subject to further investigations].
10. The site is not located near any noise sources.
11. The site lies outside an AQMA.
12. The site is not in an Area of Archaeological Importance.
13. There would be no impacts on designated heritage assets.
14. The site is not in a designated rural area.
15. The site does not have any international, national or local wildlife, habitat or biodiversity designations.
16. The site is does not have any local plan allocation.
17. The site is not an identified SHELAA site.
18. The site has a single landowner.

Negative site attributes:

1. The whole site is not known to be available.
2. The site is not in single ownership.
3. The site lies in the Green Belt.
4. The site lies in a Minerals Consultation Area.
5. The site has moderate-good grade agricultural land classification [if relevant].
6. The site is traversed by rights of way.
7. A significant amount of hedgerow/tree belt would need to be removed to accommodate the development.
8. There would likely be more than minor ecological impact [subject to further investigations].

SITE LAYOUT PRINCIPLES

A BB103 compliant 8fe secondary school site could be accommodated on this site:

1. Development principles plan 5309/342
2. Total site area: [10.73 ha]
3. Build zone: [3.56 ha]
4. Playing Field zone: [7.17 ha]
5. Building footprint: [11,557 sqm]
6. Vehicular access/egress: [Green Street]
7. Pedestrian access: [Green Street]

CONCLUSION

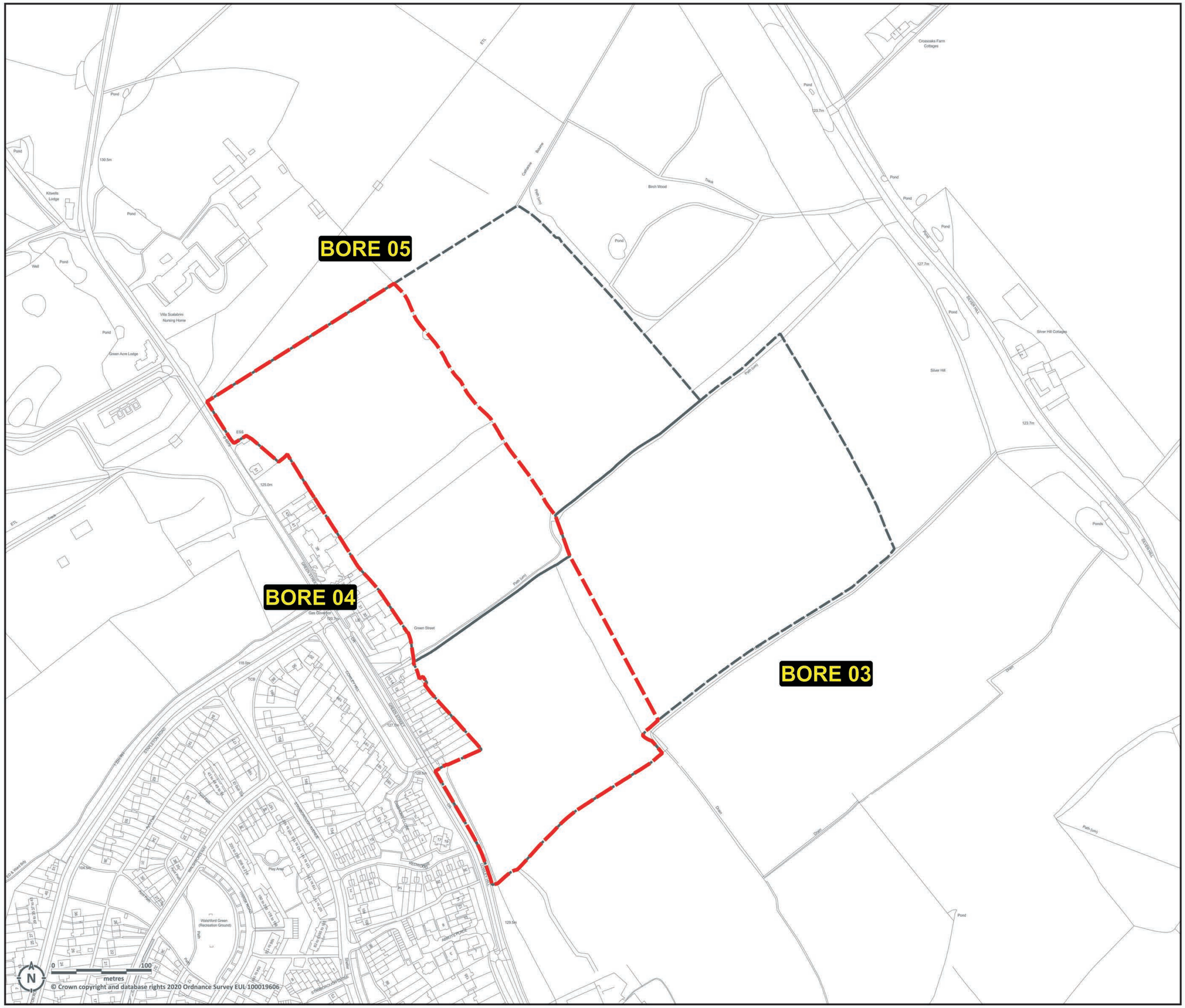
The site is located east of Green Street, Borehamwood (plan 5309/301 B) extending north-west in parallel to Green Street. The existing use is agricultural, and the site is in 3 ownerships. The site

evaluation identified 20 positive attributes and 9 negative site attributes. The site is an optimal size for an 8fe secondary school. The site was recommended for high level transport appraisal.

The conclusions of the high level transport appraisal were that in principle, it would appear that the road network and potential for sustainable access to the site would be suitable for provision of an 8FE Secondary school, subject to a full review of transport impact and safety as part of a full Transport Assessment. It is suggested that adequate pedestrian crossings are provided along Green Street and at suitable locations within the residential area to the south-west, in order to provide a safe and suitable route for pupils to access the school. The footway network along residential roads to the south-west of the site is generally considered suitable. Bus services in the vicinity of the site appear to be infrequent. Therefore, additional services may be required to ensure that bus access to the site is feasible. The site was ranked 3/6 in terms of access and highways suitability. Whilst it scored high on providing a safe and suitable vehicular access, it scored less favourably in terms of its location and access by sustainable forms of transportation.

A development principles plan (5309) has been prepared and is attached at Appendix 3. The plan shows the disposition of the building zone, playing fields and the optimal point of vehicular access to the site (based on highway appraisal conclusions). The location of the playing fields would require the removal of a significant tree belt in the centre of the site.

It is concluded that because of the need to remove mature vegetation on site and the comparatively undesirable location of the site in terms of its access by sustainable forms of transportation, this site should not be considered for an 8fe school unless another more sequentially preferable site cannot be identified.



SOUTH WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH

Site identification: BORE04

PROJECT NO	DRAWING NO	REV
5309	340	
DRAWN	DATE	SCALE
HNA	JUNE 2020	1:2500 @A2

T: +44 (0) 1438 316 331
planners@vincent-gorbing.co.uk
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SOUTH WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH

Aerial photograph: BORE04

PROJECT NO	DRAWING NO	REV
5309	341	
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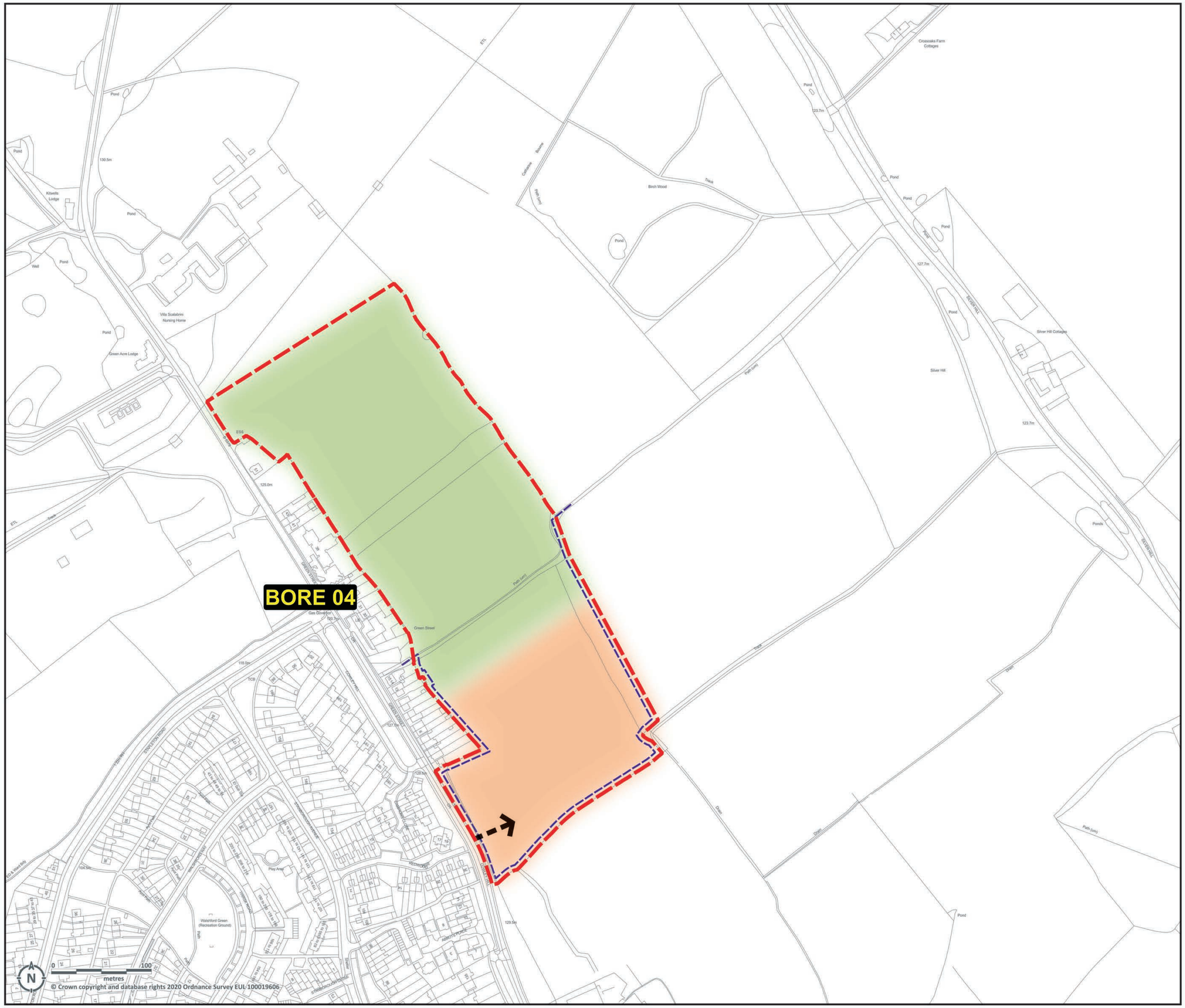

SOUTH WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH

Development principles: BORE04

PROJECT NO	DRAWING NO	REV
5309	342	
DRAWN	DATE	SCALE
HNA	SEPT 2020	1:2500 @A2

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South West Hertfordshire Secondary School Site Search

High Level Transport Appraisal for Sites 03, 04 and 05 Borehamwood

Land to the East of Green Street/Cowley Hill

This High-Level Transport Appraisal (HLTA) is to consider the suitability of access for a new 8 Form of Entry (8FE) secondary school on land to the east of Green Street/Cowley Hill, Borehamwood.

1. Site Background

1.1 Location

Sites 3, 4 and 5 are all located on the northern side of Borehamwood. The sites are next to each other, and overlap in parts. Therefore, this HLTA considers the suitability of all three sites.

The proposed sites comprise parcels of agricultural land which are separated by hedgerows. The western boundary is defined by the B5378 Green Street/Cowley Hill, or properties fronting onto Green Street. The southern and eastern boundaries follow the hedgerow boundaries of the fields, whilst the northern boundary runs through fields, perpendicular to Green Street.

To the north of the site is a care home and Rowley Hill Livery lies directly to the south.

A Public Right Of Way (PROW), Footpath 4 runs through or alongside the proposed sites; along the northern boundary of Site 3, through the centre of Site 4 and along the southern boundary of Site 5.

1.2 Local Road Network

The B5378 runs south from the A414 North Orbital Road at St Albans, through Shenley and Borehamwood to the northern side of Elstree. As it passes the site the B5378 is named Green Street which runs between Shenley and its junction with Campions Close/Cowley Hill. To the south of here, the B5378 is named B5378 Cowley Hill until Potters Lane, where the road continues south as the B5378 Shenley Road. The B5378 runs to the centre of Borehamwood and then continues west towards Elstree and Borehamwood Railway Station.

750m south of the site is Hertswood Academy.

Opposite the southern portion of the site there are a number of residential roads to the west of Green Street, accessed from Gateshead Road and Stapleton Road.

Properties on the eastern side of Green Street generally have individual or shared access. However, there are a number of properties with no vehicular access, which results in on-street parking that partially blocks the footway on the eastern side of the road.

Green Street is a two-way road, varying slightly in width with a minimum width of 6.5m. However, it is generally wider than this with large stretches of central hatching separating the vehicle lanes. Vehicles greater than 7.5tonnes are prohibited from travelling north on the B5378, from the north of the junction with Stapleton Road.

Stapleton Road runs westwards from the B5378 Green Street, becoming Brampton Terrace before connecting to Aycliffe Road, which in turn provides a link to Theobald Street and Gateshead Road. Stapleton Road is approximately 5.5m wide, lit and lies within a 30mph speed limit zone.

There are sections of road named Cowley Hill which connect to and run parallel to the B5378 Green Street. These roads are approximately 5.5m wide, lit and lie within a 30mph speed limit zone.

1.3 Existing Access

Vehicular/agricultural access to the Sites 3 and 4 is currently provided through the adjacent fields or via a gated agricultural access which is located at the connection between PROW Footpath 4 and Green Street. This agricultural access is in the form of a dropped kerb.

Sites 3 and 4 abut the B5378 Cowley Hill to the south of existing properties on Green Street. However, there appears to be no existing vehicular access to the site from this location.

Sites 4 and 5 abut the B5378 Green Street to the north of the existing properties on Green Street. An existing gated agricultural access from Green Street is located approximately 100m south of Kitwells Lodge. This access is in the form of a dropped kerb.

Access to Site 5 is also available via the adjacent fields.

2. Walking Accessibility

2.1 Local Pedestrian Provision

A footway is provided on both sides of the B5378 in front of existing properties which abut the site. However, to the north of the properties, there is no footway along the eastern side of the road, only on the western side. The footway along the eastern side of Green Street appears to be narrow in parts.

There is a significant volume of on street parking adjacent to properties which front Green Street. This parking is largely on the footway, meaning that in many locations the footway is partially blocked.

The footway network in the residential area to the west of the site is comprehensive and provides good permeability in the area for access on foot to the school from the centre of Borehamwood.

There are no formal pedestrian crossings in the vicinity of the site on Green Street or within the residential area to the south.

PROW Footpath 1 runs from southwest to northeast between the B5378 and Well End Road. This footpath runs alongside the southern corner of Sites 3 and 4 as it connects to the B5378.

PROW Footpath 4 runs from southwest to northeast between the B5378 Green Street and Silver Hill. This Footpath runs along the northern boundary of Site 3, through the centre of Site 4 and along the southern boundary of Site 5.

2.2 Existing Pedestrian Access

Access into the site is available via Footpath 4 (all sites) or via Footpath 1 (Sites 3 and 4 only).

2.3 Proposed Improvements

Pedestrian access should be provided from Cowley Hill or Green Street. Improvements to linkages between the site and surrounding residential areas will be necessary as follows:

- New crossing facilities would be required near to the school site on Green Street and/or Cowley Hill, dependent upon the location of the proposed access. Footways between the crossing point and the school access would need to be improved on the eastern side of the road.
- Footway provision along the B5378 to the south of the sites should be reviewed with improvements provided where necessary.
- Suitable pedestrian crossing provision through the residential area to the south and south west of the site.
- Pedestrian crossings at junctions will need to be established including dropped kerbs, tactile paving and possible parking restrictions where necessary.

Due to the on-pavement parking adjacent to properties fronting Green Street, and lack of footways further to the north, our initial view is that a pedestrian access in the south west corner of Sites 3 and 4 would be preferable over an access via Footpath 4 or further north. This would avoid potential displacement of existing resident's parking and would be closest to the main residential areas of Borehamwood.

Access from Shenley by pedestrians would be via the footway on the west side of Green Street which is likely to require widening in parts, with a formal crossing in the vicinity of the school site away from the existing parked cars.

PROW Footway 04 crosses through Site 4 and along the boundary of Site 3 and 5. A publicly accessible route through a school site is unlikely to be acceptable. Therefore, it is likely that this route will need to be diverted or access managed via a physical boundary (i.e. fence and gates) if Site 4 is the preferred site.

An assessment of the likely catchment of the school would need to be carried out as part of the Transport Assessment to determine pedestrian desire lines and where any additional improvements are required to the local footway network in relation to the impact of the proposed school.

Existing speed limits should be reviewed in relation to access points, pedestrian desire lines and proposed crossing points.

3. Cycling Accessibility

3.1 Local Cycle Provision

There are no existing cycle routes in the vicinity of the site or linking the site to the wider area of Borehamwood. The existing network of residential roads to the south and southwest provide good permeability and accessibility to Green Street and traffic volumes are likely to be relatively light in these areas.

However, cycle travel from areas to the south of the site would be via the B5378 Cowley Hill and Green Street and improvements may be necessary to maximise cyclist safety.

There is an existing segregated cycle route along the western side of Cowley Hill between Palmers Road and Gateshead Road. There is also a segregated cycle route along the eastern side of Cowley Hill and Shenley Lane between Hertswood Academy and the roundabout junction with Elstree Way to the south.

2.2 Existing Cyclist Access

There are no existing cycle accesses into the site.

3.3 Proposed Improvements

It would be preferable to extend the existing foot/cycleways on Cowley Hill to the site in order to maintain a continuous cycle route and avoid the need for cyclists to switch onto the carriageway between Gateshead Road and the site, or between Hertswood Academy and the site.

Widening on the eastern side of the road between Hertswood Academy and the site would be preferable in terms of continuation of the route from the south. Widening on the western side of the road would be preferable in terms of serving the residential areas to the west and south west. However, widening on the eastern side of the road is constrained by existing hedges, trees and a ditch, while widening on the western side of the road is constrained by existing properties.

Road narrowing may be necessary to facilitate continuation of existing cycle routes and while this would be expensive, there does appear to be sufficient carriageway width to enable this.

4. Bus Accessibility

4.1 Local Bus Provision

The nearest bus stops are located on Green Street to the north of Stapleton Road. Northbound and southbound stops serve routes 357/358 which run between Harpenden and London Colney via Wheathampstead, St Albans, London Colney and Shenley on an hourly basis. These stops are located approximately 150m north of PROW Footpath 4, accessible from all three sites subject to footway improvements.

Bus route 306 provides a service between Watford and Borehamwood via Bushey, providing a circular bus route around the northern part of Borehamwood. The nearest stops on this route are

located on Stanborough Avenue to the west of Green Street, approximately 250m from Sites 3 & 4 via Redwood Rise.

4.2 Existing Connectivity

There are existing bus services serving both the local and wider areas, arriving/departing during peak school traffic periods in the vicinity of the site, which could cater for travel to and from school. However, these services appear to be infrequent.

4.3 Proposed Improvements

A bus access strategy for the site would depend on the likely catchment area and whether pupils from further afield would use scheduled bus services or school specific services. The latter would be more likely to deliver pupils directly to the school, the former would use existing stops.

If existing services near to the site are to be used it is recommended that a strategy for upgrading stops would be required. Depending on which stops would serve the school, this would require provision of a shelter, flag, appropriate kerb types and information boards.

Pedestrian facilities between existing stops and the site will need to be improved with wider footways and new crossing points to reflect the proposed access arrangements for the school.

5. Rail Accessibility

5.1 Local Rail Provision

The nearest railway station is Elstree and Borehamwood Station, located approximately 3km from PROW Footpath 4 in the centre of the sites, accessed on foot or by bicycle via Shenley Road (2.75km from the south west corner of Sites 3 & 4).

5.2 Existing Connectivity

Elstree and Borehamwood Station is on the Thameslink route between Radlett and Mill Hill Broadway. Connections are also available to St. Albans, Luton and London, among others.

Walking time between the site and Elstree and Borehamwood Railway Station is between 35 and 40 minutes.

5.3 Proposed Improvements

The Transport Assessment would need to consider the likely number of pupils using trains as part of their journey to/from the school site and whether any improvements can be proposed to improve the connectivity of the railway stations to the school.

