

South Staffordshire Regulation 19 Publication Document

Statement of Representations

Land off Hyde Lane (west) and land at Dunsley Drive, Kinver

Submitted on behalf of Bellway Homes Ltd

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Client
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Our reference
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1. Introduction

- 1.1 These representations are made on behalf of Bellway Homes Limited (Bellway), in response to the South Staffordshire Local Plan Review (LPR) Regulation 19 consultation.
- 1.2 Bellway welcome the opportunity to make representations on the final draft version of the Local Plan in terms of soundness and legal compliance.
- 1.3 These representations have been prepared with input from EDP on matters including heritage.

The Sites

- 1.4 Bellway is promoting two sites at Kinver:
 - Land to the west of Hyde Lane, Kinver
 - Land east of Dunsley Drive, Kinver

Land west of Hyde Lane, Kinver

- 1.5 Land west of Hyde Lane is an 8.49ha site to the north of Kinver. It represents a sustainable and deliverable residential opportunity for between 45 and 200 dwellings, alongside public open space and associated infrastructure. The site is proposed to be released from the Green Belt and allocated for a minimum 44 new homes (site 576 under draft policy SA5, where it is referred to as 'Hyde Lane (west)').
- 1.6 The draft allocation broadly reflects the most compact of the three options for development presented in the enclosed Vision Framework (**Appendix 1**). This option comprises approximately 45 dwellings with a significant area of green open space located to the east.
- 1.7 Beyond the proposed allocation, the site has greater capacity to accommodate new homes to the north, as shown in option 2 of the enclosed Vision Framework. It is therefore capable of making a greater contribution to Kinver's housing needs should it be necessary to reduce the size of the White Hill proposed allocation, or the needs of the wider District given that the anticipated delivery rates on strategic sites are ambitious (as we discuss further later).
- 1.8 Reflecting the *Spatial Housing and Infrastructure Delivery (October 2019)* consultation document, option 3 of the Vision Framework proposes a layout focused on the parts of the site least visible from the surrounding countryside, in particular along the lowest part of the site's south-western boundary either side of the ridge which runs centrally through the site's southern field. The proposed option also allows for the creation of a positive interface between Kinver and the surrounding countryside, repairing the current exposed edge presented by the domestic gardens along the site's south western boundary.
- 1.9 The following evidence base is submitted for the Hyde Lane, Kinver site:

Document	Date	Author	Appendix No.
Vision Framework	March 2021	Turley	1.
Heritage Appraisal	December 2021	EDP	2.
Landscape Position Paper	December 2021	EDP	3.

Land east of Dunsley Drive, Kinver

- 1.10 Land east of Dunsley Drive has also been promoted through the Local Plan Review. It represents a sustainable and deliverable residential opportunity for up to 36 new homes, and public open space and associated infrastructure.
- 1.11 This site was proposed by the *LPR preferred options paper (November 2021)* to be released from the Green Belt and allocated for a minimum 22 new homes (site 272 under draft policy SA5), however, the site is no longer an allocation within the publication version of the Plan. Notwithstanding this, it remains a suitable and deliverable option to meet Kinver and South Staffordshire's wider housing needs, as we discuss further at section 2 of these representations.
- 1.12 We first made representations promoting the site to the call for sites in 2017 (SHLAA ref: 272). Since then the site has been promoted through the different stages of the plan and is supported by a comprehensive evidence base, as summarised below:

Document	Date	Author	Appendix No.
Heritage Appraisal	December 2019	EDP	4.
Landscape Position Paper	December 2019	EDP	5.
Access Appraisal Technical Note	March 2022	PJA	6.
Flood Risk Appraisal	January 2022	Link	7.
Preliminary Ecological Appraisal	December 2021	CSA	8.
Arboriculture Survey	March 2021	Barton Hyett Associates / CSA	9.
Constraints Plan	March 2022	Turley	10.
Illustrative Masterplan	March 2022	Turley	11.

Bellway Homes

- 1.13 Evolving from a local family business to a FTSE 250 major PLC, Bellway builds exceptional quality new homes throughout the UK, delivering almost 11,000 new

homes across the UK in the last year. They are an established five star housebuilder as a result of their emphasis on build quality, customer care and health and safety, and build and sell high quality homes to suit local housing styles as well as providing social housing to housing associations.

- 1.14 Bellway, with their consultant team, have and will continue to seek to work closely with the Council, statutory consultees and other stakeholders through the development plan process, and as the housebuilder for the site with a strong track record for delivery, will ensure careful attention is given to viability and costs in plan-making.
- 1.15 Bellway welcome the opportunity to further engage with the LPR through the Regulation 19 consultation. We respond to the Publication Plan at **Section 2** of these representations and provide a summary at **Section 3**. The statement provides further context to responses set out in the consultation forms which are also submitted on behalf of Bellway Homes.

Support for the Plan

- 1.16 Bellway support the inclusion of the land west of Hyde Lane and its form as proposed in the draft plan, including the provision of green infrastructure to the east, which will enable the delivery of significant biodiversity enhancements and Green Belt compensatory improvements.
- 1.17 Bellway do however have concerns regarding the anticipated delivery rates for Cross Green (though do not disagree with its principle) and the principle of the proposed allocation on land south of White Hill, Kinver given the impact this will have on heritage assets in the vicinity of the site. The plan should anticipate less delivery from both sites before 2039 to de-risk the plan and to remedy this identify land elsewhere to ensure the District's needs are met in full, including additional land to the north of the proposed land west of Hyde Lane, Kinver allocation, or if necessary re-allocation of land at Dunsley Drive, Kinver.

2. Response to Draft Strategic Policies

Cross boundary issues and the duty to cooperate, and Strategic Objectives

- 2.1 It is welcomed that the LPR acknowledges from the outset and at paragraph 3.6-3.7, the opportunities section of Table 2 SWOT analysis, and the strategic objectives, and a theme throughout the plan, that unmet housing needs from the wider Greater Birmingham and Black Country Housing Market Area (GBBCHMA) is a 'key cross boundary issue' to be addressed through the plan.
- 2.2 Bellway support the vision and strategic objectives set out. Strategic Objective 2 in particular references the need to meet the housing and employment needs of the District whilst making a proportionate contribution towards the unmet needs of the GBBCHMA.
- 2.3 The objectives for high quality housing to meet a wide range of needs and provide beautiful and sustainable places where people want to live are welcomed. The LPR notes the lack of brownfield development sites available within the District, and the requirement for a careful release of suitable Green Belt land to meet housing need.
- 2.4 The strategic objectives of the LPR are sound.

Policy DS1: Green Belt

- 2.5 Whilst we have no in principle concern with draft policy DS1, the LPR should be drafted as though it is being read once the plan is adopted. The fifth paragraph may therefore need amendment to reflect that the Green Belt boundaries have already been altered, rather than 'will be'.
- 2.6 We would recommend the following modification at draft policy DS1 paragraph 5 to reflect this:

*"The Green Belt boundary ~~will be~~ **has been** altered through this Plan to accommodate development allocations set out in Policies SA1, SA2, SA3, SA5 and SA7" ...*

Policy DS2: Green Belt Compensatory Improvements

- 2.7 NPPF paragraph 142 states that the removal of land from the Green Belt can be offset through compensatory improvements to the environmental quality and accessibility of the remaining Green Belt. Planning practice guidance clarifies that this could include new or enhanced green infrastructure, woodland planting, landscape and visual enhancements, improvements to biodiversity and habitats, new or enhanced walking and cycling routes, and improved access to new or existing recreational and playing field provision.
- 2.8 Policy DS2 reflects this approach and provides sufficient flexibility to agree a contribution if no specific scheme can be identified.

- 2.9 Bellway intend to engage with Kinver Parish Council to agree a suitable compensatory scheme for the land identified as part of the Hyde Lane (west) proposed allocation.

Policy DS4: Development Needs

- 2.10 The development needs of South Staffordshire include a proportion of the unmet housing need of the GBBCHMA. The GBBCHMA is made up of 14 different authorities, including Birmingham and the four Black Country authorities. There is no question that there is a significant unmet need arising from the GBBCHMA:

- There is a remaining unmet need of **6,302 homes up to 2031** from the adopted Birmingham Development Plan (January 2017), as per the *GBBCHMA fourth position statement addendum (December 2021)*.
- Based on their own assumptions the Black Country has an unmet need of **36,819 homes up to 2039** (the Black Country Urban Capacity Review Update (May 2021)). The previous draft of the Black Country Plan proposed allocations to reduce this to circa 28,000 homes, however the plan has now been abandoned and each authority will be preparing its own plan.
- Birmingham has now commenced a review of its plan. The Issues and Options version is currently published for consultation – that indicates there is a substantial shortfall from the city of circa **78,000 homes up to 2042**.

- 2.11 Given the significant remaining shortfall arising in the GBBCHMA and South Staffordshire's clear functional relationship with the wider HMA (demonstrated by its travel to work patterns, and transport links with Birmingham and the Black Country), Bellway are therefore supportive of the plan's proposed contribution to the GBBCHMA's unmet need. The scale of the contribution and the Council's approach is justified by the *Greater Birmingham and Black Country Strategic Growth Study (February 2018)*.

- 2.12 Nearly all of South Staffordshire's villages are surrounded by Green Belt, therefore it is inevitable that the District will need to release Green Belt to meet its needs and those of the wider GBBCHMA. As such exceptional circumstances have been clearly demonstrated to alter Green Belt boundaries through the draft plan, in accordance with NPPF paragraph 140.

- 2.13 The ongoing work with neighbouring authorities to agree the contribution to the shortfall is well evidenced, as such the Council has satisfied the duty to cooperate.

- 2.14 The approach to making a contribution to the wider GBBCHMA unmet needs is therefore positively prepared, based on effective joint working, and is consistent with national policy.

Policy DS5: The Spatial Strategy to 2039

- 2.15 The policy sets out that growth will be directed towards the most accessible and sustainable locations, whilst also ensuring that the natural and historic environment is maintained and enhanced to protect local distinctiveness.

- 2.16 Kinver is identified as a 'Tier 2 Settlement' within the policy. The village benefits from several bus services providing routes to Kidderminster, Stourbridge, Hagley, Wolverhampton and some local routes. These settlements also include a number of train stations providing regional, as well as national connections. Stourbridge Junction station is the nearest, located approximately 7km to the east of Kinver. This station provides direct and regular rail services to Birmingham, Kidderminster, Solihull and London.
- 2.17 As such, there are options available to reduce car use for residents. The village also benefits from a range of local facilities, for instance, a infants, primary and secondary school, public houses and restaurants, shops and services, including a GP and dental surgery, further limiting the need for residents to travel for their day to day needs. On this basis, Kinver is considered to be a highly sustainable and accessible 'Tier 2 Village'.
- 2.18 Bellway do however have some concerns regarding the spatial strategy's reliance on land at Cross Green, which we comment on in response to draft policy SA2. There are also concerns regarding the locations of where growth in Kinver is proposed, which we comment on in response to draft policy SA5.

Policy SA2: Cross Green

- 2.19 We have no objection in principle to the proposed allocation at Cross Green, however we have some concerns regarding the scale of delivery anticipated for the proposed plan period given infrastructure delivery.
- 2.20 Firstly, there are concerns regarding the access road to ROF Featherstone and the associate costs and the potential impacts on Cross Green's viability and delivery trajectory. The IDP now estimates the cost of delivering the access road at £14.4m-£19m, to be funded via Staffordshire County Council and developer contributions. Evidence should be provided as to how this will be funded. The only funding evidence to date is reference to £1.5m of Growth Deal funding being made available via the Stoke-on-Trent and Staffordshire Local Enterprise Partnership.
- 2.21 Secondly, mindful of the scale of infrastructure delivery at the site, no detailed evidence has been provided to support the site's proposed quantum of housing growth (1,200 new homes).
- 2.22 With the expectation set out in the LDS that the plan will be adopted in December 2023, it is assumed an application will be submitted by summer 2024, at the earliest. *Lichfields' Start to Finish report (February 2020)* identifies that the average lead in time for applications of Cross Green's scale from validation of an application to first delivery is **8.4 years**. This would see the first completion in **winter 2033**.
- 2.23 The Lichfield's report indicates it is reasonable to assume 160 dwellings per annum (dpa) to be delivered on sites of Cross Green's scale. This is qualified by *Stafford Borough's Lead-in Times and Built Rate Assumptions Topic Paper (October 2022)*, which provides evidence for lead in times for sites in Stafford's neighbouring authorities. Stafford's only neighbouring authority to provide evidence to the topic paper for sites of 501 homes or more, Lichfield District (who are also a neighbour to South

Staffordshire), indicate it is reasonable to assume a ceiling of 150dpa on sites of that scale.

2.24 Based on the above assumptions the below delivery is anticipated:

2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	Total
40	160	160	160	160	160	160	1,000

2.25 In total, it is therefore assumed that Cross Green will only deliver **around 1,000 new homes** before the end of the plan period, 200 less than the policy assumes.

2.26 The Council should therefore consider preparing further evidence to justify the scale of growth proposed for Cross Green, or if this is not possible reduce the anticipated delivery before 2039 to 1,200 homes and identify other sustainable locations for this growth to be delivered elsewhere in the District (such as additional land available at the land off Hyde Lane (west) and Dunsley Drive, both at Kinver).

2.27 If the delivery rates cannot be evidenced than the following modification to draft policy SA2 at part a) will be necessary:

2.28 “a) A minimum of ~~1,200~~ **1,000** homes”

Policy SA5: Housing Allocations

Land off Hyde Lane (west) (Housing Allocation 576)

2.29 We continue to support the principle of the proposed release of land at Hyde Lane (west) from the Green Belt and allocation for housing growth. The Council’s evidence base is clear it performs better than other options at Kinver.

2.30 The southern and western edges of Kinver are significantly constrained by the Canal Conservation Area; Kinver Hillfort scheduled ancient monument and the Rock houses, as well as Flood Zones 2 and 3. Land to the north west is constrained by highway capacity and access. In this context, land west of Hyde Lane (as well as land to the east of Dunsley Drive) represents a sustainable location for accommodating future growth in Kinver village.

2.31 The increase in the minimum housing allocation to 44 homes and the associated amended allocation boundary is welcomed, it reflects Option 3 of the Vision Document.

2.32 Bellway also support the provision of green infrastructure to the east, which will allow the provision of new open space, biodiversity enhancements and Green Belt compensatory improvements.

2.33 Elsewhere we have raised concerns regarding the scale of delivery at the proposed Cross Green site and land south of White Hill. As demonstrated by the enclosed Vision Framework (**Appendix 1**), the Hyde Lane site is capable of accommodating a greater scale of growth on the land available to the north of the currently proposed allocation.

The evidence demonstrates the land to the north of the Hyde Lane allocation is a sustainable location for growth with no constraints which cannot be overcome. The evidence base assesses it as having the same impacts as the majority of other proposed allocations in the plan, including those within Kinver:

- The *Strategic Housing and Employment Land Availability Assessment (SEHLAA) (2022)* identifies the site as potentially suitable
- The *LUC Landscape Study (2019)* identifies the site as being of ‘moderate-high’ landscape sensitivity
- The *LUC Green Belt Review (2019)* identifies that the loss of the site would represent ‘moderate’ Green Belt harm

- 2.34 It would provide a similar response to the proposed Hyde Lane allocation, creating a positive interface between Kinver and the surrounding countryside, repairing the current exposed edge presented by the domestic gardens along the site’s south western boundary, a significant benefit acknowledged by Kinver Parish Council in the minutes of their meeting held on 14 December 2022. It would also deliver a significant benefit by increasing the area of Green Infrastructure proposed as part of the Hyde Lane (west) allocation, as shown in option 2 of the Vision Framework (**Appendix 1**).

Land south of White Hill (Housing Allocation 274)

- 2.35 Bellway has concerns regarding the likely impacts of developing this site.
- 2.36 As demonstrated by the *EDP Heritage and Landscape Technical Note* enclosed at **Appendix 2**, in terms of heritage impact, although the site’s ‘less than substantial harm’ to the Kinver Camp Scheduled Monument is not an in-principle issue, NPPF paragraph 199 requires the Council to afford the ‘greatest weight’ to the conservation of the monument as a designated heritage asset of the highest significance. NPPF paragraph 200 states that ‘clear and convincing’ justification should be provided for that harm, public benefits notwithstanding. There are other sites available in Kinver such as the additional land to the north of the Hyde Lane proposed allocation or the de-allocated Dunsley Drive site which do not result in this level of harm and should therefore be preferable in the site selection process.
- 2.37 In landscape terms, EDP’s note states that to accord with the local planning authority’s evidence base and the prevailing landscape and visual character of the site, the extent of residential development currently illustrated is deemed to be unacceptable. It is considered to represent an over-estimation of the site’s development capacity in landscape and visual terms. The design response to the Staffordshire Way would result in a major permanent and irreversible adverse effect, a point reiterated in Kinver Parish Council’s minutes of the meeting held on 14 December 2022. The development proposals do not provide a sufficient off-set space to the western boundary, which includes trees subject to Tree Preservation Orders. It should also include a far stronger link north south to link the phases together.
- 2.38 The Council should therefore carefully consider alternative sites at Kinver such as Bellway’s additional land at Hyde Lane (west) discussed above and land east of Dunsley

Drive discussed below which could come forward and deliver the same public benefits (in terms of delivering much needed housing) with less harm to designated heritage assets and which will provide a better landscape and visual response.

Land east of Dunsley Drive (Omitted site)

- 2.39 Land east of Dunsley Drive was initially included proposed to be removed from the Green Belt and allocated for development up to an including the Preferred Options stage of the Local Plan Review, as housing site allocation 272 (Figure 2).
- 2.40 The allocation was for a minimum of 22 dwellings on a site featuring good access and a natural extension to Kinver. The *2021 Housing Site Selection Topic Paper* stated that, unlike some of the other potential Green Belt sites around Kinver, the Dunsley Drive site is free from 'significant constraints' (e.g. Highways Authority concerns, potentially significant impact upon the historic environment). Paragraph 5.7.8 noted that the site is of a similar landscape sensitivity to most other land around the village but is of lesser Green Belt harm than other sites in this area.
- 2.41 The November *2022 Housing Site Selection Topic Paper* discounts the site from the proposed housing allocations. The reasoning provided for this is the *Stage 2 Historic Environment Site Assessment (HESA) (2022)*, which revised the scoring of the site from Green to Red. The basis of this is the predicted impact of development on the contribution that the site makes to the significance of the Kinver Conservation Area. The *HESA* states that development on the site would **not in itself compromise the cultural heritage value of the overall Conservation Area** to the extent that the values that led to its designation would be diminished. The Assessment contends however, that it would inevitably compromise the setting of the small character zone within the Conservation Area that is defined by Dunsley House and its hilltop position, as well as the setting of the non-designated asset itself. The *HESA* states that mitigation is unlikely to be possible and therefore a high (red) impact is predicted.
- 2.42 Nevertheless, the *HESA* also concludes that:
- “The predicted level of effect upon both the setting of the non-designated house and the character of the Dunsley component of the Conservation Area would not be of such a level as to constitute ‘Substantial Harm’ in terms of the NPPF.”*
- 2.43 The site does adjoin the Conservation Area in the far east (where it extends to include Dunsley House – a ‘positive’ building within the Conservation Area). The site does form part of Dunsley House’s setting, however in the context of the Conservation Area as a whole, its contribution to Dunsley House’s significance (the Conservation Area’s special interest) is likely to be very small and so the ‘harm’ arising from its development would also be ‘very small’. In terms of the NPPF this harm would, at worst, be less than substantial harm towards the lowest end of that broad spectrum.
- 2.44 Beyond heritage, Dunsley Drive scores similar to other proposed allocations at Kinver:
- The Strategic Housing and Employment Land Availability Assessment (SEHLAA) (2022) identifies the site as potentially suitable

- The *LUC Landscape Study (2019)* identifies the site as being of ‘moderate-high’ landscape sensitivity
- The *LUC Green Belt Review (2019)* identifies that the loss of the site would represent ‘moderate’ Green Belt harm

2.45 The evidence base enclosed with these representations also demonstrates the site is not subject to any constraints which cannot be overcome. As such the evidence base does not justify the omission of land east of Dunsley Drive as a proposed allocation.

2.46 Policy SA5 should therefore be modified to reduce the capacity of land south of White Hill or delete it completely, to reflect its constraints (in particular heritage) and the additional land north of the proposed Hyde Lane allocation and / or the omitted Dunsley Drive site should be added into the policy for a minimum capacity of around 40 homes each.

3. Response to Draft Development Management Policies

Policy HC1: Housing Mix

- 3.1 Bellway support the core principle of these policies, to create ‘mixed, sustainable and inclusive communities’. However, the prescriptive minimum housing requirements may risk providing the wrong type of housing for Kinver residents and potentially impact on development viability and delivery.
- 3.2 As such, the policy should be reconsidered to ensure it accords with paragraph 82 of the NPPF and the need for policies to “*be flexible enough to accommodate needs not anticipated in the plan*” and to “*enable a rapid response to changes in economic circumstances.*”
- 3.3 The policy should take a more flexible approach on housing mix to ensure it is consistent with NPPF paragraph 82’s need for policies to “*be flexible enough to accommodate needs not anticipated in the plan*” and to “*enable a rapid response to changes in economic circumstances.*” It also needs to recognise that housing needs vary within different areas and on a site-by-site basis. The policy must ensure that the viability of development proposals is protected whilst providing an appropriate housing mix for the site location and local market. In addition to evidence such as the latest Housing Market Assessment, it would be appropriate for the Council to refer to other evidence including current demand.
- 3.4 We would recommend the following modifications to the third paragraph of policy HC1 to ensure it is consistent with NPPF paragraph 82:

*“On major development housing sites (excluding sites exclusively provided for self-build or custom housebuilding), the market housing ~~must~~ **should** include a minimum of 70% of properties with 3 bedrooms or less, with the specific mix breakdown to be determined on a site-by-site basis and reflective of need identified in the council’s latest Housing Market Assessment, **unless evidence is submitted to demonstrate otherwise**”.*

Policy HC3: Affordable Housing

- 3.5 The latest *Housing Market Assessment Update (2022)* identifies a net affordable housing need of between 67 dpa and 156 dpa, dependent on the proportion of household income used spent on housing costs. The *Viability Study (2022)* clearly highlights the challenges in delivering the 30% affordable housing requirement, and highlights that without higher sales values the sites would not necessarily be viable. As such, affordable housing policy should take full account of all evidence in terms of both affordable housing need and viability, and ensure that sufficient flexibility remains.
- 3.6 PPG states that a minimum of 25% of all affordable housing units secured through developer contributions should be First Homes. The NPPF states that planning policies should expect at least 10% of the total number of homes to be available for affordable home ownership. The proposed policy is consistent with these requirements.

- 3.7 However, in relation to affordable housing tenure, existing Core Strategy policy H2 states that the precise proportion of affordable housing tenure split will be agreed with the Council *“having regard to local housing needs within the locality of the development, exceptional circumstances and the effects on the viability of a scheme.”*
- 3.8 The proposed policy should be less prescriptive in terms of tenure mix, to allow sites to best respond to current housing needs with a location and site-specific approach. Impact on scheme viability is referenced in the existing policy H2, and there should also be an allowance for a consideration of site viability, including whether there is a need for new infrastructure etc. which could impact on delivery of the allocated sites. The proposed tenure split for affordable housing is broadly in line with the need evidenced in the *Housing Market Assessment Update 2022*. However, this may change over time and location-specific flexibility should be provided.

Policy HC4: Homes for older people and others with special housing requirements

- 3.9 Bellway support the provision of accessible homes that are suitable to meet the needs of older people and others with special housing requirements. However, if the Council is to adopt the higher optional standards within the Building Regulations (Part M4(2) Category 2) for accessible and adaptable homes, it should only do so by applying the criteria set out in PPG.
- 3.10 The PPG identifies the type of evidence required to introduce such a policy, including the likely future need; the size, location, type and quality of dwellings needed; the accessibility and adaptability of the existing stock; how the needs vary across different housing tenures; and the overall viability. The Council should provide localised evidence making the specific case for South Staffordshire which justifies the inclusion of **optional** higher standards for accessible and adaptable homes in this policy. If the Council can provide the appropriate evidence and this policy is to be included, then Bellway would support a transition period included within the policy, as appropriate.
- 3.11 The Council should also note that the Government proposes to mandate the current M4(2) requirement in Building Regulations as a minimum for all new homes, with M4(1) applying in exceptional circumstances. This will be subject to a further consultation on the technical details and will be implemented in due course through the Building Regulations. M4(3) would continue to apply as now where there is a local planning policy in place and where a need has been identified and evidenced.
- 3.12 There is a need for policy to be consistent with national standards unless a specific evidenced reason exists for a higher standard to be applied in South Staffordshire.

Policy HC12: Space about dwellings and internal space

- 3.13 The requirement to meet the Nationally Described Space Standard is considered reasonable. External space standards and amenity spaces should not be explicitly stated within the policy. Whilst there are caveats contained within which state an allowance for flexibility *“depending upon the site orientation and the individual merits of the development proposal”*, planning judgement on a case-by-case basis with reference to the distance/size criteria as guidance rather than policy would suffice to achieve suitable quality residential environments. It must be ensured that specific

criteria do not result in 'planning by numbers' and an unintentional lack of flexibility in assessing future planning applications.

Policy HC13: Parking Provision

- 3.14 Part (e) of the Policy references Appendix I of the Plan which sets out parking standards, in relation to electric vehicles. Bellway support the Council's endeavours to encourage electric vehicle uptake.
- 3.15 Part S of the Building Regulations 'Infrastructure for the charging of electric vehicles' has now taken effect and provides guidance on the installation and location of electric vehicle charge points (EVCPs). It states that a new residential building with associated parking must have access to EVCPs and that their total number must be equal to the number of parking spaces if there are fewer parking spaces than dwellings, or the equal to the number of dwellings where there are more parking spaces. The Regulations also set technical requirements for the charging points these include having a nominal output of 7kW and being fitted with a universal socket.
- 3.16 The policy should avoid repeating electric vehicle requirements which are otherwise secured through Building Regulations and which may risk a lack of accordance with the Regulations should requirements change during the lifetime of the Plan.

Policy HC17: Open Space

- 3.17 The approach of this policy is welcomed, which provides flexibility in terms of the location of any open space – to respond to a site's characteristics to ensure any development maximises recreational use. This is a more appropriate approach than being specific about the potential location of open space, as had been previously proposed by the preferred options consultation.

Policy HC19: Green Infrastructure

- 3.18 The policy will require that all development proposals maximise on-site green infrastructure. The aim of the policy and for the maximisation of on-site green infrastructure is to enhance biodiversity, improve connectivity to existing habitats and enhance the quality of the area for the benefit of residents.
- 3.19 An enhancement in the provision of green infrastructure can be achieved on both sites with buffers to the Green Belt to the north and west.
- 3.20 Whilst the broad themes of the policy are understood and achievable, the policy is not clear on whether this requirement will be triggered where sites are also providing compensatory green infrastructure on sites which have been taken out of the Green Belt. There is uncertainty over whether green infrastructure requirements can be combined with the compensatory measures and be provided off site. This should be clarified within the policy or supporting text.
- 3.21 In this regard, there is a need for the policy wording to be revised to ensure that it is unambiguous (as required by NPPF paragraph 16) so that it is evident how a decision maker should react to development proposals.

Policy NB6: Sustainable Construction

- 3.22 The proposed policy approach represents repetition of the 2021 Part L Interim Uplift and the Future Homes Standard. It is the Government's intention to set standards for energy efficiency through the Building Regulations. The higher levels of energy efficiency standards for new homes set out in the 2021 Part L Interim Uplift and proposals for the 2025 Future Homes Standard negate any need for local energy efficiency standards to achieve the shared net zero goal because of the higher levels of energy efficiency standards for new homes set out in the 2021 Part L Interim Uplift and proposals for the 2025 Future Homes Standard.
- 3.23 The policy states that all residential schemes must also show compliance with a water efficiency standard of 110 litres/person/day. The Building Regulations require all new dwellings to achieve a mandatory level of water efficiency of 125 litres per day per person, which is a higher standard than that achieved by much of the existing housing stock. This mandatory standard represents an effective demand management measure. The Optional Technical Housing Standard is 110 litres per day per person. The higher standard proposed within the draft policy has not been justified in accordance with the standard required by the NPPF. If the Council wishes to adopt the optional standard for water efficiency of 110 litres per person per day, it should justify doing so by applying the criteria set out in the PPG.
- 3.24 Given the above the policy does not serve a clear purpose. Whilst the policy will require the calculation of the whole life cycle carbon emissions and actions to reduce life cycle carbon emissions, it is not clear how determination will be made as to what is an appropriate level of emissions or reductions. There are also concerns in relation to the elements of the policy regarding performance and monitoring. It is not clear what the Council would do with the information in relation to performance information or the monitoring information once the development is completed.
- 3.25 For the above reasons the policy is not considered to be justified and should be deleted.

EC13: Broadband

- 3.26 Bellway will work to provide modern and future-proof infrastructure provision within sites to be delivered, including broadband connectivity. This reflects Bellway's ambition to provide contemporary, attractive places to live which provide a high-level of connectivity.

4. Summary

- 4.1 Bellway welcome the opportunity to engage with the South Staffordshire Local Plan Review (LPR) publication plan regulation 19 consultation.
- 4.2 Bellway are broadly supportive of the publication plan, in particular the overall housing need, the contribution to the Greater Birmingham and Black Country Housing Market Area which is completely justified, and the proposed allocation of land off Hyde Lane (west) (housing allocation 576), supported by the plan's evidence base.
- 4.3 Bellway however have the following concerns regarding the plan, which may require remedy:
- Whilst not objecting to principle of Cross Green, **the proposed delivery trajectory is ambitious based on lead in times for significant infrastructure.** On this basis the Council should consider whether further evidence can be provided to justify the scale of growth proposed for Cross Green, or if not then its anticipated delivery before 2039 should be reduced and the associated growth delivered elsewhere in the district, such as Bellway's additional land to the north of Hyde Lane (west) or land east of Dunsley Drive.
 - **For the Council to fulfil its duty to afford the 'greatest weight' to the conservation of Kinver Camp Scheduled Monument as a designated heritage asset of the highest significance, before allocating further land at White Hill, Kinver, it should first look to alternative sites at Kinver,** which could come forward and deliver the same public benefits, before proceeding with the proposed allocation of a site which Historic England and the promoters themselves identify as generating 'harm' to a nationally important archaeological site.
 - As demonstrated by the enclosed vision document, **the Hyde Lane site is capable of accommodating a greater scale of growth on the land to the north of the currently proposed allocation.** The evidence demonstrates the land to the north of the Hyde Lane allocation is a sustainable location for growth with no constraints which cannot be overcome. Indeed it would provide a similar response to the proposed Hyde Lane allocation, creating a positive interface between Kinver and the surrounding countryside, repairing the current exposed edge presented by the domestic gardens along the site's south western boundary.
 - The **evidence base does not justify the omission of land east of Dunsley Drive** as a proposed allocation. Any harm to the Kinver Conservation Area would be, at worst, less than substantial harm towards the lowest end of that broad spectrum. The site represents similar impacts in terms of landscape sensitivity and Green Belt harm as other proposed allocations in the plan. The site is therefore capable of meeting any residual housing need in the event the anticipated delivery for Cross Green before 2039 is reduced or land at White Hill has to be removed from the plan.

- Other policies, outlined in Section 3 of this statement, are overly prescriptive and therefore not consistent with national policy in terms of ensuring that the policies are sufficiently flexible to meet changing requirements.

4.4 We would welcome the opportunity to discuss the contents of these representations further with officers and reserve the right to attend any future examination hearing sessions.

Appendix 1: Hyde Lane, Kinver Vision Framework

Hyde Lane, Kinver

Vision Framework

Prepared on behalf of Bellway Homes Ltd.

March 2021

On behalf of
Bellway

Prepared by
Turley

Introduction

This Vision Framework document has been prepared on behalf of the Bellway Homes Ltd (Bellway) in response to the growing housing requirements of Kinver and the wider area. It also supports the need for South Staffordshire Council to plan strategically for sustainable housing growth to help meet the needs of future generations.

It seeks to demonstrate that land at Hyde Lane, Kinver is a suitable, sustainable and deliverable site for future development and is the most logical location for future housing.

This document presents three separate options for development at the site and is intended to be flexible, so it can respond to the requirements of the emerging South Staffordshire Local Plan Review. All three options represent landscape-led proposals which reflect the site's characteristics and the surrounding context.

The site

The site is located on the northern edge of Kinver, South Staffordshire. Defined by Hyde Lane to the east, an existing hedgerow to the north, and residential properties bounding Cedar Gardens, Hillboro Rise and Hyde Close to the south and west, the site comprises of 8.5 Ha of land currently used for agricultural purposes.

Beyond the sites immediate boundaries, the village of Kinver extends outwards both south and west of the site with open farmland extending outwards to the north and east.

The site is well defined and contained by its existing boundaries and is not known to contain and inhibitive constraints which would limit its future development potential.



Site
aerial
photograph

Bellway

At Bellway our aim is not just to build new houses, it is to create attractive and sustainable communities that leave a positive legacy for residents and the wider society. Our commitment to this is demonstrated by being awarded the coveted five star housebuilder award by the House Builders Federation as a result of emphasis on build quality, customer care and health and safety.

Bellway recognise that successful developments must meet the needs of not just potential residents, but also of existing neighbouring communities. We therefore consult on new developments through tailored engagement with local communities and stakeholders, incorporating feedback into our plans to ensure local people have the opportunity to help shape developments within their community.

As the fourth largest housebuilder in the UK, Bellway are well placed to deliver much needed market and affordable homes to address the country's ongoing housing shortage. Since our beginning as a family business over 70 years ago, Bellway now operate from 22 trading divisions which are located in the main population centres in England, Scotland and Wales. This structure enables our divisional management teams to use their locational knowledge and working relationships to buy land, design, build and sell homes which are well-suited to the local area.

Bellway are promoting this highly sustainable Site in Kinver for the delivery of much needed market and affordable homes, and we are fully committed to working with the Council and the community to make this happen.



The team

This document has been prepared in collaboration with an experienced range of specialist consultants to ensure the proposals represent the highest quality development that is most suitable for the site and its surrounding context.

The consultant team instructed to advise as part of this project is as follows:

Turley

Turley

Planning and urban design



PHIL JONES ASSOCIATES
transport planning consultants

Phil Jones Associates

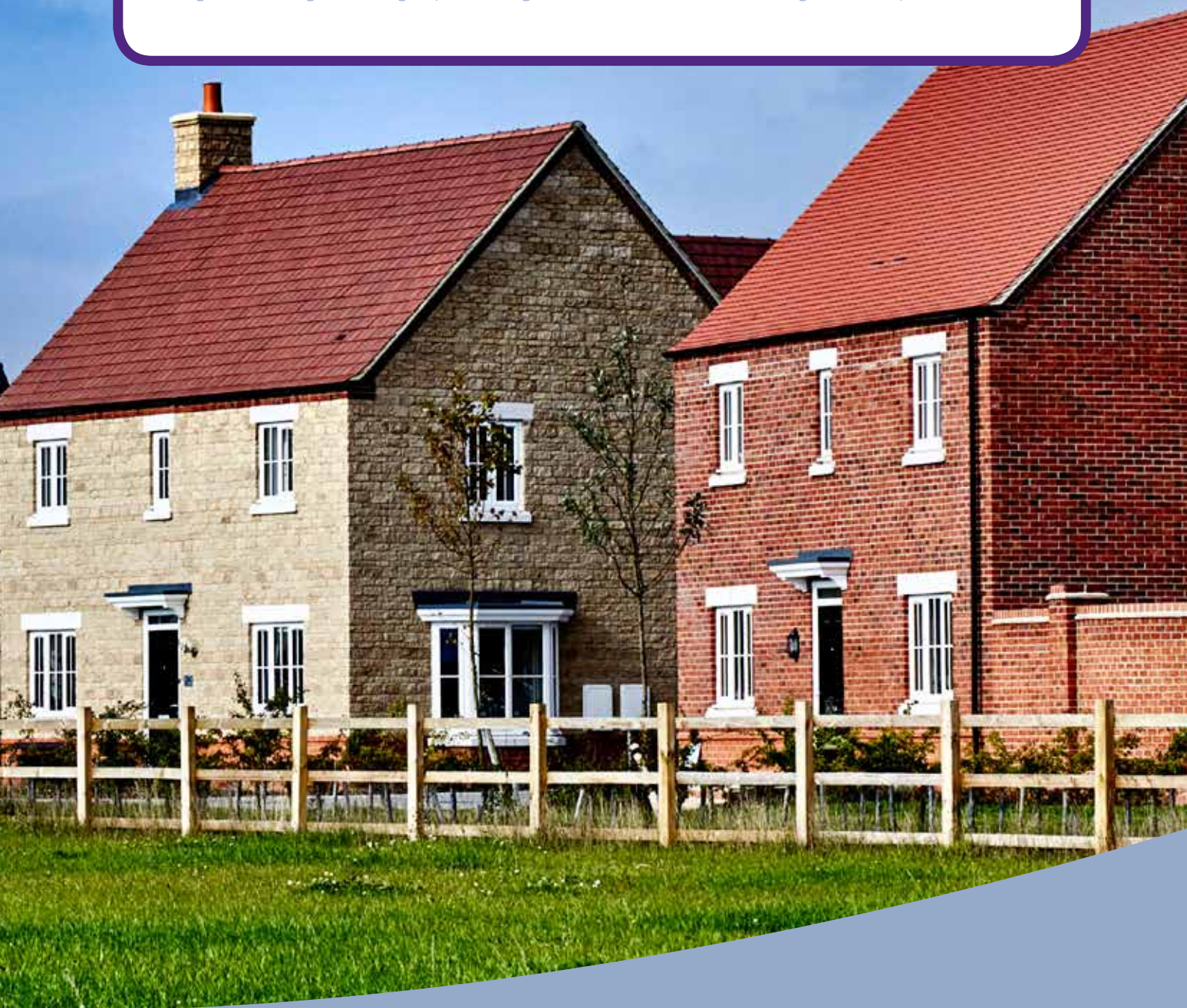
Highways and drainage



the environmental
dimension partnership

edp

Heritage and landscape

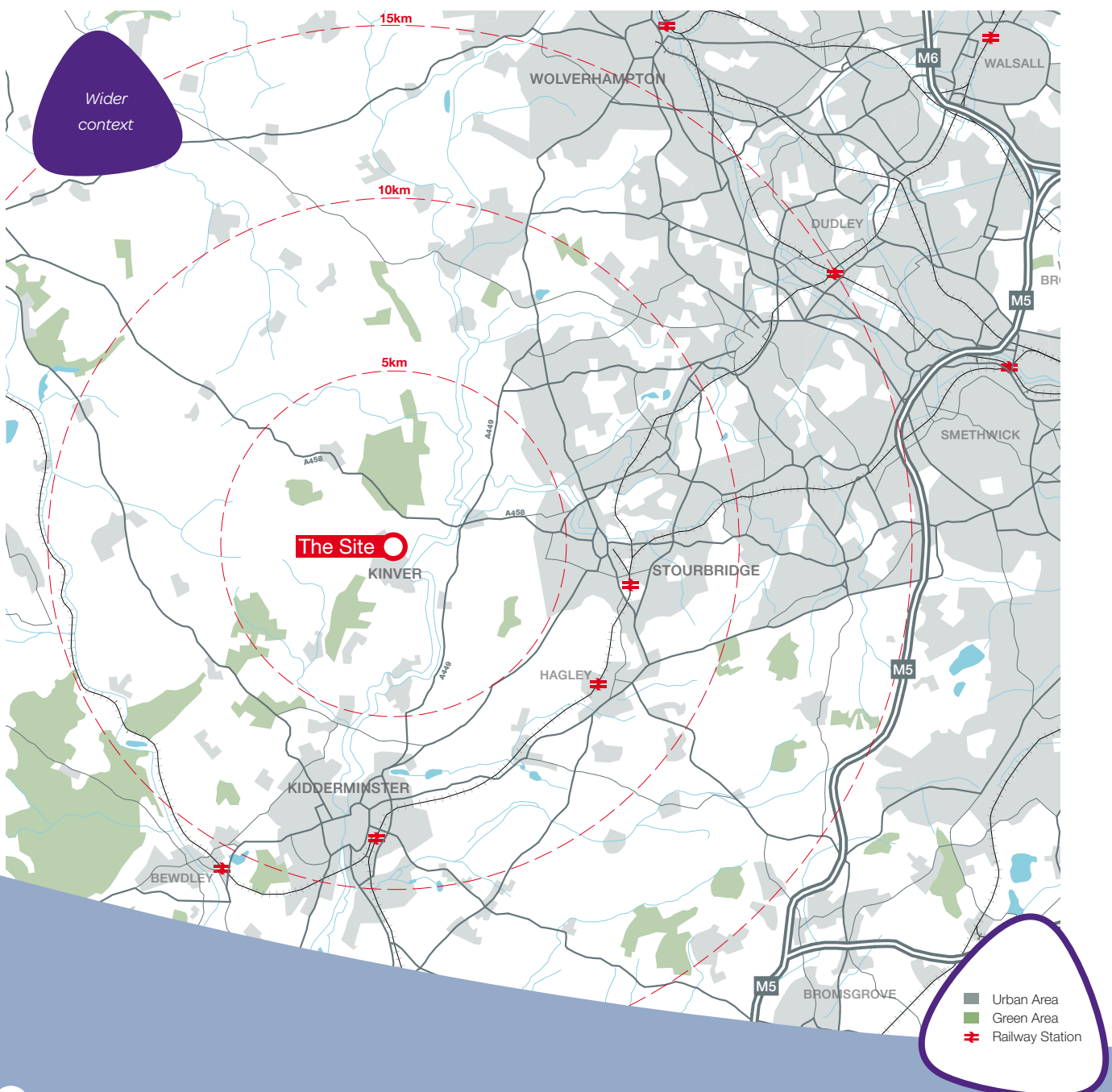


Strategic context

Kinver is a key service village of nearly 7,500 residents located to the west of Stourbridge. A historic rural settlement, the village is popular with commuters and families alike and hosts a range of service such as schools, doctors and a vibrant high street.

Located along the A449, Kinver has good connections with Stourbridge to the east and Kidderminster to the south. The local road network links the site to the M5, approximately 20 km to the east (a 30 minutes drive) and provides good connections to surrounding urban centres such as Birmingham, Wolverhampton and with wider Greater Birmingham and Black Country areas.

With regard to public transport, a number of bus services provide regular connections to the surrounding settlements of Stourbridge, Hagley, Kidderminster and Wolverhampton. These settlements also include a number of train stations providing regional, as well as national connections, with Stourbridge Town and Stourbridge Junction stations being the nearest, located approximately 9 km to the east (16 minute car drive) from Kinver. These stations provide direct and regular rail services to Birmingham, Kidderminster, Solihull and London.



Immediate context

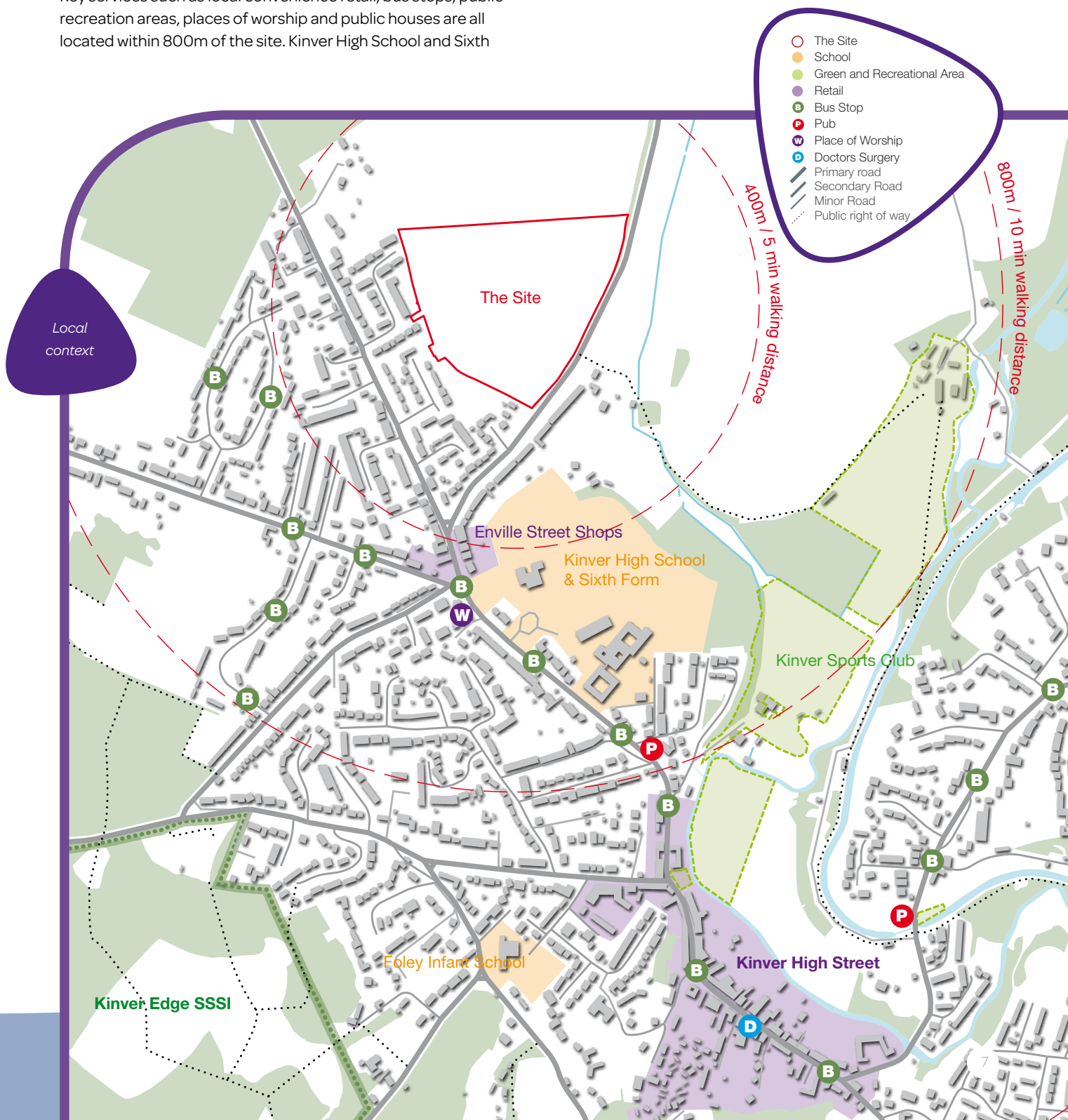
The site is located along the northern edge of Kinver adjacent to a number of residential streets.

Kinver has been identified within local planning policy as a Main Service Village which serves the needs of the wider area and hosts a range of high quality services which are key to supporting future residential growth.

Key services such as local convenience retail, bus stops, public recreation areas, places of worship and public houses are all located within 800m of the site. Kinver High School and Sixth

Form, the main secondary school which serves both Kinver and the surrounding area is also located less than 800m from the site.

Beyond but still within a short walk of the site is Foyle Infant School as well as Kinver High Street which plays host to a range of key local services including a doctors surgery, pharmacy and dentist, a library community hall as well as a number of leisure uses.



The strategic choice for housing

The Council has commenced preparation of its Local Plan Review and the associated evidence base. As part of the review the Council published its Spatial Housing Strategy and Infrastructure Delivery paper in October 2019 for consultation. That paper identified the Council's preferred spatial strategy for meeting the district's housing needs, as well as a contribution to the neighbouring emerging Black Country Plan's housing shortfall, includes delivering at least 35 dwellings in Kinver on land not currently allocated or safeguarded in an adopted plan.

The plan is supported by an extensive evidence base, including a Green Belt Review (DATE). This demonstrates that development at the site would have a moderate impact on the Green Belt given the absence of a strong settlement edge and the presence of woodland blocks which contain the land, limiting impact on the wider Green Belt, reducing harm.

Going forward the Council intends to publish the preferred options paper for consultation in July 2021, before publishing its publication plan in July 2022 and then submitting it for examination in December 2022. The Council anticipates adopting the plan in December 2023.

Planning constraints

The site represents the most sustainable location for growth at Kinver. It is located wholly within Flood Zone 1, representing a low risk of flooding (less than 0.1%/1 in 1,000 years). There are no heritage assets located within or adjacent to the site. The Kinver Camp scheduled monument is 1.1km to the south and the edge of the Kinver Conservation Area is 550m to the south of the site at its nearest point. Furthermore, the site is not constrained by any environmental designations, such as Sites of Special Scientific Interest, Special Areas of Conservation, Special Protection Areas or Ramsar sites.

It will be accessed from Hyde Lane, a principal 6m wide single carriageway, which connects Kinver with the A458 (Bridgnorth Road) towards Stourbridge and Kidderminster via the A449. There is an opportunity to extend the existing footway to provide pedestrian access to the site.

Beyond land to the west of Hyde Lane, there are limited opportunities for growth around Kinver. The southern and western edges of the village are significantly constrained by the Canal Conservation Areas and Kinver Camp scheduled monument. Land to the east and south east is dominated by Kinver Edge (which contains the Kinver Hillfort) and forms part of the Merican Forest. Land to the north west is constrained by accessibility, given White Lane comprises a narrow carriageway 4.5m in width and the unconventional layout of the junction between White Hill, Meddins Lane and Enville Road which is prone to on street parking.

There are also large areas to the south east of Kinver which are within Flood Zones 2 and 3 and so unsuitable for residential development.

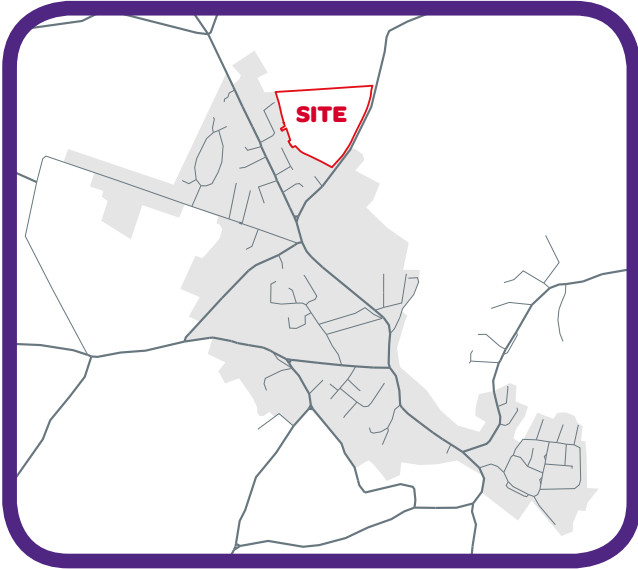
The plan below demonstrates the nature of Kinver and that land to the west of Hyde Lane represents the most sustainable location for housing growth.

Ideal for future development

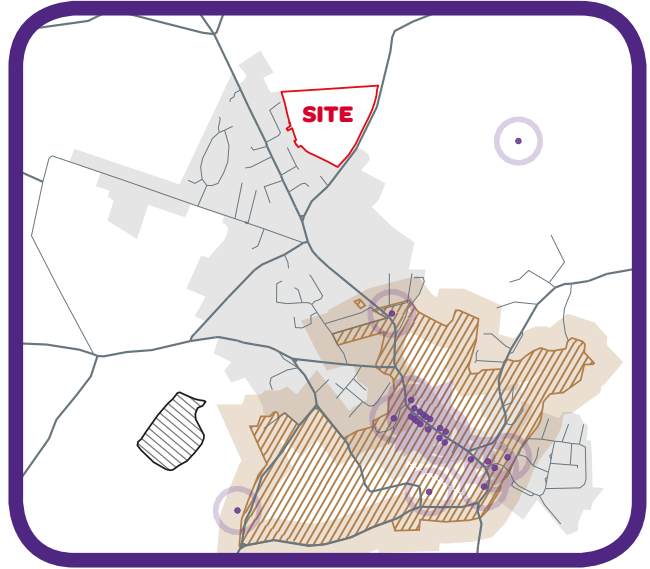
The constraints plans opposite clearly demonstrate how the site is ideally located for future housing growth:

- away from any heritage constraints including listed buildings and conservation areas
- away from any landscape constraints including the Kinver Edge SSSI
- outside any areas identified at risk of flooding or allocated flood plain, and
- along a route (Hyde Lane) which is capable of handling additional traffic needs.

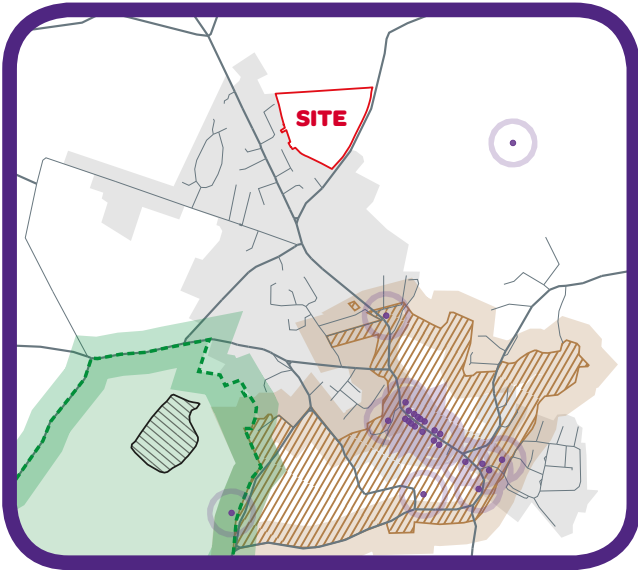
The site



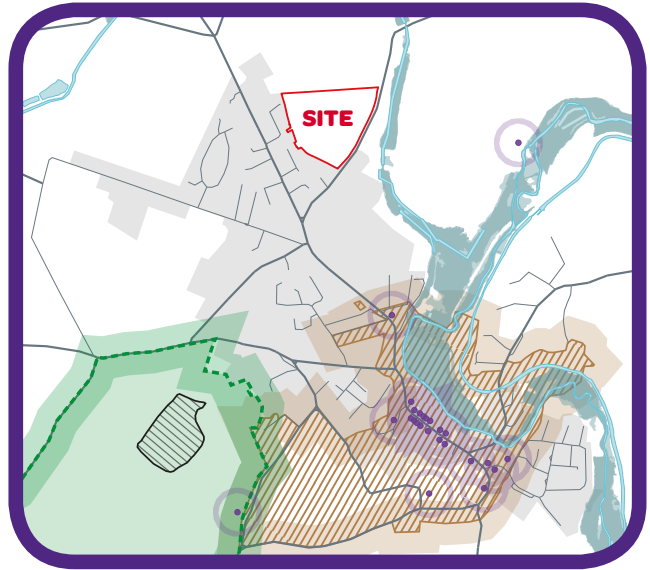
- away from heritage constraints



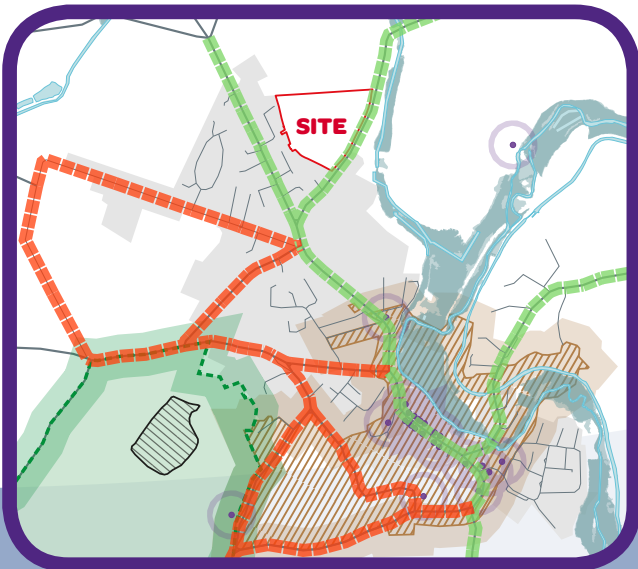
- away from landscape constraints



- away from flood risk areas



- with suitable highway capacity



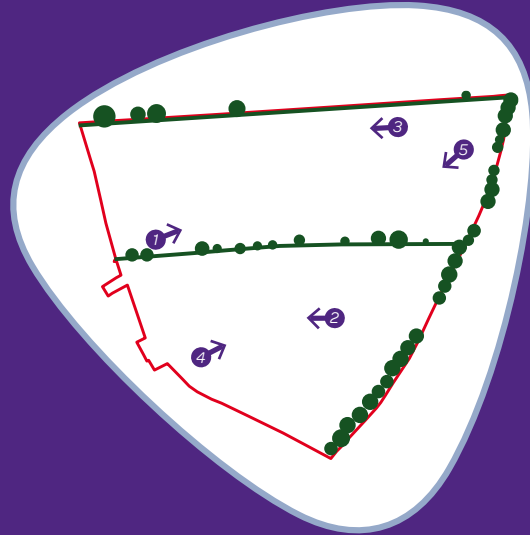
 A legend enclosed in a purple rounded rectangle, listing the symbols used in the maps:

- The site (red outline)
- Listed building (purple circle)
- Conservation area (orange hatched area)
- Kinver Edge SSSI (green hatched area)
- Kinver Camp SAM (hatched area with diagonal lines)
- Flood risk area (blue hatched area)
- Highway with spare capacity (green dashed line)
- Highway with restricted capacity (orange dashed line)

Site context

The images below and on the adjacent page offer an insight into the site characters and setting as well as an understanding of the sites wide context.

Whilst currently used as farmland, the site is bound along its western and southern edges by the existing urban footprint of Kinver and represents an ideal opportunity to provide much needed housing land in a sensitive manner with minimal impacts on its setting.





Access and movement

Sustainable Travel Opportunities

The nearest bus stops to the site are located on Enville Road 400m south of the site and are accessible using existing pedestrian infrastructure.

From the southern extent of the site, there are footways along both sides of Hyde Lane with a minimum width of 1.5m. The majority of the footway is segregated from the carriageway with a grass verge. The footway continues along Enville Road towards the amenities within Kinver. Street lighting is provided on Hyde Lane and throughout Kinver. A zebra crossing is provided on Enville Road in the vicinity of the school, church and bus stops.

Accessibility

The site is well located in relation to all the basic amenities and services on offer in Kinver village. Schools covering all age groups, a dentist, convenience store and post office are all located within an acceptable walking distance of the site.

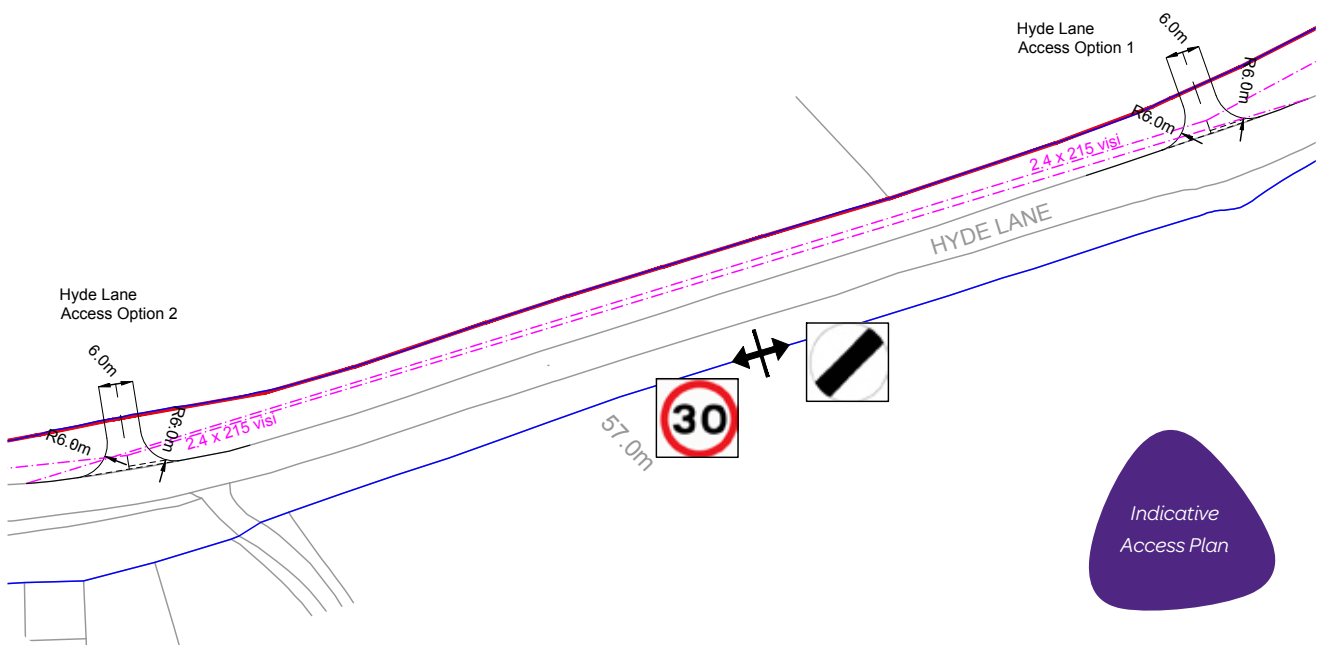
Vehicle Access Strategy

The site benefits from 370m of direct frontage with Hyde Lane, and this provides numerous opportunities to provide vehicular access to the site. The site has capacity for around 200 dwellings and this will require one, or two access points depending on the final number of dwellings that come forward.

Two potential access positions are shown on the plan below with the locations chosen identified as being optimal to reduce earthworks and the removal of vegetation:

- At the existing agricultural access to the northern field; and
- Opposite the existing dwellings on Hyde Lane.

The access points have been designed in accordance with DMRB and are deliverable within land under the control of Bellway. The access strategy has also been developed in consideration of the new access that will be provided to the housing allocation to the east of Hyde Lane. Both site of the site access points would be at least 100m from the access to housing allocation, and this is more than adequate in terms of junction spacing.



Pedestrian Access Strategy

The existing provision for pedestrians along Hyde Lane is of a good standard and this will be extended to the boundary of the site, all infrastructure can be provided within the site boundary or highway land.

There is an opportunity to provide an additional pedestrian and cycle access onto Cedar Gardens to provide increased connectivity particularly for the north western extent of the site. This infrastructure can also be provided within land under the control of Bellway and within highway land.