6. Vehicular Accessibility

6.1 Existing Highway Conditions

Due to the Covid-19 pandemic, traffic conditions at the time of writing this High-Level Assessment do not reflect former 'typical' traffic condition. Therefore, it is not possible to comment upon existing highway conditions in terms of congestion in the vicinity of the site.

'Typical traffic' information from Google Maps appears to show typical traffic conditions over recent periods and is therefore not a reliable source of information for identifying likely congestion hotspots due to reductions in traffic during the recent lockdown period. This has been assumed based upon the fact that several known congestion hotspots in the area are showing up as having no congestion during the AM and PM peak periods on the current 'typical traffic' mapping.

Despite the lowered traffic rates it appears that the junction between Green Street and Stapleton Road may suffer from congestion during peak times of the day.

Previous experience suggests that traffic in the centre of Borehamwood is likely to be significant at peak times while traffic on residential roads immediately adjacent to the site is likely to be light.

Figure 3.1.1 of the Hertfordshire Traffic and Transport Data Report 2018 identifies that the following junctions within the vicinity of the site are highlighted as congested junctions on the key network:

- Junction between the B5378 Shenley Lane, A5183 Elstree Way and Brook Road.
- Junction between the B5378 Allum Lane, B5378 Shenley Lane, Station Road and Theobald Street,

Further assessment of traffic congestion in the vicinity of the site will need to be carried out in due course in consultation with the Highway Authority.

7. Proposed Vehicular Access

7.1 Proposed Vehicular Access

Site 3 & 4: Access to Site 3 and 4 could be taken from a position just north of Redwood Rise, which would provide a relatively central entrance, maximise visibility at the junction and avoid existing large trees on the site boundary.

Site 4 & 5: The existing agricultural access to the site located north of existing properties on Green Street could be upgraded to form the main access for vehicles entering the site, minimising the impact on existing vegetation and the existing ditch. Visibility splays may impact upon existing hedgerows although minimal trimming back may be sufficient to achieve suitable splays. Visibility to the left would need to be confirmed by topographical survey due to the potential constraint of an existing fence line just to the south of the access. There is a large tree and an electric sub-station directly south of the existing access which would also need to be taken into consideration.

Overhead power lines are present immediately to the north of the site, which may impact upon construction processes and should be considered in the design.

Vehicular access to the sites along the route of PROW Footpath 4 is not currently considered suitable due to width constraints and visibility past parked cars to the south. However, further investigation and land ownership confirmation may identify this as a potential option.

7.2 Proposed Improvements

It is likely that traffic calming measures will need to be provided along Green Street to manage vehicle speeds and ensure free flowing traffic. Parking restrictions may need to be introduced to prevent school related parking along Green Street and Cowley Hill, but existing residents' parking would need to be retained or re-provided elsewhere.

Parking restrictions may also be required along the nearby residential roads which provide attractive drop off locations for parents, particularly Cowley Hill and Redwood Rise.

It will be necessary to allow parent drop off in the site to prevent parking along Green Street, which would cause traffic flow issues and safety concerns.

Green Street is currently subject to a 30mph speed limit, increasing to a 40mph speed limit at the south west corner of Site 5. Depending upon the location of the proposed access, it is recommended that the speed limit is reduced to at least 30mph, with consideration taken to reducing to 20mph in the vicinity of the school to help manage vehicle speeds and maximise safety.

A full Transport Assessment would be required to determine the predicted impact of traffic in comparison to typical flows in the area.

8. Vehicular Trip Generation

8.1 Potential Vehicle Generation and Impact

Full analysis of potential vehicle trip generation and impact would be considered as part of a full Transport Assessment.

Initial assumptions for secondary school traffic would be that around 20% of pupils travel to/from school by car during the AM and PM peak periods. Most staff are likely to travel to school by car, although arrival times can start from 7am (or earlier), with departure times also spread across a wide period minimising the impact on peak periods.

However, car travel would be considered in conjunction with the likely catchment area of the school and resulting travel distances, proposed school facilities such as before school and after school clubs, potential for improved bus services and implementation of sustainable travel routes.

It would be necessary to allow parent drop off in the site to prevent parking along Green Street or adjacent residential roads, which would cause traffic flow issues and safety concerns.

8.2 Proposed Mitigation

A School Travel Plan will need to be prepared for the school to promote walking, cycling and public transport for travel rather than car use.

An assessment of vehicle and pedestrian desire lines will be undertaken as part of the Transport Assessment which will identify any potential Park and Stride facilities further afield, which the school could utilise.

9. Highway Safety

9.1 Existing Accident Data

Data from crashmap.co.uk for the last 5 years has been obtained which identifies personal injury accidents received from the Department of Transport. The data identifies that within the 5 year period there have been a small number of accidents within the vicinity of the site, all of which have been 'slight' in severity.

Source: www.crashmap.co.uk

9.2 Proposed Improvements

The accident data does not give rise to any safety concerns along the local road network within the vicinity of the sites. However, the two 'slight' incidents occurring at the junction between Cowley Hill and Stapleton Road may warrant the need to review the manoeuvres into and out this junction, particularly as Cowley Hill would potentially be an attractive drop off location for parents.

10. Conclusions

In principle, it would appear that the road network and potential for sustainable access to the site would be suitable for provision of an 8FE Secondary school, subject to a full review of transport impact and safety as part of a full Transport Assessment.

It is suggested that adequate pedestrian crossings are provided along Green Street and at suitable locations within the residential area to the south west, in order to provide a safe and suitable route for pupils to access the school.

The footway network along residential roads to the south west of the site is generally considered suitable.

Bus services in the vicinity of the site appear to be infrequent. Therefore, additional services may be required to ensure that bus access to the site is feasible.

Due to the Covid-19 pandemic, traffic conditions at the time of writing this High-Level Assessment do not reflect former 'typical' traffic condition. Therefore, it is not possible to comment upon existing highway conditions in terms of congestion in the vicinity of the site. It is likely that any congestion issues occur at junction with London Road, which may cause school related traffic to use the network of residential roads near the school to avoid delays.

A further review of the accidents around the Stapleton Road/Cowley Hill junction is recommended to investigate whether any safety improvements are required.

BORE 05

BORE 04

BORE 03

POSSIBLE PED/CYCLE AND VEHICULAR ACCESS - SITES 4 & 5

POSSIBLE PED/CYCLE ACCESS - SITES 3, 4 & 5

POSSIBLE PED/CYCLE AND VEHICULAR ACCESS - SITES 3 & 4

SHENDISH

GREEN STREET

STAPLETON ROAD

COWLEY HILL

STANBOROUGH AVENUE

HEATHFIELD WAY

THIRSK ROAD

BRAMPTON TERRACE

AYCLIFFE ROAD

GATESHEAD ROAD

BUS STOP

0 50 100 150 200 250m

SCALE BAR 1:5000

KEY

- SITE BOUNDARY
- FOOTPATH
- BRIDLEWAY
- BYWAY OPEN TO ALL TRAFFIC
- WATERCOURSE
- POTENTIAL ACCESS LOCATION
- SITE 03
- SITE 04
- SITE 05

Rev	Description	Date	Drawn	Checked	Apvd.

Project

SOUTH WEST HERTS SECONDARY SCHOOLS

Drawing Description

BOREHAMWOOD SITE 3,4,5

Drawing Number	Scale	Date	Drawn	Checked	Approved
ST-2995-13	1:5000@A3	17.08.20	JJN	NJM	SJB

Client

Architect

stomor
CIVIL ENGINEERING CONSULTANTS
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Portmill Lane, Hitchin, Herts, SG5 1DJ
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SOUTH -WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH: SHORTLISTED POTENTIAL SCHOOL SITE

SITE DETAILS

Site Reference and address	Borehamwood Site: BORE05 Land east of Green Street, Borehamwood Site identification plan: 5309/350 Aerial photograph: 5309/351 Development principles plan: [5309/352]	
Site area	11 ha	
Existing use/occupiers	Agricultural	
Land ownership	HERTFORDSHIRE COUNTY COUNCIL of County Hall, Hertford SG13 8DE and of DX145781, Hertford 4 & JOHN MOORE of 5 Anderson Road, Shenley, Radlett, Herts., and HERBERT JAMES MARTIN of 1 The Pines, Rectory Lane, Shenley, Herts. & VILLA SCALABRINI (Co. Regn. No. 04750130) of Villa Scalabrini, Green Street, Shenley, Radlett WD7 9BB.	
Site availability	Unknown	
Brownfield Land Register	No.	
Planning history	None.	
Buildings	None.	
Adjoining uses	North:	To the north of the site is agricultural land and Villa Scalabrini, a retirement home.
	East:	To the east of the site is an area of woodland which is a local nature reserve.
	South:	To the south of the site is agricultural land.
	West:	To the west of the site are residential dwellings fronting onto Green Street.
Topography	The site is almost completely level. There is a slight incline from south-east to north-west.	
Water courses	None.	
Vegetation	The site is formed of three agricultural field parcels. Each are bounded by hedgerows and tree belts. There is no vegetation within the central	

	areas of the site, although the hedgerow between fields is relatively dense.
ACCESSIBILITY	
Vehicular access	Cowley Hill/Green Street bound the site to the west. The road is a classified B road with 30mph speed restriction.
Cycle access	None.
Pedestrian access	Green Street features footpaths on both sides of the road. There are informal footpaths within and around the site.
Public transport	Stapleton Road bus stop is a 0.1km walk from the site (1min) and Stanborough Avenue bus stop is 0.3km. They both provide access to routes 357 (Harpenden to Borehamwood via Batford, Wheathampstead, St Albans, London Colney and Shenley) and 358 (Borehamwood – Oaklands).
High level transport appraisal	A high-level transport appraisal prepared by Stomor Civil Engineering Consultants concludes that, in principle, it would appear that the road network and potential for sustainable access to the site would be suitable for provision of an 8FE Secondary school, subject to a full review of transport impact and safety as part of a full Transport Assessment. It is suggested that adequate pedestrian crossings are provided along Green Street and at suitable locations within the residential area to the south-west, in order to provide a safe and suitable route for pupils to access the school. The footway network along residential roads to the south-west of the site is generally considered suitable. Bus services in the vicinity of the site appear to be infrequent. Therefore, additional services may be required to ensure that bus access to the site is feasible. Due to the Covid-19 pandemic, traffic conditions at the time of writing this High-Level Assessment do not reflect former 'typical' traffic condition. Therefore, it is not possible to comment upon existing highway conditions in terms of congestion in the vicinity of the site. It is likely that any congestion issues occur at junction with London Road, which may cause school related traffic to use the network of residential roads near the school to avoid delays. A further review of the accidents around the Stapleton Road/Cowley Hill junction is recommended to investigate whether any safety improvements are required.
ENVIRONMENTAL IMPACT	
Landscape and visual impact	The site is relatively well screened from all directions.
Impact on residential amenities:	Residential amenity to dwellings fronting onto Green Street could be affected including, noise impact, loss of sunlight/daylight, outlook etc. Villa Scallabrini, a retirement home, is situated north of the site. Noise impact could be particularly detrimental to this use.

Ecology:	Due to the intensive agricultural nature of the site and mowing regime in grassed areas, ecology is likely limited to the surrounding trees and hedgerows which may provide habitats for bats, birds and other invertebrates. A large area of woodland (a local nature reserve) is just east of the site.
Noise sources	None significant.
Flood risk	Flood zone 1 – very low risk
Surface water flooding	Mostly very low risk – however there are areas of low-high risk in the eastern part of the site.
Groundwater source protection area	None.
Air quality	No.
Minerals	Sand and Gravel Belt.
Agricultural land quality	3a/3b.
Rights of way	Shenley footpath 004 runs along the southern boundary of the site.
EXISTING PLANNING AND DESIGNATION CONSTRAINTS	
Existing and emerging local plan site specific designations	Green Belt.
Heritage assets: archaeology	None.
Designated heritage assets	None.
Designated rural areas	None.
International, National and locally designated sites of importance for biodiversity and habitat sites	None. A local wildlife site is just east of the site.
SITE EVALUATION	

Positive site attributes:

1. The site is of optimal / sufficient size for 8fe
2. The site is flat and re-grading would be minimal.
3. Vehicular access could likely be achieved from Green Street with suitable mitigation/improvements.
4. Pedestrian/cycle access could likely be achieved from Green Street with suitable mitigation/improvements.
5. The site lies adjacent/within 400m walking distance of bus stops and bus routes.

6. Site development would not be exposed to long distance views in the wider landscape.
7. The site lies adjacent to the urban area of Borehamwood.
8. There would be no impacts on preserved trees.
9. The site is not located near any noise sources.
10. The site lies outside an AQMA.
11. The site is not in an Area of Archaeological Importance.
12. There would be no impacts on designated heritage assets.
13. The site is not in a designated rural area.
14. The site does not have any international, national or local wildlife, habitat or biodiversity designations.
15. The site is does not have any local plan allocation.
16. The site is not an identified HELAA site.

Negative site attributes:

1. The site is not known to be available.
2. The site is not in single ownership.
3. The site lies in the Green Belt.
4. There is potential for more than minor harm to occur to ecology.
5. The eastern part of the site is at risk of surface water flooding.
6. The site lies in a Minerals Consultation Area.
7. The site has moderate-good grade agricultural land classification [if relevant].
8. The site is traversed by rights of way.
9. A significant amount of hedgerow/tree belt would need to be removed to accommodate the development. If this is not removed there would be poor intervisibility and supervision.

SITE LAYOUT PRINCIPLES

A BB103 compliant 8fe secondary school site could be accommodated on this site:

1. Development principles plan 5309/352
2. Total site area: [11.00 ha]
3. Build zone: [3.60 ha]
4. Playing Field zone: [7.40 ha]
5. Building footprint: [11,557 sqm]
6. Vehicular access/egress: [Green Street]
7. Pedestrian access: [Green Street]

CONCLUSION

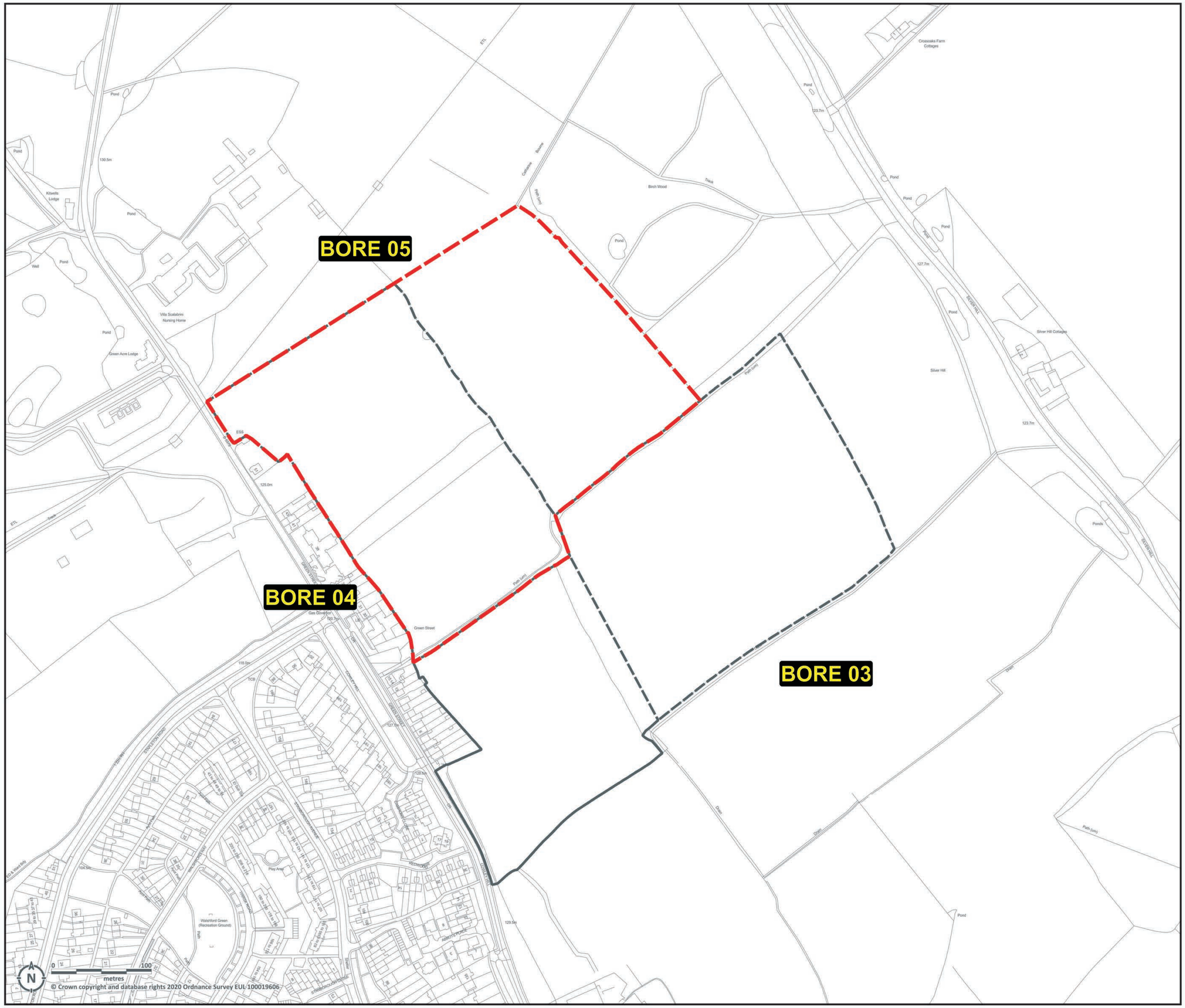
The site is located east of Green Street, Borehamwood (plan 5309/301/C) extending north-east away from Green Street. The existing use is agricultural, and the site is in 3 ownerships, including partly owned by Hertfordshire County Council. The site is an optimal size for an 8fe secondary school. The site was recommended for transport appraisal.

The conclusions of the transport appraisal were that in principle, it would appear that the road

network and potential for sustainable access to the site would be suitable for provision of an 8FE Secondary school, subject to a full review of transport impact and safety as part of a full Transport Assessment. It is suggested that adequate pedestrian crossings are provided along Green Street and at suitable locations within the residential area to the south-west, in order to provide a safe and suitable route for pupils to access the school. The footway network along residential roads to the south-west of the site is generally considered suitable. Bus services in the vicinity of the site appear to be infrequent. Therefore, additional services may be required to ensure that bus access to the site is feasible. The site was ranked 5/6 in terms of access and highways suitability. Whilst it scored high on providing a safe and suitable vehicular access, it scored less favourably in terms of its location and access by sustainable forms of transportation and issues with parking on Green Street.

A development principles plan (5309/352) has been prepared and is attached at Appendix 3. The plan shows the disposition of the building zone, playing fields and the optimal point of vehicular access to the site (based on highway appraisal conclusions). The playing fields would be split into two parcels unless the tree line between them is removed. The tree lines around the building zone boundaries to the playing fields could be retained although there would be poor supervision and intervisibility between the school building and the playing fields.

It is concluded that because of the need to remove mature vegetation on site, the poor supervision and intervisibility between the building zone and the playing fields and the relatively undesirable location of the site in terms of its access by sustainable forms of transportation, this site should not be considered for an 8fe school unless another more sequentially preferable site cannot be identified.



SOUTH WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH

Site identification: BORE05

PROJECT NO	DRAWING NO	REV
5309	350	
DRAWN	DATE	SCALE
HNA	JUNE 2020	1:2500 @A2

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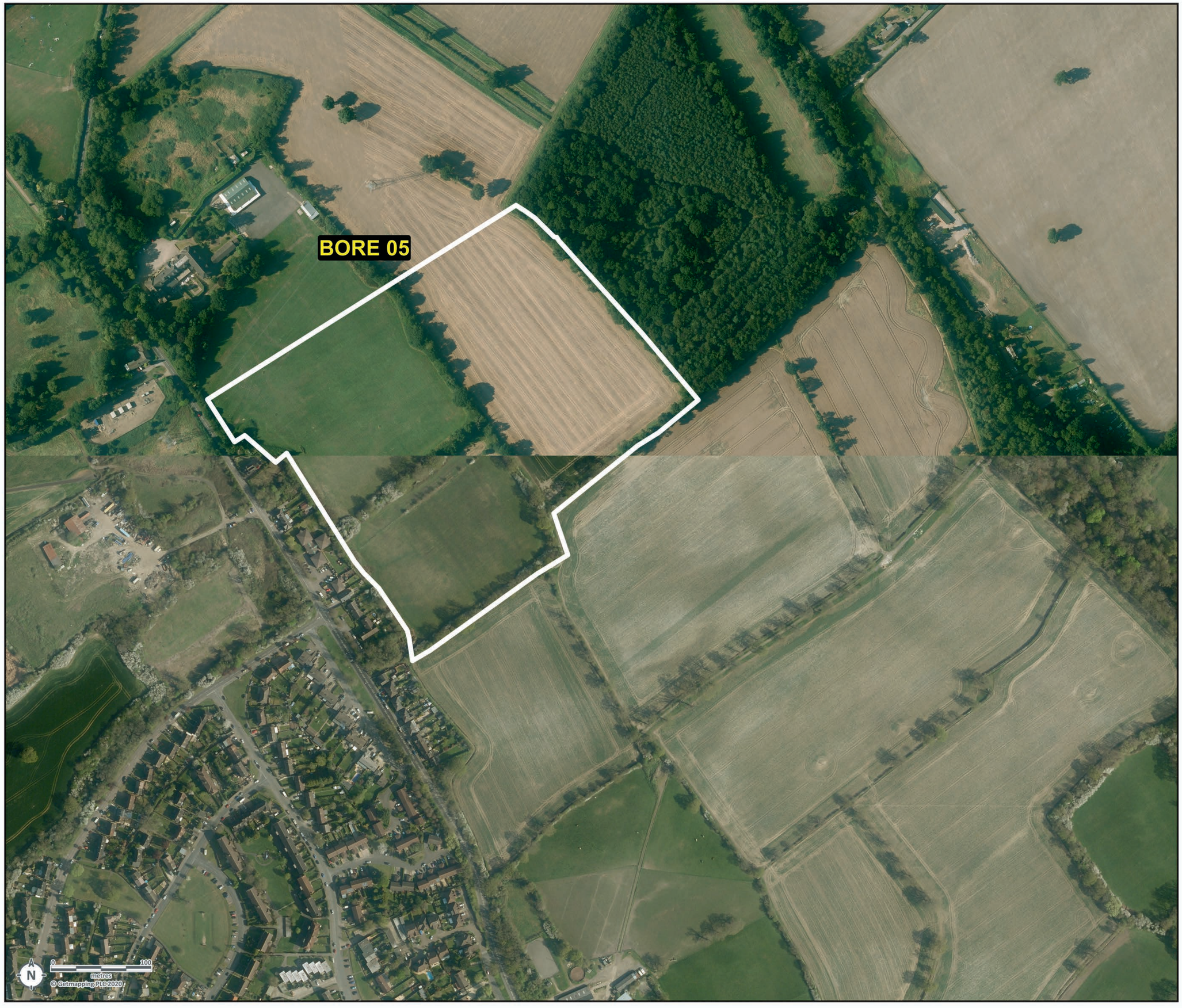

SOUTH WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH

Aerial photograph: BORE05

PROJECT NO	DRAWING NO	REV
5309	351	
DRAWN	DATE	SCALE
HNA	JUNE 2020	1:2500 @A2

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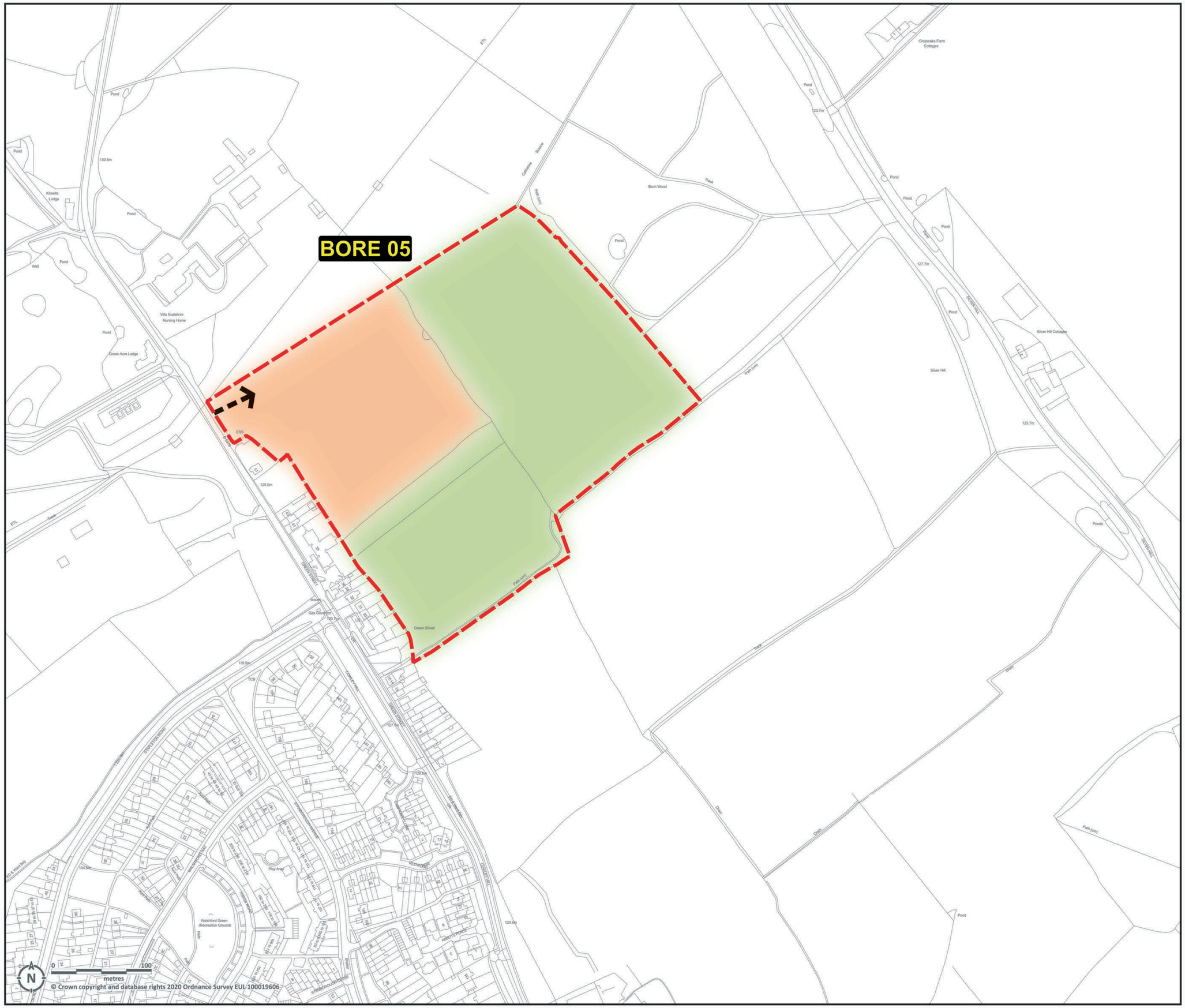

SOUTH WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH

Development principles: BORE05

PROJECT NO	DRAWING NO	REV
5309	352	
DRAWN	DATE	SCALE
HNA	SEPT 2020	1:2500 @A2

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South West Hertfordshire Secondary School Site Search

High Level Transport Appraisal for Sites 03, 04 and 05 Borehamwood

Land to the East of Green Street/Cowley Hill

This High-Level Transport Appraisal (HLTA) is to consider the suitability of access for a new 8 Form of Entry (8FE) secondary school on land to the east of Green Street/Cowley Hill, Borehamwood.

1. Site Background

1.1 Location

Sites 3, 4 and 5 are all located on the northern side of Borehamwood. The sites are next to each other, and overlap in parts. Therefore, this HLTA considers the suitability of all three sites.

The proposed sites comprise parcels of agricultural land which are separated by hedgerows. The western boundary is defined by the B5378 Green Street/Cowley Hill, or properties fronting onto Green Street. The southern and eastern boundaries follow the hedgerow boundaries of the fields, whilst the northern boundary runs through fields, perpendicular to Green Street.

To the north of the site is a care home and Rowley Hill Livery lies directly to the south.

A Public Right Of Way (PROW), Footpath 4 runs through or alongside the proposed sites; along the northern boundary of Site 3, through the centre of Site 4 and along the southern boundary of Site 5.

1.2 Local Road Network

The B5378 runs south from the A414 North Orbital Road at St Albans, through Shenley and Borehamwood to the northern side of Elstree. As it passes the site the B5378 is named Green Street which runs between Shenley and its junction with Campions Close/Cowley Hill. To the south of here, the B5378 is named B5378 Cowley Hill until Potters Lane, where the road continues south as the B5378 Shenley Road. The B5378 runs to the centre of Borehamwood and then continues west towards Elstree and Borehamwood Railway Station.

750m south of the site is Hertswood Academy.

Opposite the southern portion of the site there are a number of residential roads to the west of Green Street, accessed from Gateshead Road and Stapleton Road.

Properties on the eastern side of Green Street generally have individual or shared access. However, there are a number of properties with no vehicular access, which results in on-street parking that partially blocks the footway on the eastern side of the road.

Green Street is a two-way road, varying slightly in width with a minimum width of 6.5m. However, it is generally wider than this with large stretches of central hatching separating the vehicle lanes. Vehicles greater than 7.5tonnes are prohibited from travelling north on the B5378, from the north of the junction with Stapleton Road.

Stapleton Road runs westwards from the B5378 Green Street, becoming Brampton Terrace before connecting to Aycliffe Road, which in turn provides a link to Theobald Street and Gateshead Road. Stapleton Road is approximately 5.5m wide, lit and lies within a 30mph speed limit zone.

There are sections of road named Cowley Hill which connect to and run parallel to the B5378 Green Street. These roads are approximately 5.5m wide, lit and lie within a 30mph speed limit zone.

1.3 Existing Access

Vehicular/agricultural access to the Sites 3 and 4 is currently provided through the adjacent fields or via a gated agricultural access which is located at the connection between PROW Footpath 4 and Green Street. This agricultural access is in the form of a dropped kerb.

Sites 3 and 4 abut the B5378 Cowley Hill to the south of existing properties on Green Street. However, there appears to be no existing vehicular access to the site from this location.

Sites 4 and 5 abut the B5378 Green Street to the north of the existing properties on Green Street. An existing gated agricultural access from Green Street is located approximately 100m south of Kitwells Lodge. This access is in the form of a dropped kerb.

Access to Site 5 is also available via the adjacent fields.

2. Walking Accessibility

2.1 Local Pedestrian Provision

A footway is provided on both sides of the B5378 in front of existing properties which abut the site. However, to the north of the properties, there is no footway along the eastern side of the road, only on the western side. The footway along the eastern side of Green Street appears to be narrow in parts.

There is a significant volume of on street parking adjacent to properties which front Green Street. This parking is largely on the footway, meaning that in many locations the footway is partially blocked.

The footway network in the residential area to the west of the site is comprehensive and provides good permeability in the area for access on foot to the school from the centre of Borehamwood.

There are no formal pedestrian crossings in the vicinity of the site on Green Street or within the residential area to the south.

PROW Footpath 1 runs from southwest to northeast between the B5378 and Well End Road. This footpath runs alongside the southern corner of Sites 3 and 4 as it connects to the B5378.

PROW Footpath 4 runs from southwest to northeast between the B5378 Green Street and Silver Hill. This Footpath runs along the northern boundary of Site 3, through the centre of Site 4 and along the southern boundary of Site 5.

2.2 Existing Pedestrian Access

Access into the site is available via Footpath 4 (all sites) or via Footpath 1 (Sites 3 and 4 only).

2.3 Proposed Improvements

Pedestrian access should be provided from Cowley Hill or Green Street. Improvements to linkages between the site and surrounding residential areas will be necessary as follows:

- New crossing facilities would be required near to the school site on Green Street and/or Cowley Hill, dependent upon the location of the proposed access. Footways between the crossing point and the school access would need to be improved on the eastern side of the road.
- Footway provision along the B5378 to the south of the sites should be reviewed with improvements provided where necessary.
- Suitable pedestrian crossing provision through the residential area to the south and south west of the site.
- Pedestrian crossings at junctions will need to be established including dropped kerbs, tactile paving and possible parking restrictions where necessary.

Due to the on-pavement parking adjacent to properties fronting Green Street, and lack of footways further to the north, our initial view is that a pedestrian access in the south west corner of Sites 3 and 4 would be preferable over an access via Footpath 4 or further north. This would avoid potential displacement of existing resident's parking and would be closest to the main residential areas of Borehamwood.

Access from Shenley by pedestrians would be via the footway on the west side of Green Street which is likely to require widening in parts, with a formal crossing in the vicinity of the school site away from the existing parked cars.

PROW Footway 04 crosses through Site 4 and along the boundary of Site 3 and 5. A publicly accessible route through a school site is unlikely to be acceptable. Therefore, it is likely that this route will need to be diverted or access managed via a physical boundary (i.e. fence and gates) if Site 4 is the preferred site.

An assessment of the likely catchment of the school would need to be carried out as part of the Transport Assessment to determine pedestrian desire lines and where any additional improvements are required to the local footway network in relation to the impact of the proposed school.

Existing speed limits should be reviewed in relation to access points, pedestrian desire lines and proposed crossing points.

3. Cycling Accessibility

3.1 Local Cycle Provision

There are no existing cycle routes in the vicinity of the site or linking the site to the wider area of Borehamwood. The existing network of residential roads to the south and southwest provide good permeability and accessibility to Green Street and traffic volumes are likely to be relatively light in these areas.

However, cycle travel from areas to the south of the site would be via the B5378 Cowley Hill and Green Street and improvements may be necessary to maximise cyclist safety.

There is an existing segregated cycle route along the western side of Cowley Hill between Palmers Road and Gateshead Road. There is also a segregated cycle route along the eastern side of Cowley Hill and Shenley Lane between Hertswood Academy and the roundabout junction with Elstree Way to the south.

2.2 Existing Cyclist Access

There are no existing cycle accesses into the site.

3.3 Proposed Improvements

It would be preferable to extend the existing foot/cycleways on Cowley Hill to the site in order to maintain a continuous cycle route and avoid the need for cyclists to switch onto the carriageway between Gateshead Road and the site, or between Hertswood Academy and the site.

Widening on the eastern side of the road between Hertswood Academy and the site would be preferable in terms of continuation of the route from the south. Widening on the western side of the road would be preferable in terms of serving the residential areas to the west and south west. However, widening on the eastern side of the road is constrained by existing hedges, trees and a ditch, while widening on the western side of the road is constrained by existing properties.

Road narrowing may be necessary to facilitate continuation of existing cycle routes and while this would be expensive, there does appear to be sufficient carriageway width to enable this.

4. Bus Accessibility

4.1 Local Bus Provision

The nearest bus stops are located on Green Street to the north of Stapleton Road. Northbound and southbound stops serve routes 357/358 which run between Harpenden and London Colney via Wheathampstead, St Albans, London Colney and Shenley on an hourly basis. These stops are located approximately 150m north of PROW Footpath 4, accessible from all three sites subject to footway improvements.

Bus route 306 provides a service between Watford and Borehamwood via Bushey, providing a circular bus route around the northern part of Borehamwood. The nearest stops on this route are

located on Stanborough Avenue to the west of Green Street, approximately 250m from Sites 3 & 4 via Redwood Rise.

4.2 Existing Connectivity

There are existing bus services serving both the local and wider areas, arriving/departing during peak school traffic periods in the vicinity of the site, which could cater for travel to and from school. However, these services appear to be infrequent.

4.3 Proposed Improvements

A bus access strategy for the site would depend on the likely catchment area and whether pupils from further afield would use scheduled bus services or school specific services. The latter would be more likely to deliver pupils directly to the school, the former would use existing stops.

If existing services near to the site are to be used it is recommended that a strategy for upgrading stops would be required. Depending on which stops would serve the school, this would require provision of a shelter, flag, appropriate kerb types and information boards.

Pedestrian facilities between existing stops and the site will need to be improved with wider footways and new crossing points to reflect the proposed access arrangements for the school.

5. Rail Accessibility

5.1 Local Rail Provision

The nearest railway station is Elstree and Borehamwood Station, located approximately 3km from PROW Footpath 4 in the centre of the sites, accessed on foot or by bicycle via Shenley Road (2.75km from the south west corner of Sites 3 & 4).

5.2 Existing Connectivity

Elstree and Borehamwood Station is on the Thameslink route between Radlett and Mill Hill Broadway. Connections are also available to St. Albans, Luton and London, among others.

Walking time between the site and Elstree and Borehamwood Railway Station is between 35 and 40 minutes.

5.3 Proposed Improvements

The Transport Assessment would need to consider the likely number of pupils using trains as part of their journey to/from the school site and whether any improvements can be proposed to improve the connectivity of the railway stations to the school.

6. Vehicular Accessibility

6.1 Existing Highway Conditions

Due to the Covid-19 pandemic, traffic conditions at the time of writing this High-Level Assessment do not reflect former 'typical' traffic condition. Therefore, it is not possible to comment upon existing highway conditions in terms of congestion in the vicinity of the site.

'Typical traffic' information from Google Maps appears to show typical traffic conditions over recent periods and is therefore not a reliable source of information for identifying likely congestion hotspots due to reductions in traffic during the recent lockdown period. This has been assumed based upon the fact that several known congestion hotspots in the area are showing up as having no congestion during the AM and PM peak periods on the current 'typical traffic' mapping.

Despite the lowered traffic rates it appears that the junction between Green Street and Stapleton Road may suffer from congestion during peak times of the day.

Previous experience suggests that traffic in the centre of Borehamwood is likely to be significant at peak times while traffic on residential roads immediately adjacent to the site is likely to be light.

Figure 3.1.1 of the Hertfordshire Traffic and Transport Data Report 2018 identifies that the following junctions within the vicinity of the site are highlighted as congested junctions on the key network:

- Junction between the B5378 Shenley Lane, A5183 Elstree Way and Brook Road.
- Junction between the B5378 Allum Lane, B5378 Shenley Lane, Station Road and Theobald Street,

Further assessment of traffic congestion in the vicinity of the site will need to be carried out in due course in consultation with the Highway Authority.

7. Proposed Vehicular Access

7.1 Proposed Vehicular Access

Site 3 & 4: Access to Site 3 and 4 could be taken from a position just north of Redwood Rise, which would provide a relatively central entrance, maximise visibility at the junction and avoid existing large trees on the site boundary.

Site 4 & 5: The existing agricultural access to the site located north of existing properties on Green Street could be upgraded to form the main access for vehicles entering the site, minimising the impact on existing vegetation and the existing ditch. Visibility splays may impact upon existing hedgerows although minimal trimming back may be sufficient to achieve suitable splays. Visibility to the left would need to be confirmed by topographical survey due to the potential constraint of an existing fence line just to the south of the access. There is a large tree and an electric sub-station directly south of the existing access which would also need to be taken into consideration.

Overhead power lines are present immediately to the north of the site, which may impact upon construction processes and should be considered in the design.

Vehicular access to the sites along the route of PROW Footpath 4 is not currently considered suitable due to width constraints and visibility past parked cars to the south. However, further investigation and land ownership confirmation may identify this as a potential option.

7.2 Proposed Improvements

It is likely that traffic calming measures will need to be provided along Green Street to manage vehicle speeds and ensure free flowing traffic. Parking restrictions may need to be introduced to prevent school related parking along Green Street and Cowley Hill, but existing residents' parking would need to be retained or re-provided elsewhere.

Parking restrictions may also be required along the nearby residential roads which provide attractive drop off locations for parents, particularly Cowley Hill and Redwood Rise.

It will be necessary to allow parent drop off in the site to prevent parking along Green Street, which would cause traffic flow issues and safety concerns.

Green Street is currently subject to a 30mph speed limit, increasing to a 40mph speed limit at the south west corner of Site 5. Depending upon the location of the proposed access, it is recommended that the speed limit is reduced to at least 30mph, with consideration taken to reducing to 20mph in the vicinity of the school to help manage vehicle speeds and maximise safety.

A full Transport Assessment would be required to determine the predicted impact of traffic in comparison to typical flows in the area.

8. Vehicular Trip Generation

8.1 Potential Vehicle Generation and Impact

Full analysis of potential vehicle trip generation and impact would be considered as part of a full Transport Assessment.

Initial assumptions for secondary school traffic would be that around 20% of pupils travel to/from school by car during the AM and PM peak periods. Most staff are likely to travel to school by car, although arrival times can start from 7am (or earlier), with departure times also spread across a wide period minimising the impact on peak periods.

However, car travel would be considered in conjunction with the likely catchment area of the school and resulting travel distances, proposed school facilities such as before school and after school clubs, potential for improved bus services and implementation of sustainable travel routes.

It would be necessary to allow parent drop off in the site to prevent parking along Green Street or adjacent residential roads, which would cause traffic flow issues and safety concerns.