Summary

- There is a network of pedestrian routes providing direct access to local amenities within Kinver.
- The site is located within 400m of a bus stop which is served by all bus services within Kinver including regular bus services are provided between Kinver and Stourbridge and less frequent services to Kidderminster;
- The site is well located in relation to its accessibility of all the basic amenities within Kinver village. Schools, a dentist, convenience store and post office are all located within an acceptable walking distance of the site and a doctor's surgery is available within the preferred maximum walking distance.
- Given the existing transport infrastructure and proximity to local amenities, the site is well located for journeys to be undertaken by modes other than private car.
- Preliminary access designs for two options have been prepared which demonstrate that access can be provided which accords with the relevant design standards and there is flexibility in the access location.



Landscape

The site lies to the immediate west of Hyde Lane, on the north side of the village and has a predominantly easterly aspect with the north-western corner lying at around 76m AOD and the north eastern corner at around 56m AOD. The southern tip of the site lies at circa 60m AOD.

The site is bounded to the east by Hyde Lane which is defined by a slight bank with trees and outgrown hedgerow, to the west by rear boundaries of neighbouring properties located off Cedar Gardens and Hillboro Rise, to the north by an earth embankment topped with a poor quality, gappy hedgerow and to the south by the rear/side boundaries of residential properties off Hyde Lane.

The site itself comprises two field parcels separated by a dilapidated hedgerow with a sparse line of deciduous Larch trees. The most notable feature of the fields is their topography with the broadly easterly aspect complicated by more localised undulations aligned in an east-west alignment causing a 'ripple' effect moving southwards through the site.

Overall, the site does not demonstrate any landscape features worthy of absolute protection and retention other than the trees/hedges at its boundaries, many of which would benefit from improved management.



Kinver

Enville Lane

Visual amenity

The site's location to the northern side of the village, adjacent to well established modern development (latter half of the 20th Century) to the west means that it has the potential to integrate well with the existing settlement when seen in wider views.

Holy Austin Rock (St Peter's Church) is located to the south of the site, occupying the area with the greatest degree of elevation above the village (164m AOD). It provides expansive panoramic views over the village and the landscape beyond. Within views towards the site from this location the site appears well integrated with the existing settlement, appearing as a natural 'rounding off' of the northern edge.

Overall, the site's easterly aspect and the topography of the local landscape results in a relatively limited visual envelope which integrates the site with the existing village form. This means that the site is perceived as a logical extension of the village rather than an incoherent, disconnected addition.



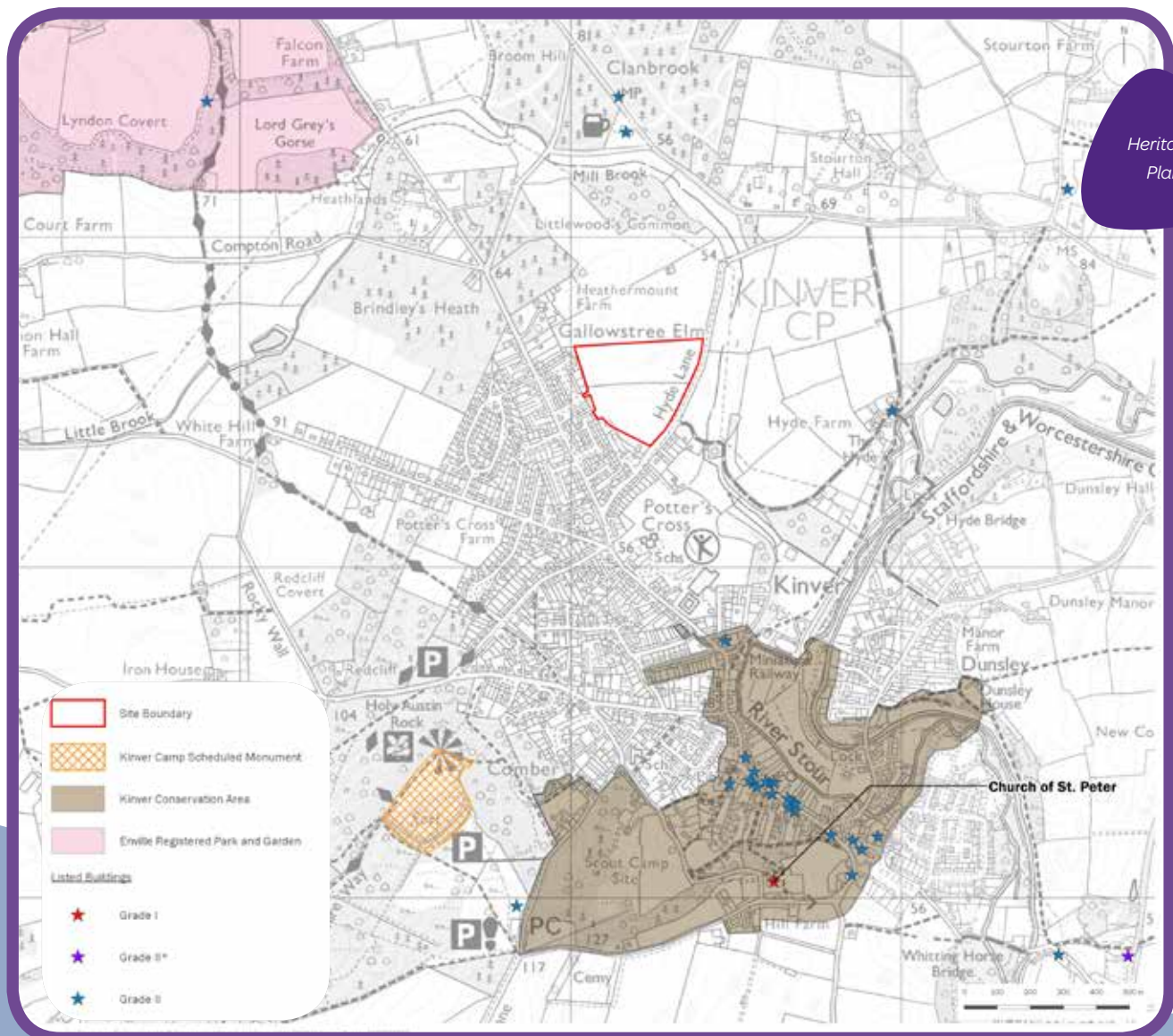
Heritage

The site does not contain any 'designated heritage assets' and neither is it located within the boundary of such an asset. There are no heritage constraints to the delivery of the site for development or in respect of its capacity to accommodate development.

The site is situated 1.3 km north of the Church of St. Peter Grade I listed building and 1.1 km north-north east of the Kinver Camp Iron Age hillfort Scheduled Monument, which both occupy the prominent ridge overlooking Kinver, and characterise the settlement's historic villagescape. It is located 550 m to the north of the Kinver Conservation Area.

The site is distant, and, whilst it is visible, there is nothing significant about it which contributes positively to the setting or the significance of these designated heritage assets. It is joined by 20th century housing estates accessed along a series of cul-de-sacs on the east side of Enville Road and the properties fronting the sides of Hyde Lane, to the west and east respectively.

It is concluded to be very unlikely that these designated heritage assets would be harmed by development within the site, in large part because of the intervening distance and land use.



Drainage

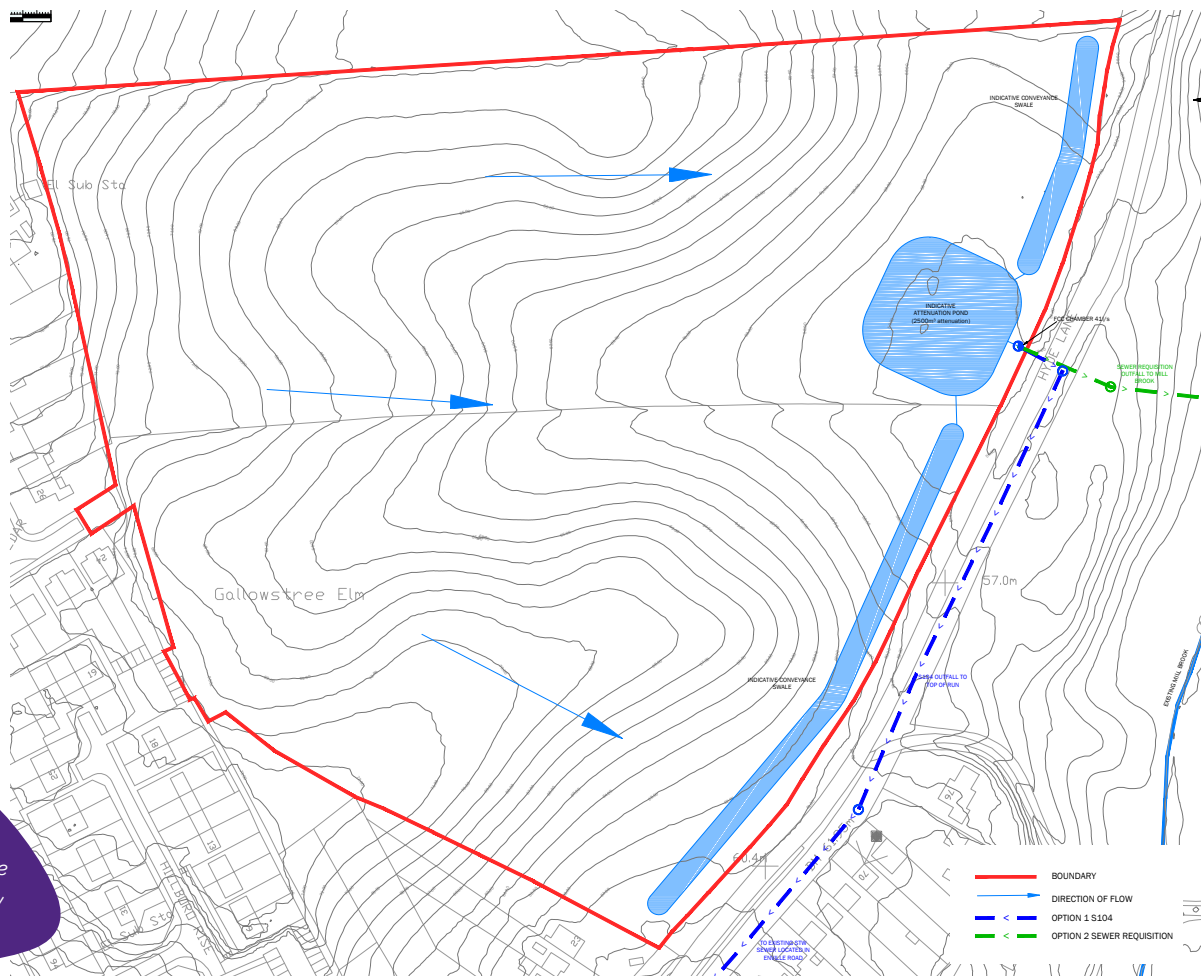
Fluvial flooding, occurs when a river or stream is unable to take on water draining in to it from surrounding land. The additional water causes the water to rise above its banks or retaining structures and subsequently flows onto the land.

The Environment Agency Indicative Flood Zone Mapping shows that the proposed development site falls within Flood Zones 1 (Low risk), meaning the site is not considered at risk of flooding from a watercourse or river.

Pluvial flooding refers to flooding from rainfall and the associated runoff. Surface water flooding is defined as flooding caused by rainfall generated overland flow before the runoff enters a watercourse or sewer. In such events, sewerage and drainage systems and surface watercourses may be entirely overwhelmed.

Surface water (pluvial) flooding will usually be a result of extreme rainfall events, though may also occur when lesser amounts of rain falls on land which has low permeability and/or is already saturated, frozen or developed. In such cases overland flow and 'ponding' in topographical depressions may occur.

It is understood that run off from Cedar Gardens to the West flows across the site in a low channel indicated from a comparison of EA data and LIDAR data, as shown on the plan below. This low and medium flood risk strip turns to a high risk when Hyde road is reached, due to a low spot in the topography. The pluvial flood route will be taken into account and considered as part of any future development layout.



Drainage strategy

Option 1 – Approximately 200 dwellings

This option proposes approximately 200 dwellings and associated open space, and has the potential to deliver a new doctor's surgery / community building.

As well as much needed new family homes, the proposal includes significant levels of Public Open Space along Hyde Lane resulting in a development set back, helping to retain the rural character of this rural route. With the exception of two new access points off Hyde Lane, all existing trees along the site boundary and existing hedgerows will be retained and enhanced, ensuring development has minimal impact on the surrounding character of the area.

Other features include naturalised attenuation in the form of SUDs and swales helping to support local biodiversity and mitigate impacts of flooding, as well as new native tree/shrub planning to help support local wildlife and act as a meaningful amenity to local residents. Proposals also include a new Local Equipped Area of Play (LEAP) for use by new and existing residents of the village.

Whilst representing the option containing the largest quantum of development, this option represents a sensitive and considered design solution to fulfilling long-term housing need.

Key

1. Access points
2. Main roads
3. Share streets
4. Lanes
5. Parking spaces
6. Rear gardens
7. Share surfaces
8. Pedestrian paths
9. LEAP (Local Equipped Area of Play)
10. Existing vegetation (trees and hedgerows)
11. Proposed trees
12. Attenuation basin
13. Public Open Space



Option 1 –
Approximately
200 dwellings



Hyde Lane

Option 2 – Approximately 110 dwellings

This option would respond to the scenario whereby the Local Plan Review needed to allocate circa 110 dwellings at Kinver. Similarly to Option 1, this option responds to the surrounding landscape and topography of the site, and includes the potential for a doctor's surgery / community building.

Key

1. Access points
2. Main roads
3. Share streets
4. Lanes
5. Parking spaces
6. Rear gardens
7. Pedestrian paths
8. LEAP (Local Equipped Area of Play)
9. Existing vegetation (trees and hedgerows)
10. Proposed trees
11. Attenuation basin
12. Public Open Space



Option 2 –
Approximately
110 dwellings



Hyde Lane

Option 3 – Approximately 45 dwellings

The most compact scale of development being considered, this option comprises around 45 new homes seeks to meet Kinver’s housing needs in a modest form.


This option proposes containing development to only the southern of the two fields which make up the Hyde Lane site, retaining the remainder of the southern field as Public Open Space and meadow grassland. Development is focused on the parts of the site least visible from the surrounding countryside, in particular along the lowest parts of site’s south-western boundary either side of the ridge which runs centrally through the site’s southern field. The proposals also allow for the creation of a positive interface between Kinver and the surrounding countryside.

The remainder of the southern field will be utilised as natural and meadowed Public Open Space including naturalised attenuation in the form of SUDs and swales helping to support local biodiversity and mitigate impact of flooding, as well as new native tree/shrub planting to help support local wildlife and act as a meaningful amenity to local residents. Proposals also include a new LEAP for use by new and existing residents of the village. With the exception of trees removed to allow for the single point of access being proposed, all existing trees and hedgerows will be retained and enhance with nature species.

Limited to around 45 residential units, this modest proposal not only meets the short-term housing need for the village, it does so in a way which ensures impact on the character of the village are kept to a minimum whilst ensure the rest of the site is made available to new and existing residents as a valuable wildlife and recreation amenity.

Key

1. Access points
2. Main road
3. Shared streets
4. Lanes/shared driveways
5. Parking spaces
6. Rear gardens
7. Pedestrian paths
8. LEAP (Local Equipped Area of Play)
9. Existing vegetation (trees and hedgerows)
10. Proposed trees
11. Attenuation basin
12. Public Open Space
13. Public footpath



Option 3 –
Approximately
45 dwellings



Hyde Lane



A vision for a new sustainable community within a relaxed landscape setting for Kinver.

Summary and conclusions

This Vision Framework document has been prepared on behalf of Bellway, in response to the growing housing requirements of Kinver and the wider area, and the need for South Staffordshire Council to plan strategically for sustainable housing growth to help meet the needs of future generations.

It seeks to demonstrate that land at Hyde Lane, Kinver is a suitable, sustainable and deliverable site for future development and is the most logical location for future housing.

Through a robust assessment of the site's spatial and environmental context, it has been demonstrated that the land at Hyde Lane is both suitable and appropriate for a sustainable and high quality future residential development.

As demonstrated by this Vision Document and the three options presented, the site has inherent flexibility to deliver a range of development options which can respond to Kinver's housing needs to be identified in the emerging South Staffordshire Local Plan Review. Bellway is keen to work with South Staffordshire Council, Kinver Parish Council, and the local community to evolve its proposals for Hyde Lane further.

It is concluded that the site is the most logical and sustainable location for future development to meet the housing needs of Kinver, as well as South Staffordshire as a whole.





For further information contact

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Turley

turley.co.uk

Appendix 2: EDP Hyde Lane Heritage Technical Note

Land off Dunsley Drive, Kinver, Staffordshire

Landscape Position Paper

edp4711_r007

1. Introduction, Purpose and Approach

- 1.1 The Environmental Dimension Partnership Ltd (EDP) has been appointed by Bellway Homes ('the promotor') to prepare a Landscape Position Paper, which examines the prospect of future development on Land off Dunsley Drive, Kinver, Staffordshire ('the site').
- 1.2 The site is situated in Staffordshire, within the administrative area of South Staffordshire District Council, which acts as the statutory planning authority. South Staffordshire District Council has commenced a District Plan Review to identify land to accommodate the remainder of the adopted South Staffordshire District Plan (SSDP) housing requirement.
- 1.3 This Landscape Position Paper provides a preliminary appraisal of the site to inform the early consideration of its design and its promotion in the planning process. The Position Paper has been informed by a desk-based review of available data, policy, landscape character publications and mapping and by a site visit undertaken by an experienced Chartered Landscape Architect during early December 2019.
- 1.4 EDP is an independent environmental consultancy providing advice to landowner and property development clients in the public and private sectors in the fields of landscape, ecology, heritage, arboriculture and masterplanning. The Practice operates throughout the UK from offices in Cirencester, Cardiff, Cheltenham and Shrewsbury. Details can be obtained at (www.edp-uk.co.uk).

2. Site Location and Site Description

- 2.1 The existing site comprises a parcel of land roughly triangular in shape. The site is located at Ordnance Survey Grid Reference (OSGR): SO 85195 83756 (centre of the site).
- 2.2 The site is within the West Midlands Green Belt. However, there are no National or Local landscape designations situated within or adjoining the quantum of the site.
- 2.3 The site lies to the immediate east of Dunsley Drive, on the eastern side of the village and has a predominantly western aspect with the south-eastern side edge sloping to the north-western corner, see **Image EDP 2.1** overleaf.



Image EDP 2.1: View from within the site looking south-easterly across rising landform. Photograph taken at OSGR: SO 85202 83807 (during December 2019)

- 2.4 The site is made up of two interconnecting fields, both of which are managed for equestrian grazing. There is a single-storey equestrian stable type building in the north-western corner of the site, with an existing gated access at this boundary from Dunsley Drive, see **Image EDP 2.2** below.



Image EDP 2.2: View from within the site looking north-west to an existing stable block on the northern site boundary. Photograph taken at OSGR: SO 85207 83828 (during December 2019)

2.5 The site is bounded:

- To the north, the site is bounded by existing two-storey residential dwellings situated off an associated private amenity space. These dwellings are accessed off Dunsley Drive and are arranged oblique to the site (looking east to west). The private amenity space is enclosed by low timber post and wire fencing with occasional trees, see **Image EDP 2.3** below;
- The eastern edge of the site is defined by a timber post and wire fence, beyond which there is an open pastoral field. Landform gently rises to the east to a landform, beyond which there is no visibility as landform drops away to the north-east towards the Kidderminster/Wolverhampton Road (A449). A number of existing residential dwellings arranged in a complex, are discernible from the site, see **Image EDP 2.4** overleaf;
- To the south, the site is bounded by an existing timber post and wire fence, with a private driveway and a collection of existing residential dwellings set with private amenity space with mature landscape features, see **Image EDP 2.5** overleaf; and
- The western site boundary is bounded by a timber post and wire fence, beyond which is a private driveway leading a number of two-storey residential dwellings set within private amenity space with mature landscape features. The north-western edge of the site is enclosed by Dunsley Drive, public roadway and with two-storey residential dwellings beyond, see **Image EDP 2.6** overleaf. The site is situated above the level of Dunsley Drive, which in places is approximately 1.25m overall.



Image EDP 2.3: View from within the site looking north towards the adjoining dwelling situated on Dunsley Drive. Photograph taken at OSGR: SO 85202 83807 (during December 2019)



Image EDP 2.4: View from within the site looking north-east towards the existing residential dwellings arranged in a complex. These dwellings are accessed from Dunsley Road. Photograph taken at OSGR: SO 85202 83807 (during December 2019)



Image EDP 2.5: View from within the site looking south towards the existing residential dwellings situated off a private drive from Dunsley Drive. Photograph taken at OSGR: SO 85202 83807 (during December 2019)



Image EDP 2.6: View from within the site looking north-west along the private driveway which encloses the western site boundary, with existing residential dwellings situated off. N.B. Many of these dwellings are two-storey and the Finished Floor Level (FFL) is below the ground level of the site. Photograph taken at OSGR: SO 85187 83703 (during December 2019)

- 2.6 There is no public access available to the site and no Public Rights of Way (PRoW) which pass through the quantum of the site. PRoW Public Footpath Kinver 94 is situated outside of the site, immediate to its southern boundary see **Image EDP 2.7** and **2.8**. However, there are no themed, promoted or long-distance walking routes which pass the site within its immediate environment.

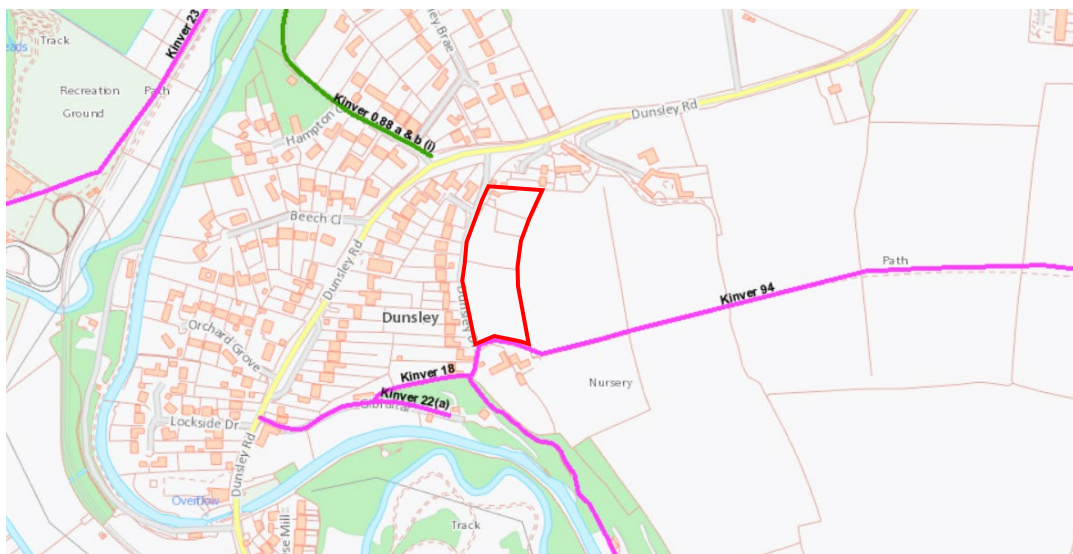


Image EDP 2.7: Extract from the Staffordshire County Council's online Countryside Access and PRoW Map. N.B. EDP has highlighted the site with a solid red line



Image EDP 2.8: View from outside of the site looking north-east from PRow (Public Footpath 94).
Photograph taken at OSGR: SO 85187 83703 (during December 2019)

- 2.7 Overall, the site does not demonstrate any landscape features worthy of absolute protection and retention other than the trees/hedges at its boundaries, many of which would benefit from improved management. The site's topography is an interesting characteristic and could inform the layout of any future development.

3. Landscape Character

- 3.1 The site is situated within a landscape that has been characterised at National and County level. At National level, the site is located within National Character Area (NCA) 66: Mid Severn Sandstone Plateau, see **Image EDP 3.1** overleaf.

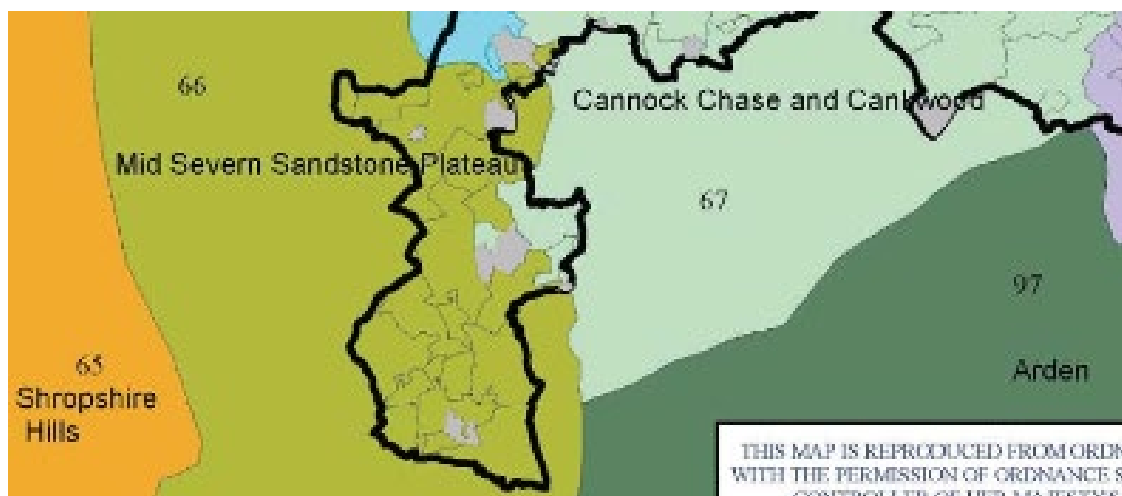


Image EDP 3.1: Extract from Map 2 of the Staffordshire County Council's 'Planning for Landscape Change: An Introduction and User's Guide to Supplementary Planning Guidance to the Staffordshire and Stoke on Trent Structure Plan, 1996 - 2011'

3.2 The County-wide landscape character assessment comprises the 'Planning for Landscape Change: An Introduction and User's Guide to Supplementary Planning Guidance to the Staffordshire and Stoke on Trent Structure Plan, 1996 - 2011', which remains current at the time of writing this Landscape Position Paper. The County Council find the site within the Sandstone Estatelands Landscape Character Area, see **Image EDP 3.2** below.

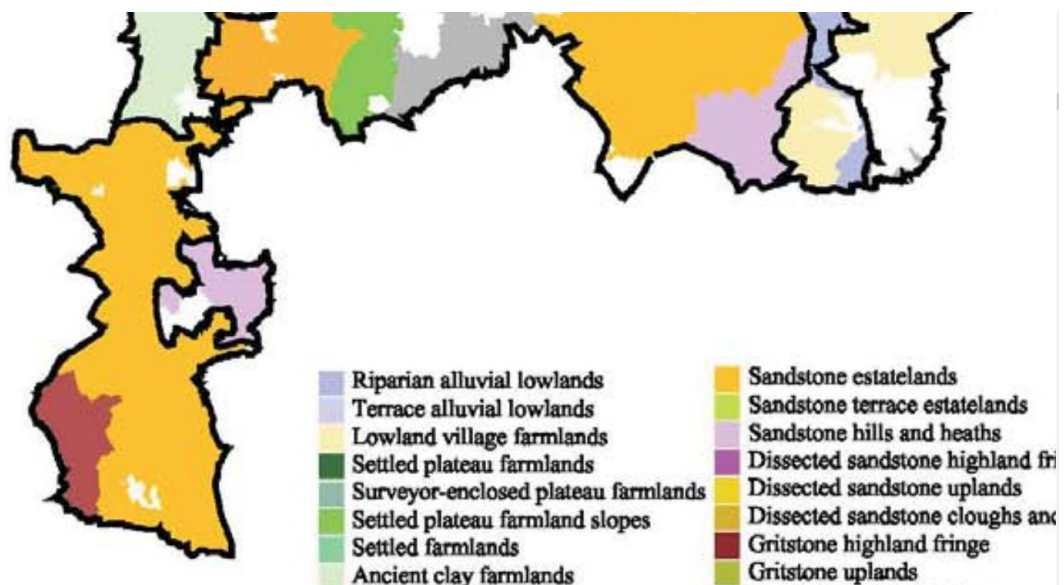


Image EDP 3.2: Extract from Map 4 of the Staffordshire County Council's 'Planning for Landscape Change: An Introduction and User's Guide to Supplementary Planning Guidance to the Staffordshire and Stoke on Trent Structure Plan, 1996 - 2011'. N.B. The site is situated within the Sandstone Estatelands Landscape Character Area

3.3 The character of the Sandstone Estatelands Landscape Character Area is described as follows:

“The woodlands and parklands of traditional rural estates characterise the more intact parts of this rolling lowland landscape type...Settlement is sparse, and characterised by expanded hamlets and wayside cottages...This is a landscape that appears far more wooded than it actually is, with prominent positioning of woodlands and the coalescence of mature hedgerow oaks in places. The slopes in turn give way to well-treed valleys...”

3.4 The County Council continue:

“Villages are expanding with the increase in commuter dwellings and small lanes show the obvious signs of becoming well used rat-runs. Where farmland abuts the conurbation the landscape reflects this influence, hedgerow deterioration being more evident and horsey culture becoming frequent.”

3.5 The County Council’s assessment notes, the following landscape features common to this landscape character area. EDP notes the underlined as common to the site and its immediate setting:

- *“Estate Plantations;*
- *Heathy ridge woodlands;*
- *Hedgerow oaks;*
- *Well tree’d stream valleys;*
- *Smooth rolling landform with scarp slopes;*
- *Red brick farmsteads and estate cottages;*
- *Mixed intensive arable and pasture farming;*
- *Large hedged fields;*
- *Halls and associated parkland; and*
- *Canal.”*

3.6 Further to this, under the heading of ‘Incongruous Landscape Features’, the County Council raises the following points relative to this landscape character area. EDP notes the underlined as common to the site and its immediate setting:

- *“Power lines;*
- *Village expansion;*

- *Urban edge;*
- *Modern farm buildings;*
- *Deteriorating hedgerows;*
- *Commuter dwellings; and*
- *Busy roads.*

3.7 Naturally, the degrading effect of such factors vary across the Sandstone Estatelands landscape character area with such factors, as aforementioned, having a greater or lesser effect on the intactness of the landscape character. In their assessment, the County Council asserts that the “*landscape character type is locally sensitive to the impacts of development and land use change.*”

3.8 A site visit was undertaken by a Chartered Landscape Architect during December 2019, at which, the character of the site was appraised. With reference to the key characteristics listed (above) for the Sandstone Estatelands landscape character area, this review found that there are a number of key differences within the site, including:

- No representation of “*...Estate Plantation*”, which is more reflective of land practice further north of the site within the wider open countryside beyond nearby estate plantations associated with the Enville and Stallybridge Estate (i.e. ‘The Million woodland’). There is a small parkland remnant around Dunsley Hall, off Dunsley Road which is approximately 0.75km north-east of the site. Consequently, the presence of “*Halls and associated parkland*” are outlying to Kinver and not within the environment of the site:
- No representation of “*...Commuter dwellings and urban edge*”, albeit, the site is situated on the village edge adjacent to well established modern development (latter half of the 20th century). Dunsley Drive is a quiet residential road, leading to Dunsley Road. Whilst traffic on Dunsley Drive is infrequent and Dunsley Road is one of a number of routes into Kinver;
- No representation of “*large hedged fields*” with the site situated in a field pattern of small to medium scale and hedgerows are commonly gappy in this location through either age, being outgrown or degraded or previously removed. The site is predominantly enclosed by timber post and wire fencing, with the probability of previous hedgerow extraction within the site;
- No representation of “*Red brick farmsteads and estate cottages*” as the site does not contain development, and that development surrounding the site is modern day, ‘sub-urban’ style built form; and

- No representation of “*well tree’d stream valleys*” at the site, or within its vicinity. Albeit, these features can be found in the wider landscape area.