8.2 Proposed Mitigation

A School Travel Plan will need to be prepared for the school to promote walking, cycling and public transport for travel rather than car use.

An assessment of vehicle and pedestrian desire lines will be undertaken as part of the Transport Assessment which will identify any potential Park and Stride facilities further afield, which the school could utilise.

9. Highway Safety

9.1 Existing Accident Data

Data from crashmap.co.uk for the last 5 years has been obtained which identifies personal injury accidents received from the Department of Transport. The data identifies that within the 5 year period there have been a small number of accidents within the vicinity of the site, all of which have been 'slight' in severity.

Source: www.crashmap.co.uk

9.2 Proposed Improvements

The accident data does not give rise to any safety concerns along the local road network within the vicinity of the sites. However, the two 'slight' incidents occurring at the junction between Cowley Hill and Stapleton Road may warrant the need to review the manoeuvres into and out this junction, particularly as Cowley Hill would potentially be an attractive drop off location for parents.

10. Conclusions

In principle, it would appear that the road network and potential for sustainable access to the site would be suitable for provision of an 8FE Secondary school, subject to a full review of transport impact and safety as part of a full Transport Assessment.

It is suggested that adequate pedestrian crossings are provided along Green Street and at suitable locations within the residential area to the south west, in order to provide a safe and suitable route for pupils to access the school.

The footway network along residential roads to the south west of the site is generally considered suitable.

Bus services in the vicinity of the site appear to be infrequent. Therefore, additional services may be required to ensure that bus access to the site is feasible.

Due to the Covid-19 pandemic, traffic conditions at the time of writing this High-Level Assessment do not reflect former 'typical' traffic condition. Therefore, it is not possible to comment upon existing highway conditions in terms of congestion in the vicinity of the site. It is likely that any congestion issues occur at junction with London Road, which may cause school related traffic to use the network of residential roads near the school to avoid delays.

A further review of the accidents around the Stapleton Road/Cowley Hill junction is recommended to investigate whether any safety improvements are required.

BORE 05

BORE 04

BORE 03

POSSIBLE PED/CYCLE AND VEHICULAR ACCESS - SITES 4 & 5

POSSIBLE PED/CYCLE ACCESS - SITES 3, 4 & 5

POSSIBLE PED/CYCLE AND VEHICULAR ACCESS - SITES 3 & 4

SHENDISH

GREEN STREET

STAPLETON ROAD

COWLEY HILL

STANBOROUGH AVENUE

HEATHFIELD WAY

THIRSK ROAD

BRAMPTON TERRACE

AYCLIFFE ROAD

GATESHEAD ROAD

BUS STOP

0 50 100 150 200 250m

SCALE BAR 1:5000

KEY

- SITE BOUNDARY
- FOOTPATH
- BRIDLEWAY
- BYWAY OPEN TO ALL TRAFFIC
- WATERCOURSE
- POTENTIAL ACCESS LOCATION
- SITE 03
- SITE 04
- SITE 05

Rev	Description	Date	Drawn	Checked	Apvd.

Project

SOUTH WEST HERTS SECONDARY SCHOOLS

Drawing Description

BOREHAMWOOD SITE 3,4,5

Drawing Number	Scale	Date	Drawn	Checked	Approved
ST-2995-13	1:5000@A3	17.08.20	JJN	NJM	SJB

Client

Architect

stomor
CIVIL ENGINEERING CONSULTANTS
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SOUTH -WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH: SHORTLISTED POTENTIAL SCHOOL SITE

SITE DETAILS

Site Reference and address	Borehamwood Site: BORE06 Land north of Allum Lane, Elstree Site identification plan: [5309/360] Aerial photograph: [5309/361]	
Site area	10.96 ha	
Existing use/occupiers	Grassland / Agricultural	
Land ownership	ELSTREE GOLF AND COUNTRY CLUB LIMITED of 172/174 Nantwich Road, Crewe, Cheshire. & MARGARET LOIS ROSE of South Medburn Farm, Watling Street, Elstree, Herts.	
Site availability	The availability of most of the site is unknown. The eastern part of the site forms part of the Radlett Park Golf Club which is available and identified as site HEL514 in the HELAA 2019 Report.	
Brownfield Land Register	No	
Planning history	None.	
Buildings	None.	
Adjoining uses	North:	To the north of the site is agricultural land and the Radlett Park Golf Club.
	East:	To the east of the site are residential areas of Borehamwood/Elstree,
	South:	The sire is bounded to the south by Allum Lane. Beyond this is a stables and a cemetery.
	West:	To the west of the site are allotment grounds and residential dwellings fronting onto Watling Street.
Topography	The site inclines moderately to the east.	
Water courses	OS maps show a small water course running through the site. This was not evident during the site visit.	
Vegetation	The site is bounded by hedgerow and trees. There are mature trees scattered throughout the central areas of the site and a denser wooded area between the golf course and the rest of the site.	

ACCESSIBILITY

Vehicular access	Allum Lane (classified B road) bounds the site to the south. There is a 30mph limit. The junction with Watling Street was noticeably busy.
Cycle access	None.
Pedestrian access	There is a pedestrian footpath on the southern side of Allum Lane. There is a public right of way running through the site.
Public transport	Elstree Hill North bus stop is directly adjacent to the south-western corner of the site. This is served by route 107 (with connections between New Barnet and Edgeware), 306 (Watford-Borehamwood) and 823 (Garston – Borehamwood)
High level transport appraisal	A high-level transport appraisal was not recommended.
ENVIRONMENTAL IMPACT	
Landscape and visual impact	The site is relatively well enclosed although long distance views may be possible from the north where there is less dense vegetative screening.
Impact on residential amenities:	There is potential for noise/light impact to occur to dwellings fronting onto Watling Street to the west and The Stables to the east.
Ecology:	There are a number of mature trees on site which likely provide habitats for bird, bats and other invertebrate. At the time of the site visit much of the site was covered in long grass which could provide habitats to lizards and other small mammals.
Noise sources	Some noise may arise from Allum Lane / Watling Street.
Flood risk	Flood Zone 1 – very low risk
Surface water flooding	A strip of land at high risk of surface water flooding runs along the western boundary of the site. There is also a strip of low-medium risk along the eastern boundary of the site. Allum Lane is known locally to flood.
Groundwater source protection area	None.
Air quality	None.
Minerals	None.
Agricultural land quality	3a/3b
Rights of way	Elstree and Borehamwood Footpath 057 runs along the western boundary of the site.
EXISTING PLANNING AND DESIGNATION CONSTRAINTS	
Existing and emerging local plan site specific designations	Green Belt Partially - HELAA Site HEL514

Heritage assets: archaeology	A small part of the site is designated as an area of archaeological significance.
Designated heritage assets	Aldenham House Registered Park and Garden is situated just west of the site. There is also a Grade II listed barn to the east/south of the site at Nicoll Farm.
Designated rural areas	None.
International, National and locally designated sites of importance for biodiversity and habitat sites	None.

SITE EVALUATION

Positive site attributes:

1. The site is of optimal / sufficient size for 8fe
2. Vehicular access could potentially be achieved from Allum Lane with suitable mitigation/improvements.
3. Pedestrian/cycle access could potentially be achieved from Allum Lane with suitable mitigation/improvements.
4. The site lies adjacent/within 400m walking distance of bus stops and bus routes.
5. The site lies adjacent to the urban area of Borehamwood/Elstree.
6. There would be no impacts on preserved trees.
7. There would be minor ecological impact [subject to further investigations].
8. The site is not located near any significant noise sources.
9. The site lies outside an AQMA.
10. The site does not lie in a Minerals Consultation Area.
11. The site is not in a designated rural area.
12. The site does not have any international, national or local wildlife, habitat or biodiversity designations.
13. The site does not lie in a Minerals Consultation Area.
14. The site is does not have any local plan allocation.

Negative site attributes:

1. The site is in more than one ownership.
2. Most of the site is not known to be available.
3. The site is sloping and re-grading would be required.
4. Site development may be exposed to long distance views in the wider landscape.
5. The site has significant areas of vegetation that would require removal to accommodate a secondary school.
6. The site is at risk of surface water flooding [subject to further investigations].

7. The site lies in the Green Belt.
8. The site is in an Area of Archaeological Importance.
9. There may be impacts on designated heritage assets.
10. The site does have an HELAA allocation [HEL514].
11. The site has moderate-good grade agricultural land classification [if relevant].
12. The site is traversed by rights of way.
13. The site more than one landowner/is not in the ownership of HCC.

SITE LAYOUT PRINCIPLES

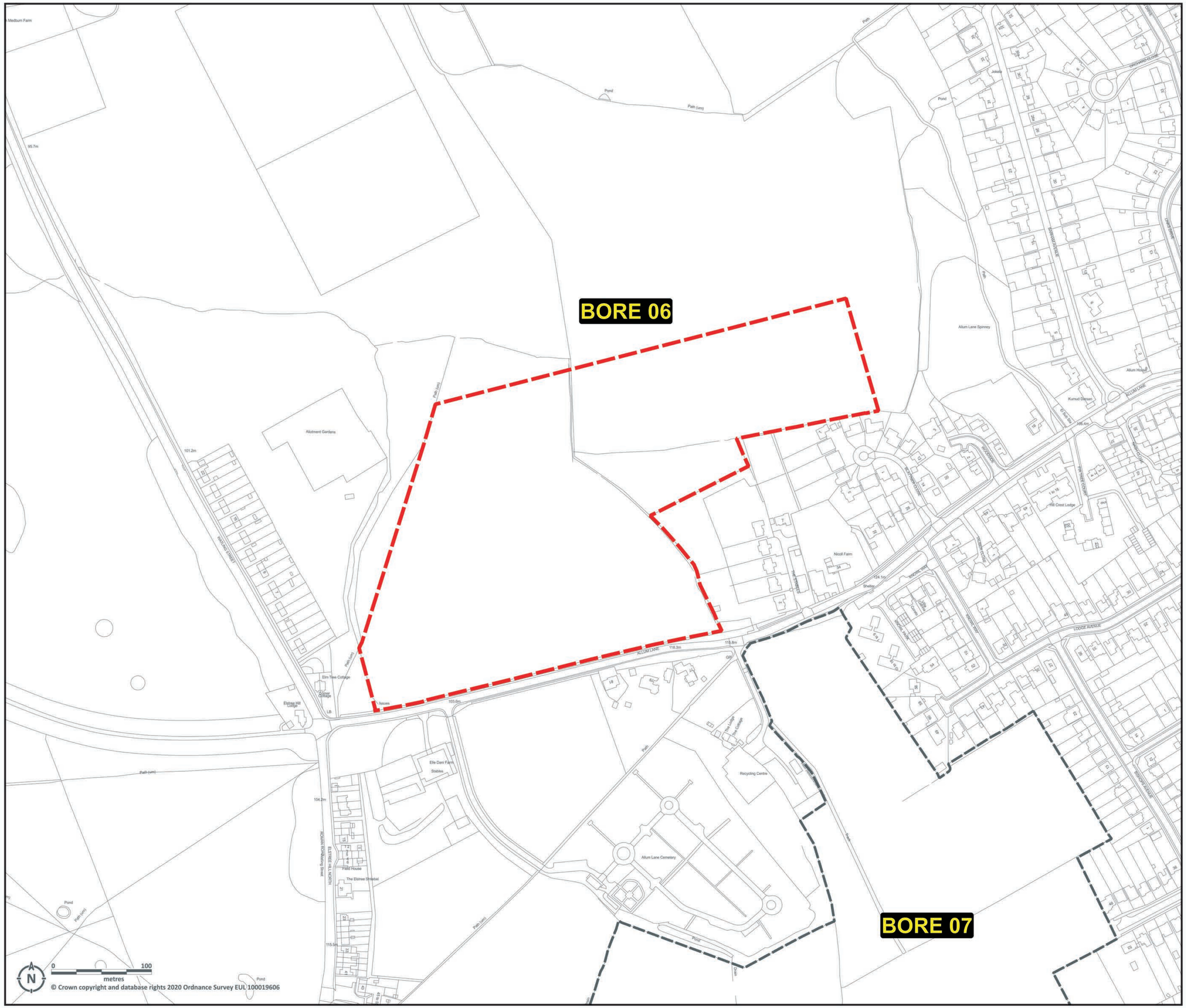
A BB103 compliant 8fe secondary school site could not be accommodated on this site.

CONCLUSION

The site is located north of Allum Lane, Borehamwood (plan 5309/301/B). The existing uses are grassland and part of Radlett Park Golf Club which is identified as site HEL514 in the HELAA 2019 Report. The site is in 2 ownerships. The site evaluation identified 16 positive site attributes and 15 negative site attributes. The site is an optimal size for an 8fe secondary school.

The site is moderately sloped, inclining to the east meaning which would necessitate regrading. Site development may be exposed to long distance views in the wider landscape. There is a significant area of large mature trees within the site that would require removal to accommodate the development. Part of the site is in an area of archaeological importance adding a further potential constraint. Whilst the site is in the HELLA as a potential housing site it is still in use as a golf course.

For the above reasons, the site was too heavily constrained and was not therefore recommended for a high-level transport appraisal or for comparative assessment with other sites.



SITE BOUNDARY
10.96ha

OTHER POTENTIAL SITES

SOUTH WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH

Site identification: BORE06

PROJECT NO	DRAWING NO	REV
5309	360	
DRAWN	DATE	SCALE
HNA	JUNE 2020	1:2500 @A2

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planners@vincent-gorbing.co.uk
vincent-gorbing.co.uk
Vincent and Gorbing Limited, Sterling Court
Norton Road, Stevenage, Hertfordshire SG1 2JY

SOUTH WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH

Aerial photograph: BORE06

PROJECT NO	DRAWING NO	REV
5309	361	
DRAWN	DATE	SCALE
HNA	JUNE 2020	1:2500 @A2

T: +44 (0) 1438 316 331
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Norton Road, Stevenage, Hertfordshire SG1 2JY

SOUTH -WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH: SHORTLISTED POTENTIAL SCHOOL SITE

SITE DETAILS

Site Reference and address	Borehamwood: Site BORE07 Land south of Allum Lane, Borehamwood Site identification plan: 5309/370 Aerial photograph: 5309/371 Development principles plan: [5309/372]	
Site area	16.00 ha	
Existing use/occupiers	Agricultural pasture	
Land ownership	ANNE JEANETTE MATTOCK of 209 Edgwarebury Lane, Edgware, Middx HA8 8QJ and DAVID JOHN BIRN of Trayman, 189 Stoke Newington High Street, London N16 0LH. & PETER GEORGE SUTTON FARROW of Maydene House, New Road, Prestwood, Great Missenden HP16 0PX and NOEL THOMAS FARROW of Wellbrook Place, Hammer Lane, Vines Cross, Heathfield TN21 9HF and ALEXANDER ERIC BENTLEY FARROW of 19 Shipbourne Road, Tonbridge TN10 3DN and ANDREW ROBERT FARROW of 2 Canterbury Road, Urmston, Manchester M41 7AX. & MOHAMMED AKMAL of Oaklands, Lime Grove, London N20 8PX. <PENDING OWNERSHIP UPDATE>	
Site availability	Site in HEL393 in HELAA 2019	
Brownfield Land Register	No.	
Planning history	TP/91/0641 - Retention of fill material laid along trackway and on adjacent land to form hardstanding – Refused TP/88/0749 Outline application for erection of 2 storey single family dwellings. Density to be determined (REFUSED)	
Buildings	There are a couple of single storey structures to the south of the cemetery used as agricultural storage.	
Adjoining uses	North:	The site is bounded to the north by Allum Lane, beyond which are residential dwellings, agricultural land and Radlett Golf Course.
	East:	To the east are residential areas of Borehamwood/Elstree.
	South:	To the south of the site is woodland.

	West:	To the west of the site is Allum Lane Cemetery, a recycling centre and stables.
Topography	The site is gently undulating. There is a gentle slope upwards towards the centre of the site and the ground slopes downwards on either side to east and west.	
Water courses	No water courses were evident during the site visit. However, Google Maps shows two bands of water within the southern part of the site.	
Vegetation	There is a low hedgerow bounding the site with Allum Lane. To the west, bounding the cemetery, is a dense tree belt. A row of trees begins at the centre of the northern field boundary and extends around the eastern part of the site. There are trees/hedges demarking the field boundaries of the site, although within the open areas, vegetation is relatively sparse. To the south of the sire is a large area of woodland. There are TPO trees to the eastern part of the site.	
ACCESSIBILITY		
Vehicular access	Allum Lane (classified B road) bounds the site to the north. There is a 30mph limit. The junction with Watling Street was noticeably busy.	
Cycle access	None.	
Pedestrian access	There is a public footpath on the southern side of Allum Lane.	
Public transport	Knowl Lane bus stop is less than 50m away from the site (<1 minute walk). This is served by route 107 (with connections between New Barnet and Edgeware), 306 (Watford-Borehamwood) and 823 (Garston – Borehamwood)	
High level transport appraisal	A high-level transport appraisal prepared by Stomor Civil Engineering Consultants concludes that, in principle, it would appear that the road network and potential for sustainable access to the site would be suitable for provision of an 8FE Secondary school, subject to a full review of transport impact and safety as part of a full Transport Assessment. The current width of Allum Lane is considered sufficient for the amount of traffic present as well as an additional access for a school. However, the access location and associated impact on the B5378 Allum Lane would need to be carefully considered in order to minimise the impact on the free flow of traffic along the road while also providing a suitable access arrangement for the school site. It is suggested that adequate pedestrian crossings are provided along Allum Lane and at suitable locations within the residential area to the east, in order to provide a safe and suitable route for pupils to access the school. The footway network along residential roads to the east and north-east of the site is generally considered suitable. Bus accessibility to the site from Borehamwood and Elstree is reasonable, with bus stops on the B5378 Allum Lane. Improved accessibility between the site and the local bus stops should be considered as part of proposals.	

	Due to the Covid-19 pandemic, traffic conditions at the time of writing this High-Level Assessment do not reflect former 'typical' traffic condition. Therefore, it is not possible to comment upon existing highway conditions in terms of congestion in the vicinity of the site. It is likely that any congestion issues occur at junction with London Road, which may cause school related traffic to use the network of residential roads near the school to avoid delays. It is recommended that safety across the mini-roundabout junction between the B5378 and Deacons Hill Road is reviewed, considering the potential increase in traffic and pedestrian movements related with the school development.
ENVIRONMENTAL IMPACT	
Landscape and visual impact	The site is relatively well enclosed from long distance views from all directions due to the topography and surrounding vegetation. There are short-distance private views of the site from the east.
Impact on residential amenities:	Residential dwellings directly abut the site to the east. There is potential for harm to occur to residential amenity arising from loss of daylight/sunlight, outlook, noise and light overspill.
Ecology:	The majority of the site is in agricultural pasture use. The ecological value of the site is considered to be limited to the boundary vegetation which could provide habitats for bats, birds and small invertebrate and mammals. The large, wooded area to the south of the site is likely to be of high ecological value.
Noise sources	A recycling centre is situated directly west of the site.
Flood risk	Flood zone 1 – very low risk.
Surface water flooding	Most of the site is at very low risk, however there are bands of high risk to the south and south-west of the site.
Groundwater source protection area	None.
Air quality	None.
Minerals	None.
Agricultural land quality	3a/3b
Rights of way	Elstree and Borehamwood footpath 07 runs through the centre of the site.
EXISTING PLANNING AND DESIGNATION CONSTRAINTS	
Existing and emerging local plan site specific designations	Green Belt. Identified as site HEL393 in HELAA 2019 report.
Heritage assets: archaeology	Adjoins area of archaeological interest.

Designated heritage assets	Grade II Nicoll Farm on opposite side of Allum Lane
Designated rural areas	None.
International, National and locally designated sites of importance for biodiversity and habitat sites	None.

SITE EVALUATION

Positive site attributes:

1. The site is of optimal / sufficient size for 8fe.
2. The site is available.
3. The site has relatively gentle level changes and re-grading would be limited.
4. Vehicular access could potentially be achieved from Allum Lane with suitable mitigation/improvements.
5. Pedestrian/cycle access could potentially be achieved from Allum Lane with suitable mitigation/improvements.
6. The site lies adjacent/within 400m walking distance of bus stops and bus routes.
7. Site development would not be exposed to long distance views in the wider landscape.
8. The site has relatively small areas of vegetation that would require removal to accommodate a secondary school.
9. The site lies adjacent to the urban area of Borehamwood/Elstree.
10. There would be minor ecological impact [subject to further investigations].
11. The site is not located near any noise sources.
12. The site does not lie in a Minerals Consultation Area.
13. The site lies outside an AQMA.
14. The site is not in a designated rural area.
15. The site does not have any international, national or local wildlife, habitat or biodiversity designations.
16. The site is does not have any local plan allocation.

Negative site attributes:

1. The site is in more than one ownership.
2. There could be impacts on archaeology [subject to further investigations].
3. There would be impacts on preserved trees.
4. The site is at risk of surface water flooding [subject to further investigations].
5. The site lies in the Green Belt.
6. There could be impacts on designated heritage assets.
7. The site does have an HELAA allocation [HEL393].
8. The site has moderate-good grade agricultural land classification [if relevant].

9. The site is traversed by rights of way.
10. The site more than one landowner/is not in the ownership of HCC.

SITE LAYOUT PRINCIPLES

A BB103 compliant 8fe secondary school site could be accommodated on this site:

Option 1

1. Development principles plan 5309/372
2. Total site area: [16.00 ha]
3. Build zone: [3.97 ha]
4. Playing Field Zone: [6.57 ha]
5. Building footprint: [11,557 sqm]
6. Vehicular access/egress: [The Rise]
7. Pedestrian access: [The Rise / Allum Lane]

Option 2

1. Development principles plan 5309/372
2. Total site area: [16.00 ha]
3. Build zone: [3.60 ha]
4. Playing Field Zone: [8.98 ha]
5. Building footprint: [11,557 sqm]
6. Vehicular access/egress: [Allum Lane]
7. Pedestrian access: [The Rise / Allum Lane]

CONCLUSION

The site is located south of Allum Lane, Borehamwood (plan 5309/301/B). The existing use is agricultural pastureland. The site is in 3 ownerships. The site is an optimal size for an 8fe secondary school.

Although the site is undulating with a gentle slope upwards towards the centre of the side and downwards on either side to the east and west it is relatively enclosed, and the site is known to be available. There are two potential points of access from The Rise or Allum Lane which could potentially be used. The site was recommended for a highway appraisal.

The conclusions of the high-level transport appraisal were that in principle, it would appear that the road network and potential for sustainable access to the site would be suitable for provision of an 8FE Secondary school, subject to a full review of transport impact and safety as part of a full Transport Assessment. The current width of Allum Lane is considered sufficient for the amount of traffic present as well as an additional access for a school. However, the access location and associated impact on the B5378 Allum Lane would need to be carefully considered in order to minimise the impact on the free flow of traffic along the road while also providing a suitable access arrangement for the school site. It is suggested that adequate pedestrian crossings are provided along Allum Lane and at suitable locations within the residential area to the east, in order to provide a safe and suitable route for pupils to access the school. The footway network along residential roads to the east and north-east of the site is generally considered suitable. Bus accessibility to the site from Borehamwood and Elstree is reasonable, with bus stops on the B5378 Allum Lane. Improved

accessibility between the site and the local bus stops should be considered as part of proposals.

Due to the Covid-19 pandemic, traffic conditions at the time of writing do not reflect former 'typical' traffic condition. Therefore, it is not possible to comment upon existing highway conditions in terms of congestion in the vicinity of the site. It is likely that any congestion issues occur at junction with London Road, which may cause school related traffic to use the network of residential roads near the school to avoid delays. It is recommended that safety across the mini-roundabout junction between the B5378 and Deacons Hill Road is reviewed, considering the potential increase in traffic and pedestrian movements related with the school's development. The site was ranked 2/6 in terms of highways and access. The vehicular access to the site would likely need to be situated on Allum Lane. If the site was also used for residential purposes, the siting of the school development would need to ensure that access to the wider site is suitable for residential purposes.

Two development principles plans (5309/372 and 5309/373) have been prepared and are attached at Appendix 3. Plan 5309/372 shows the retention of the possible housing allocation (hatched) with a school building zone to the south accessed from The Rise and playing fields to the west of the site. The location of the school would necessitate the diversion of a footpath along the tree line boundary (as shown), locating the playing fields on significantly undulating land (particularly the farthest western parcel) requiring significant re-grading and the use of The Rise which, at this stage has been identified in the transport appraisal as a sub-optimal access solution. Overall, the site area for the school would be slightly sub-optimal being 10.54ha which is just below the 10.78ha requirement for an 8fe secondary school.

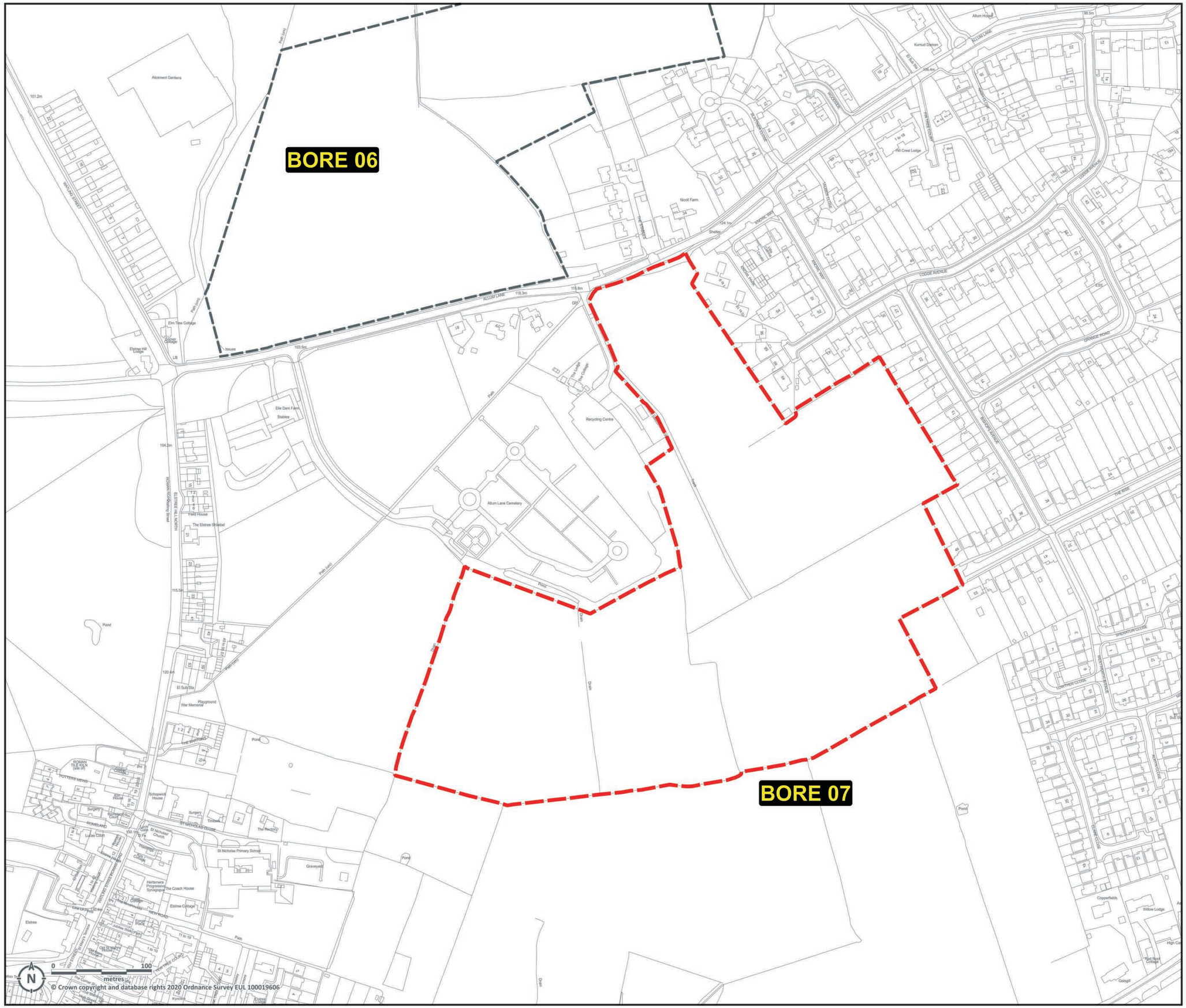
Plan 5309/373 shows the removal of the possible housing allocation with a school building zone to the north accessed from Allum Lane and the playing fields to the south of the school building zone. The location of the school would not necessarily require the diversion of the footpath if a secure line through the playing field could be established with the use of fencing. However, the footpath could be diverted if required along the tree line as shown on plan 5309/392. This site arrangement would not require the farthest western parcel of the site thus reducing potential re-grading requirements. This option proposes the use of Allum Lane which at this stage has been identified in the highway appraisal as the preferred access solution. There may be a requirement for a landscape buffer to manage the relationship between the building zone and adjoining residential dwellings on the eastern site boundary. Overall, the site area for the school would be 12.58ha which is above the 10.78ha requirement for an 8fe secondary school.

At this stage, given the constraints currently identified, the preferred land use option would be the development principles layout shown on plan 5309/373.

It is concluded that the site can be taken forward for comparative assessment with other sites.

Further site investigations are recommended comprising:

- Traffic condition survey (post Covid-19 levels)
- Noise Impact Assessment
- Air Quality Assessment
- Landscape and Visual Assessment
- High-level flood risk/drainage assessment
- Archaeological Desk Based Assessment



SITE BOUNDARY
16.00ha

OTHER POTENTIAL SITES

SOUTH WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH

Site identification: BORE06

PROJECT NO	DRAWING NO	REV
5309	370	
DRAWN	**DATE**	**SCALE**
HNA	JUNE 2020	1:2500 @A2

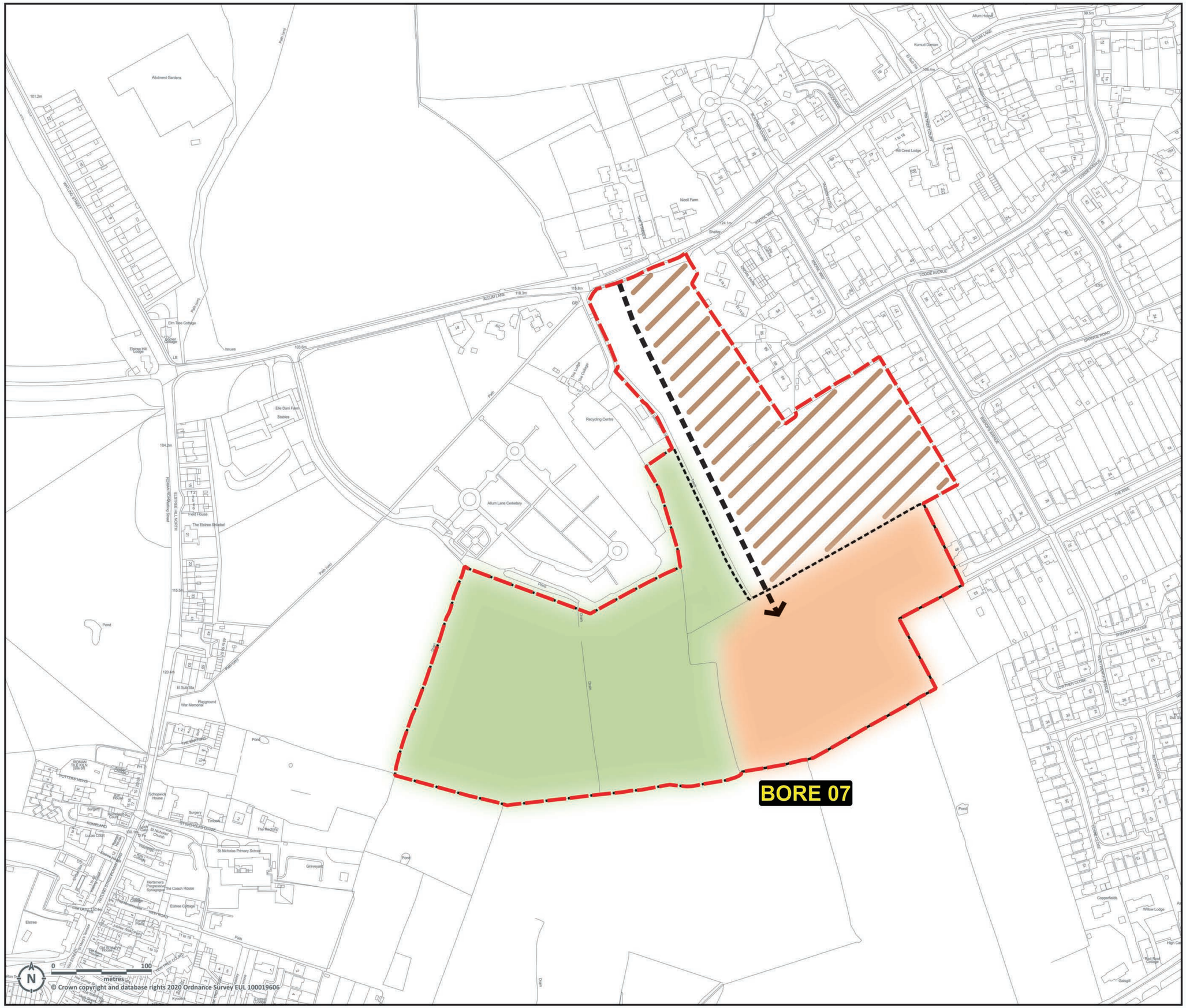
T: +44 (0) 1438 316 331
planners@vincent-gorbing.co.uk
vincent-gorbing.co.uk
Vincent and Gorbing Limited, Sterling Court
Norton Road, Stevenage, Hertfordshire SG1 2JY

SOUTH WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH

Site identification: BORE07

PROJECT NO	DRAWING NO	REV
5309	371	
DRAWN	DATE	SCALE
HNA	JUNE 2020	1:2500 @A2

T: +44 (0) 1438 316 331
planners@vincent-gorbing.co.uk
vincent-gorbing.co.uk
Vincent and Gorbing Limited, Sterling Court
Norton Road, Stevenage, Hertfordshire SG1 2JY



SITE BOUNDARY
16.00ha

PROPOSED SCHOOL BOUNDARY
10.54ha

BUILDING ZONE
3.89ha

PLAYING FIELD ZONE
6.65ha

SITE ACCESS

POTENTIAL RESIDENTIAL DEVELOPMENT AREA

SOUTH WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH

Development principles: BORE06

PROJECT NO	DRAWING NO	REV
5309	372	
DRAWN	DATE	SCALE
HNA	SEPT 2020	1:2500 @A2

T: +44 (0) 1438 316 331
planners@vincent-gorbing.co.uk
vincent-gorbing.co.uk
Vincent and Gorbing Limited, Sterling Court
Norton Road, Stevenage, Hertfordshire SG1 2JY

South West Hertfordshire Secondary School Site Search

High Level Transport Appraisal for Site 07 Borehamwood

Land to the South of Allum Lane

This High-Level Transport Appraisal (HLTA) is to consider the suitability of access for a new 8 Form of Entry (8FE) secondary school on land to the south of Allum Lane, in Borehamwood.

1. Site Background

1.1 Location

The site comprises four parcels of pasture land located on the south western edge of Borehamwood.

To western boundary is defined by residential properties fronting Knowl Park, Lodge Avenue, Bishops Avenue and The Rise. To the north, the B5378 Allum Lane abuts the site, with Elstree Household Waste Recycling Centre and Allum Lane Cemetery located adjacent to the north west of the site. The southern boundary is defined by woodland, while further pasture land abuts the western site boundary.

1.2 Local Road Network

The B5378 Allum Lane runs east to west, between central Borehamwood and the A5183 Elstree Hill North/Watling Street. Allum Lane meets the A5183 approximately 420m to the west of the site via a simple T-junction. From here, the A5138 runs north as Watling Street and south as Elstree Hill North. There is a 7.5tonne weight limit upon entry to the B5378 from the A5183. In the vicinity of the site, the B5378 is approximately 7.2m wide, is subject to a 30mph speed limit, is lit and there are double white lines or central hatching along the centreline of the road.

Knowl Way, Bishops Avenue, Lodge Avenue and The Rise are residential roads which provide access between the B5378 Allum Lane and Deacons Hill Road to the east and southeast. The Rise runs from the western boundary of the site to Deacons Hill Road. All of these roads are approximately 6m wide and lie within a 30mph speed limit zone. There are parking restrictions along the majority of the roads in the form of a single yellow line and permit parking. There is a 7.5tonne weight limit upon entry to Knowl Way and Lodge Avenue from the B5378.

Deacons Hill Road runs north to south between the B5378 Allum Lane and the A411 Barnet Lane. The road is approximately 6m wide, there are speed cushions along the extent of the road and parking restrictions are in place in the form of single and double yellow lines. There is a 7.5tonne weight limit upon entry to Deacons Hill Road at both ends.

The A411 Barnet Lane runs east to west between Elstree and the A1, along the south side of Borehamwood.

1.3 Existing Access

There is an existing gated access to the site from the B5378 Allum Lane, located at the eastern edge of the northern boundary. The access is in the form of a dropped kerb.

Access is also currently available via the access road serving the Elstree Household Waste Recycling Centre. The access is gated and is taken via a dropped kerb. The access road is approximately 5.5m wide with a speed hump, no footways and no central white lines. There is poor visibility around a bend at the southern end of the road where the existing gated access is located.

A gated access is also in place at the western end of The Rise, from the eastern site boundary. This is also via a dropped kerb. The access width into the site between adjacent properties at the end of the road appears to be restricted to approximately 4m.

Access also appears to be available from the adjacent fields to the west, which in turn appear to link to the B5378 via Elle Dani Farm.

2. Walking Accessibility

2.1 Local Pedestrian Provision

There is a footway along the south side of the B5378 Allum Lane and on the north side from the northern site boundary to the east, there is no footway on the northern side of the road to the west of the site. The footways along Allum Lane to the east of the site are generally separated from the road by a grass verge. To the west, the footway on the south side abuts the carriageway to the A5183. There are no formal pedestrian crossing facilities within the vicinity of the site, with the nearest formal crossing located approximately 440m to the east comprising a dropped kerb and refuge island. Crossing provision across junctions is generally in the form of dropped kerbs only. The road is lit along its length.

The footway network within the residential area to the west of the site is comprehensive and provides good permeability in the area for access on foot. The majority of the roads within this area, including Knowl Way, Bishops Avenue, Lodge Avenue and The Rise, are lit and generally have a footway on both sides of the road which are separated from the carriageway by a grass verge.

The footway along the northern side of The Rise appears to end before reaching the site boundary, being separated from the site by a private driveway. The footway on the southern side appears to connect to the site boundary.

Deacons Hill Road has footways on both sides of the road, which abut the carriageway.

Public Right Of Way (PROW) Footpath 07 runs southwards from the B5378 Allum Lane, along the access road to the Elstree Household Waste Recycling Centre and then through the site. Footpath 07 exits the site on the southern boundary where it runs through a wooded area to the A411 Barnet Lane.

PROW Footpath 06 runs south westwards from the same location as Footpath 07 connects to the B5378 Allum Lane. This Footpath provides a link to Elstree, connecting to the eastern side of the A5183 Elstree Hill North.

The Watling Chase Timberland Trail is accessible approximately 290m from the north eastern corner of the site. The trail provides a traffic free foot/cycle route between Smallford, St Albans and Elstree and Borehamwood Station, running along the north western side of Borehamwood.

2.2 Existing Pedestrian Access

PROW Footpath 07 provides a pedestrian access to the site from the north and the south. From the Elstree Household Waste Recycling Centre access road, the access to the Footpath is in the form of a stile.

There does not appear to be any access restrictions to PROW Footpath 7 from the A411 Barnet Lane to the south.

There are no other existing formal pedestrian accesses into the site.

2.3 Proposed Improvements

Pedestrian access can potentially be taken from the B5378 Allum Lane, from The Rise, or via PPROW Footpath 7. There is a good network of pedestrian routes through the residential area to the east of the site. However, it is recommended that improvements to linkages are undertaken to ensure the footway network is suitable for pupil movements. This would include, but not limited to, the following:

- Pedestrian crossing facilities on the B5378 Allum Lane, in the vicinity of the access, and at locations where pupils are likely to travel across major roads i.e. Deacons Hill Road.
- Suitable pedestrian crossing provision through the residential area to the east of the site.
- PROW Footpath 06 is likely to be a well-used pedestrian route for pupils originating from Elstree. Therefore, improvements to this footpath would be recommended to provide a continuous, hard surfaced, lit footway along this route. However, any improvements to the PROW would be subject to confirmation of land ownership.
- Pedestrian crossings at junctions will need to be established including dropped kerbs, tactile paving and possible parking restrictions where necessary.

PROW Footway 07 crosses through the site. A publicly accessible route through a school site is unlikely to be acceptable. Therefore, it is likely that this route will need to be diverted or access managed via a physical boundary (i.e. fence and gates). It is unlikely that there will be a significant desire line for pupils accessing the site from the A411 Barnet Lane to the south via PROW Footpath 7.