3.9 EDP considers that the site makes only a limited contribution to the key characteristics of the landscape of the Sandstone Estatelands. Additionally, there are a number of landscape detractors discernible from the site. These detractors are predominantly associated with the position of the site on the village edge of Kinver and the perception of existing residential development from within the site, see **Section 2, Image EDP 2.3** and **Image EDP 2.4** above.

4. Visual Amenity

- 4.1 The site’s location to the eastern side of the village, adjacent to well established modern development (latter half of the 20th century) to the west means that it has the potential to integrate well with the existing settlement when seen in wider views. During the site visit, the Zone of Visual Influence of the site (i.e. those areas of the surrounding landscape which had potential views of the site) was established and then these areas were visited to establish whether ground level views were accessible and if so, how the site appeared.
- 4.2 **Image EDP 4.1** overleaf, illustrates the location of PRoW within the wider environment of Kinver and the open countryside which surrounds the village. This extract from Staffordshire County Council’s PRoW map demonstrates that PRoW are found to the east (Public Footpath Kinver 94) which progresses through open countryside away from the site on the settlement edge.
- 4.3 The route for Public Footpath 18 (adjoining the southern site edge and to the south-west) progresses through existing dwellings within the urban setting. Public Footpath 22a and 22b lead down to Staffordshire and Worcestershire canal (south of the site) and so are situated within a valley’d landscape that is well tree’d.

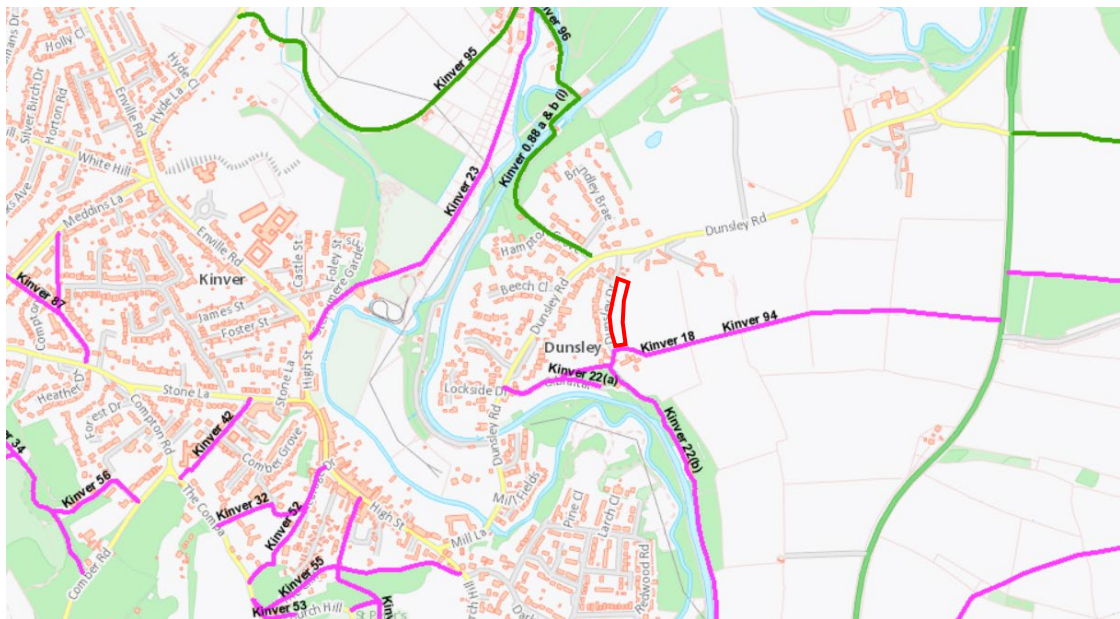


Image EDP 4.1: Extract from the Staffordshire County Council's online Countryside Access and PRow Map. N.B. EDP has highlighted the site with a solid red line

4.4 The broad extent of the view available from each of these areas is described below:

- To the north, the site is enclosed by the existing residential dwellings adjoining the site, and the combination of landform adjoining the site and the verge of Dunsley Drive and mature landscape features within private amenity space, see **Image EDP 4.2** below and **Section 2, Image EDP 2.6** above.



Image EDP 4.2: View from outside of the site looking south down Dunsley Drive towards the western site boundary. Photograph taken at OSGR: SO 85192 83866 (during December 2019)



- To the east, landform rises toward a Local ridgeline, beyond which landform falls easterly away towards the Kidderminster/Wolverhampton Road (A449), see **Section 2, Image EDP 2.4** and **Image EDP 2.8**. There are a small number of residential dwellings to the north-east which overlook the site. In the wider landscape, any vantage point for seeing the site would be well over 1km east;
- To the south, the site is overlooked a small collection of residential dwellings, with the PRoW Public Footpath 94 and 18 passing the site, see **Section 2, Image 2.5** and **Image EDP 2.8** above. Views from these Public Footpaths are already influenced by the settlement edge location. Beyond this, views of the site are substantially filtered, if not screened, by existing built form and mature landscape features;
- To the west, the site is bounded by either a public roadway or private driveway, with residential dwellings situated on, see **Section 2, Image EDP 2.6** above; and
- There is a network of PRoW situated south and south-west of the site on elevated landform above the village. With the greatest degree of elevation above the village these routes, including those around Holy Austin Rock and St Peter's Church, provide expansive panoramic views over the village and the landscape beyond. Within views towards the site from this the junction of Public Footpath 54 and 89 (see **Image EDP 4.3** below) the site appears well integrated with the existing settlement, with existing, long established development to either side (on Dunsley Drive), and development beyond the site (off Dunsley Drive). The site appears to be on the existing edge of the settlement but situated adjoining existing development and not situated on a prominent ridgeline where development may appear detached from the village and incongruous.



Image EDP 4.3: View from Public Footpath 54 and 89 on elevated landform around St Peter's Church, approximately 0.8km south-west of the site (at its closest point). Photograph taken at OSGR: SO 84711 83068 (during December 2019)

- From the residential properties situated off Dunsley Drive (primarily) and north-east of the site off Dunsley Road (see **Section 2** above), it is clear that these dwellings have advantage of the view over the site to the countryside beyond with several having 'picture windows' to enjoy this aspect. Though such views are not protected in planning policy terms, the design of any scheme here would benefit from being sensitive to these adjacent residents, ensuring their residential amenity is not significantly degraded.

5. Landscape Sensitivity

- 5.1 In July 2019, South Staffordshire District Council published their 'South Staffordshire Landscape Sensitivity Assessment' (Final Report). This assessment forms an important evidence base for the preparation of the South Staffordshire Local Plan.
- 5.2 The purpose of this study was to provide an assessment as to the extent of which 'the character and quality of landscape abutting is in principle susceptible to change as a result of introducing new built form.'
- 5.3 This study specifically considers new residential development. The settlement of Kinver is defined by this study as a 'Main Service Village' and therefore, a Tier 4 settlement in this study.

- 5.4 In terms of scope, this study considers the landscape sensitivity of land within the West Midlands Green Belt which is: *“immediately adjacent to selected South Staffordshire settlements (Tier 1-4 settlements) ... encompassing locations identified through the South Staffordshire ‘Call for Sites’ exercises, and land adjacent without promoted sites.”*
- 5.5 South Staffordshire District Council define landscape sensitivity as: *“the relative extent to which the character and quality of an area (including its vital attributes) is likely to change as a result of introducing a particular type of development.”*
- 5.6 This study appraises parcels of land, some of which are large and expansive tracts of land, the study includes the site within a wider parcel of land (identified by the South Staffordshire District Council as SL2), see **Image EDP 5.1**.

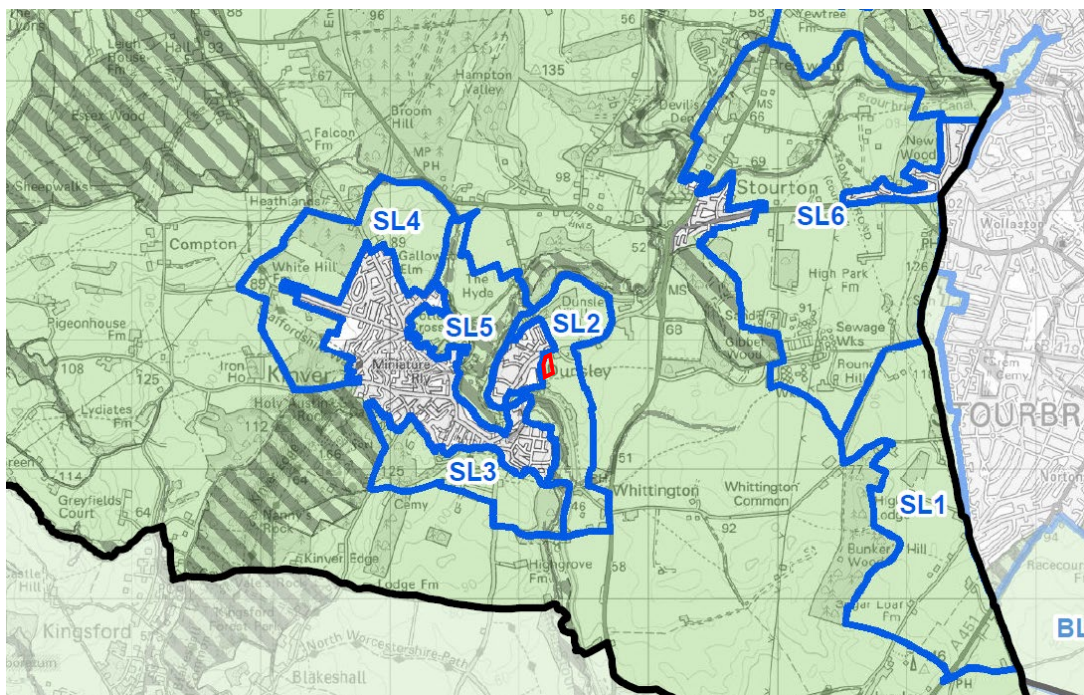


Image EDP 5.1: Extract from the South Staffordshire District Council’s South Staffordshire Landscape Sensitivity Assessment (Final Report, July 2019). N.B. EDP has highlighted the site with a solid red line

- 5.7 With reference to Table 4.1 of the South Staffordshire District Councils, South Staffordshire Landscape Sensitivity Assessment (Final Report, July 2019), the land parcel SL2 has an overall quantum of nearly 75ha, of which the site is less than 2ha and so is less than 2.5% of the overall land parcel. Staffordshire District Council assess land parcel SL2 as having an overall landscape sensitivity of Moderate – High.
- 5.8 With Chapter 3 of South Staffordshire District Councils, South Staffordshire Landscape Sensitivity Assessment (Final Report, July 2019), the rating of Moderate – High is not defined specifically by South Staffordshire District Council. Instead, the South Staffordshire

District Council directly defines only Low, Moderate and High. None the less, the South Staffordshire District Council consider that the land parcel has a relatively high landscape sensitivity and susceptibility to change, as this land parcel having some distinct, if not strong, character and qualities.

5.9 With consideration of the published methodology for this study and our own field-based assessment during December 2019, EDP considers that a site-specific assessment of the site would most definitely yield a lower landscape sensitivity than the wider land parcel, for the following reasons:

- The site has very limited features of value with previously extracted hedgerows replaced with timber post and wire fencing, limited native tree cover and poorly managed internal vegetation. The site's topography is probably the most interesting aspect. Consequently, the site makes a very limited, if any contribution to the key characteristics of the landscape of the Sandstone Estatelands; and
- There are a number of landscape detractors discernible from the site, which are predominantly associated with the position of the site on the village edge of Kinver. The perception of existing residential development enclosing the site to the north, south and western edges, which in some situations, overlooks the site's interior.

5.10 Landform continues to rise eastwards from the site towards a Local ridgeline, which is situated within open countryside beyond the village settlement and within the typical 'mixed intensive arable and pasture farmland' common to the Sandstone Estatelands landscape character area, see **Image EDP 5.2** below, as well as **Section 2, Image EDP 2.4** and **Image EDP 2.8** above.



Image EDP 5.2: View from within the site looking east towards the ridgeline outside of the site, beyond which landform falls easterly downwards to the Kidderminster/Wolverhampton Road A449). Photograph taken at OSGR: SO 85187 83703 (during December 2019)

- 5.11 The combination of this Local ridgeline, the settlement edge and roadway enclose the site and act as physical constraints. Consequently, the site is within these features which limit and contain the site. The site is experienced as being within the settlement edge of Kinver, and its domestic land use and character. When on site, especially in winter, one is aware of the presence of the surrounding village related land use, albeit, on the edge of the village rather feeling divorced from it, in the open countryside, like aspects of the wider land parcel SL2.
- 5.12 From a landscape and village character perspective, the domestic curtilages discernible from the site most definitely contribute to the perception of the site as village edge (see **Section 2, Images 2.3, 2.5 and 2.6** above).
- 5.13 The wider land parcel SL2 is situated further out to the village and through its combination of elevated landform and mature woodland blocks along the course of the canal and around Horse Bridge Lane. The site is more related to the settlement edge than the wider open countryside of the land parcel. Hence, the wider land parcel is experienced as divorced and poorly related to Kinver.
- 5.14 EDP considers that residential development in the wider land parcel SL2 would be subject to a greater landscape sensitivity than those areas on the periphery of Kinver, such as the site. Consequently, given the above factors, EDP would most definitely conclude that the site has only a Moderate landscape sensitivity at most.



6. Implications for Masterplanning

6.1 Any future development of the site should be informed by a Landscape and Visual Impact Assessment, the findings of which should help shape the scheme design. At this early stage, the preliminary landscape and visual appraisal has identified a series of key principles for the design of future development, which would assist in mitigating its landscape and visual effects and ensure it integrates effectively with the existing village form. These are:

- The existing external field boundaries to the site are weak, presenting an opportunity to establish new native hedgerows with tree planting and strengthen the landscape fabric of the site;
- The site will drain naturally to the western edge, with the north-eastern corner being the lowest point. On this basis, the western edge of the site should be utilised for sustainable drainage attenuation features designed as attractive landscape components. This initiative has the potential to provide an attractive focal point in this part of the village, set within a compact 'village green' style open space. This would help connect the new development with the existing settlement;
- The layout of the site should seek to work with and reflect the site topography;
- There is an opportunity to create a central route which capitalizes new landscape fabric to aid the 'sense of place' of the development;
- Existing dwellings to the northern edge (situated off Dunsley Lane) should be 'backed' with new development, but length of garden and height of building should be carefully considered to try to mitigate effects on residential views and amenity;
- Development should be stepped back from the southern boundary and carefully considered to try to mitigate effects on residential views and amenity on neighbouring dwellings; and
- Architectural proposals should seek to reflect the vernacular of the older parts of the village.

7. Conclusions

7.1 The site to the east of Dunsley Drive, Kinver lies immediately adjacent to the existing settlement and has the potential to appear as a well-integrated, contiguous area of the village if appropriately designed. In elevated views from Holy Austin Rock, to the south of the village, the site is not seen. However, might the proposal be discernible from elevated landform at Kinver Edge, the site appears to be on the existing edge of the settlement, but

situated adjoining existing development and not situated on a prominent ridgeline, where development may appear detached from the village and incongruous.

7.2 Furthermore, as the site is sandwiched between existing development on the eastern edge of Dunsley Drive and inside, and below topographically, the extent of ribbon development along Dunsley Road, the development of the site would avoid any perception of 'sprawl' into the countryside beyond.

7.3 The following main matters have been identified within this Position Paper and are summarised below.

Relevant Designations:

- The site is situated within West Midlands Green Belt however, the site does not lie within, or adjoin any Nationally or Locally designated landscape; and
- Whilst there are a number of PRoW within the wider open countryside and adjoining the southern site edge, there is no public access into the site.

Visual Amenity:

- Visually, the site is enclosed through the combination of landform and mature landscape features in the open countryside surrounding the site. Additionally, the adjoining residential development sandwich the site within built form, enclosing the site and limit direct views from the adjoining village settlement;
- Views of the site are limited to the immediate geographical area to the western and north-western edge of the site, with no long-distance views identified. In addition, there are limited views available from the Public Footpath Kinver 18 and 94 to the south-west of the site, which pass through open countryside. Furthermore, it is unlikely the development of the site is likely to be seen from Public Footpath 22a and 22b, which pass through a well tree'd valley landscape; and
- The site is overlooked by a number of residential dwellings, see **Section 2** above. These receptors are perhaps the most sensitive receptors, though private views are not protected in policy terms. Residential amenity is protected however and, as such, the scheme design should be sensitive to these receptors, buffering neighbouring properties with open space or rear gardens and seeking to provide an attractive, high quality development in architectural terms.

Landscape Character:

- Heathy, wooded ridgeline, mature hedgerow oak trees within extensive hedgerows are characteristic of the landscape, but these features are not present within the site, or



its immediate setting. Therefore, there is an opportunity to strengthen local landscape character through new landscape planting, including new hedgerow and tree planting; and

- The site makes only a very limited contribution to the key characteristics of the landscape character area of the Sandstone Estatelands, with typical landscape features appearing more intact in the wider open countryside surrounding Kinver village.

7.4 Overall, this Position Paper has identified no issues which suggest the site is undevelopable in landscape and visual terms subject to an appropriate design coming forward.

7.5 The over-arching landscape strategy should look to integrate the site with Kinver, incorporating the existing trees and hedgerows and facilitating green infrastructure through the site, breaking up the mass of the development and offering new recreation links.

7.6 In conclusion, the site to the east of Dunsley Drive, Kinver, lies immediately adjacent to the existing settlement and has the potential to appear as a well-integrated, contiguous area of the village if appropriately designed.

7.7 Subject to these considerations, further technical studies and development of a well-designed masterplan and landscape strategy, there is no in-principle reason to prevent development of the site in landscape and visual terms. In conclusion, therefore, this preliminary appraisal has identified no issues which suggest the site is undevelopable in landscape and visual terms subject to an appropriate design coming forward.

Appendix 3: EDP Hyde Lane Landscape Position Paper

Land at Dunsley Drive, Kinver, Staffordshire

Heritage Appraisal

edp4711_r006

1. Introduction

1.1 This Heritage Appraisal provides a preliminary appraisal of the Dunsley Drive site at Kinver, Staffordshire, the aim of which is to inform the early consideration of its design and promotion in the planning process. This Heritage Appraisal has been informed by a desk-based review of data relating to heritage assets and is supported by a visit to the site and its immediate environs. This Heritage Appraisal should be read in conjunction with the preliminary Landscape and Visual Appraisal (LVA), which sets out the character of the site and establishes, in basic terms, its visual envelope.

2. Site Description

2.1 The site is to the east of the village of Kinver, South Staffordshire. It is approximately 1.16 hectares (ha) and comprises agricultural land which gently slopes from east to west. It is bounded to the north, south and west by existing residential development and open agricultural land to the east. The site's western boundary is formed of an existing hedgerow interspersed with trees, beyond which lies Dunsley Drive, from which the site will gain its access. Northern and southern boundaries are formed of existing residential properties and their associated curtilage. The site's eastern boundary is formed of a post and wire fence with some boundary trees and hedgerow planting.

2.2 The LVA establishes that the topography of the Local landscape results in a relatively limited visual envelope. To the east, intermittent views of the site are available from the immediately adjacent fields, but not further than the ridgeline c.200m distant. To the west, north and south, the existing residential development on the Dunsley Drive screens the site from any short or mid-distance views (i.e. from Dunsley Road or beyond). The tree belts to the south/south-east of the site are an additional screening element within the Local landscape, particularly in terms of blocking views to/from the Kinver Conservation Area (CA) and in the direction of the canal.

2.3 There are no views of the historic core of the settlement of Kinver, but there is intervisibility with Kinver Edge, c.1km to the south-west. As described below, Kinver Edge and the heritage sites located there (notably the church, Rock Houses and Iron Age Hillfort) have panoramic views to the north and north-east, over the village of Kinver and the landscape beyond.

3. Legislation and Policy Review

National Planning Policy Framework

- 3.1 The National Planning Policy Framework (NPPF) sets out the government's approach to the Conservation and Management of the historic environment, including both listed buildings and CAs, through the planning process (Section 16). The opening paragraph 184, recognises that heritage assets are an irreplaceable resource and should be conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of existing and future generations. Subsequent paragraphs stress the desirability of preserving heritage assets and applies a test of 'substantial' or 'less than substantial' harm for those assets which are affected by development.

Legislation

- 3.2 The relevant legislation concerning the treatment of scheduled monuments is the *Ancient Monuments and Archaeological Areas Act 1979*. This act details the designation, care, and management of scheduled monuments, as well as detailing the procedures needed to obtain permission for works which would directly impact upon their preservation. The act does not confer any statutory protection on the setting of scheduled monuments although this is considered as a policy matter in Paragraph 193 of the NPPF.
- 3.3 Sections 66(1) and 72(1) of the (*Planning Listed Buildings and Conservation Areas Act 1990*) set out the duties of Local Planning Authorities (LPAs) in respect of the treatment of listed buildings and CAs through the planning process. Section 66(1) of the 1990 Act sets out the statutory duty of the decision-maker, where proposed development would affect a listed building or its setting. In respect of CAs, Section 72(1) of the 1990 Act states that special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area.

South Staffordshire Local Plan

- 3.4 The South Staffordshire Local Plan contains a range of policies and land allocations and is made up of the Core Strategy and Site Allocations Document (SAD). These replace the 1996 Local Plan and together deliver the Local Planning Strategy for South Staffordshire. The Core Strategy was adopted in 2012 and the SAD in September 2018.
- 3.5 Under Environmental Quality, Strategic Objective 5 is as follows: "*To protect, conserve and enhance the historic environment and heritage assets and ensure that the character and appearance of the District's Conservation Areas is sustained and enhanced through management plans and high-quality design.*"
- 3.6 Within Core Policy 2 (Protecting and Enhancing the Natural and Historic Environment), the salient policy is EQ3: "*Conservation, Preservation and Protection of Heritage Assets.*" This

sets out a number of means by which the preservation of South Staffordshire's historic environment will be achieved. Those relevant to this Appraisal are as follow:

- c. *"The Council will ensure that development which affects a heritage asset or its setting will be informed by a proportionate assessment of the significance of the asset, including its setting, which is likely to be affected by the proposals. These will be judged by considering the extent to which an asset's archaeological, architectural, historic or artistic interest will be harmed, including its conservation, in the interest of present and future generations.*
- d. *In the case of development in a conservation area, proposals will be considered against any management plan and appraisal adopted for that area.*

Development proposals should be consistent with the NPPF, the adopted Village Design Guide Supplementary Planning Document (or subsequent revisions) and other local planning policies."

Kinver Conservation Area Management Plan (2011)

3.7 Most of the Management Plan concerns the boundary and buffer of the CA, and development within this defined zone. As such, these do not apply to the proposed development of the site. However, section 3.2 concerns the protection of the broader landscape setting and views and are therefore relevant to this Appraisal. The management plan states that:

3.2.1 *"The landscape setting of the Kinver Conservation Area is very important. It has been established that new development on the edges of the conservation area affects views into and out of the conservation area, and can adversely affect the area's special architectural or historic interest ...*

3.2.3 *Views across the Kinver Conservation Area are very important given the dramatic topography and river- and canal-side location. The unique qualities of the conservation area rely on the continued protection of these views.*

3.2.5 *Action: The Council will also seek to ensure that these views remain protected from inappropriate forms of development and that due regard is paid to them in the formulation of public realm works or enhancement schemes."*

4. Heritage Baseline

4.1 The site does not contain any 'designated heritage assets' (as defined in Annex 2 of the NPPF), nor is it located (either wholly or in part) within the boundary of such an asset. As such, there are no 'in principle' heritage constraints to the delivery of the site for development, or in respect of its capacity to accommodate development.

- 4.2 In respect of non-designated sites, an informal examination of data from the Staffordshire Historic Environment Record (HER) does not indicate any known archaeological features or finds within the site. (As a caveat, this search was undertaken via the Heritage Gateway portal, as opposed to a formal request to the HER. Consequently, the data obtained may be neither up-to-date nor comprehensive. It is also the case that the site has never been subject to archaeological investigation, so this apparently 'blank' area in the HER dataset may simply reflect an absence of evidence).
- 4.3 Abutting the site to the north, the HER records the former Dunsley Farm (MST17982). This was a farmstead on a courtyard arrangement: the farmhouse has been demolished but other 18th and 19th century buildings still remain, converted to dwellings. The farm is suspected to have earlier origins. A related HER entry for an area immediately to the east, relates to Dunsley Manor Farm (MST 17981). To the south of the site is Dunsley House, an un-listed historic house which dates to the early 19th century.
- 4.4 Turning to the wider locality of the site, the baseline data indicates several assets that require consideration by this Appraisal. These are discussed in turn below, and are as follow:
- Enville Registered Park and Garden (Grade II*) and its component listed buildings;
 - Church of St Peter, Kinver (Grade I listed building);
 - Kinver CA;
 - Staffordshire and Worcestershire Canal CA;
 - Kinver Camp Iron Age Hillfort (scheduled monument); and
 - Holy Austin Rock Houses, Kinver Edge (non-designated asset).

Enville Registered Park and Garden (NHLE Ref. 1000114)

- 4.5 The manor of Enville was held from the early 16th century by a minor branch of the Grey family, which survived the aftermath of Lady Jane Grey's brief assumption of English rule in 1553. A new house was built on the estate in the mid-16th century and forms the core of the present Grade II listed Enville Hall (NHLE Ref. 1230636). The house was enlarged by stages in the late 17th and early 18th centuries, and again in the 1770s. Various alterations were also made in the early 20th century. The park itself was a creation of the mid-18th century, completed by the 1770s, extending to the south of the Hall over 750 acres with a variety of buildings, lakes, cascades and bridges. It declined in the early 19th century before new gardens were developed to the north of the Hall in the Victorian period. The early 20th century once again saw decline, before restoration in recent decades.

4.6 The site and the registered park are separated by 2.5km. Immediately to the north-west of the site, the existing housing on Dunsley Road/Dunsley Drive precludes views towards the park, beyond which is a landscape of farmland with mature hedges, woodland blocks and further areas of residential development. There is no intervisibility between the site and the park, nor any historical connection between the land occupied by the park and that of the site. The site therefore does not contribute to the setting of the park, or its character, key views and visitor experience. The site's development would therefore not affect either the significance of the park or the significance of the listed buildings it contains.

Church of St Peter (NHLE Ref. 1230950)

4.7 The Church of St Peter, Kinver, is a Grade I listed building. The main body of the structure, including the tower, is mainly early- to mid-14th century in date, incorporating some 12th century fragments of an earlier church and with substantial mid-15th century extensions. It was restored in 1884 - 85. The church lies at the summit of a steep sided ridge, above and to the south of the historic core of the village, these attributes providing its setting and historic context.

4.8 The church is separated from the site by c.1.3km. Immediately below the church is the historic core of Kinver, focused on the curvilinear course of High Street running into Church Hill. Modern housing developments along Dunsley Road, Public Open Space (POS), pastoral farmland and woodland occupy the remainder of the intervening ground.

4.9 Looking outwards from the church, the site is a distant element in the view from the north-eastern edge of the churchyard. Looking through the mature woodland that fringes the churchyard, the site is partially visible, albeit partially obscured by existing houses on Dunsley Drive and by the trees near the site's southern margins. In the opposite direction, outwards from the site, the church tower is a prominent feature on the skyline.

4.10 The site does not make a positive contribution to the church's setting. Arguably the outward views *from* the church are less significant than views of and *including* the church. It is a prominent structure, clearly intended to be seen from a distance, the present gap in the woodland on Kinver Edge emphasises this situation.

4.11 The extent to which outward views from the churchyard are relevant to the building's *historic* setting (as opposed to a more general visitor amenity) is more questionable. The windows on the north side of the church are narrow (both in the original structure and the modern extension) and in any case, church windows are intended to allow light into the structure, as opposed to facilitating outward views. The churchyard clearly affords extensive north and eastward views of Kinver and its surroundings and provides the landscape context, but the extent to which these views contribute to the historic setting of the church is questionable. The sightline to the church of St Mary at Enville (NHLE 1230632) is perhaps more significant.

4.12 These abstract points aside, the practical reality is that the site merely forms part of the backdrop of both the church and the village's historic core. In terms of changes to the existing view, if developed for housing, the site will appear as a very minor extension of the 20th century housing estates that are already present on either side of Dunsley Road around this location. The extent of visual change will be minimal, and the significance of the church unaltered.

Kinver Conservation Area

4.13 The Kinver Conservation Area Management Plan (adopted 11 November 2011) sets out a mid-to long-term strategy in the form of a series of recommendations and guidelines. The extent and composition of the CA is set out in paragraph 2.1.1 of the document, as follows:

“The Conservation Area covers the historic High Street, with its shops, banks and other commercial premises; the green fields and woods which lie up steeply rising hills to the south west, forming Kinver Edge; Church Hill and the historic St. Peter’s Church, visible on the crown of the hill from many vantage points in the conservation area; and, lastly, the sinuous curves of the River Stour and the adjoining Staffordshire and Worcestershire Canal, between which lie open fields and areas of woodland.”

4.14 Paragraph 3.1.2 subsequently observes that:

“Despite mainly late 20th century housing, which lies in closely defined areas to the west, north and east of the conservation area, Kinver retains a village quality, which is reinforced by the rural setting and waterside location.”

4.15 Paragraph 3.2.1 further adds that:

“Kinver is notable for the high sandstone ridge which forms the southern and western part of the conservation area, and which lies about 50 metres above the High Street. This forms a backdrop in views from the High Street and beyond, punctuated by the outline of St. Peter’s Church on the skyline.”

4.16 The CA presents the most significant heritage-based constraint to growth around the village because of its location, extent, integrity and coherence, and setting. The gently falling, open agricultural landscape to the south of Church Hill makes a strong positive contribution to the special interest of the CA, illustrating and emphasising its rural origins and context, as well as representing a striking contrast with the prominent ridgeline sheltering the historic core of Kinver on the north side. This represents a clear argument against settlement growth in this direction. The mosaic of woodland and farmland west of Kinver and the rolling agricultural fields to the east, similarly serve to restrict growth in these directions because these aspects of the landscape form key aspects of the setting of the CA. They contribute positively to its special interest by maintaining the village's character as a historic rural settlement and

connecting it to its wider agricultural hinterland, despite its substantial growth to the north during the 20th century.