An assessment of the likely catchment of the school would need to be carried out as part of the Transport Assessment to determine pedestrian desire lines and where any additional improvements are required to the local footway network in relation to the impact of the proposed school.

3. Cycling Accessibility

3.1 Local Cycle Provision

The only existing cycle route in the vicinity of the site is the Watling Chase Timberland Trail located 290m to the north east of the site, on the north side of the B5378 Allum Lane. The trail runs north from Allum Lane along the edge of Borehamwood, to connect to Theobald Street to the north.

2.2 Existing Cyclist Access

There are no existing cycle accesses into the site.

3.3 Proposed Improvements

There appears to be sufficient width to provide off-road cycle facilities along the B5378 Allum Lane between the school site and Deacons Hill Road, although there appears to be limited width available to provide off-road cycle facilities beyond this point. There is limited potential for provision of a foot/cycle route alongside the B5378 Allum Lane to the west of the site linking to Elstree.

Consideration should be given to making PROW Footpath 06 a bridleway or foot/cycleway to cater for potential cycle movements between Elstree and the site, subject to land ownership constraints..

Hertfordshire County Council (HCC) Roads in Hertfordshire Design Guidance states that the preferred priority provision for cyclists would be to cater for them on the road network, with dedicated cycle lanes being considered in the second instance. Therefore, traffic calming measures along the residential roads to the east of the site may be sufficient to reduce vehicle speeds and create an attractive on-road route for cyclists. However, any proposed on-road cycle route will need to be assessed in tandem with the potential traffic impact also generated by the school.

4. Bus Accessibility

4.1 Local Bus Provision

The closest bus stops are located on the B5378 Allum Lane, located approximately 50m from the north eastern corner of the site. These bus stops serve routes 107 and 306, which provide connections to Edgeware, Watford, Elstree and Borehamwood. These routes also stop at Elstree and Borehamwood Railway Station.

Elstree and Borehamwood Railway Station is located approximately 780m to the north east of the site and provides access to additional bus routes: 292, B3 and 357. These routes provide connections to Edgeware, St. Albans and Wheathampstead.

4.2 Existing Connectivity

In terms of connectivity, the routes on the B5378 Allum Lane provide at least two services to the local bus stops between 7:30am and 9:00am which would suit school travel, with similar frequencies during the afternoon to cater for travel home from school.

4.3 Proposed Improvements

A bus access strategy for the site would depend on likely catchment area and whether pupils from further afield would use scheduled bus services or school specific services. The latter would be more likely to deliver pupils directly to the school, the former would use existing stops.

If existing services near to the site are to be used it is recommended that a strategy for upgrading stops would be required. Depending on which stops would serve the school, this would require provision of a shelter, flag, appropriate kerb types and information boards.

Pedestrian facilities between existing stops and the site are considered to be of a reasonable quality to allow access on foot, subject to the proposed improvements identified in Section 2.3.

5. Rail Accessibility

5.1 Local Rail Provision

The nearest railway station is Elstree and Borehamwood Railway Station, located approximately 780m to the north east of the site, accessed via the B5378 Allum Lane.

5.2 Existing Connectivity

Elstree and Borehamwood Station is on the Thameslink route between Radlett and Mill Hill Broadway. Connections are also available to St. Albans, Luton and London, among others.

Walking time between the site and Elstree and Borehamwood Railway Station is approximately 10 minutes.

5.3 Proposed Improvements

The Transport Assessment would need to consider the likely number of pupils using trains as part of their journey to/from the school site and whether any improvements can be proposed to improve the connectivity of the railway stations to the school.

6. Vehicular Accessibility

6.1 Existing Highway Conditions

Due to the Covid-19 pandemic, traffic conditions at the time of writing this High-Level Assessment do not reflect former 'typical' traffic condition. Therefore, it is not possible to comment upon existing highway conditions in terms of congestion in the vicinity of the site.

'Typical traffic' information from Google Maps appears to show typical traffic conditions over recent periods and is therefore not a reliable source of information for identifying likely congestion hotspots due to reductions in traffic during the recent lockdown period. This has been assumed

based upon the fact that several known congestion hotspots in the area are showing up as having no congestion during the AM and PM peak periods on the current 'typical traffic' mapping.

However, previous experience indicates that traffic on the B5378 Allum Lane is likely to be significant at peak times, particularly at the mini-roundabout junction with Deacon Hill Road.

Figure 3.1.1 of the Hertfordshire Traffic and Transport Data Report 2018 identifies that the following junctions within the vicinity of the site are highlighted as congested junctions on the key network:

- Junction between the B5378 Allum Lane, B5378 Shenley Lane, Station Road and Theobald Street,
- Junction between the B5378 Allum Lane, A5183 Watling Street and A5183 Elstree Hill North,
- Junction between the A411 Watford Road, A411 Barnet Lane, A5183 Elstree Hill North and A5183 High Street.

Furthermore, the A411 is identified as being subject to occasional congestion during the peak hours.

Further assessment of traffic congestion in the vicinity of the site will need to be carried out in due course in consultation with the Highway Authority.

7. Proposed Vehicular Access

7.1 Proposed Vehicular Access

The most suitable point of access would appear to be from the B5378 Allum Lane.

If an access is taken directly from Allum Lane, then the junction spacing between the new access, the Elstree Household Waste Recycling Centre access and The Stables will need to be taken into consideration. In addition, a new access would impact on the existing hedgerows and likely some trees. An access at the existing gated access location would potentially have insufficient visibility to the right due to a high point in the road in the vicinity of the existing bus stop. This would need to be considered in more detail with topographical survey information. An access to the west of The Stables may be more suitable in terms of visibility, but there appears to be a significant level difference between Allum Lane and the site which would need to be considered.

An access via the existing Elstree Household Waste Recycling Centre access would need to take into consideration the uses of the recycling centre and the likely impact of school related traffic which would include coaches and potential parent drop off. PROW Footpath 07 would also need to be catered for as part of the access arrangements. In addition, the existing junction on the B5378 Allum Lane would need to be improved to cater for the additional school related movements. Any improvements to this junction would need to consider the existing driveways on the western side and PROW Footpath 06. Therefore, this route would not appear to be preferable.

The Rise could also be considered as a possible access for the site. However, the existing access width appears to be too narrow to cater for two-way school related traffic, and the adjacent private drive appears to restrict the potential to widen the access. Furthermore, should a vehicular access

be sought in this location, some of the existing on-street parking bays would need to be relocated to ensure they do not restrict traffic flows to and from the school site.

School access arrangements would need to be determined by analysis of typical traffic conditions and the impact of school traffic on the flow of vehicles along congested areas, which would be undertaken as part of the Transport Assessment.

7.2 Proposed Improvements

It is likely that traffic calming measures and parking restrictions will need to be provided along Allum Lane to manage vehicle speeds and ensure free flowing traffic.

It will be necessary to allow parent drop off in the site to prevent parking along Allum Lane, which would cause traffic flow issues and safety concerns.

The B5378 Allum Lane is currently subject to a 30mph speed limit. Consideration would need to be given to reducing the speed limit to 20mph in the vicinity of the vehicular and pedestrian accesses to maximise safety adjacent to the school.

A full Transport Assessment would be required to determine the predicted impact of traffic in comparison to typical flows in the area.

8. Vehicular Trip Generation

8.1 Potential Vehicle Generation and Impact

Full analysis of potential vehicle trip generation and impact would be considered as part of a full Transport Assessment.

Initial assumptions for secondary school traffic would be that around 20% of pupils travel to/from school by car during the AM and PM peak periods. Most staff are likely to travel to school by car, although arrival times can start from 7am (or earlier), with departure times also spread across a wide period minimising the impact on peak periods.

However, car travel would be considered in conjunction with the likely catchment area of the school and resulting travel distances, proposed school facilities such as before school and after school clubs, potential for improved bus services and implementation of sustainable travel routes.

It would be necessary to allow parent drop off in the site to prevent parking along the access road or in the surrounding residential roads.

8.2 Proposed Mitigation

A School Travel Plan will need to be prepared for the school to promote walking, cycling and public transport for travel rather than car use.

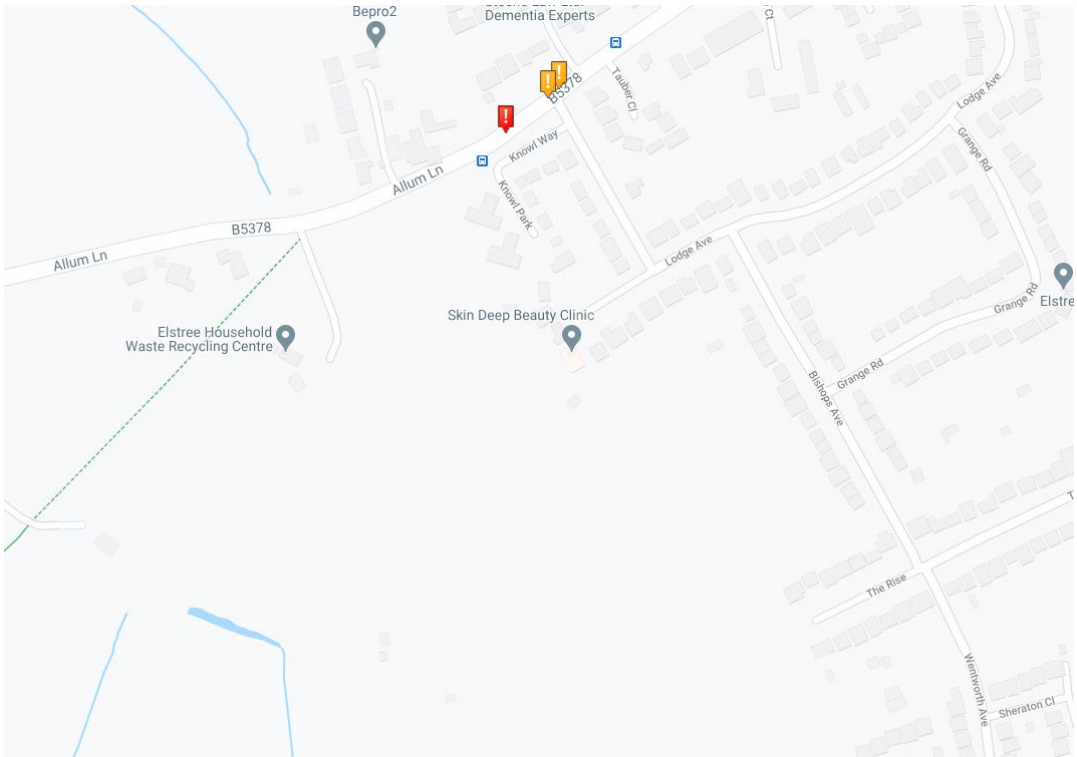
An assessment of vehicle and pedestrian desire lines will be undertaken as part of the Transport Assessment which will identify any potential Park and Stride facilities further afield, which the school could utilise.

9. Highway Safety

9.1 Existing Accident Data

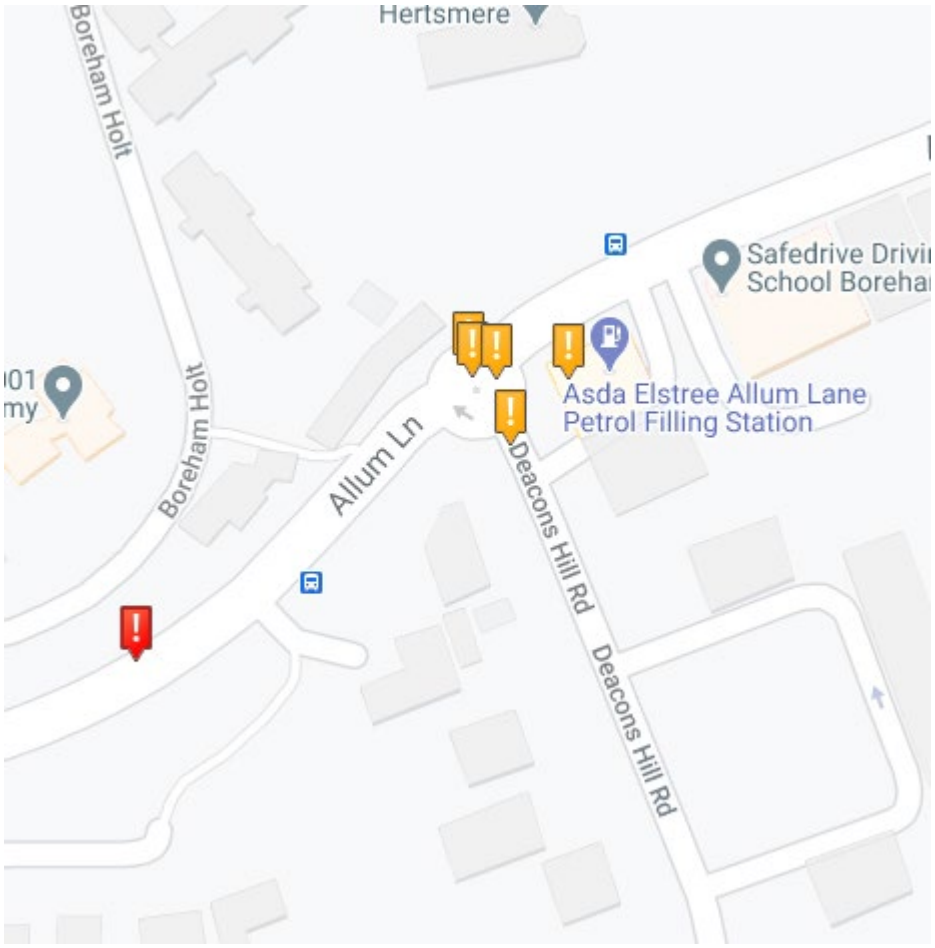
Data from crashmap.co.uk for the last 5 years has been obtained which identifies personal injury accidents received from the Department of Transport. The data identifies that within the 5 year period there has been one 'serious' accident within the vicinity of the site. This incident occurred approximately 60m to the north east of the site on Allum Lane and involved a single vehicle hitting a refuge island.

There are two 'slight' incidents identified at the junction between Allum Lane and Knowl Way.



Source: www.crashmap.co.uk

In addition to the above, the accident data for the junction between the B5378 and Deacons Hill Road identifies 5 'slight' accidents in the vicinity of the junction.



Source: www.crashmap.co.uk

9.2 Proposed Improvements

An influx of cyclists, pedestrians, and traffic due to the school development may cause additional pressures and increased accidents. Therefore, mitigation measures will need to be considered.

It is recommended that safety across the mini-roundabout junction between the B5378 and Deacons Hill Road is reviewed, considering the potential increase in traffic and pedestrian movements related with the school's development.

10. Conclusions

In principle, it would appear that the road network and potential for sustainable access to the site would be suitable for provision of an 8FE Secondary school, subject to a full review of transport impact and safety as part of a full Transport Assessment.

The current width of Allum Lane is considered sufficient for the amount of traffic present as well as an additional access for a school. However, the access location and associated impact on the B5378 Allum Lane would need to be carefully considered in order to minimise the impact on the free flow of traffic along the road while also providing a suitable access arrangement for the school site.

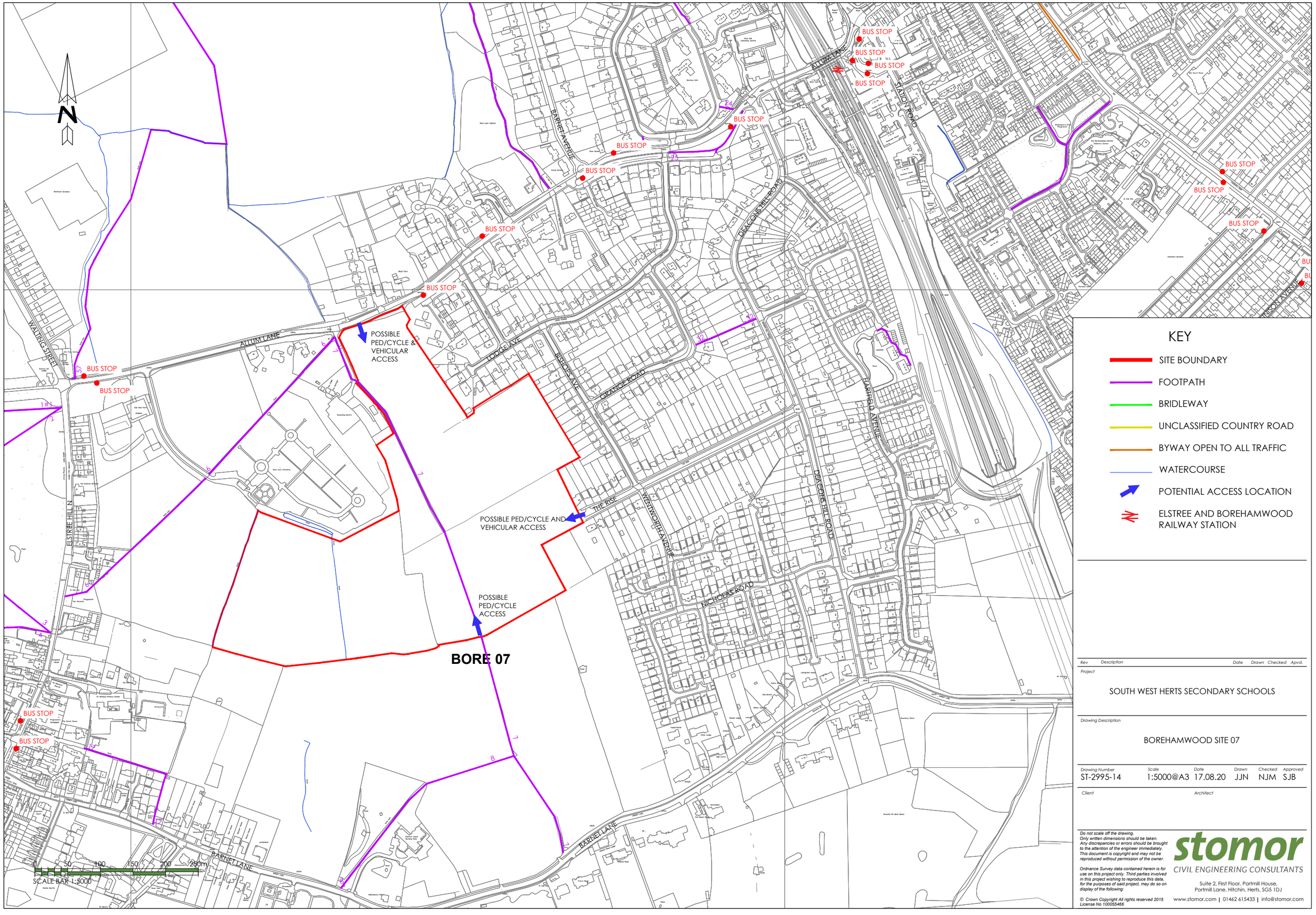
It is suggested that adequate pedestrian crossings are provided along Allum Lane and at suitable locations within the residential area to the east, in order to provide a safe and suitable route for pupils to access the school.

The footway network along residential roads to the east and north east of the site is generally considered suitable.

Bus accessibility to the site from Borehamwood and Elstree is reasonable, with bus stops on the B5378 Allum Lane. Improved accessibility between the site and the local bus stops should be considered as part of proposals.

Due to the Covid-19 pandemic, traffic conditions at the time of writing this High-Level Assessment do not reflect former 'typical' traffic condition. Therefore, it is not possible to comment upon existing highway conditions in terms of congestion in the vicinity of the site. It is likely that any congestion issues occur at junction with London Road, which may cause school related traffic to use the network of residential roads near the school to avoid delays.

It is recommended that safety across the mini-roundabout junction between the B5378 and Deacons Hill Road is reviewed, considering the potential increase in traffic and pedestrian movements related with the schools development.



KEY

- SITE BOUNDARY
- FOOTPATH
- BRIDLEWAY
- UNCLASSIFIED COUNTRY ROAD
- BYWAY OPEN TO ALL TRAFFIC
- WATERCOURSE
- POTENTIAL ACCESS LOCATION
- ELSTREE AND BOREHAMWOOD RAILWAY STATION

Rev	Description	Date	Drawn	Checked	Apvd.