- 4.17 The site abuts the north-east corner of the CA. At the boundary is Dunsley House and its garden (early 19th century, noted above as HER record MST 17983). Beyond the house to the south and west, the CA is characterised by woodland, particularly along the corridors of the Staffordshire and Worcestershire Canal and the River Stour, and POS. The closest housing estate is that on the lane named Kernose Mill, 500m south-west of the site boundary.
- 4.18 There is little intervisibility between the site and the adjacent parts of the CA. Dunsley House and the properties at the southern end of Dunsley Drive (West Point House, Elsfield) block much of the view, while the woodland within 100m of the site boundary precludes views further into, or outwards from, the CA. The 'positive views' in this locality identified by the Conservation Management Plan's Townscape Appraisal map, including that northwards from the canal, will not be altered. These comments are reiterated below in respect of the Staffordshire and Worcestershire Canal CA.
- 4.19 Where the more elevated parts of the CA are concerned (i.e. Kinver Edge) the same comments apply as for the church – namely that the site is visible as a small open area immediately beyond the modern urban fringe. It contributes to the setting of the CA to the same extent as other agricultural land on its margins, but its development for housing will bring minimal change.
- 4.20 Given the importance afforded to the 'green' and open spaces within the CA set out by the Management Plan, it is obvious that future residential growth should be focused away from this designated heritage asset, in order to avoid or minimise harm to its character and appearance. As set out above, in physical terms the proposed development of the site will achieve this aim, avoiding land-take within the CA boundary. Equally, development here will not significantly affect the visual setting of the CA, bringing only negligible changes in views from relatively distant viewpoints on Kinver Edge.

Staffordshire and Worcestershire Canal Conservation Area

- 4.21 The Staffordshire and Worcestershire Canal passes to the east of Kinver. Where it falls within the Kinver CA, it is not separately designated. To the south and north-east (i.e. beyond the Kinver CA boundary), the canal is afforded its own separate CA designation.
- 4.22 To the south of the site, the canal comes within 190m of the site, before turning to follow a sinuous course west. It then turns north and north-east, such that it wraps around the north of the site, at a closest distance of c.300m.
- 4.23 To the north, the site and the canal CA are separated by the existing housing estates on the north side of Dunsley Road. There would be no intervisibility between the site and CA in this direction, while intervisibility with the canal further to the north-east are also precluded by housing and the natural landform. On the south/south-west side, the comprehensive

screening effect of Dunsley House, the modern housing on Dunsley Drive and of woodland on the canal fringe is as described above for the Kinver CA.

- 4.24 In physical terms, therefore, the proposed development will have no effect on the special interest of the CA for the canal. In setting terms, it will bring no change to the canal's visual environment. It will, however, contribute in a small way to the general cumulative effect of modern development, in which the canal's originally rural course to the east of Kinver, well-separated from the town, now contains more suburban elements. Despite this, no significant impact on the CAs character and appearance is predicted.

Kinver Camp Iron Age Hillfort (NHLE Ref. 1015432)

- 4.25 This scheduled monument is situated at the north-west corner and highest point of the Kinver escarpment, on the south-west outskirts of Kinver village. It includes the earthwork and buried remains of a univallate Iron Age fort. The Hillfort's earthworks are sub-rectangular in plan with external dimensions of c.210m by 300m, enclosing an area of approximately 3.75ha.
- 4.26 In respect of its setting, the Hillfort's position on the Kinver escarpment is critical to an understanding of its function, intended both as a defensive site and also one which dominated the surrounding landscape. The earthworks have intrinsic visual interest, whilst from Kinver and its environs the site of the fort is a prominent landmark.
- 4.27 The site lies 2.5km east of the scheduled monument. The summit location of the Hillfort must once have afforded it broad landscape views in all directions, but the mature woodland on its west and north sides now mean that its primary vistas are now to the south and east, only becoming partially open in other directions during winter. The site does not make a positive contribution to the monument's setting. Its development for housing will bring negligible visual change, if any, and will not affect the setting of, or views from, the monument.

Kinver Edge Rock Houses

- 4.28 This non-designated asset comprises a series of six houses cut into the cliffs at Holy Austin Rock (Staffordshire Historic Environment Record Ref. MST 1158). These are of possible 17th century date, although the name may indicate that the dwellings were occupied as a hermitage prior to the Reformation. The houses were inhabited as domestic dwellings until the mid-20th century. The core element of their setting is, self-evidently, Kinver Edge, of which these houses are an integral part. The village below provides their broader context.
- 4.29 The Rock Houses and the site are separated by 2.5km. As with the Hillfort, the site is visible but is an inconsequential element in the view and does not make a positive contribution to the setting of this asset. Views of and including the Rock Houses are southward-looking, obtained from Compton Road and the adjacent woodland, and do not include the site. If developed for housing, the site will appear as a very minor extension of the 20th century

housing estates that extend in this direction. The significance of these assets will be unaffected.

South Staffordshire Historic Environment Assessment

- 4.30 The Historic Environment Assessment (HEA) divides South Staffordshire into 13 project areas and aims to establish the potential for the historic environment of each to absorb new development and housing in particular. This has been carried out by dividing each of the project areas into 'Historic Environment Character Zones' (HECZs) and assessing the significance of the heritage assets of each zone.
- 4.31 The site falls within two Kinver (KV) project areas: the greater part within character area KVHECZ 2 – East of Kinver and Dunsley, with the small fenced enclosure in the north of the site within KVHECZ 3 – Dunsley (HEA, Appendix 4).
- 4.32 KVHECZ 2 (including the site) is almost entirely characterised by a landscape created by piecemeal enclosure. This is suggested to have originated in the medieval period as part of an open-field system, subsequently divided into fields that pre-date the formal enclosure process of the 18th to mid-19th century. There are no historic boundaries within the site, which comprises a single coherent land parcel. A cursory inspection of modern aerial photographs does not indicate any relict elements of the open field system, but this does not preclude these existing, either as faint earthwork elements or as below-ground archaeology.
- 4.33 The relevant part of the HEA recommendations for KVHECZ 2 are therefore as follow:
- “Should land within the zone be allocated ... any proposed development should seek to complement the low settlement density and the conservation and fabric and legibility of the historic landscape character ... Any such development should also be designed to enhance the local vernacular in terms of its scale and architectural form.”*
- 4.34 KVHECZ 3 is dominated by the built environment, which essentially comprises the modern extent of Dunsley. The small parcel of open ground within the site that is included in this character area therefore, appears slightly anomalous. The recommendations made by the HEA for KVHECZ 3 largely apply to the preservation of the small number of historic buildings and their settings. These do not apply to the site.

5. Conclusion

- 5.1 As described in the baseline section of this Appraisal, development of the site would not physically affect any scheduled monument or listed building, nor would any scheduled monument or listed building's setting be affected.



- 5.2 In terms of CAs, the site is outside the boundaries of those designated for both Kinver and the Staffordshire and Worcestershire Canal. The actions within the Kinver Management Plan which solely concern development within the CA therefore do not apply. On the other hand, those which concern protection of the broad landscape views that include the CA are relevant. However, as discussed above, the site is in an appropriate location in respect of the CA, while its placement and design are not in conflict with the actions set out in section 3.2 of its Management Plan. The same comments apply to the Canal CA.
- 5.3 No known, non-designated heritage asset would be physically affected by development of the site, nor would the setting of any be likely to be significantly affected.
- 5.4 In the light of the above, the development of the site would not result in any heritage asset being subject to 'substantial harm' as defined by NPPF, while the development as a whole would not be in conflict with relevant heritage legislation or policy.
- 5.5 As such, there is no reason why, in terms of effects on the historic environment, the site should not be promoted for future development.

Appendix 4: EDP Dunsley Drive Heritage Appraisal

Land at Dunsley Drive, Kinver, Staffordshire

Heritage Appraisal

edp4711_r006

1. Introduction

1.1 This Heritage Appraisal provides a preliminary appraisal of the Dunsley Drive site at Kinver, Staffordshire, the aim of which is to inform the early consideration of its design and promotion in the planning process. This Heritage Appraisal has been informed by a desk-based review of data relating to heritage assets and is supported by a visit to the site and its immediate environs. This Heritage Appraisal should be read in conjunction with the preliminary Landscape and Visual Appraisal (LVA), which sets out the character of the site and establishes, in basic terms, its visual envelope.

2. Site Description

2.1 The site is to the east of the village of Kinver, South Staffordshire. It is approximately 1.16 hectares (ha) and comprises agricultural land which gently slopes from east to west. It is bounded to the north, south and west by existing residential development and open agricultural land to the east. The site's western boundary is formed of an existing hedgerow interspersed with trees, beyond which lies Dunsley Drive, from which the site will gain its access. Northern and southern boundaries are formed of existing residential properties and their associated curtilage. The site's eastern boundary is formed of a post and wire fence with some boundary trees and hedgerow planting.

2.2 The LVA establishes that the topography of the Local landscape results in a relatively limited visual envelope. To the east, intermittent views of the site are available from the immediately adjacent fields, but not further than the ridgeline c.200m distant. To the west, north and south, the existing residential development on the Dunsley Drive screens the site from any short or mid-distance views (i.e. from Dunsley Road or beyond). The tree belts to the south/south-east of the site are an additional screening element within the Local landscape, particularly in terms of blocking views to/from the Kinver Conservation Area (CA) and in the direction of the canal.

2.3 There are no views of the historic core of the settlement of Kinver, but there is intervisibility with Kinver Edge, c.1km to the south-west. As described below, Kinver Edge and the heritage sites located there (notably the church, Rock Houses and Iron Age Hillfort) have panoramic views to the north and north-east, over the village of Kinver and the landscape beyond.

3. Legislation and Policy Review

National Planning Policy Framework

- 3.1 The National Planning Policy Framework (NPPF) sets out the government's approach to the Conservation and Management of the historic environment, including both listed buildings and CAs, through the planning process (Section 16). The opening paragraph 184, recognises that heritage assets are an irreplaceable resource and should be conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of existing and future generations. Subsequent paragraphs stress the desirability of preserving heritage assets and applies a test of 'substantial' or 'less than substantial' harm for those assets which are affected by development.

Legislation

- 3.2 The relevant legislation concerning the treatment of scheduled monuments is the *Ancient Monuments and Archaeological Areas Act 1979*. This act details the designation, care, and management of scheduled monuments, as well as detailing the procedures needed to obtain permission for works which would directly impact upon their preservation. The act does not confer any statutory protection on the setting of scheduled monuments although this is considered as a policy matter in Paragraph 193 of the NPPF.
- 3.3 Sections 66(1) and 72(1) of the (*Planning Listed Buildings and Conservation Areas Act 1990*) set out the duties of Local Planning Authorities (LPAs) in respect of the treatment of listed buildings and CAs through the planning process. Section 66(1) of the 1990 Act sets out the statutory duty of the decision-maker, where proposed development would affect a listed building or its setting. In respect of CAs, Section 72(1) of the 1990 Act states that special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area.

South Staffordshire Local Plan

- 3.4 The South Staffordshire Local Plan contains a range of policies and land allocations and is made up of the Core Strategy and Site Allocations Document (SAD). These replace the 1996 Local Plan and together deliver the Local Planning Strategy for South Staffordshire. The Core Strategy was adopted in 2012 and the SAD in September 2018.
- 3.5 Under Environmental Quality, Strategic Objective 5 is as follows: "*To protect, conserve and enhance the historic environment and heritage assets and ensure that the character and appearance of the District's Conservation Areas is sustained and enhanced through management plans and high-quality design.*"
- 3.6 Within Core Policy 2 (Protecting and Enhancing the Natural and Historic Environment), the salient policy is EQ3: "*Conservation, Preservation and Protection of Heritage Assets.*" This

sets out a number of means by which the preservation of South Staffordshire's historic environment will be achieved. Those relevant to this Appraisal are as follow:

- c. *"The Council will ensure that development which affects a heritage asset or its setting will be informed by a proportionate assessment of the significance of the asset, including its setting, which is likely to be affected by the proposals. These will be judged by considering the extent to which an asset's archaeological, architectural, historic or artistic interest will be harmed, including its conservation, in the interest of present and future generations.*
- d. *In the case of development in a conservation area, proposals will be considered against any management plan and appraisal adopted for that area.*

Development proposals should be consistent with the NPPF, the adopted Village Design Guide Supplementary Planning Document (or subsequent revisions) and other local planning policies."

Kinver Conservation Area Management Plan (2011)

3.7 Most of the Management Plan concerns the boundary and buffer of the CA, and development within this defined zone. As such, these do not apply to the proposed development of the site. However, section 3.2 concerns the protection of the broader landscape setting and views and are therefore relevant to this Appraisal. The management plan states that:

3.2.1 *"The landscape setting of the Kinver Conservation Area is very important. It has been established that new development on the edges of the conservation area affects views into and out of the conservation area, and can adversely affect the area's special architectural or historic interest ...*

3.2.3 *Views across the Kinver Conservation Area are very important given the dramatic topography and river- and canal-side location. The unique qualities of the conservation area rely on the continued protection of these views.*

3.2.5 *Action: The Council will also seek to ensure that these views remain protected from inappropriate forms of development and that due regard is paid to them in the formulation of public realm works or enhancement schemes."*

4. Heritage Baseline

4.1 The site does not contain any 'designated heritage assets' (as defined in Annex 2 of the NPPF), nor is it located (either wholly or in part) within the boundary of such an asset. As such, there are no 'in principle' heritage constraints to the delivery of the site for development, or in respect of its capacity to accommodate development.

- 4.2 In respect of non-designated sites, an informal examination of data from the Staffordshire Historic Environment Record (HER) does not indicate any known archaeological features or finds within the site. (As a caveat, this search was undertaken via the Heritage Gateway portal, as opposed to a formal request to the HER. Consequently, the data obtained may be neither up-to-date nor comprehensive. It is also the case that the site has never been subject to archaeological investigation, so this apparently 'blank' area in the HER dataset may simply reflect an absence of evidence).
- 4.3 Abutting the site to the north, the HER records the former Dunsley Farm (MST17982). This was a farmstead on a courtyard arrangement: the farmhouse has been demolished but other 18th and 19th century buildings still remain, converted to dwellings. The farm is suspected to have earlier origins. A related HER entry for an area immediately to the east, relates to Dunsley Manor Farm (MST 17981). To the south of the site is Dunsley House, an un-listed historic house which dates to the early 19th century.
- 4.4 Turning to the wider locality of the site, the baseline data indicates several assets that require consideration by this Appraisal. These are discussed in turn below, and are as follow:
- Enville Registered Park and Garden (Grade II*) and its component listed buildings;
 - Church of St Peter, Kinver (Grade I listed building);
 - Kinver CA;
 - Staffordshire and Worcestershire Canal CA;
 - Kinver Camp Iron Age Hillfort (scheduled monument); and
 - Holy Austin Rock Houses, Kinver Edge (non-designated asset).

Enville Registered Park and Garden (NHLE Ref. 1000114)

- 4.5 The manor of Enville was held from the early 16th century by a minor branch of the Grey family, which survived the aftermath of Lady Jane Grey's brief assumption of English rule in 1553. A new house was built on the estate in the mid-16th century and forms the core of the present Grade II listed Enville Hall (NHLE Ref. 1230636). The house was enlarged by stages in the late 17th and early 18th centuries, and again in the 1770s. Various alterations were also made in the early 20th century. The park itself was a creation of the mid-18th century, completed by the 1770s, extending to the south of the Hall over 750 acres with a variety of buildings, lakes, cascades and bridges. It declined in the early 19th century before new gardens were developed to the north of the Hall in the Victorian period. The early 20th century once again saw decline, before restoration in recent decades.

4.6 The site and the registered park are separated by 2.5km. Immediately to the north-west of the site, the existing housing on Dunsley Road/Dunsley Drive precludes views towards the park, beyond which is a landscape of farmland with mature hedges, woodland blocks and further areas of residential development. There is no intervisibility between the site and the park, nor any historical connection between the land occupied by the park and that of the site. The site therefore does not contribute to the setting of the park, or its character, key views and visitor experience. The site's development would therefore not affect either the significance of the park or the significance of the listed buildings it contains.

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4.7 The Church of St Peter, Kinver, is a Grade I listed building. The main body of the structure, including the tower, is mainly early- to mid-14th century in date, incorporating some 12th century fragments of an earlier church and with substantial mid-15th century extensions. It was restored in 1884 - 85. The church lies at the summit of a steep sided ridge, above and to the south of the historic core of the village, these attributes providing its setting and historic context.

4.8 The church is separated from the site by c.1.3km. Immediately below the church is the historic core of Kinver, focused on the curvilinear course of High Street running into Church Hill. Modern housing developments along Dunsley Road, Public Open Space (POS), pastoral farmland and woodland occupy the remainder of the intervening ground.

4.9 Looking outwards from the church, the site is a distant element in the view from the north-eastern edge of the churchyard. Looking through the mature woodland that fringes the churchyard, the site is partially visible, albeit partially obscured by existing houses on Dunsley Drive and by the trees near the site's southern margins. In the opposite direction, outwards from the site, the church tower is a prominent feature on the skyline.

4.10 The site does not make a positive contribution to the church's setting. Arguably the outward views *from* the church are less significant than views of and *including* the church. It is a prominent structure, clearly intended to be seen from a distance, the present gap in the woodland on Kinver Edge emphasises this situation.

4.11 The extent to which outward views from the churchyard are relevant to the building's *historic* setting (as opposed to a more general visitor amenity) is more questionable. The windows on the north side of the church are narrow (both in the original structure and the modern extension) and in any case, church windows are intended to allow light into the structure, as opposed to facilitating outward views. The churchyard clearly affords extensive north and eastward views of Kinver and its surroundings and provides the landscape context, but the extent to which these views contribute to the historic setting of the church is questionable. The sightline to the church of St Mary at Enville (NHLE 1230632) is perhaps more significant.

4.12 These abstract points aside, the practical reality is that the site merely forms part of the backdrop of both the church and the village's historic core. In terms of changes to the existing view, if developed for housing, the site will appear as a very minor extension of the 20th century housing estates that are already present on either side of Dunsley Road around this location. The extent of visual change will be minimal, and the significance of the church unaltered.

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connecting it to its wider agricultural hinterland, despite its substantial growth to the north during the 20th century.

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- 4.20 Given the importance afforded to the 'green' and open spaces within the CA set out by the Management Plan, it is obvious that future residential growth should be focused away from this designated heritage asset, in order to avoid or minimise harm to its character and appearance. As set out above, in physical terms the proposed development of the site will achieve this aim, avoiding land-take within the CA boundary. Equally, development here will not significantly affect the visual setting of the CA, bringing only negligible changes in views from relatively distant viewpoints on Kinver Edge.

Staffordshire and Worcestershire Canal Conservation Area

- 4.21 The Staffordshire and Worcestershire Canal passes to the east of Kinver. Where it falls within the Kinver CA, it is not separately designated. To the south and north-east (i.e. beyond the Kinver CA boundary), the canal is afforded its own separate CA designation.
- 4.22 To the south of the site, the canal comes within 190m of the site, before turning to follow a sinuous course west. It then turns north and north-east, such that it wraps around the north of the site, at a closest distance of c.300m.
- 4.23 To the north, the site and the canal CA are separated by the existing housing estates on the north side of Dunsley Road. There would be no intervisibility between the site and CA in this direction, while intervisibility with the canal further to the north-east are also precluded by housing and the natural landform. On the south/south-west side, the comprehensive

screening effect of Dunsley House, the modern housing on Dunsley Drive and of woodland on the canal fringe is as described above for the Kinver CA.

- 4.24 In physical terms, therefore, the proposed development will have no effect on the special interest of the CA for the canal. In setting terms, it will bring no change to the canal's visual environment. It will, however, contribute in a small way to the general cumulative effect of modern development, in which the canal's originally rural course to the east of Kinver, well-separated from the town, now contains more suburban elements. Despite this, no significant impact on the CAs character and appearance is predicted.

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- 4.25 This scheduled monument is situated at the north-west corner and highest point of the Kinver escarpment, on the south-west outskirts of Kinver village. It includes the earthwork and buried remains of a univallate Iron Age fort. The Hillfort's earthworks are sub-rectangular in plan with external dimensions of c.210m by 300m, enclosing an area of approximately 3.75ha.
- 4.26 In respect of its setting, the Hillfort's position on the Kinver escarpment is critical to an understanding of its function, intended both as a defensive site and also one which dominated the surrounding landscape. The earthworks have intrinsic visual interest, whilst from Kinver and its environs the site of the fort is a prominent landmark.
- 4.27 The site lies 2.5km east of the scheduled monument. The summit location of the Hillfort must once have afforded it broad landscape views in all directions, but the mature woodland on its west and north sides now mean that its primary vistas are now to the south and east, only becoming partially open in other directions during winter. The site does not make a positive contribution to the monument's setting. Its development for housing will bring negligible visual change, if any, and will not affect the setting of, or views from, the monument.

Kinver Edge Rock Houses

- 4.28 This non-designated asset comprises a series of six houses cut into the cliffs at Holy Austin Rock (Staffordshire Historic Environment Record Ref. MST 1158). These are of possible 17th century date, although the name may indicate that the dwellings were occupied as a hermitage prior to the Reformation. The houses were inhabited as domestic dwellings until the mid-20th century. The core element of their setting is, self-evidently, Kinver Edge, of which these houses are an integral part. The village below provides their broader context.
- 4.29 The Rock Houses and the site are separated by 2.5km. As with the Hillfort, the site is visible but is an inconsequential element in the view and does not make a positive contribution to the setting of this asset. Views of and including the Rock Houses are southward-looking, obtained from Compton Road and the adjacent woodland, and do not include the site. If developed for housing, the site will appear as a very minor extension of the 20th century

housing estates that extend in this direction. The significance of these assets will be unaffected.

South Staffordshire Historic Environment Assessment

- 4.30 The Historic Environment Assessment (HEA) divides South Staffordshire into 13 project areas and aims to establish the potential for the historic environment of each to absorb new development and housing in particular. This has been carried out by dividing each of the project areas into 'Historic Environment Character Zones' (HECZs) and assessing the significance of the heritage assets of each zone.
- 4.31 The site falls within two Kinver (KV) project areas: the greater part within character area KVHECZ 2 – East of Kinver and Dunsley, with the small fenced enclosure in the north of the site within KVHECZ 3 – Dunsley (HEA, Appendix 4).
- 4.32 KVHECZ 2 (including the site) is almost entirely characterised by a landscape created by piecemeal enclosure. This is suggested to have originated in the medieval period as part of an open-field system, subsequently divided into fields that pre-date the formal enclosure process of the 18th to mid-19th century. There are no historic boundaries within the site, which comprises a single coherent land parcel. A cursory inspection of modern aerial photographs does not indicate any relict elements of the open field system, but this does not preclude these existing, either as faint earthwork elements or as below-ground archaeology.
- 4.33 The relevant part of the HEA recommendations for KVHECZ 2 are therefore as follow:
- “Should land within the zone be allocated ... any proposed development should seek to complement the low settlement density and the conservation and fabric and legibility of the historic landscape character ... Any such development should also be designed to enhance the local vernacular in terms of its scale and architectural form.”*
- 4.34 KVHECZ 3 is dominated by the built environment, which essentially comprises the modern extent of Dunsley. The small parcel of open ground within the site that is included in this character area therefore, appears slightly anomalous. The recommendations made by the HEA for KVHECZ 3 largely apply to the preservation of the small number of historic buildings and their settings. These do not apply to the site.

5. Conclusion

- 5.1 As described in the baseline section of this Appraisal, development of the site would not physically affect any scheduled monument or listed building, nor would any scheduled monument or listed building's setting be affected.

- 5.2 In terms of CAs, the site is outside the boundaries of those designated for both Kinver and the Staffordshire and Worcestershire Canal. The actions within the Kinver Management Plan which solely concern development within the CA therefore do not apply. On the other hand, those which concern protection of the broad landscape views that include the CA are relevant. However, as discussed above, the site is in an appropriate location in respect of the CA, while its placement and design are not in conflict with the actions set out in section 3.2 of its Management Plan. The same comments apply to the Canal CA.
- 5.3 No known, non-designated heritage asset would be physically affected by development of the site, nor would the setting of any be likely to be significantly affected.
- 5.4 In the light of the above, the development of the site would not result in any heritage asset being subject to 'substantial harm' as defined by NPPF, while the development as a whole would not be in conflict with relevant heritage legislation or policy.
- 5.5 As such, there is no reason why, in terms of effects on the historic environment, the site should not be promoted for future development.

**Appendix 5: EDP Dunsley Drive Landscape
Position Paper**

Land off Dunsley Drive, Kinver, Staffordshire

Landscape Position Paper

edp4711_r007

1. Introduction, Purpose and Approach

- 1.1 The Environmental Dimension Partnership Ltd (EDP) has been appointed by Bellway Homes ('the promotor') to prepare a Landscape Position Paper, which examines the prospect of future development on Land off Dunsley Drive, Kinver, Staffordshire ('the site').
- 1.2 The site is situated in Staffordshire, within the administrative area of South Staffordshire District Council, which acts as the statutory planning authority. South Staffordshire District Council has commenced a District Plan Review to identify land to accommodate the remainder of the adopted South Staffordshire District Plan (SSDP) housing requirement.
- 1.3 This Landscape Position Paper provides a preliminary appraisal of the site to inform the early consideration of its design and its promotion in the planning process. The Position Paper has been informed by a desk-based review of available data, policy, landscape character publications and mapping and by a site visit undertaken by an experienced Chartered Landscape Architect during early December 2019.
- 1.4 EDP is an independent environmental consultancy providing advice to landowner and property development clients in the public and private sectors in the fields of landscape, ecology, heritage, arboriculture and masterplanning. The Practice operates throughout the UK from offices in Cirencester, Cardiff, Cheltenham and Shrewsbury. Details can be obtained at (www.edp-uk.co.uk).

2. Site Location and Site Description

- 2.1 The existing site comprises a parcel of land roughly triangular in shape. The site is located at Ordnance Survey Grid Reference (OSGR): SO 85195 83756 (centre of the site).
- 2.2 The site is within the West Midlands Green Belt. However, there are no National or Local landscape designations situated within or adjoining the quantum of the site.
- 2.3 The site lies to the immediate east of Dunsley Drive, on the eastern side of the village and has a predominantly western aspect with the south-eastern side edge sloping to the north-western corner, see **Image EDP 2.1** overleaf.



Image EDP 2.1: View from within the site looking south-easterly across rising landform. Photograph taken at OSGR: SO 85202 83807 (during December 2019)

- 2.4 The site is made up of two interconnecting fields, both of which are managed for equestrian grazing. There is a single-storey equestrian stable type building in the north-western corner of the site, with an existing gated access at this boundary from Dunsley Drive, see **Image EDP 2.2** below.



Image EDP 2.2: View from within the site looking north-west to an existing stable block on the northern site boundary. Photograph taken at OSGR: SO 85207 83828 (during December 2019)

2.5 The site is bounded:

- To the north, the site is bounded by existing two-storey residential dwellings situated off an associated private amenity space. These dwellings are accessed off Dunsley Drive and are arranged oblique to the site (looking east to west). The private amenity space is enclosed by low timber post and wire fencing with occasional trees, see **Image EDP 2.3** below;
- The eastern edge of the site is defined by a timber post and wire fence, beyond which there is an open pastoral field. Landform gently rises to the east to a landform, beyond which there is no visibility as landform drops away to the north-east towards the Kidderminster/Wolverhampton Road (A449). A number of existing residential dwellings arranged in a complex, are discernible from the site, see **Image EDP 2.4** overleaf;
- To the south, the site is bounded by an existing timber post and wire fence, with a private driveway and a collection of existing residential dwellings set with private amenity space with mature landscape features, see **Image EDP 2.5** overleaf; and
- The western site boundary is bounded by a timber post and wire fence, beyond which is a private driveway leading a number of two-storey residential dwellings set within private amenity space with mature landscape features. The north-western edge of the site is enclosed by Dunsley Drive, public roadway and with two-storey residential dwellings beyond, see **Image EDP 2.6** overleaf. The site is situated above the level of Dunsley Drive, which in places is approximately 1.25m overall.



Image EDP 2.3: View from within the site looking north towards the adjoining dwelling situated on Dunsley Drive. Photograph taken at OSGR: SO 85202 83807 (during December 2019)



Image EDP 2.4: View from within the site looking north-east towards the existing residential dwellings arranged in a complex. These dwellings are accessed from Dunsley Road. Photograph taken at OSGR: SO 85202 83807 (during December 2019)



Image EDP 2.5: View from within the site looking south towards the existing residential dwellings situated off a private drive from Dunsley Drive. Photograph taken at OSGR: SO 85202 83807 (during December 2019)



Image EDP 2.6: View from within the site looking north-west along the private driveway which encloses the western site boundary, with existing residential dwellings situated off. N.B. Many of these dwellings are two-storey and the Finished Floor Level (FFL) is below the ground level of the site. Photograph taken at OSGR: SO 85187 83703 (during December 2019)

2.6 There is no public access available to the site and no Public Rights of Way (PRoW) which pass through the quantum of the site. PRoW Public Footpath Kinver 94 is situated outside of the site, immediate to its southern boundary see **Image EDP 2.7** and **2.8**. However, there are no themed, promoted or long-distance walking routes which pass the site within its immediate environment.

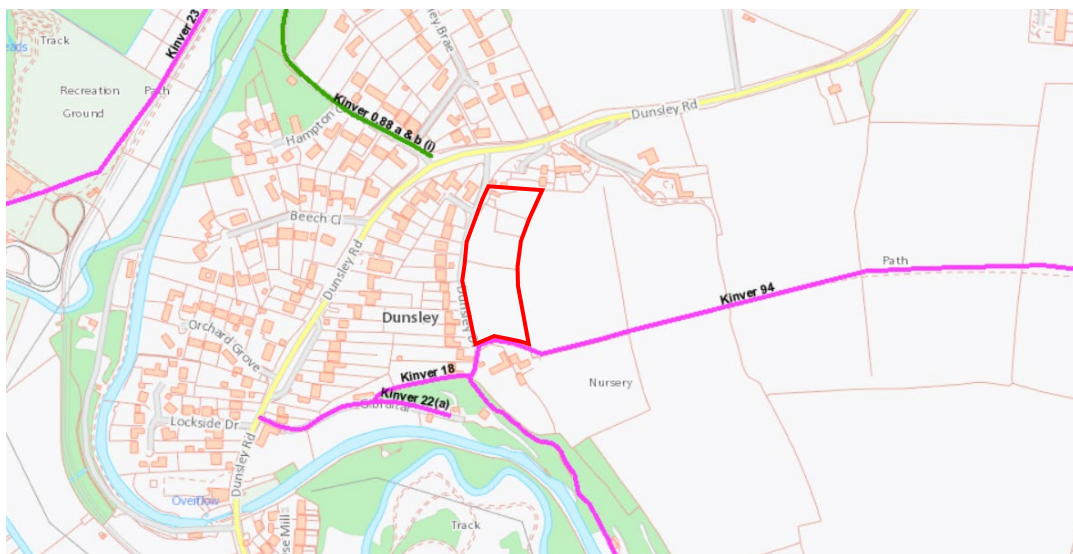


Image EDP 2.7: Extract from the Staffordshire County Council's online Countryside Access and PRoW Map. N.B. EDP has highlighted the site with a solid red line



Image EDP 2.8: View from outside of the site looking north-east from PRow (Public Footpath 94). Photograph taken at OSGR: SO 85187 83703 (during December 2019)

- 2.7 Overall, the site does not demonstrate any landscape features worthy of absolute protection and retention other than the trees/hedges at its boundaries, many of which would benefit from improved management. The site's topography is an interesting characteristic and could inform the layout of any future development.

3. Landscape Character

- 3.1 The site is situated within a landscape that has been characterised at National and County level. At National level, the site is located within National Character Area (NCA) 66: Mid Severn Sandstone Plateau, see **Image EDP 3.1** overleaf.

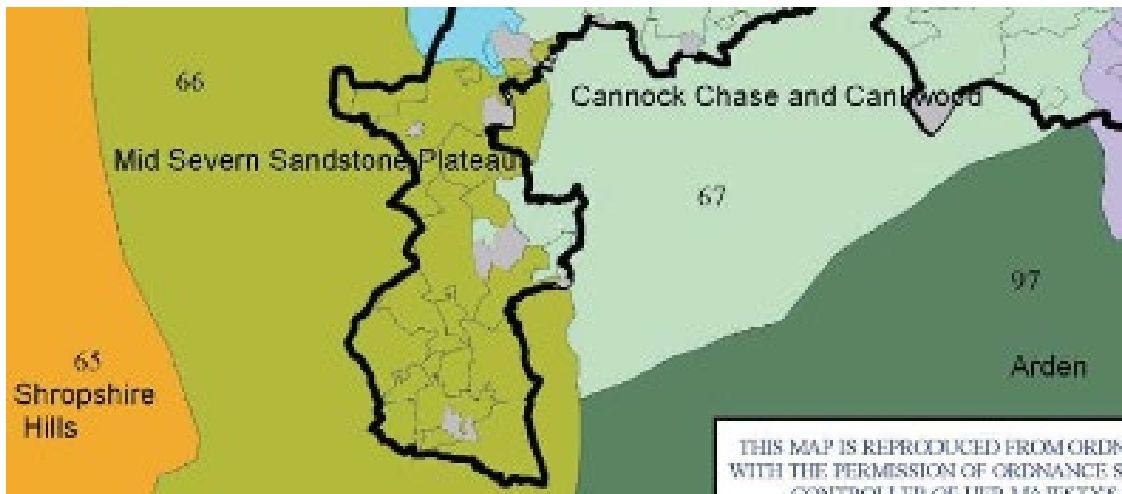


Image EDP 3.1: Extract from Map 2 of the Staffordshire County Council's 'Planning for Landscape Change: An Introduction and User's Guide to Supplementary Planning Guidance to the Staffordshire and Stoke on Trent Structure Plan, 1996 - 2011'

3.2 The County-wide landscape character assessment comprises the 'Planning for Landscape Change: An Introduction and User's Guide to Supplementary Planning Guidance to the Staffordshire and Stoke on Trent Structure Plan, 1996 - 2011', which remains current at the time of writing this Landscape Position Paper. The County Council find the site within the Sandstone Estatelands Landscape Character Area, see **Image EDP 3.2** below.

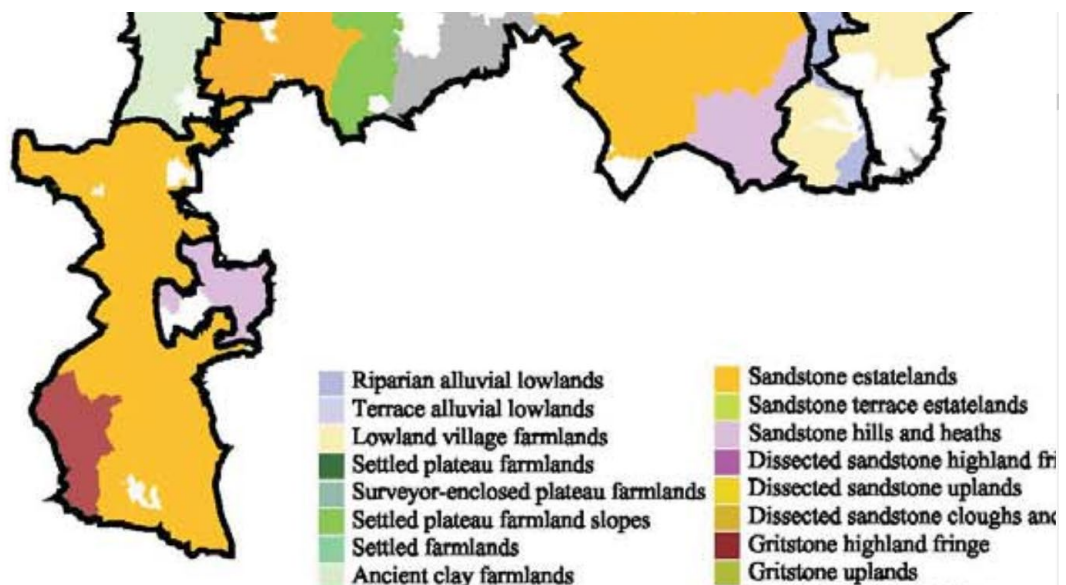


Image EDP 3.2: Extract from Map 4 of the Staffordshire County Council's 'Planning for Landscape Change: An Introduction and User's Guide to Supplementary Planning Guidance to the Staffordshire and Stoke on Trent Structure Plan, 1996 - 2011'. N.B. The site is situated within the Sandstone Estatelands Landscape Character Area

3.3 The character of the Sandstone Estatelands Landscape Character Area is described as follows:

“The woodlands and parklands of traditional rural estates characterise the more intact parts of this rolling lowland landscape type...Settlement is sparse, and characterised by expanded hamlets and wayside cottages...This is a landscape that appears far more wooded than it actually is, with prominent positioning of woodlands and the coalescence of mature hedgerow oaks in places. The slopes in turn give way to well-treed valleys...”

3.4 The County Council continue:

“Villages are expanding with the increase in commuter dwellings and small lanes show the obvious signs of becoming well used rat-runs. Where farmland abuts the conurbation the landscape reflects this influence, hedgerow deterioration being more evident and horsey culture becoming frequent.”

3.5 The County Council’s assessment notes, the following landscape features common to this landscape character area. EDP notes the underlined as common to the site and its immediate setting:

- *“Estate Plantations;*
- *Heathy ridge woodlands;*
- *Hedgerow oaks;*
- *Well tree’d stream valleys;*
- *Smooth rolling landform with scarp slopes;*
- *Red brick farmsteads and estate cottages;*
- *Mixed intensive arable and pasture farming;*
- *Large hedged fields;*
- *Halls and associated parkland; and*
- *Canal.”*

3.6 Further to this, under the heading of ‘Incongruous Landscape Features’, the County Council raises the following points relative to this landscape character area. EDP notes the underlined as common to the site and its immediate setting:

- *“Power lines;*
- *Village expansion;*

- *Urban edge;*
- *Modern farm buildings;*
- *Deteriorating hedgerows;*
- *Commuter dwellings; and*
- *Busy roads.*

3.7 Naturally, the degrading effect of such factors vary across the Sandstone Estatelands landscape character area with such factors, as aforementioned, having a greater or lesser effect on the intactness of the landscape character. In their assessment, the County Council asserts that the “*landscape character type is locally sensitive to the impacts of development and land use change.*”

3.8 A site visit was undertaken by a Chartered Landscape Architect during December 2019, at which, the character of the site was appraised. With reference to the key characteristics listed (above) for the Sandstone Estatelands landscape character area, this review found that there are a number of key differences within the site, including:

- No representation of “*...Estate Plantation*”, which is more reflective of land practice further north of the site within the wider open countryside beyond nearby estate plantations associated with the Enville and Stallybridge Estate (i.e. ‘The Million woodland’). There is a small parkland remnant around Dunsley Hall, off Dunsley Road which is approximately 0.75km north-east of the site. Consequently, the presence of “*Halls and associated parkland*” are outlying to Kinver and not within the environment of the site:
- No representation of “*...Commuter dwellings and urban edge*”, albeit, the site is situated on the village edge adjacent to well established modern development (latter half of the 20th century). Dunsley Drive is a quiet residential road, leading to Dunsley Road. Whilst traffic on Dunsley Drive is infrequent and Dunsley Road is one of a number of routes into Kinver;
- No representation of “*large hedged fields*” with the site situated in a field pattern of small to medium scale and hedgerows are commonly gappy in this location through either age, being outgrown or degraded or previously removed. The site is predominantly enclosed by timber post and wire fencing, with the probability of previous hedgerow extraction within the site;
- No representation of “*Red brick farmsteads and estate cottages*” as the site does not contain development, and that development surrounding the site is modern day, ‘sub-urban’ style built form; and



- No representation of “*well tree’d stream valleys*” at the site, or within its vicinity. Albeit, these features can be found in the wider landscape area.

3.9 EDP considers that the site makes only a limited contribution to the key characteristics of the landscape of the Sandstone Estatelands. Additionally, there are a number of landscape detractors discernible from the site. These detractors are predominantly associated with the position of the site on the village edge of Kinver and the perception of existing residential development from within the site, see **Section 2, Image EDP 2.3** and **Image EDP 2.4** above.

4. Visual Amenity

4.1 The site’s location to the eastern side of the village, adjacent to well established modern development (latter half of the 20th century) to the west means that it has the potential to integrate well with the existing settlement when seen in wider views. During the site visit, the Zone of Visual Influence of the site (i.e. those areas of the surrounding landscape which had potential views of the site) was established and then these areas were visited to establish whether ground level views were accessible and if so, how the site appeared.

4.2 **Image EDP 4.1** overleaf, illustrates the location of PRoW within the wider environment of Kinver and the open countryside which surrounds the village. This extract from Staffordshire County Council’s PRoW map demonstrates that PRoW are found to the east (Public Footpath Kinver 94) which progresses through open countryside away from the site on the settlement edge.

4.3 The route for Public Footpath 18 (adjoining the southern site edge and to the south-west) progresses through existing dwellings within the urban setting. Public Footpath 22a and 22b lead down to Staffordshire and Worcestershire canal (south of the site) and so are situated within a valley’d landscape that is well tree’d.

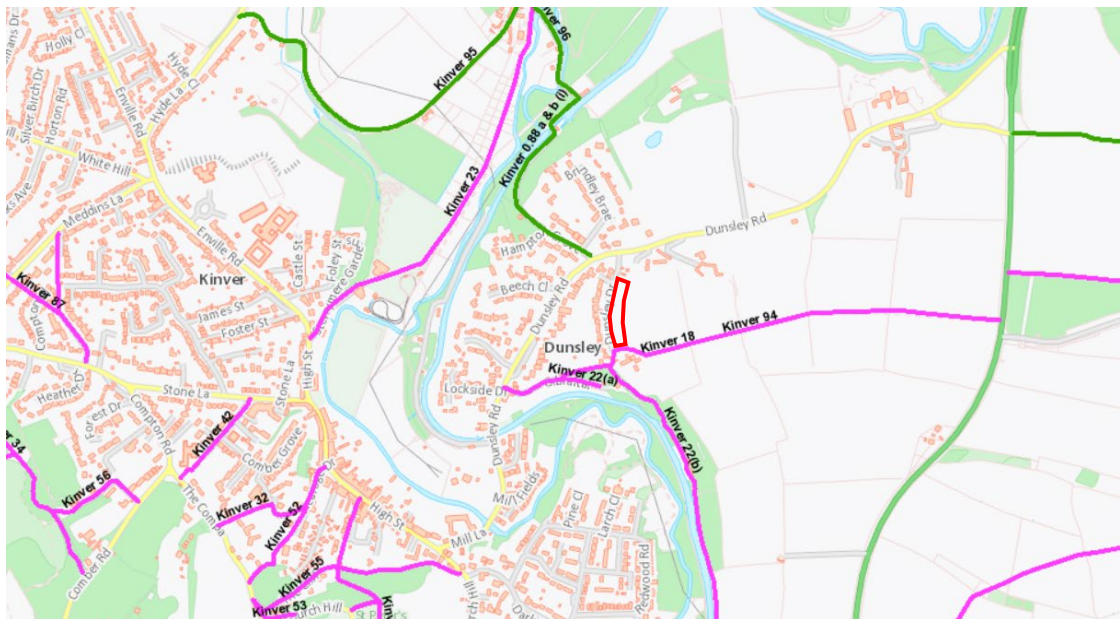


Image EDP 4.1: Extract from the Staffordshire County Council's online Countryside Access and PRow Map. N.B. EDP has highlighted the site with a solid red line

4.4 The broad extent of the view available from each of these areas is described below:

- To the north, the site is enclosed by the existing residential dwellings adjoining the site, and the combination of landform adjoining the site and the verge of Dunsley Drive and mature landscape features within private amenity space, see **Image EDP 4.2** below and **Section 2, Image EDP 2.6** above.



Image EDP 4.2: View from outside of the site looking south down Dunsley Drive towards the western site boundary. Photograph taken at OSGR: SO 85192 83866 (during December 2019)



- To the east, landform rises toward a Local ridgeline, beyond which landform falls easterly away towards the Kidderminster/Wolverhampton Road (A449), see **Section 2, Image EDP 2.4** and **Image EDP 2.8**. There are a small number of residential dwellings to the north-east which overlook the site. In the wider landscape, any vantage point for seeing the site would be well over 1km east;
- To the south, the site is overlooked a small collection of residential dwellings, with the PRoW Public Footpath 94 and 18 passing the site, see **Section 2, Image 2.5** and **Image EDP 2.8** above. Views from these Public Footpaths are already influenced by the settlement edge location. Beyond this, views of the site are substantially filtered, if not screened, by existing built form and mature landscape features;
- To the west, the site is bounded by either a public roadway or private driveway, with residential dwellings situated on, see **Section 2, Image EDP 2.6** above; and
- There is a network of PRoW situated south and south-west of the site on elevated landform above the village. With the greatest degree of elevation above the village these routes, including those around Holy Austin Rock and St Peter's Church, provide expansive panoramic views over the village and the landscape beyond. Within views towards the site from this the junction of Public Footpath 54 and 89 (see **Image EDP 4.3** below) the site appears well integrated with the existing settlement, with existing, long established development to either side (on Dunsley Drive), and development beyond the site (off Dunsley Drive). The site appears to be on the existing edge of the settlement but situated adjoining existing development and not situated on a prominent ridgeline where development may appear detached from the village and incongruous.



Image EDP 4.3: View from Public Footpath 54 and 89 on elevated landform around St Peter's Church, approximately 0.8km south-west of the site (at its closest point). Photograph taken at OSGR: SO 84711 83068 (during December 2019)

- From the residential properties situated off Dunsley Drive (primarily) and north-east of the site off Dunsley Road (see **Section 2** above), it is clear that these dwellings have advantage of the view over the site to the countryside beyond with several having 'picture windows' to enjoy this aspect. Though such views are not protected in planning policy terms, the design of any scheme here would benefit from being sensitive to these adjacent residents, ensuring their residential amenity is not significantly degraded.

5. Landscape Sensitivity

- 5.1 In July 2019, South Staffordshire District Council published their 'South Staffordshire Landscape Sensitivity Assessment' (Final Report). This assessment forms an important evidence base for the preparation of the South Staffordshire Local Plan.
- 5.2 The purpose of this study was to provide an assessment as to the extent of which 'the character and quality of landscape abutting is in principle susceptible to change as a result of introducing new built form.'
- 5.3 This study specifically considers new residential development. The settlement of Kinver is defined by this study as a 'Main Service Village' and therefore, a Tier 4 settlement in this study.

- 5.4 In terms of scope, this study considers the landscape sensitivity of land within the West Midlands Green Belt which is: *“immediately adjacent to selected South Staffordshire settlements (Tier 1-4 settlements) ... encompassing locations identified through the South Staffordshire ‘Call for Sites’ exercises, and land adjacent without promoted sites.”*
- 5.5 South Staffordshire District Council define landscape sensitivity as: *“the relative extent to which the character and quality of an area (including its vital attributes) is likely to change as a result of introducing a particular type of development.”*
- 5.6 This study appraises parcels of land, some of which are large and expansive tracts of land, the study includes the site within a wider parcel of land (identified by the South Staffordshire District Council as SL2), see **Image EDP 5.1**.

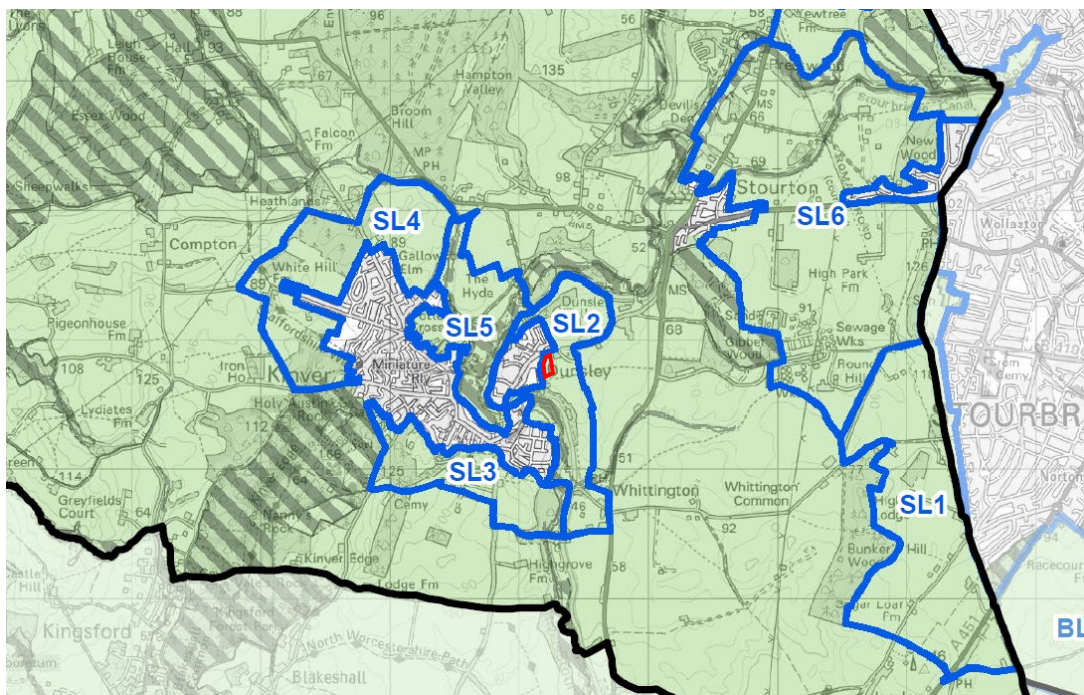


Image EDP 5.1: Extract from the South Staffordshire District Council's South Staffordshire Landscape Sensitivity Assessment (Final Report, July 2019). N.B. EDP has highlighted the site with a solid red line

- 5.7 With reference to Table 4.1 of the South Staffordshire District Councils, South Staffordshire Landscape Sensitivity Assessment (Final Report, July 2019), the land parcel SL2 has an overall quantum of nearly 75ha, of which the site is less than 2ha and so is less than 2.5% of the overall land parcel. Staffordshire District Council assess land parcel SL2 as having an overall landscape sensitivity of Moderate – High.
- 5.8 With Chapter 3 of South Staffordshire District Councils, South Staffordshire Landscape Sensitivity Assessment (Final Report, July 2019), the rating of Moderate – High is not defined specifically by South Staffordshire District Council. Instead, the South Staffordshire

District Council directly defines only Low, Moderate and High. None the less, the South Staffordshire District Council consider that the land parcel has a relatively high landscape sensitivity and susceptibility to change, as this land parcel having some distinct, if not strong, character and qualities.

5.9 With consideration of the published methodology for this study and our own field-based assessment during December 2019, EDP considers that a site-specific assessment of the site would most definitely yield a lower landscape sensitivity than the wider land parcel, for the following reasons:

- The site has very limited features of value with previously extracted hedgerows replaced with timber post and wire fencing, limited native tree cover and poorly managed internal vegetation. The site's topography is probably the most interesting aspect. Consequently, the site makes a very limited, if any contribution to the key characteristics of the landscape of the Sandstone Estatelands; and
- There are a number of landscape detractors discernible from the site, which are predominantly associated with the position of the site on the village edge of Kinver. The perception of existing residential development enclosing the site to the north, south and western edges, which in some situations, overlooks the site's interior.

5.10 Landform continues to rise eastwards from the site towards a Local ridgeline, which is situated within open countryside beyond the village settlement and within the typical 'mixed intensive arable and pasture farmland' common to the Sandstone Estatelands landscape character area, see **Image EDP 5.2** below, as well as **Section 2, Image EDP 2.4** and **Image EDP 2.8** above.



Image EDP 5.2: View from within the site looking east towards the ridgeline outside of the site, beyond which landform falls easterly downwards to the Kidderminster/Wolverhampton Road A449). Photograph taken at OSGR: SO 85187 83703 (during December 2019)

- 5.11 The combination of this Local ridgeline, the settlement edge and roadway enclose the site and act as physical constraints. Consequently, the site is within these features which limit and contain the site. The site is experienced as being within the settlement edge of Kinver, and its domestic land use and character. When on site, especially in winter, one is aware of the presence of the surrounding village related land use, albeit, on the edge of the village rather feeling divorced from it, in the open countryside, like aspects of the wider land parcel SL2.
- 5.12 From a landscape and village character perspective, the domestic curtilages discernible from the site most definitely contribute to the perception of the site as village edge (see **Section 2, Images 2.3, 2.5 and 2.6** above).
- 5.13 The wider land parcel SL2 is situated further out to the village and through its combination of elevated landform and mature woodland blocks along the course of the canal and around Horse Bridge Lane. The site is more related to the settlement edge than the wider open countryside of the land parcel. Hence, the wider land parcel is experienced as divorced and poorly related to Kinver.
- 5.14 EDP considers that residential development in the wider land parcel SL2 would be subject to a greater landscape sensitivity than those areas on the periphery of Kinver, such as the site. Consequently, given the above factors, EDP would most definitely conclude that the site has only a Moderate landscape sensitivity at most.

6. Implications for Masterplanning

6.1 Any future development of the site should be informed by a Landscape and Visual Impact Assessment, the findings of which should help shape the scheme design. At this early stage, the preliminary landscape and visual appraisal has identified a series of key principles for the design of future development, which would assist in mitigating its landscape and visual effects and ensure it integrates effectively with the existing village form. These are:

- The existing external field boundaries to the site are weak, presenting an opportunity to establish new native hedgerows with tree planting and strengthen the landscape fabric of the site;
- The site will drain naturally to the western edge, with the north-eastern corner being the lowest point. On this basis, the western edge of the site should be utilised for sustainable drainage attenuation features designed as attractive landscape components. This initiative has the potential to provide an attractive focal point in this part of the village, set within a compact 'village green' style open space. This would help connect the new development with the existing settlement;
- The layout of the site should seek to work with and reflect the site topography;
- There is an opportunity to create a central route which capitalizes new landscape fabric to aid the 'sense of place' of the development;
- Existing dwellings to the northern edge (situated off Dunsley Lane) should be 'backed' with new development, but length of garden and height of building should be carefully considered to try to mitigate effects on residential views and amenity;
- Development should be stepped back from the southern boundary and carefully considered to try to mitigate effects on residential views and amenity on neighbouring dwellings; and
- Architectural proposals should seek to reflect the vernacular of the older parts of the village.

7. Conclusions

7.1 The site to the east of Dunsley Drive, Kinver lies immediately adjacent to the existing settlement and has the potential to appear as a well-integrated, contiguous area of the village if appropriately designed. In elevated views from Holy Austin Rock, to the south of the village, the site is not seen. However, might the proposal be discernible from elevated landform at Kinver Edge, the site appears to be on the existing edge of the settlement, but



situated adjoining existing development and not situated on a prominent ridgeline, where development may appear detached from the village and incongruous.

7.2 Furthermore, as the site is sandwiched between existing development on the eastern edge of Dunsley Drive and inside, and below topographically, the extent of ribbon development along Dunsley Road, the development of the site would avoid any perception of 'sprawl' into the countryside beyond.

7.3 The following main matters have been identified within this Position Paper and are summarised below.

Relevant Designations:

- The site is situated within West Midlands Green Belt however, the site does not lie within, or adjoin any Nationally or Locally designated landscape; and
- Whilst there are a number of PRoW within the wider open countryside and adjoining the southern site edge, there is no public access into the site.

Visual Amenity:

- Visually, the site is enclosed through the combination of landform and mature landscape features in the open countryside surrounding the site. Additionally, the adjoining residential development sandwich the site within built form, enclosing the site and limit direct views from the adjoining village settlement;
- Views of the site are limited to the immediate geographical area to the western and north-western edge of the site, with no long-distance views identified. In addition, there are limited views available from the Public Footpath Kinver 18 and 94 to the south-west of the site, which pass through open countryside. Furthermore, it is unlikely the development of the site is likely to be seen from Public Footpath 22a and 22b, which pass through a well tree'd valley landscape; and
- The site is overlooked by a number of residential dwellings, see **Section 2** above. These receptors are perhaps the most sensitive receptors, though private views are not protected in policy terms. Residential amenity is protected however and, as such, the scheme design should be sensitive to these receptors, buffering neighbouring properties with open space or rear gardens and seeking to provide an attractive, high quality development in architectural terms.

Landscape Character:

- Heathy, wooded ridgeline, mature hedgerow oak trees within extensive hedgerows are characteristic of the landscape, but these features are not present within the site, or



its immediate setting. Therefore, there is an opportunity to strengthen local landscape character through new landscape planting, including new hedgerow and tree planting; and

- The site makes only a very limited contribution to the key characteristics of the landscape character area of the Sandstone Estatelands, with typical landscape features appearing more intact in the wider open countryside surrounding Kinver village.

7.4 Overall, this Position Paper has identified no issues which suggest the site is undevelopable in landscape and visual terms subject to an appropriate design coming forward.

7.5 The over-arching landscape strategy should look to integrate the site with Kinver, incorporating the existing trees and hedgerows and facilitating green infrastructure through the site, breaking up the mass of the development and offering new recreation links.

7.6 In conclusion, the site to the east of Dunsley Drive, Kinver, lies immediately adjacent to the existing settlement and has the potential to appear as a well-integrated, contiguous area of the village if appropriately designed.

7.7 Subject to these considerations, further technical studies and development of a well-designed masterplan and landscape strategy, there is no in-principle reason to prevent development of the site in landscape and visual terms. In conclusion, therefore, this preliminary appraisal has identified no issues which suggest the site is undevelopable in landscape and visual terms subject to an appropriate design coming forward.

Appendix 6: PJA Access Appraisal Technical Note

Technical Note

Project: Land at Dunsley Drive, Kinver

Subject: Access Appraisal

Client:	Bellway Homes Limited	Version:	C
Project No:	06024	Author:	DB
Date:	20/04/2022	Approved:	CS

I Introduction

I.1 Overview

1.1.1 PJA has been commissioned by Bellway Homes Limited to prepare a Transport and Access Appraisal to assess the potential residential development of land off Dunsley Drive, Kinver.

1.1.2 This note provides a review of the site's accessibility and identifies an access strategy.

I.2 Purpose of Report

1.2.1 The remainder of this document is structured as follows:

- Section 2 outlines the existing transport conditions;
- Section 3 details the proposed access strategy;
- Section 4 sets out the travel demand; and
- Section 5 summarises the key findings from the note.

I.3 Proposed Development

1.3.1 As noted above, the potential of the site for residential development has been considered. It is estimated that the site could accommodate approximately 35 dwellings and therefore the assessment in this Technical Note has been based on this quantum.

2 Baseline Conditions

2.1 Site Location

2.1.1 The site is located on the north-eastern edge of Kinver. It is bound by Dunsley Drive to the west, residential properties to the north and south and open fields to the east. The site location is presented in Figure 1.

Figure 1: Site Location



2.2 Local Highway Network

Dunsley Drive

2.2.1 Dunsley Drive is a quiet residential cul-de-sac, which measures 5.5m in width in the vicinity of the site and is subject to a 30mph speed limit. In the vicinity of the site, Dunsley Drive is unmarked, with a footway on the western side of the carriageway measuring 2m in width.

2.2.2 Dunsley Drive meets Dunsley Road via a simple priority junction, approximately 50m to the north of the site boundary.

Dunsley Road

2.2.3 Dunsley Road is a single-carriageway road which measures 7.8m in width. In the vicinity of the junction with Dunsley Drive, Dunsley Road is subject to national speed limit (60mph), which reduces to 30mph approximately 40m to the west of the Dunsley Drive / Dunsley Road junction.

2.2.4 There is a footway on the northern side of the carriageway measuring circa 1m in width, separated from the carriageway by a steep grass verge.

2.2.5 Dunsley Road runs from a priority junction with the A49 north-east of the site, to a priority junction with High Street and Church Hill in Kinver, to the south-west of the site.

2.3 Pedestrian and Cycle Infrastructure

Pedestrian Infrastructure

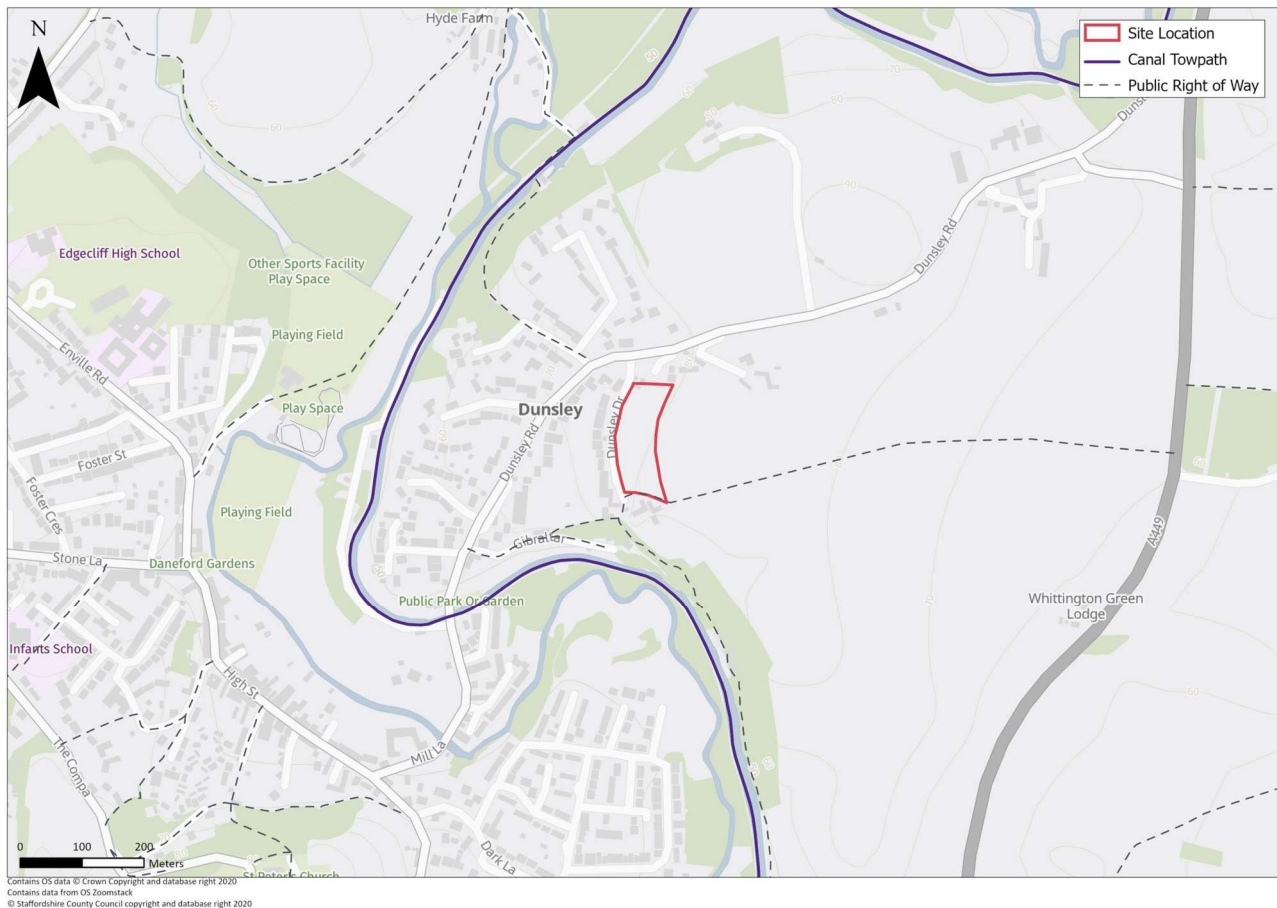
2.3.1 There is a footway on the western side of Dunsley Drive, which measures 2m in width. However, at present, this footway ends at the junction with Dunsley Road meaning there is no connection to the existing infrastructure on the northern side of the Dunsley Road carriageway. There is an unsurfaced footpath which connects Dunsley Drive to the southbound bus stop, east of the junction with Dunsley Road.