Project

SOUTH WEST HERTS SECONDARY SCHOOLS

Drawing Description

BOREHAMWOOD SITE 07

Drawing Number	Scale	Date	Drawn	Checked	Approved
ST-2995-14	1:5000@A3	17.08.20	JJN	NJM	SJB

Client

Architect

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SOUTH -WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH: SHORTLISTED POTENTIAL SCHOOL SITE		
SITE DETAILS		
Site Reference and address	Borehamwood: Site BORE08 Land south of Barnet Lane, Borehamwood Site identification plan: 5309/380 A Aerial photograph: 5309/381 A Development principles plan: [5309/382]	
Site area	11.3 ha	
Existing use/occupiers	Agricultural	
Land ownership	HERTFORDSHIRE COUNTY COUNCIL of County Hall, Hertford SG13 8DE and of DX145781, Hertford 4	
Site availability	Owned by HCC – available.	
Brownfield Land Register	No.	
Planning history	TP/99/0005 - Erection of 24 metre high mono pole telecommunications tower with 4 antennae, radio equipment cabin and fence enclosure together with 35m long access track – Refuse permission	
Buildings	None.	
Adjoining uses	North:	The north of the site is bounded by Barnet Lane and a roundabout connecting to Furzehill Road and Farriers Way. Beyond this are residential dwellings and to the north-east is a large supermarket.
	East:	To the east of the site is a caravan park, agricultural land and woodland.
	South:	To the south of the site is agricultural land, beyond which is a large area of woodland.
	West:	To the west are low density dwelling fronting onto Barnet Lane.
Topography	The site is almost entirely level. There is a very gentle incline to the south-west.	
Water courses	Google Maps shows a narrow watercourse around the perimeter of the adjacent caravan park.	
Vegetation	There is a hedgerow and tree belt bounding the site from Barnet Lane. A sporadic hedgerow/tree belt screens most of the caravan park from the site. There are a few singular trees dispersed within the central areas of the site. The area of the site to the south of the caravan park is	

	separated from the northern part of the site by a mature hedgerow. The central area of the site comprises long grassland.
ACCESSIBILITY	
Vehicular access	The is no existing vehicular access to the site. The site is bounded to the north by Barnet Lane, a principal A road with 40mph restrictions. Just over 100m to the east is the Barnet Bypass which connects to the A1(M).
Cycle access	The pavement on the northern side of Barnet Lane, opposite the site, has a dedicated cycle lane, although this terminates after a short distance.
Pedestrian access	There is no pedestrian access to the site. There is a pavement along the northern side of Barnet Lane and a pavement leading to a bus stop on the southern side of the road, accessed via a pedestrian crossing point opposite the nearby supermarket.
Public transport	Stirling Court bus stop is located directly adjacent to the site and provides access to routes 107 (Edgeware to New Barnet via Borehamwood/Elstree) and 292 (Borehamwood – Edgeware).
High level transport appraisal	A high-level transport appraisal prepared by Stomor Civil Engineering Consultants concludes that, in principle, it would appear that the road network and potential for sustainable access to the site would be suitable for provision of an 8FE Secondary school, subject to a full review of transport impact and safety as part of a full Transport Assessment. Although the Highway Authority usually resists new accesses onto A roads, the A411 Barnet Lane to the west of Furzehill Road appears to be a suitable location for a school access to be established, provided an acceptable junction arrangement can be achieved. There may be potential for park and stride arrangements from nearby car parks associated with Morrisons and other commercial properties on Stirling Way, which would help to discourage travel by car and avoid provision of parent drop off facilities on site. The local footway and cycleway network appears to be generally good and suitable for school related movements. However, upgraded crossing facilities will be required, particularly on the A411 Barnet Lane. It is recommended that measures to manage traffic speed would be required in the vicinity of the school such as a reduction in speed limit to 30mph in the immediate vicinity of the site. Bus accessibility to the site is considered good, with bus stops adjacent to the site and within close proximity. Access between the site and the local bus stops should be considered as part of the proposals. Due to the Covid-19 pandemic, traffic conditions at the time of writing this High-Level appraisal do not reflect former ‘typical’ traffic condition. Therefore, it is not possible to comment upon existing highway conditions in terms of congestion in the vicinity of the site. It is likely that any congestion issues occur at junction with London Road, which may cause school traffic to use the adjacent network of residential roads to

	avoid delays. It is recommended that safety on the eastbound approach to the A411 Barnet Lane and Furzehill Road is reviewed, as well as the safety of school related traffic on Stirling Corner.
ENVIRONMENTAL IMPACT	
Landscape and visual impact	The site is not exposed to long distance views.
Impact on residential amenities:	Dwellings fronting onto Barnet Lane and occupiers of the adjacent caravan park may incur a loss of daylight, sunlight or outlook depending on where the school building is sited. There may also be light and noise overspill.
Ecology:	The trees and hedgerows surrounding and within the site are likely to provide habitats for birds and potentially bats. The long grass on site may also provide habitat for lizards and other small invertebrates.
Noise sources	The site is in close proximity to the A1(M).
Flood risk	The eastern part of the site, adjacent to the caravan park is in Flood Zone 3.
Surface water flooding	There is a strip of low risk along the northern boundary of the site. To the east of the site, close to the caravan park, the site is at high risk of surface water flooding.
Groundwater source protection area	None.
Air quality	Part of the London Borough of Barnet AQMA.
Minerals	Sand and Gravel Belt.
Agricultural land quality	3a/3b.
Rights of way	None known.
EXISTING PLANNING AND DESIGNATION CONSTRAINTS	
Existing and emerging local plan site specific designations	Green Belt.
Heritage assets: archaeology	Area of archaeological interest.
Designated heritage assets	None within close proximity.
Designated rural areas	None.
International, National and locally designated sites of importance for biodiversity and habitat	None.

sites	

SITE EVALUATION

Positive site attributes:

1. The site is of optimal / sufficient size for 8fe.
2. The site is in single ownership.
3. The site is available.
4. The site is flat and re-grading would be minimal.
5. Vehicular access could be achieved from – A411 Barnet Lane with suitable mitigation/improvements.
6. Pedestrian/cycle access could be achieved from – A411 Barnet Lane with suitable mitigation/improvements.
7. The site lies adjacent/within 400m walking distance of bus stops and bus routes.
8. Site development would not be exposed to long distance views in the wider landscape.
9. The site lies adjacent to the urban area of Borehamwood.
10. There would be no impacts on preserved trees.
11. There would be minor ecological impact [subject to further investigations].
12. There would be no impacts on designated heritage assets.
13. The site is not in a designated rural area.
14. The site does not have any international, national or local wildlife, habitat or biodiversity designations.
15. The site is does not have any local plan allocation.
16. The site is not an identified HELAA site.
17. The site is not traversed by rights of way.
18. The site has a single landowner/is in the ownership of HCC.

Negative site attributes:

1. The site is at risk of flooding [subject to further investigations].
2. The site is located near noise sources.
3. The site lies in the Green Belt.
4. The site lies in an AQMA.
5. The site lies in a Minerals Consultation Area.
6. The site is in an Area of Archaeological Importance.
7. The site has moderate-good grade agricultural land classification [if relevant].
8. Relatively large areas of vegetation may have to be removed to accommodate development on the site.

SITE LAYOUT PRINCIPLES

A BB103 compliant 8fe secondary school site could be accommodated on this site:

1. Development principles plan 5309/382
2. Total site area: [11.00 ha]

3. Build zone: [3.57 ha]
4. Playing Field zone: [7.43 ha]
5. Building footprint: [11,557 sqm]
6. Vehicular access/egress: [Barnet Lane]
7. Pedestrian access: [Barnet Lane]

CONCLUSION

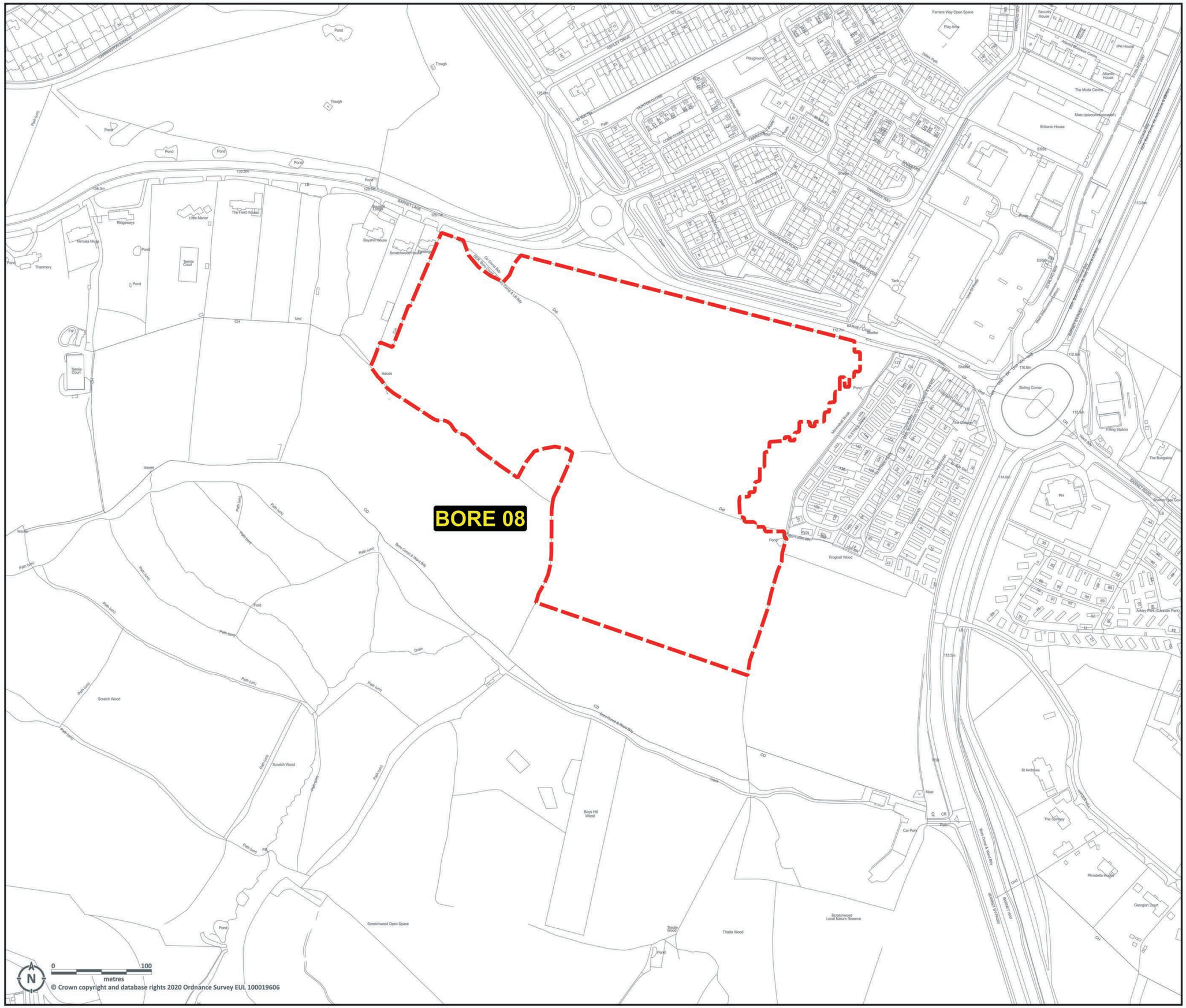
The site is located south of A411 (Barnet Lane), Borehamwood (plan 5309/381). The existing use is agricultural. The site is in 1 ownership, Hertfordshire County Council. The site is an optimal size for an 8fe secondary school. The site lies part in the administrative borough of Hertsmere and part in the administrative borough of Barnet. The site is almost entirely level. The site was recommended for a high-level transport appraisal.

The conclusions of the high-level transport appraisal were that: in principle, it would appear that the road network and potential for sustainable access to the site would be suitable for provision of an 8FE Secondary school, subject to a full review of transport impact and safety as part of a full Transport Assessment. Although the Highway Authority usually resists new accesses onto A roads, the A411 Barnet Lane to the west of Furzehill Road appears to be a suitable location for a school access to be established, provided an acceptable junction arrangement can be achieved. There may be potential for park and stride arrangements from nearby car parks associated with Morrisons and other commercial properties on Stirling Way, which would help to discourage travel by car and avoid provision of parent drop off facilities on site. The local footway and cycleway network appear to be generally good and suitable for school related movements. However, upgraded crossing facilities will be required, particularly on the A411 Barnet Lane. It is recommended that measures to manage traffic speed would be required in the vicinity of the school such as a reduction in speed limit to 30mph in the immediate vicinity of the site. Bus accessibility to the site is considered good, with bus stops adjacent to the site and within close proximity. Access between the site and the local bus stops should be considered as part of the proposals. Overall, the site was ranked 1/6 (receiving the top ranking) when compared with other sites.

A development principles plan (5309/380) has been prepared and is attached at Appendix 3. The plan shows the disposition of the building zone, playing fields and the optimal point of vehicular access to the site (based on highway appraisal conclusions). The highways appraisal identified 2 potential points of access from Barnet Lane to the east and west of the roundabout adjoining the site. The eastern point of access has been identified to allow for the building zone to be located away from the area of potential high-risk surface water flooding at the eastern part of the site. The playing fields may impact on a tree line running east west through the site but depending on layout the tree line may be retained. Some vegetation along the site frontage and scattered trees may require removal.

It is concluded that the site can be taken forward for comparative assessment with other sites. Further site investigations are recommended comprising:

- Traffic condition survey (post Covid-19 levels)
- Noise Impact Assessment
- Air Quality Assessment
- Landscape and Visual Assessment
- High-level flood risk/drainage assessment
- Archaeological Desk Based Assessment



REVISION A:
Site boundary amendment
HNA/21-09-2020

SOUTH WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH

Site identification: BORE08

PROJECT NO	DRAWING NO	REV
5309	380	A
DRAWN	DATE	SCALE
HNA	AUGUST 2020	1:2500 @A2

T: +44 (0) 1438 316 331
planners@vincent-gorbing.co.uk
vincent-gorbing.co.uk
Vincent and Gorbing Limited, Sterling Court
Norton Road, Stevenage, Hertfordshire SG1 2JY

REVISION A:
Site boundary amendment
HNA/21-09-2020

SOUTH WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH

Aerial photograph: BORE08

PROJECT NO	DRAWING NO	REV
5309	381	A
DRAWN	DATE	SCALE
HNA	AUGUST 2020	1:2500 @A2

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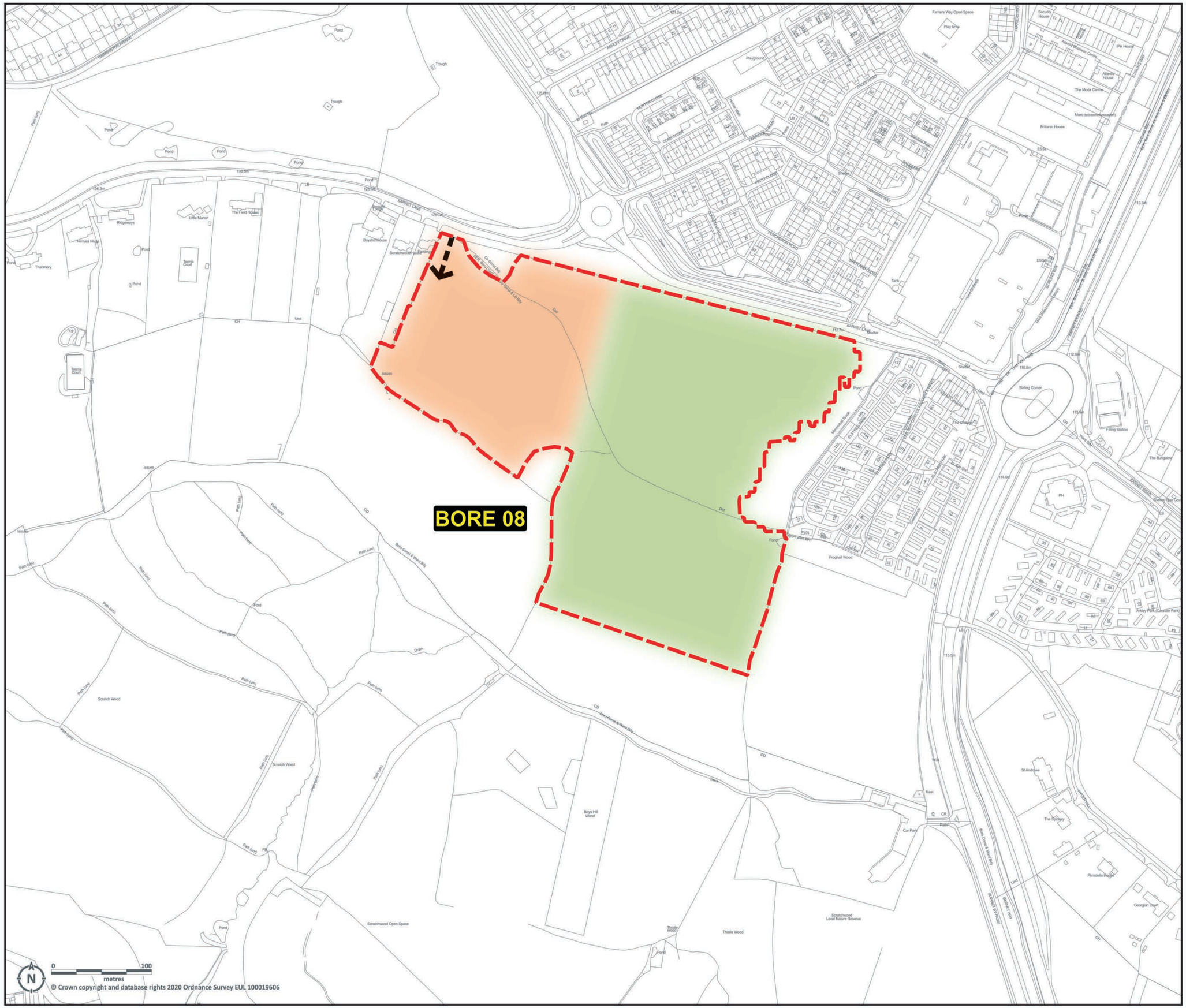

SOUTH WEST HERTFORDSHIRE SECONDARY SCHOOL SITE SEARCH

Development principles: BORE08

PROJECT NO	DRAWING NO	REV
5309	380	
DRAWN	DATE	SCALE
HNA	SEPT 2020	1:2500 @A2

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South West Hertfordshire Secondary School Site Search

High Level Transport Appraisal for Site 8 Borehamwood

Land to the South of Barnet Lane

This High-Level Transport Appraisal (HLTA) is to consider the suitability of access for a new 8 Form of Entry (8FE) secondary school on land to the south of Barnet Lane, Borehamwood.

1. Site Background

1.1 Location

The site is located on the south eastern side of Borehamwood and currently comprises two parcels of arable land.

The A411 Barnet Lane defines the northern boundary of the site, with residential properties fronting the A411 abutting the north western site boundary. A residential park called 'Elstree Park' abuts the site to the east, while arable land defines the remaining boundaries of the site. To the south, arable land separates the site from an area of woodland called Scratchwood and Scratchwood Open Space.

Mimmshall Brook runs between the site and Elstree Park.

The Hertfordshire Boundary runs from northwest to southeast through the site, with the southern part of the site lies within the London Borough of Barnet.

1.2 Local Road Network

The A411 Barnet Lane runs west to east between Elstree and the A1. Barnet Lane connects to the A1 via a large roundabout junction called Stirling Corner. The road is approximately 7.3m wide in the vicinity of the site and is subject to a 40mph speed limit. Vehicles weighing greater than 18.5tonnes are prohibited from entering the A411 from the A1 roundabout junction during certain times. There is also a restriction on vehicles weighing greater than 7.5tonnes from continuing west along the A411 after the roundabout junction with Furzehill Road.

Furzehill Road connects to the A411 Barnet Road and Farriers Way at its southern end via a roundabout junction. From here, the road runs north westwards through Borehamwood to connect to the B5378 Shenley Road. Furzehill Road is approximately 7m wide, lit and is subject to a 30mph speed limit. Vehicles weighing greater than 7.5tonnes are prohibited from entering the road from Barnet Lane.

Farriers Way connects to the A411 Barnet Road and Furzhill Road at its southern end. From here, the road meanders north eastwards to connect to Ashley Drive. Farriers Way is approximately 6m wide, lit and is subject to a 30mph speed limit. Vehicles weighing greater than 7.5tonnes are prohibited from entering the road from Barnet Lane.

Ashley Drive is a 6.75m wide road which connects southwest to northeast between Furzehill Road, and Ripon Road. The road lies in a 30mph speed limit zone and is lit.

The A1 is located approximately 125m to the east of the site. This section of the A1 runs between Edgware and the M25. The roundabout junction (Stirling Corner) between the A1, the A411 Barnet Lane and Barnet Road is signalised on its southern side, including A1 Barnet Way and A411 Barnet Road approaches and corresponding signals within the roundabout, affecting vehicle flows through the roundabout.

Opposite the north eastern corner of the site is a commercial entrance for Morrisons Supermarket for which the main car park is accessed off Stirling to the north west.

1.3 Existing Access

There does not currently appear to be any direct access to the site from the A411 Barnet Lane, with a relatively dense hedgerow between the A411 and the site along its northern boundary.

Access to the site is currently taken from the adjacent arable land to the south west. This land to the south west is accessed from the A411 Barnet Lane via an access located approximately 140m to the west of the site.

Walking Accessibility

2.1 Local Pedestrian Provision

In the vicinity of the site, to the west of the roundabout junction with Furzehill Road, the A411 Barnet Lane has a footway on the northern side of the road. There are segregated foot/cycleways around the entire roundabout junction, with crossing provision provided in the form of dropped kerbs. To the east of the roundabout, an unsegregated foot/cycleway is in place on the north side of the road although this is not particularly wide and is very overgrown in places. This becomes a segregated foot/cycleway adjacent to the north eastern corner of the site, where a footway on the southern side of the road also begins. Both of these routes continue to the east to link to the A1. There is a signalised pedestrian crossing located approximately 25m to the east of the north eastern corner of the site adjacent to a pedestrian entrance to the Morrisons Supermarket.

Furzehill Road has a footway on the eastern side of the road and a segregated foot/cycleway on the western side. A grass verge generally separates the footways from the road between the roundabout junction with the A411 Barnet Lane and Ashley Drive. To the north west of Ashley Drive, the footways abut the carriageway. There is an uncontrolled pedestrian crossing with refuge island located approximately 300m to the north of the roundabout junction with the A411 Barnet Lane.

Farriers Way, Ashley Drive, and the majority of the residential streets within the near vicinity of the site all have footways both sides of the road.

All of the roads mentioned above have street lighting along their extent.

Public Right Of Way (PROW) Footpath 09 runs north east to south west between Furzehill Road and the A411 Barnet Lane roughly parallel to Carrington Avenue and through Woodcock Hill Village Green.

The London Loop (a circular publicly accessible route which runs around London) runs eastwards along the A411 Barnet Lane before running south, along the eastern side of the access track which serves the arable land of which the site is part of. The London Loop continues south into Scratch Wood before running south eastwards towards Edgeware.

2.2 Existing Pedestrian Access

There are no existing formal pedestrian accesses into the site.

2.3 Proposed Improvements

Pedestrian access is limited to the north of the site, from the A411 Barnet Lane. There is a good network of pedestrian routes through the residential area to the north of the site. However, as it is anticipated that the majority of pedestrian movements will travel from the north, it is recommended that improvements to linkages are undertaken to ensure pupils have a safe route to/from the school site. This would include, but not limited to, the following:

- Pedestrian provision on part of the southern side of the A411 Barnet Lane, linking to the school pedestrian access. A signalised pedestrian crossing facility will also be required on the A411, in the vicinity of the site access.
- A reduction in the speed limit in the vicinity of the site on the A411 Barnet Lane to 30mph may be considered to improve pedestrian safety. However, the impact on traffic flows by reducing the speed limit would need to be assessed as part of a Transport Assessment.
- The southern part of PROW Footpath 09 and trodden routes through Woodcock Hill Village Green will likely become well-used pedestrian routes. Therefore, consideration should be given to potential improvements to the existing Footpath and routes through the Village Green, and how they connect to the wider footway network.
- Pedestrian crossings at junctions will need to be established including dropped kerbs, tactile paving and possible parking restrictions where necessary.

An assessment of the likely catchment of the school would need to be carried out as part of the Transport Assessment to determine pedestrian desire lines and where any additional improvements are required to the local footway network in relation to the impact of the proposed school.

2. Cycling Accessibility

3.1 Local Cycle Provision

As previously mentioned, there are segregated foot/cycleways around the entire roundabout junction, with crossing provision allowing for cyclist movements with segregated foot/cycleways on the refuge islands. To the east of the roundabout, an unsegregated foot/cycleway is in place on the north side of the road, which becomes a segregated foot/cycleway adjacent to the north eastern corner of the site. The segregated foot/cycleway continues to the east to link to the A1.

Furzehill Road has a segregated foot/cycleway on the western side which runs the entire length of the road, to the B5378 Shenley Road.

There is a shared foot/cycleway running along the western side of the A1, providing a link between the A411 Barnet Lane and the A5135 Elstree Way. This route is generally separated from the carriageway by a grass verge, with occasional crash barriers protecting users from any potential vehicles exiting the carriageway.

2.2 Existing Cyclist Access

There are no existing cycle accesses into the site.

3.3 Proposed Improvements

The existing cycle provision in the vicinity of the site is considered to be good. There are existing cycle routes along Furzehill Road and the A1. In addition, the existing network of residential roads to the north provides good permeability and accessibility, and could be utilised as on-road cycle routes.

Improvements to the crossing facilities would be beneficial to cater for cyclist movements. In particular, any proposed signalised crossing facility on the A411 Barnet Lane or Furzehill Road would need to be a Toucan Crossing, linking to the cycleways in the vicinity of the site.

Hertfordshire County Council (HCC) Roads in Hertfordshire Design Guidance states that the preferred priority provision for cyclists would be to cater for them on the road network, with dedicated cycle lanes being considered in the second instance. Therefore, traffic calming measures within the residential area to the north may be sufficient to reduce vehicle speeds and create an attractive on-road route for cyclists. However, any proposed on-road cycle route will need to be assessed in tandem with the potential traffic impact also generated by the school.

3. Bus Accessibility

4.1 Local Bus Provision

The closest bus stops are located on the A411 Barnet Lane adjacent to the north eastern corner of the site. This bus stop serves the 107 and 292 routes which provide connections to Edgeware, Barnet and central Borehamwood. Additional stops on this route are available from Furzehill Road and Ashley Drive, in close proximity to the site.

Service 644 is a service from between Queensbury and Hatfield, via Edgware and Borehamwood which also passes the site. This appears to only run during university term times, and started on 1st September.

Route 601, which provides connections to Hatfield, Welwyn Garden City and St. Albans, is accessible from bus stops located further north along Furzehill Road.

4.2 Existing Connectivity

In terms of connectivity, the 107 and 292 routes provides at least two services to the local bus stops between 7:30am and 9:00am which would suit school travel, with similar frequencies during the afternoon to cater for travel home from school.

Route 644 runs 1 service during the AM school peak period and 1 service during the school PM peak period.

Route 601 provides a less frequent service, although there is at least one service within the anticipated school travel times.

4.3 Proposed Improvements

A bus access strategy for the site would depend on the likely catchment area and whether pupils from further afield would use scheduled bus services or school specific services. The latter would be more likely to deliver pupils directly to the school, the former would use existing stops.

If existing services near to the site are to be used, it is recommended that a strategy for upgrading stops is implemented. Depending on which stops would serve the school, this would require provision of a shelter, flag, appropriate kerb types and information boards.

Pedestrian facilities between existing stops and the site are of good enough quality and allow access on foot, subject to the proposed improvements identified in Section 2.3. However, consideration on pedestrian access between the bus stops and the site should be undertaken as part of the Transport Assessment.

4. Rail Accessibility

5.1 Local Rail Provision

The nearest railway station is Elstree & Borehamwood Station, located approximately 1.5km north west of the site as the crow flies or 1.9km on foot.

5.2 Existing Connectivity

Elstree & Borehamwood Station is on the Thameslink route between Radlett and Mill Hill Broadway. Connections are also available to St. Albans, Luton and London, among others.

Walking time between the site and Elstree & Borehamwood Railway Station is approximately 23 minutes.

5.3 Proposed Improvements

The Transport Assessment would need to consider the likely number of pupils using trains as part of their journey to/from the school site and whether any improvements can be proposed to improve the connectivity of the railway stations to the school.

5. Vehicular Accessibility

6.1 Existing Highway Conditions

Due to the Covid-19 pandemic, traffic conditions at the time of writing this High-Level Assessment do not reflect former 'typical' traffic condition. Therefore, it is not possible to comment upon existing highway conditions in terms of congestion in the vicinity of the site.

'Typical traffic' information from Google Maps appears to show typical traffic conditions over recent periods and is therefore not a reliable source of information for identifying likely congestion hotspots due to reductions in traffic during the recent lockdown period. This has been assumed based upon the fact that several known congestion hotspots in the area are showing up as having no congestion during the AM and PM peak periods on the current 'typical traffic' mapping.

However, previous experience indicates that traffic on the A1, in the vicinity of the Stirling Corner junction, is subject to a level of congestion.

Figure 3.1.1 of the Hertfordshire Traffic and Transport Data Report 2018, identifies that the following junctions within the vicinity of the site are highlighted as congested junctions on the key network:

- Stirling Corner Junction,
- Junction between the B5378 Allum Lane, B5378 Shenley Lane, Station Road and Theobald Street,
- Junction between the A411 Watford Road, A411 Barnet Lane, A5183 Elstree Hill North and A5183 High Street.
- Junction between the B5378 Allum Lane, A5183 Watling Street and A5183 Elstree Hill North,

The report also identifies that the A1 to the north suffers from serious congestion during peak periods, while the A411 Barnet Lane is shown to suffer from occasional congestion.

Further assessment of traffic congestion in the vicinity of the site will need to be carried out in due course in consultation with the Highway Authority.

6. Proposed Vehicular Access

7.1 Proposed Vehicular Access

Vehicular access to the site would be from the A411 Barnet Lane, although it is noted that the Highway Authority usually resists new accesses onto A roads unless no other alternatives are available.

The location of the new access would need to be carefully considered, taking into account the spacing from the existing roundabout junction with Furzehill Road, the type of junction required and the potential impact on the A1, particularly during peak periods. Initial analysis indicates that an access from the western side of the roundabout may be preferable as it is anticipated to have less of

an impact on flows travelling to/from the A1, although access would appear to be technically feasible on either side of the roundabout.

An access from the A411 Barnet Lane, and associated visibility splays, would require the removal of hedgerow and trees.

School access arrangements would need to be determined by analysis of typical traffic conditions and the impact of school traffic on the flow of vehicles along congested areas, which would be undertaken as part of the Transport Assessment.

7.2 Proposed Improvements

Barnet Lane is currently subject to a 40mph speed limit. It is recommended that the speed limit is reduced to at least 30mph in the vicinity of the school to maximise safety adjacent to the school.

Localised improvements along the B411 Barnet Lane, which is prone to occasional congestion, may be required to minimise the risk of accidents.

Parking restrictions will need to be provided along the B411 Barnet Lane and Furzehill Road to prevent vehicles parking along the carriageway. In addition, it may necessary to allow parent drop off in the site to prevent parking along the A411 Barnet Lane and Furzehill Road, which would cause traffic flow issues and safety concerns. However, consideration should be given to potential park and stride opportunities from the nearby Morrisons car park, which may help to discourage travel by car.

A full Transport Assessment would be required to determine the predicted impact of traffic in comparison to typical flows in the area.

7. Vehicular Trip Generation

8.1 Potential Vehicle Generation and Impact

Full analysis of potential vehicle trip generation and impact would be considered as part of a full Transport Assessment.

Initial assumptions for secondary school traffic would be that around 20% of pupils travel to/from school by car during the AM and PM peak periods. Most staff are likely to travel to school by car, although arrival times can start from 7am (or earlier), with departure times also spread across a wide period minimising the impact on peak periods.

However, car travel would be considered in conjunction with the likely catchment area of the school and resulting travel distances, proposed school facilities such as before school and after school clubs, potential for improved bus services and implementation of sustainable travel routes.

It may be necessary to allow parent drop off in the site to prevent parking along the B411 Barnet Lane and Furzehill Road unless park and stride arrangements can be agreed with the nearby Morrisons Supermarket.

8.2 Proposed Mitigation

A School Travel Plan will need to be prepared for the school to promote walking, cycling and public transport for travel rather than car use.

An assessment of vehicle and pedestrian desire lines will be undertaken as part of the Transport Assessment which will identify any potential Park and Stride facilities, which the school could utilise.

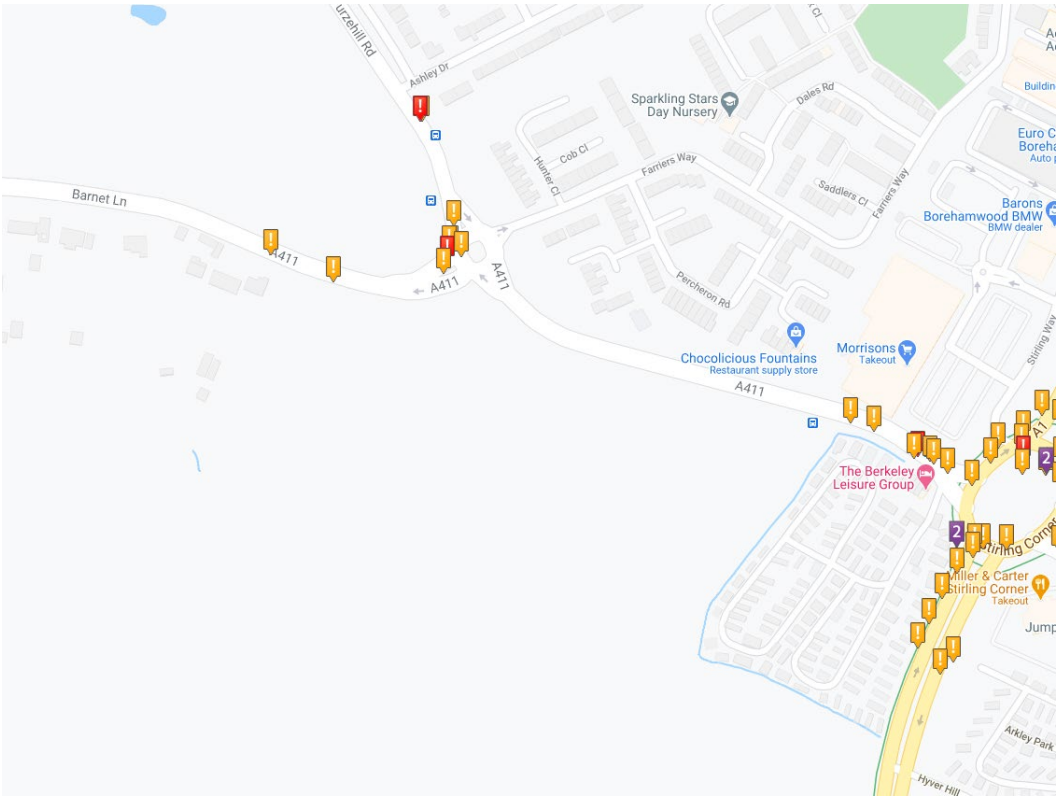
8. Highway Safety

9.1 Existing Accident Data

Data from crashmap.co.uk for the last 5 years has been obtained which identifies personal injury accidents received from the Department of Transport. The data identifies three 'serious' accidents in the vicinity of the site (excluding accidents on the A1) within the most recent 5-year period. One 'serious' incident occurred on the eastbound approach of the A411 Barnet Lane/Furzehill Road roundabout, the incident involved a vehicle being hit from behind at the give way markings. One 'serious' incident occurred on the eastbound approach to the Stirling Corner roundabout, this incident involved a vehicle being hit from behind. The other 'serious' incident occurred on Furzehill Road at the junction with Ashley Drive, involving a car being hit from behind by a car and a motorcycle.

In addition to the one 'serious' incident, there is a cluster of 'slight' accidents in the vicinity of the eastbound junction of the roundabout between the A411 Barnet Lane and Furzehill Road. There are also two 'slight' incidents further to the west of the roundabout.

There are several incidents in the vicinity of the Stirling Corner roundabout, and along the A1.



Source: www.crashmap.co.uk

9.2 Proposed Improvements

An influx of cyclists, pedestrians, and traffic due to the school development may cause additional pressures and increased accidents. Therefore, mitigation measures will need to be considered.

It is recommended that safety on the eastbound approach to the A411 Barnet Lane and Furzehill Road is reviewed, as well as the safety of school related traffic on Stirling Corner.

9. Conclusions

In principle, it would appear that the road network and potential for sustainable access to the site would be suitable for provision of an 8FE Secondary school, subject to a full review of transport impact and safety as part of a full Transport Assessment.

Although the Highway Authority usually resists new accesses onto A roads, the A411 Barnet Lane to the west of Furzehill Road appears to be a suitable location for a school access to be established, provided an acceptable junction arrangement can be achieved.

There may be potential for park and stride arrangements from nearby car parks associated with Morrisons and other commercial properties on Stirling Way, which would help to discourage travel by car and avoid provision of parent drop off facilities on site.

The local footway and cycleway network appears to be generally good and suitable for school related movements. However, upgraded crossing facilities will be required, particularly on the A411 Barnet Lane.

It is recommended that measures to manage traffic speed would be required in the vicinity of the school such as a reduction in speed limit to 30mph in the immediate vicinity of the site.

Bus accessibility to the site is considered good, with bus stops adjacent to the site and within close proximity. Access between the site and the local bus stops should be considered as part of the proposals.

Due to the Covid-19 pandemic, traffic conditions at the time of writing this High-Level Assessment do not reflect former 'typical' traffic condition. Therefore, it is not possible to comment upon existing highway conditions in terms of congestion in the vicinity of the site. It is likely that any congestion issues occur at junction with London Road, which may cause school traffic to use the adjacent network of residential roads to avoid delays.

It is recommended that safety on the eastbound approach to the A411 Barnet Lane and Furzehill Road is reviewed, as well as the safety of school related traffic on Stirling Corner.

BUS STOP
ELMWOOD AVENUE
TENNISON AVENUE
MILTON DRIVE
MASEFIELD AVENUE
ULLSWATER GARTH
CARRINGTON AVE
PURFLEET ROAD
ARUNDEL DRIVE
CRANES WAY
MANOR WAY
RIPON WAY
BIRCHLEY AVENUE
GRANTHAM GREEN
DACRE GARDENS
GEORGE DALE CLOSE
ASHLEY DRIVE
FARRIERS LANE
BARNET LANE
A411
A1
RAMILLIES DRIVE
NICOLL WAY
STIRLING WAY
MORRISONS SUPERMARKET
BARNET ROAD
VILLAGE GREEN
POSSIBLE PED/CYCLE & VEHICULAR ACCESS
POSSIBLE PED/CYCLE ACCESS
POSSIBLE PED/CYCLE & VEHICULAR ACCESS
BORE 08
0 50 100 150 200 250m
SCALE BAR 1:5000

KEY

- SITE BOUNDARY
- FOOTPATH
- BRIDLEWAY
- UNCLASSIFIED COUNTRY ROAD
- BYWAY OPEN TO ALL TRAFFIC
- WATERCOURSE
- LONDON LOOP
- POTENTIAL ACCESS LOCATION

Rev	Description	Date	Drawn	Checked	Apvd.

Project

SOUTH WEST HERTS SECONDARY SCHOOLS

Drawing Description

BOREHAMWOOD SITE 08

Drawing Number	Scale	Date	Drawn	Checked	Approved
ST-2995-06	1:5000@A3	17.08.20	JJN	SJB	NJM

Client

Architect

stomor
CIVIL ENGINEERING CONSULTANTS
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APPENDIX 5

South West Hertfordshire Secondary School Site Search

High Level Transport Appraisal – Borehamwood Site Rankings

The table below shows the ranking of the sites according to the level of compliance with highway policy. These rankings of sites are based on a safe and suitable access, sustainable transport modes, and likely mitigation works required.

Ranking	Site	Safe and suitable vehicular access	Location and Sustainable transport modes	Anticipated Mitigation Works	Comments
1	8: Land to the south of Barnet Lane				Good access to sustainable transport facilities. Concerns over impact of additional traffic and crossings on existing congestion.
2	7: Land to the west of Bishops Avenue				Good access to the site and local transport network. Possible constraint to the east of Deacons Hill Road.
3	4: Land to the east of Green Street/Cowley Hill				Good pedestrian and vehicular access to the site. Reasonable access to local transport network.
4	3: Land to the east of Green Street/Cowley Hill				Good pedestrian and vehicular access to the site. Reasonable access to local transport network.
5	5: Land to the east of Green Street/Cowley Hill				Sufficient access to the site. Reasonable access to the local transport network. Issues with parking on Green Street.
6	2: Land to the east of Well End Road				No Bus stop in the immediate vicinity of the site. Limited potential for footway/ cycleway improvements along desire line.

The above rankings are based on an initial desk based appraisal and are subject to further surveys and the detailed analysis of a Transport Assessment.

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