2.3.2 The footway on the northern side of Dunsley Road continues south-west, providing access to the northbound bus stop and to Kinver village centre. Alternatively, there is an unsurfaced public right of way which connects the southern end of Dunsley Drive to Dunsley Road in the vicinity of the Lockside Drive junction (Figure 2).

Cycling Infrastructure

2.3.3 There is no dedicated cycling infrastructure in the vicinity of the site. To the south of the site, the Staffordshire Canal towpath is suitable for cyclists (Figure 2). This route can be accessed by cycling 550m south on Dunsley Road and provides access to Kidderminster to the south via the River Stour.

Figure 2: Pedestrian and Cycle Infrastructure



2.4 Public Transport

Bus

2.4.1 The closest bus stops to the site are located on Dunsley Road. The stop for southbound services is located approximately 100m (one minute) walking distance from the site to the east of the Dunsley Road / Dunsley Drive junction. The stop for northbound services is located approximately 150m (two minutes) walking distance from the site, adjacent to the Dunsley Road / Hampton Grove junction.

2.4.2 The bus services accessible from these stops are summarised in Table 1.

Table 1: Bus Services

Service No.	Operator	Route	Weekday Hours of Operation	Weekday Frequency	Days of Operation
242	Select Bus Services	Stourbridge – Kinver via Wollaston, Stourton	10:23 – 17:28	1 per hour	Monday - Saturday
742	Select Bus Services	Stourbridge – Kinver High School	08:24 (southbound) 15:44 (northbound)	1 per day	Monday – Friday (school term time only)

2.4.3 Table 1 demonstrates that there is a regular bus service accessible from within a short walking distance of the site.

Rail

2.4.4 The closest railway station to the site is Stourbridge Junction, which is located 8km to the east of the site.

2.4.5 Stourbridge Junction is situated on the Birmingham to Worcester via Kidderminster Line which is served by West Midlands Railway trains. This station can be accessed by the 242 Bus from Dunsley Road, a journey time of approximately 21 minutes. The station offers services to Birmingham Snow Hill (at least every 20 minutes), Kidderminster (at least every 20 minutes) as well as Whitlock's End, Dorridge, Stratford-upon-Avon and Leamington Spa.

2.4.6 There are 90 cycle storage spaces and 797 car parking spaces available at Stourbridge Junction.

2.5 Accessibility

2.5.1 Guidance provided by the Institute of Highways and Transportation (IHT) in their publication 'Guidelines for Providing for Journeys on Foot' (2000) suggests that in terms of commuting, walking to school and recreational journeys; walk distances of up to 2,000m can be considered as a preferred maximum, with 'desirable' and 'acceptable' distances being 500m and 1,000m respectively. It should, however, be noted that journeys of a longer length are often undertaken.

2.5.2 For non-commuter journeys, the Guidance suggests that walk distances of up to 1,200m can be considered as a preferred maximum, with the 'desirable' and 'acceptable' distances being 400 and 800m respectively. Again, it should be noted that journeys of a longer length are often undertaken.

2.5.3 Assuming a typical walking speed of approximately 1.4m/s, Table 2 summarises the broad walk journey times that can fall under each category.

Table 2: IHT Walkng Standards

IHT Standard	Distance		Walk Time	
	Commuting and Walking to School	Other non-commuter journeys	Commuting and Walking to School	Other, non-commuter journeys
Desirable	500	400	6	5
Acceptable	1,000	800	12	10
Preferred Maximum	2,000	1,200	24	14

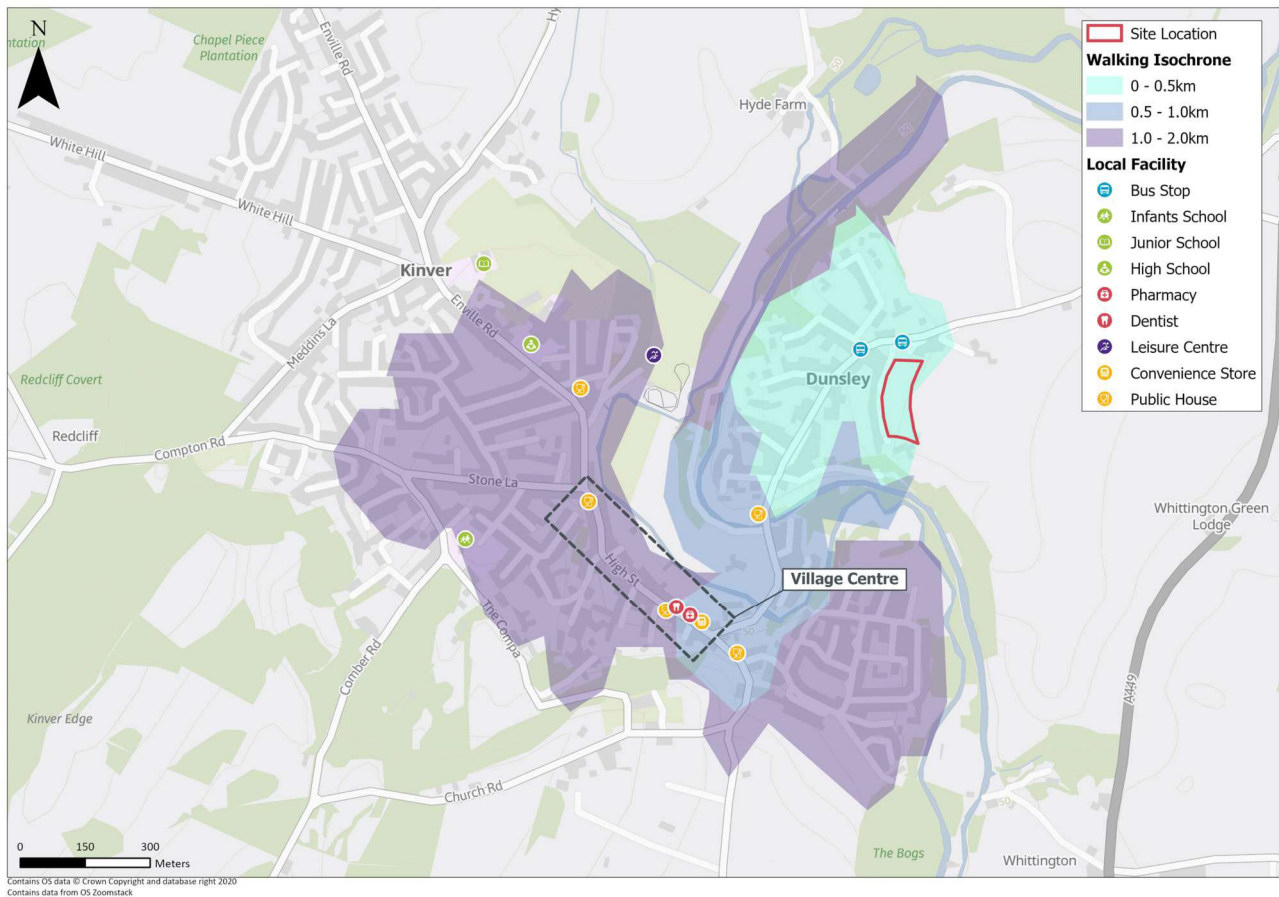
2.5.4 Local amenities within walking distance of the site are presented in Table 3. Distances are measured from the western boundary of the site, from which an access could be provided.

Table 3: Local Amenity Accessibility

Local Facility	Location	Distance from Site Access (m)	Walking Time (Minutes)	Within IHT Standard
The Vine Inn (Public House)	Dunsley Road	600	6	Acceptable
The Cross Inn (Public House)	Church Hill	1100m	12	Preferred Maximum
Kinver High Street	High Street	1200m	13	Preferred Maximum
Co-op Food (Convenience Store)	High Street	1200m	13	Preferred Maximum
Kinver Post Office	High Street	1200m	13	Preferred Maximum
Bills Pharmacy	High Street	1200m	14	Preferred Maximum
White Harte (Public House)	High Street	1200m	14	Preferred Maximum
Kinver Village Dental Practice	High Street	1200m	14	Preferred Maximum
Foley Infant Academy	Fairfield Drive	1800m	21	Preferred Maximum
Kinver High School	Enville Road	1800m	22	Preferred Maximum
Kinver Dental Surgery	Enville Road	1800m	22	Preferred Maximum
Kinver Sports and Community Association	Sterrymere Gardens	1800m	22	-
Brindley Heath Junior School	Enville Road	2000m	25	Preferred Maximum

2.5.5 Figure 3 shows the location of each amenity in relation to the site.

Figure 3: Local Amenities



2.5.6 Figure 3 demonstrates that there are several amenities accessible within walking distance of the site. This includes Kinver village centre, which provides numerous shops, eateries and medical facilities.

2.6 Highway Safety

2.6.1 In order to establish whether there are any safety concerns on the local highway network that might be exacerbated by the development of the site, publicly available collision records have been obtained from the crashmap.co.uk website for the most recent five-year period (01/01/2016 - 31/12/2020). Consideration has been given to junctions with Dunsley Road, between the A449 and High Street.

2.6.2 The recorded collisions are presented in Figure 4.

Figure 4: Collision Data



- 2.6.3 A total of five collisions have occurred within the most recent five-year period, all of which were slight in severity. As demonstrated by Figure 4, these collisions were spread across the study area, with no more than one collision recorded at any one location.
- 2.6.4 At the junction between Dunsley Road and Dunsley Drive there has been just one collision, which involved one vehicle. Within the study area as a whole, there have been no collisions involving pedestrians or cyclists.
- 2.6.5 Therefore, based on the information provided above, it is concluded that there are no existing highway safety issues which would be exacerbated by the residential development of the site.

3 Access Strategy

3.1 Overview

3.1.1 Access to the site can be provided via Dunsley Drive. The junction would be positioned approximately 60m south of the junction with Dunsley Road.

3.1.2 A 3D access design has been prepared for two access options, which are included in **Appendix A and B** respectively. Both options have been designed in accordance with the Staffordshire Residential Design Guide (2000).

Option 1

3.1.3 Option 1 comprises a 5.0m wide priority junction from Dunsley Drive with 10m kerb radii. At the junction, a footway is provided on the northern side of the carriageway, measuring 1.8m width. Along the main spine road within the site, footways measuring 1.8m in width are provided on both sides of the carriageway. At the mouth of the access junction, a dropped kerb crossing with tactile paving is provided to accommodate north to south pedestrian movements.

3.1.4 Within the site, a second priority junction from the main spine road will be provided to provide access to the plots in the northern section of the site. This would also measure 5.0m in width, with 6m kerb radii. Footways measuring 1.8m in width are provided on either side of the carriageway.

3.1.5 A drawing is provided in **Appendix A**.

Option 2

3.1.6 In Option 2, the priority at the site access junction has been reversed to give priority to vehicles accessing the site. As per Option 1, a 5.0m access road is provided with a 1.8m footway on the northern side of the carriageway. Within the site, 1.8m footways are provided on both sides of the carriageway.

3.1.7 As per Option 1 a secondary priority junction is provided from the spine road within the site, measuring 5.0m in width with 6m kerb radii. Again, footways of 1.8m are provided on either side of the carriageway.

3.1.8 A drawing is provided in **Appendix B**.

Swept Path Analysis

3.1.9 Swept Path Analysis drawings have been prepared for both access options, showing the movements of a 10.2m refuse vehicle, 5.08m large car and 7.2m van. These are included in the drawings in **Appendix A** and **Appendix B**. The swept path analysis demonstrates that each vehicle can manoeuvre into and out of the site.

3.2 Pedestrian Infrastructure

3.2.1 An uncontrolled pedestrian crossing with dropped kerbs and tactile paving would be provided just north of the proposed site access, to connect the footway on the northern side of the carriageway to the existing provision on the western side of Dunsley Drive.

3.2.2 As previously described, the existing footway on Dunsley Drive does not extend further than the junction with Dunsley Road. Therefore, a new 2m wide footway connection will be provided from Dunsley Drive, extending west. Opposite the junction with Hampton Grove, an uncontrolled pedestrian crossing with dropped kerbs and tactile paving would be provided to connect the proposed footway with the bus stop and existing footway provision on the northern side of Dunsley Road. To accommodate this, the bank on the southern side of Dunsley Road would need to be re-graded.

4 Travel Demand

4.1 Introduction

4.1.1 This section provides a summary of the travel demand calculations that have been used to determine the impact of the development proposals.

4.2 Trip Generation

4.2.1 The vehicular trip generation for the proposed residential site has been derived from the TRICS database. The following criteria has been used:

- Land Use 03/A – Houses privately owned;
- Great Britain (excluding sites within Greater London and Irish planning regions);
- Sites within an ‘Edge of Town’ location and
- Sites comprising 10 – 50 dwellings
- Removing sites surveyed during Covid-19 restrictions and any sites including flats.

- 4.2.2 As previously noted, it is estimated that approximately 35 dwellings could be accommodated on the site.
- 4.2.3 The resultant trip generation for 35 dwellings is presented in Table 4. Full TRICS output reports are provided within **Appendix C**.

Table 4: Trip Generation

	AM Peak (08:00 – 09:00)			PM Peak (15:00 – 16:00)		
	Arrive	Depart	Two-Way	Arrive	Depart	Two-Way
Trip Rate (per dwelling)	0.157	0.349	0.506	0.331	0.172	0.503
Trip Generation (35 dwellings)	5	12	18	12	6	18

- 4.2.4 Table 4 demonstrates that the proposed development would generate a total of 18 two-way trips during the AM and PM peaks. This is equivalent to fewer than one trip every three minutes.

4.3 Trip Distribution

- 4.3.1 Census 2011 Journey to Work data for the South Staffordshire 014 MSOA has been used to estimate vehicular trip distribution. ArcGIS has been used as a tool to assign trips to the local highway network. This shows that 92% leaving the site via Dunsley Drive turn right and travel east on Dunsley Road and 8% of trips turn left and travel west on Dunsley Road.

4.4 Highway Impact

- 4.4.1 Based on the above, there will be an impact of no more than 17 two-way trips at any junction beyond the Dunsley Drive / Dunsley Road junction. This equates to an increase of just one trip every 3-4 minutes, which would be imperceptible from day-to-day fluctuations in traffic levels.
- 4.4.2 The residential development of the site would therefore not have a severe impact on the highway network, and no junction capacity assessments would be required as part of any planning application.

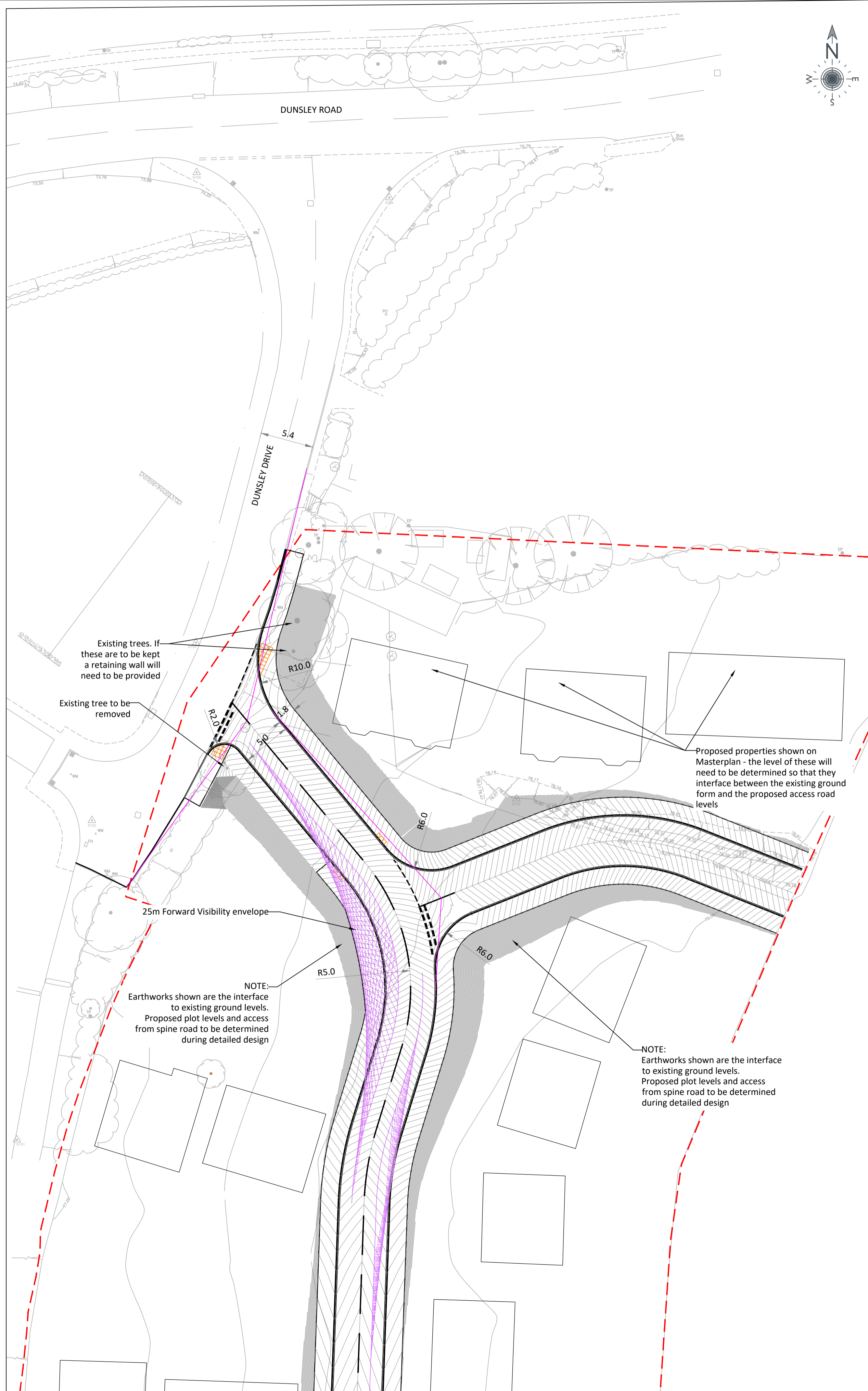
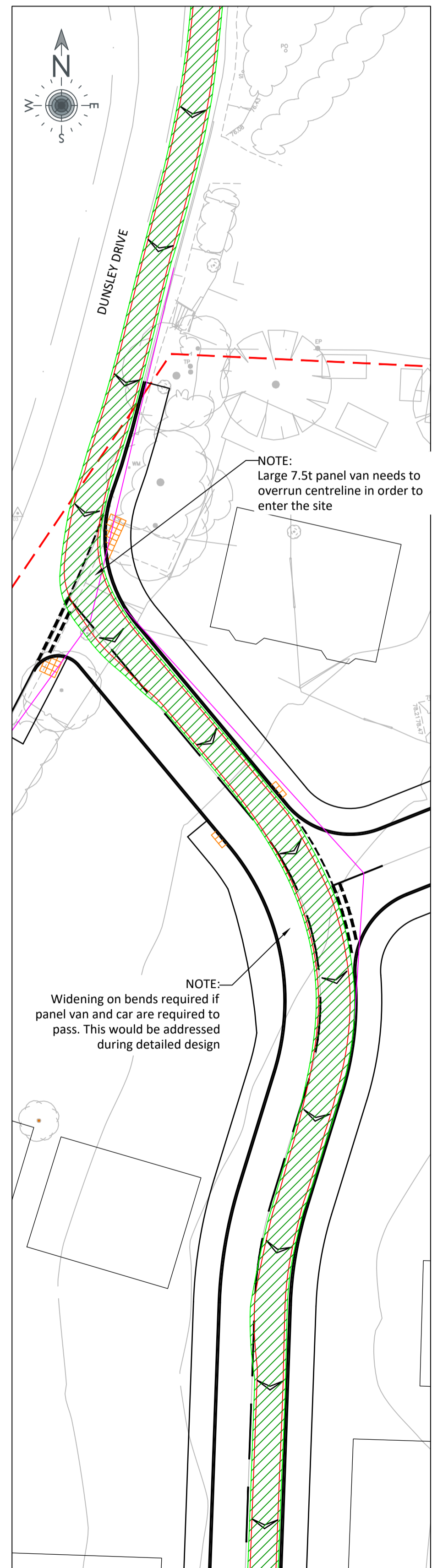
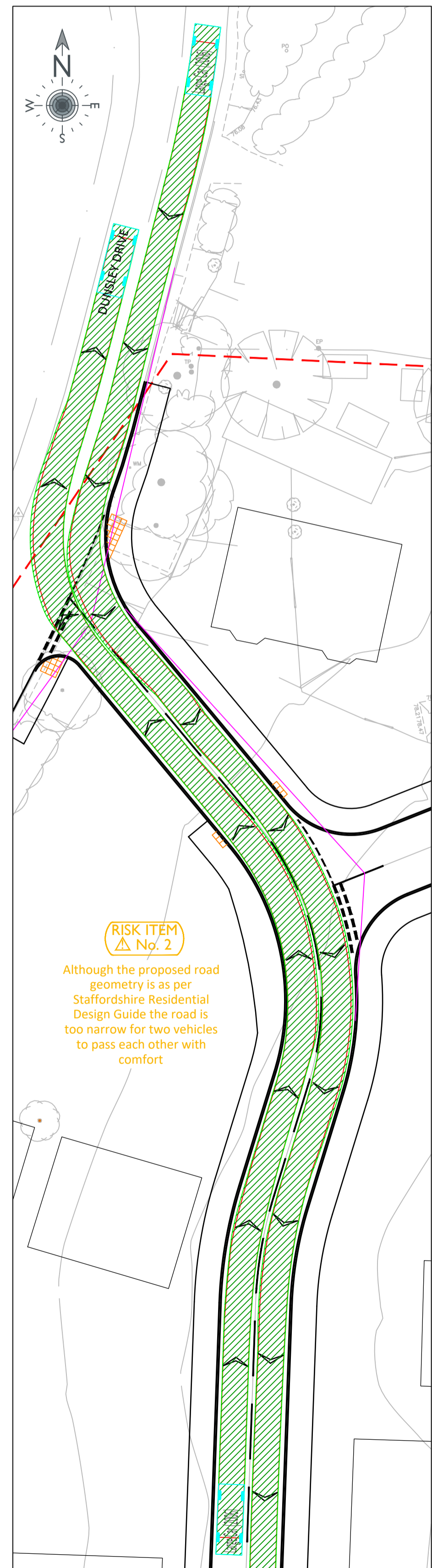
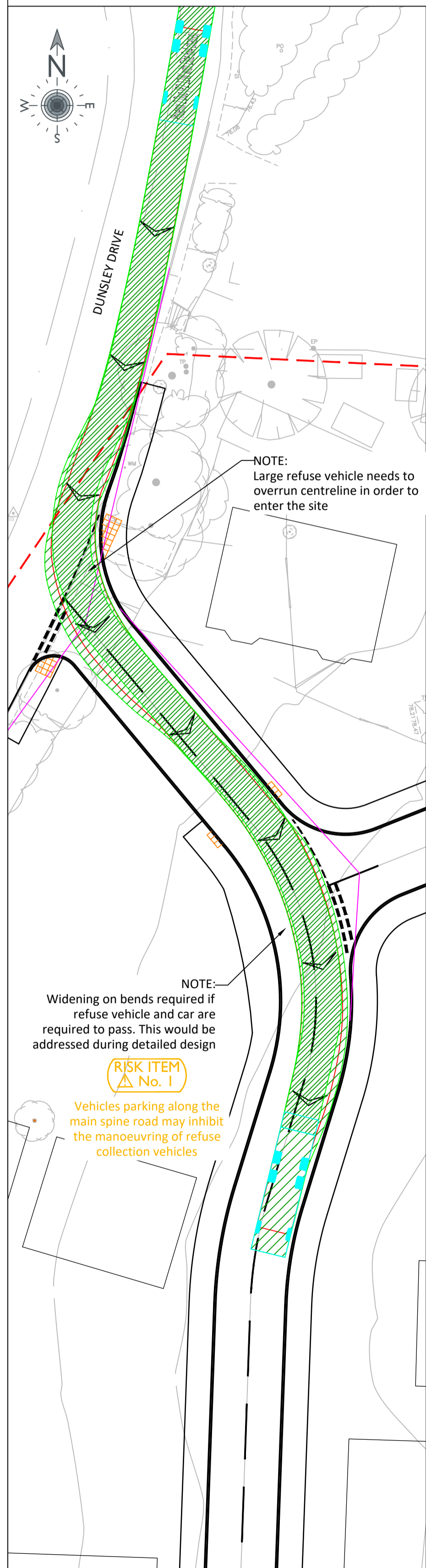
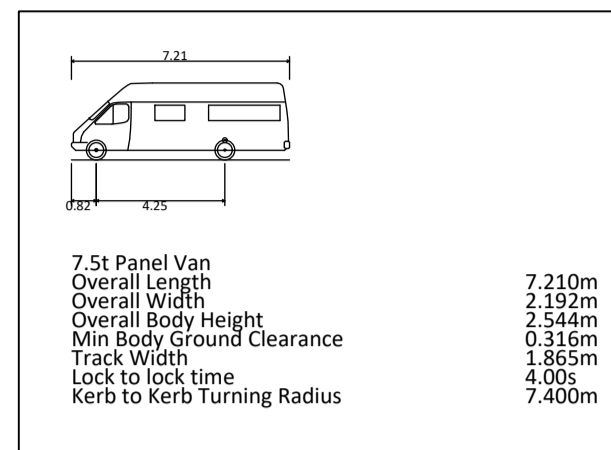
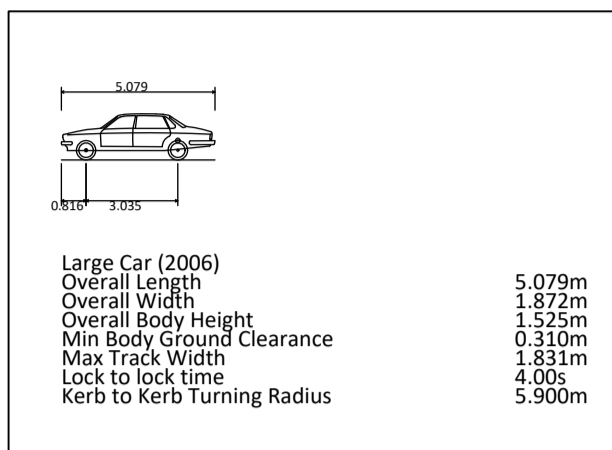
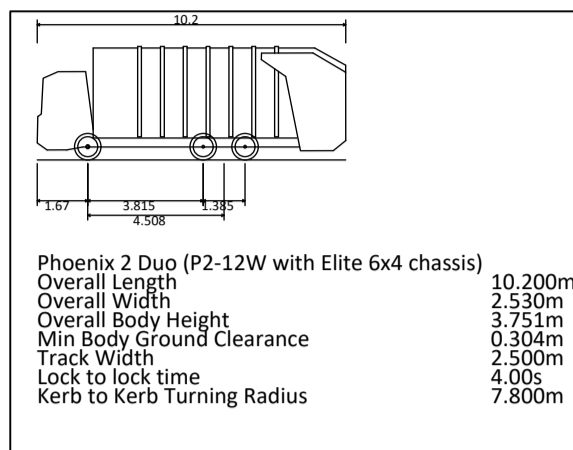
5 Summary

- 5.1.1 This technical note sets out the transport considerations and suitability of access for a potential residential development on land off Dunsley Drive, Kinver and demonstrates the following:
 - The site is accessible via sustainable modes of transport and there are a variety of amenities within IHT guidelines for walking distances;
 - A safe and suitable means of access can be achieved via Dunsley Drive;

- A footway will be provided on the northern side of the access road, with a new pedestrian crossing on Dunsley Drive to connect into the existing provision. A new footway can also be provided along Dunsley Road, connecting the site to the existing provision on Dunsley Road;
- The trip generation has been estimated based on 35 dwellings being developed on the site. It is forecast that the site would generate a total of 18 two-way trips during the AM and PM peaks, equating to approximately one trip every 3-4 minutes; and
- The traffic generated by the development would result in an imperceptible increase in vehicular trips and would therefore not constitute a severe impact on the local highway network.



Appendix A Site Access Drawing – Option I



NOTES

These drawings have been produced with reference to the CDM Regulations 2015. Please note that these are pre-construction phase drawings and should be subject to further design risk management as required in accordance with Regulation 9

- KEY**
- Proposed Contour 50mm Interval
 - Junction Visibility Splay (2.4m x 25m)
 - Forward Visibility Splay (25m)
 - Approximate Site Boundary

- This drawing is to be read in conjunction with all other relevant Engineering and Architect's details.
- The purpose of this drawing is to display the various design vehicle swept paths manoeuvring through the proposed junction. The drawing is for discussion purposes only, with the design subject to further design development, modelling assessment, data collection and consideration of constraints.
- The concept design is based on topographical survey data and design information for surrounding roads:
 - Topographical Survey (filename: 38125NGLS-01-02.dwg)
 - Internal development layout (filename: BEL13007 Feasibility Layout KW 240119.pdf)
- The highway boundary extents will need to be confirmed. All works are proposed to be within the highway boundary or Developer owned land, it is assumed that the highway and site boundary abut each other.
- The concept alignment and junction has been based on DM08 CD100, CD123, M5 and local authority design standards, existing road conditions and the vehicle swept paths presented have informed/validated the proposed geometry of the layout.
- The design vehicles that have been considered in the swept path analysis have been listed below and the relevant vehicle profiles are included to highlight the vehicle dimensions. The vehicle profiles selected below are the most frequent vehicles expected to access the site.
 - Small Sized Vehicles
 - Large Car (2006)
 - Medium Sized Vehicles
 - 7.5t Panel Van
 - Large Sized Vehicles
 - Refuse vehicle - Phoenix Duo 2 Recycler (P2-15W with Elite 6x4 chassis)*

*design vehicles to be confirmed with the client and local authority and alternative vehicles may need to be used.
- The speeds at which vehicle swept paths have been tracked have been summarised below, subject to approving authority agreement:
 - Large Car 20mph (dropping to 10mph at site access)
 - Panel Van 10mph
 - Refuse Vehicle 10mph
- Offsets to the channel and centre line of the proposed road alignments have been maintained where possible for all vehicle manoeuvres and these are listed as follows, subject to approving authority agreement:
 - Small and medium sized vehicles
 - Channel line clearance 0.25m
 - Centre line clearance 0.25m
 - Large vehicles
 - Channel line clearance 0.50m

REV	DATE	REVISION NOTE	BY
PO	07/01/2022	Initial Issue	RAH

PJA

Seven House - High Street
Longbridge - Birmingham
B31 2UQ - Tel: 0121 475 0234

Birmingham - Bristol
Exeter - London - Reading
pja.co.uk

Bellway Homes Limited

PROJECT
Land at Dunsley Drive
Dunsley
Kinver

DRAWING TITLE
Site Access
Priority Junction

DRAWING ISSUE STATUS
INFORMATION

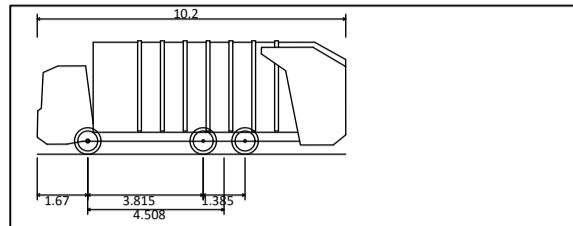
PJA JOB NO: SUB-CODE DRAWING NO REVISION
06024 - A - 100 - P0

Revision Letter : P - Prelim / A - Approval / T - Tender / C - Construction
BIM DRAWING REFERENCE

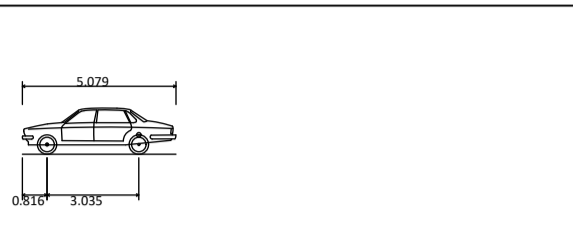
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A1@1:500 RAH AN Jan-22



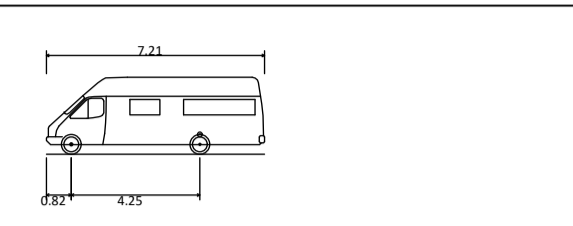
Appendix B Site Access Drawing – Option 2



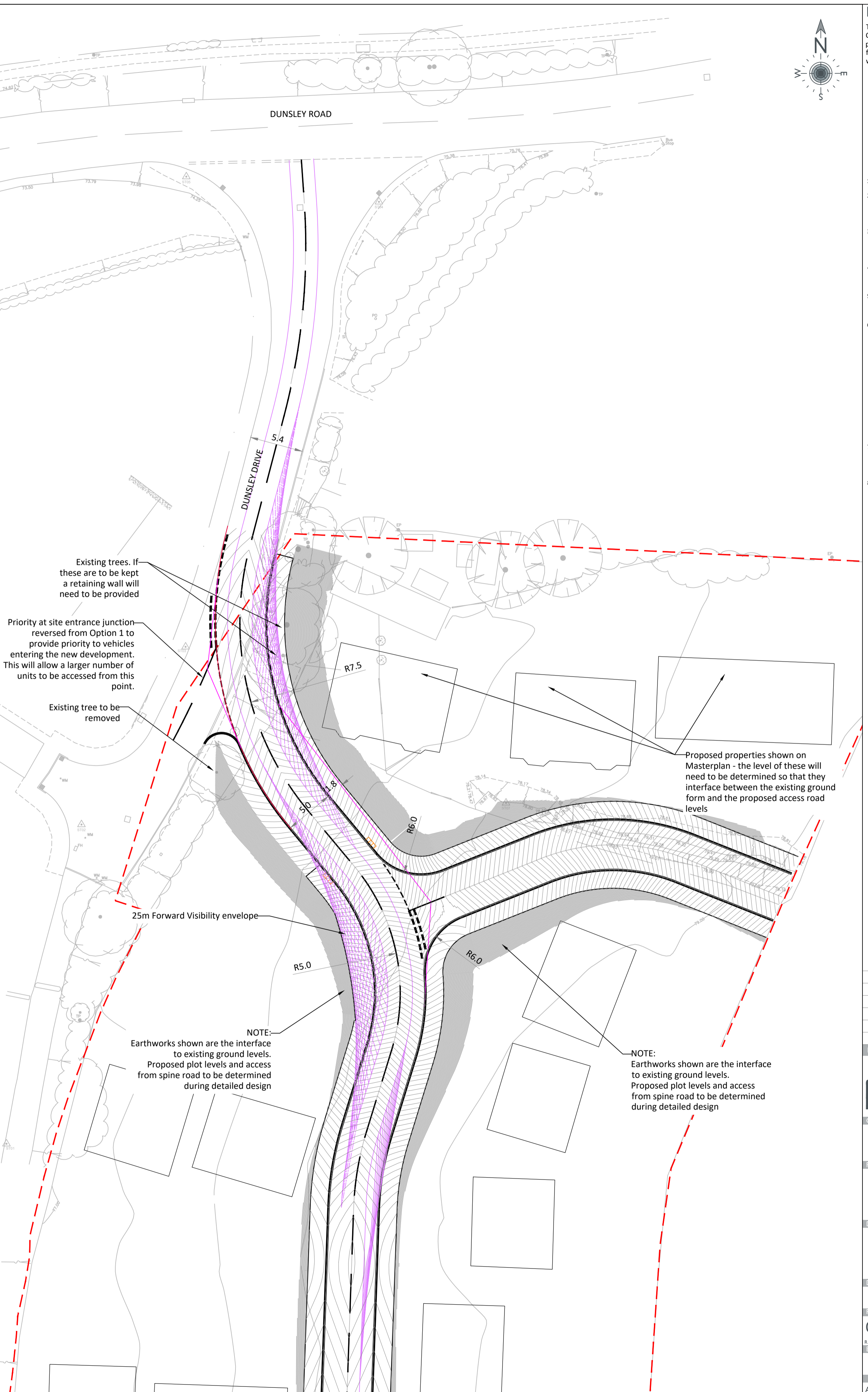
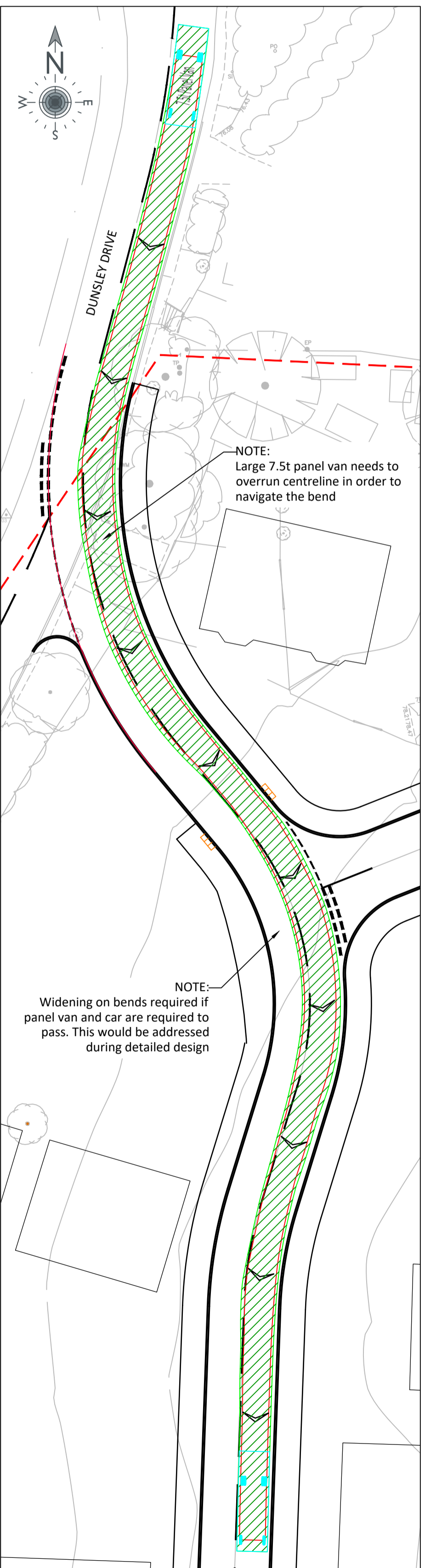
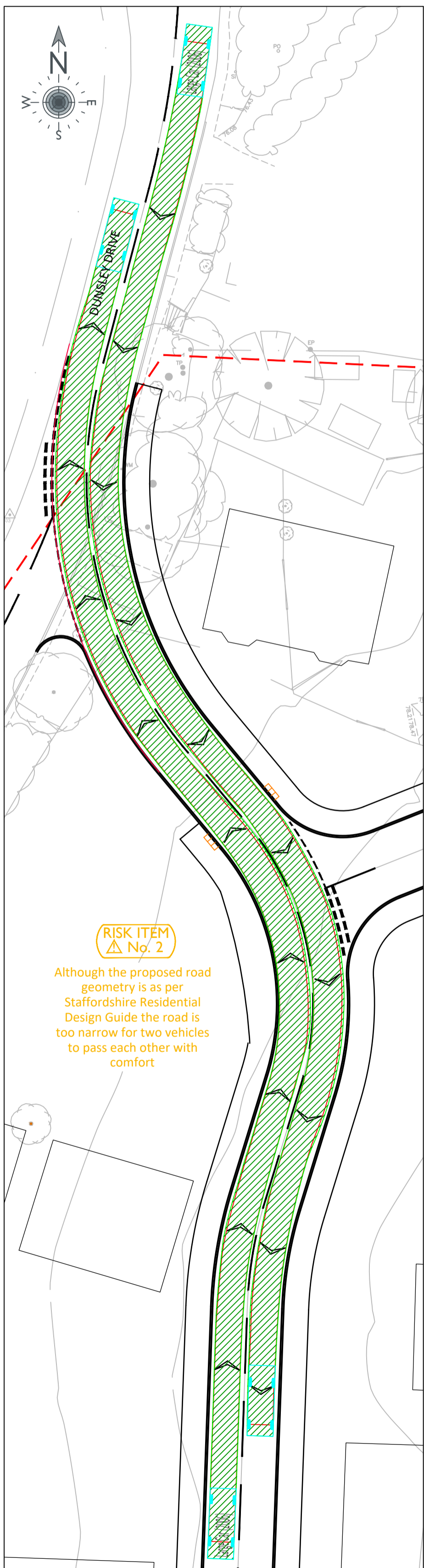
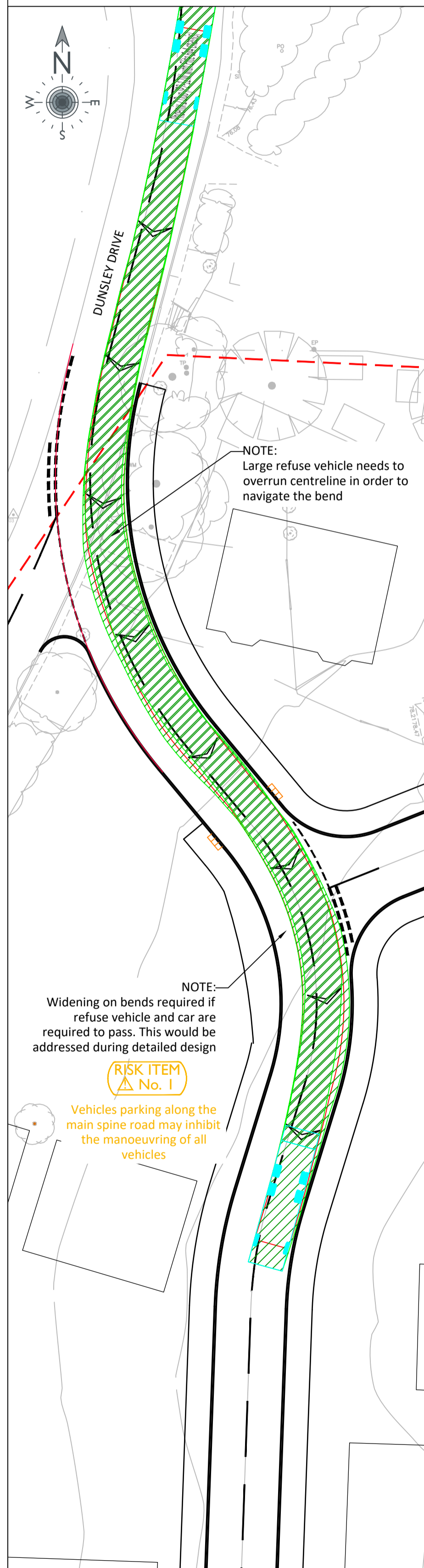
Phoenix 2 Duo (P2-12W with Elite 6x4 chassis)
 Overall Length 10.200m
 Overall Width 2.530m
 Overall Body Height 3.751m
 Min Body Ground Clearance 0.304m
 Track Width 2.500m
 Lock to lock time 4.00s
 Kerb to Kerb Turning Radius 7.800m



Large Car (2006)
 Overall Length 5.079m
 Overall Width 1.872m
 Overall Body Height 1.525m
 Min Body Ground Clearance 0.310m
 Max Track Width 1.831m
 Lock to lock time 4.00s
 Kerb to Kerb Turning Radius 5.900m



7.5t Panel Van
 Overall Length 7.210m
 Overall Width 2.192m
 Overall Body Height 2.544m
 Min Body Ground Clearance 0.316m
 Track Width 1.865m
 Lock to lock time 4.00s
 Kerb to Kerb Turning Radius 7.400m



NOTES

These drawings have been produced with reference to the CDM Regulations 2015. Please note that these are pre-construction phase drawings and should be subject to further design risk management as required in accordance with Regulation 9

- KEY**
- Proposed Contour 50mm Interval
 - Junction Visibility Splay (2.4 x 25)
 - Forward Visibility Splay (25m)
 - Approximate Site Boundary

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 - Refuse vehicle - Phoenix Duo 2 Recycler (P2-15W with Elite 6x4 chassis)

*design vehicles to be confirmed with the client and local authority and alternative vehicles may need to be used.

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 - Small and medium sized vehicles Channel line clearance 0.25m Centre line clearance 0.25m
 - Large vehicles Channel line clearance 0.50m

PO	07/01/2022	Initial Issue	RAH
REV	DATE	REVISION NOTE	BY

PJA
 Seven House - High Street
 Longbridge - Birmingham
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 Exeter - London - Reading
 pja.co.uk

CLIENT
Bellway Homes Limited

PROJECT
**Land at Dunsley Drive
 Dunsley
 Kinver**

DRAWING TITLE
**Site Access
 Option 2
 Through Junction**

DRAWING ISSUE STATUS
INFORMATION

PJA JOB No. SUB-CODE DRAWING NO. REVISION
06024 - A - 200 - PO

Revision letter: P - Prelim / A - Approval / T - Tender / C - Construction
 BIM DRAWING REFERENCE

SCALE	DRAWN	REVIEWED	DATE
AI@1:500	RAH	AN	Jan-22

Appendix C TRICS Outputs

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED

TOTAL VEHICLESSelected regions and areas:

02	SOUTH EAST	
	HC HAMPSHIRE	2 days
03	SOUTH WEST	
	DC DORSET	1 days
	SM SOMERSET	1 days
04	EAST ANGLIA	
	NF NORFOLK	2 days
	SF SUFFOLK	1 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	1 days
	ST STAFFORDSHIRE	1 days
	WK WARWICKSHIRE	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
08	NORTH WEST	
	CH CHESHIRE	2 days
	LC LANCASHIRE	1 days
10	WALES	
	VG VALE OF GLAMORGAN	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
 Actual Range: 10 to 49 (units:)
 Range Selected by User: 10 to 50 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/13 to 27/05/21

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	3 days
Tuesday	2 days
Wednesday	5 days
Thursday	4 days
Friday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	16 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Edge of Town

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone 16

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3 16 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	2 days
5,001 to 10,000	3 days
10,001 to 15,000	5 days
15,001 to 20,000	3 days
20,001 to 25,000	2 days
25,001 to 50,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	2 days
25,001 to 50,000	1 days
50,001 to 75,000	3 days
75,001 to 100,000	3 days
125,001 to 250,000	4 days
250,001 to 500,000	3 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	4 days
1.1 to 1.5	12 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	4 days
No	12 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present 16 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	CH-03-A-09	TERRACED HOUSES	CHESHIRE
	GREYSTOKE ROAD		
	MACCLESFIELD		
	HURDSFIELD		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	24	
	Survey date: MONDAY	24/11/14	Survey Type: MANUAL
2	CH-03-A-10	SEMI-DETACHED & TERRACED	CHESHIRE
	MEADOW DRIVE		
	NORTHWICH		
	BARNTON		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	40	
	Survey date: TUESDAY	04/06/19	Survey Type: MANUAL
3	DC-03-A-08	BUNGALOWS	DORSET
	HURSTDENE ROAD		
	BOURNEMOUTH		
	CASTLE LANE WEST		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	28	
	Survey date: MONDAY	24/03/14	Survey Type: MANUAL
4	HC-03-A-21	TERRACED & SEMI-DETACHED	HAMPSHIRE
	PRIESTLEY ROAD		
	BASINGSTOKE		
	HOUNDMILLS		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	39	
	Survey date: TUESDAY	13/11/18	Survey Type: MANUAL
5	HC-03-A-22	MIXED HOUSES	HAMPSHIRE
	BOW LAKE GARDENS		
	NEAR EASTLEIGH		
	BISHOPSTOKE		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	40	
	Survey date: WEDNESDAY	31/10/18	Survey Type: MANUAL
6	LC-03-A-31	DETACHED HOUSES	LANCASHIRE
	GREENSIDE		
	PRESTON		
	COTTAM		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	32	
	Survey date: FRIDAY	17/11/17	Survey Type: MANUAL
7	NF-03-A-03	DETACHED HOUSES	NORFOLK
	HALING WAY		
	THETFORD		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	10	
	Survey date: WEDNESDAY	16/09/15	Survey Type: MANUAL
8	NF-03-A-05	MIXED HOUSES	NORFOLK
	HEATH DRIVE		
	HOLT		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	40	
	Survey date: THURSDAY	19/09/19	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	NY-03-A-11 HORSEFAIR BOROUGHBRIDGE	PRIVATE HOUSING		NORTH YORKSHIRE
	Edge of Town Residential Zone Total No of Dwellings:		23	
	Survey date: WEDNESDAY		18/09/13	Survey Type: MANUAL
10	SF-03-A-05 VALE LANE BURY ST EDMUNDS	DETACHED HOUSES		SUFFOLK
	Edge of Town Residential Zone Total No of Dwellings:		18	
	Survey date: WEDNESDAY		09/09/15	Survey Type: MANUAL
11	SH-03-A-06 ELLESMERE ROAD SHREWSBURY	BUNGALOWS		SHROPSHIRE
	Edge of Town Residential Zone Total No of Dwellings:		16	
	Survey date: THURSDAY		22/05/14	Survey Type: MANUAL
12	SM-03-A-01 WEMBDON ROAD BRIDGWATER NORTHFIELD	DETACHED & SEMI		SOMERSET
	Edge of Town Residential Zone Total No of Dwellings:		33	
	Survey date: THURSDAY		24/09/15	Survey Type: MANUAL
13	ST-03-A-08 SILKMORE CRESCENT STAFFORD MEADOWCROFT PARK	DETACHED HOUSES		STAFFORDSHIRE
	Edge of Town Residential Zone Total No of Dwellings:		26	
	Survey date: WEDNESDAY		22/11/17	Survey Type: MANUAL
14	VG-03-A-01 ARTHUR STREET BARRY	SEMI-DETACHED & TERRACED		VALE OF GLAMORGAN
	Edge of Town Residential Zone Total No of Dwellings:		12	
	Survey date: MONDAY		08/05/17	Survey Type: MANUAL
15	WK-03-A-02 NARBERTH WAY COVENTRY POTTERS GREEN	BUNGALOWS		WARWICKSHIRE
	Edge of Town Residential Zone Total No of Dwellings:		17	
	Survey date: THURSDAY		17/10/13	Survey Type: MANUAL
16	WK-03-A-04 DALEHOUSE LANE KENILWORTH	DETACHED HOUSES		WARWICKSHIRE
	Edge of Town Residential Zone Total No of Dwellings:		49	
	Survey date: FRIDAY		27/09/19	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

PJA Seven House, High Street Longbridge, Birmingham

Licence No: 231601

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
BD-03-A-03	Covid
WO-03-A-07	Covid

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

TOTAL VEHICLES**Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	16	28	0.083	16	28	0.302	16	28	0.385
08:00 - 09:00	16	28	0.157	16	28	0.349	16	28	0.506
09:00 - 10:00	16	28	0.150	16	28	0.230	16	28	0.380
10:00 - 11:00	16	28	0.166	16	28	0.174	16	28	0.340
11:00 - 12:00	16	28	0.170	16	28	0.201	16	28	0.371
12:00 - 13:00	16	28	0.166	16	28	0.199	16	28	0.365
13:00 - 14:00	16	28	0.190	16	28	0.161	16	28	0.351
14:00 - 15:00	16	28	0.174	16	28	0.199	16	28	0.373
15:00 - 16:00	16	28	0.302	16	28	0.237	16	28	0.539
16:00 - 17:00	16	28	0.291	16	28	0.154	16	28	0.445
17:00 - 18:00	16	28	0.331	16	28	0.172	16	28	0.503
18:00 - 19:00	16	28	0.246	16	28	0.136	16	28	0.382
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.426			2.514			4.940

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

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Parameter summary

Trip rate parameter range selected:	10 - 49 (units:)
Survey date date range:	01/01/13 - 27/05/21
Number of weekdays (Monday-Friday):	16
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix 7: Link Flood Risk Appraisal



Bellway Homes Limited

Dunsley Drive, Kinver

Flood Risk Appraisal

LE20150- DD-LE-GEN-XX-RP-CE-FRA01-P1-Flood Risk Appraisal

April 2022



Bellway Homes Limited

Dunsley Drive, Kinver

Flood Risk Appraisal

LE21550 – DD-LE-GEN-XX-RP-CE-FRA01-P1-Flood Risk Appraisal

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PROJECT NO:

LE21550

DATE:

April 2022

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1

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WJT

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KL

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NHM

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VERSION NO.

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KL

REASON FOR CHANGE:

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3

07.04.22

KL

Updated to reflect client comments

Bellway Homes Limited

Dunsley Drive, Kinver

LE21550 – DD-LE-GEN-XX-RP-CE-FRA01-Flood Risk Appraisal

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Bellway Homes Limited

Dunsley Drive, Kinver

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APPENDIX C – HYDRAULIC CALCULATIONS

1 INTRODUCTION

1.1 Background

- 1.1.1 Link was commissioned by Bellway Homes Limited to prepare a Flood Risk Appraisal (FRA) and associated Drainage Strategy in respect to a proposed development at Dunsley Drive, Kinver. This report has been prepared to support the promotion of the site for approximately 35 new homes through the emerging South Staffordshire Local Plan Review.
- 1.1.2 The exact number of dwellings that can be constructed depends on the extent of developable land on the site, which will be influenced by the flood risk posed to the site. A particular aim of this FRA is to inform this extent of developable land. The overall extent of the site is included in a site location plan provide in **Appendix A**.

1.2 Site Location

- 1.2.1 The site is located along the eastern edge of Dunsley Drive in Kinver, Staffordshire. The site is enclosed by Dunsley Drive to the west and Dunsley Road to the north.

1.3 Topography

- 1.3.1 The existing site level range has been found to range from approximately 77.3mAOD on its western edge to 79.9mAOD on its southern extent and generally falls in a north-westerly direction. The site consists primarily of empty field land with no distinguishing features or structures.

1.4 Ground conditions

- 1.4.1 A review of the British Geological Survey's geological mapping has been undertaken to determine the likely ground conditions on the site. Geological maps on the British Geological Survey online tools identify the Chester Formation as the bedrock geology, which consists of sandstone and conglomerate. No superficial deposits were recorded for this location.
- 1.4.2 Furthermore, publicly available boreholes in the proximity of the site have been reviewed. It should be noted that whilst there are records of borehole scans within a few hundred metres of the site, these lie on a different formation and thus are not representative of the ground conditions on site. A borehole scan taken on the same formation approximately 2km to the north of Dunsley Drive indicates a strata composition of red clays and cobbles to a depth of 1.5m, then a large stratum of soft red sandstone to a great depth (85m+).
- 1.4.3 Given the location of this borehole scan in relation to the site, it is recommended that a site investigation be carried out to determine the true ground conditions on site. As suggested by the Geological Survey and the borehole scan, the soil strata are likely to be granular in nature which could facilitate infiltration drainage for surface water. A site investigation and subsequent infiltration testing would need to be conducted in order to confirm this (see Section 4.1 for further details).

1.5 Watercourses

1.5.1 As part of this report, a review of the existing watercourses in close proximity to the site has been completed. The nearest watercourse is the River Stour, which encircles the site on its northern, western and southern edges. The river is located at 120m to the south of the site, approximately 380m to the west and north-west, and 440m to the north. Given the proximity of the River Stour to the proposed development, it is essential that the flood risk posed to the site by this body of water is assessed. This associated flood risk is discussed further in Section 1.7 and Section 2.1.

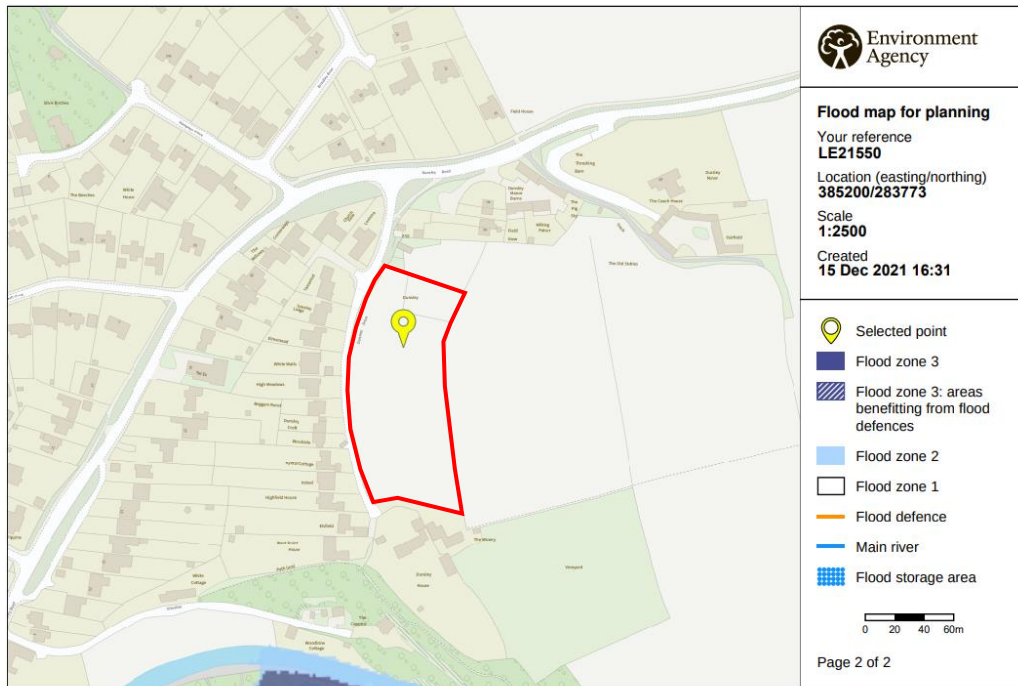
1.6 Drainage

1.6.1 A developer's enquiry was submitted to Severn Trent Water (STW), the local water authority, to determine whether there are any existing sewers within or in the vicinity of the site. The correspondence and accompanying sewer record provided by STW is included in **Appendix B**, which indicates the presence of a single foul sewer in Dunsley Road to the north of the site, which follows the profile of the road and falls in a south-westerly direction.

1.6.2 It is anticipated that the foul drainage for this proposed development shall outfall into this existing sewer, given its proximity to the site. Since no surface water sewers have been identified in the vicinity of the site and the River Stour is at a minimum distance of 120m from the site, it is anticipated that the surface water strategy for the site shall outfall via infiltration drainage, as suggested in Section 1.4.

1.7 Flood Zones and Vulnerability Classification

1.7.1 The formal flood zone mapping approved by the government and prepared for use in the planning process, identifies areas potentially at risk of flooding from fluvial or tidal sources without taking into account the presence of flood defences or structures such as culverts or minor watercourses. An extract from the mapping is included in Figure 1 below; the yellow marker denotes the site location.



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Figure 1: Flooding from Rivers and Watercourses

1.7.2 The formal flood zone mapping shows the site to be located entirely within Flood Zone 1, which implies an annual probability of flooding of less than 0.1% (corresponding to a 1 in 1000 year storm or less frequent), and therefore can be considered to be at a very low risk of flooding from nearby watercourses. Table 1 overleaf indicates what uses of land are appropriate for each flood zone, as set out within Table 3 – Flood risk vulnerability and flood zone ‘compatibility’ in the National Planning Policy Framework (NPPF). The proposed use would be defined as ‘More Vulnerable’, hence the proposed use is deemed acceptable.

	Essential Infrastructure	Highly Vulnerable	More Vulnerable	Less Vulnerable	Water Compatible
Zone 1	✓	✓	✓	✓	✓
Zone 2	✓	Exception Test	✓	✓	✓
Zone 3a	Exception Test	✗	Exception Test	✓	✓
Zone 3b	Exception Test	✗	✗	✗	✓

Table 1 - Flood risk vulnerability and flood zone ‘compatibility’

1.8 National Planning Flood Risk Policies Relevant to this Development

1.8.1 The NPPF last revised by the Department for Levelling Up, Housing and Communities (DLUHC) on 20th July 2021, took immediate effect on that date. The document Technical Guidance on the National Policy Framework (TGNPPF) also published by the Department for Levelling Up, Housing and Communities,

has now been withdrawn and superseded by the Planning Practice Guidance (PPG), published on 6 March 2014.

1.8.2 The requirement for conducting a FRA as part of a planning application is set out in Footnote 55 on page 48 of the NPPF, which states:

“A site-specific flood risk assessment should be provided for all development in Flood Zones 2 and 3. In Flood Zone 1, an assessment should accompany all proposals involving: sites of 1 hectare or more; land which has been identified by the Environment Agency as having critical drainage problems; land identified in a strategic flood risk assessment as being at increased flood risk in future; or land that may be subject to other sources of flooding, where its development would introduce a more vulnerable use.”

1.8.3 Essential content of a site specific FRA is explained in the NPPG, paragraph 30 as follows:

“A site-specific flood risk assessment is carried out by (or on behalf of) a developer to assess the flood risk to and from a development site. Where necessary (see footnote 5 in the National Planning Policy Framework), the assessment should accompany a planning application submitted to the local planning authority. The assessment should demonstrate to the decision-maker how flood risk will be managed now and over the development’s lifetime, taking climate change into account, and with regard to the vulnerability of its users (see Table 2 – Flood Risk Vulnerability).

- The objectives of a site-specific flood risk assessment are to establish:
- whether a proposed development is likely to be affected by current or future flooding from any source;
- whether it will increase flood risk elsewhere;
- whether the measures proposed to deal with these effects and risks are appropriate;
- The evidence for the local planning authority to apply (if necessary) the Sequential Test, and;
- Whether the development will be safe and pass the Exception Test, if applicable.”

1.8.4 For certain types of flood sensitive development, NPPF describes how the Local Planning Authority (LPA) should check that the site proposed has the lowest frequency of flooding of those available for the development. This check is called the “Sequential Test”. All development that is identified in the LPA’s Local Development Framework Development Plan (LDFDP) has been Sequentially Tested using the LPA’s Strategic Flood Risk Assessment (SFRA). When a test is required, and the development is not identified in the Development Plan, NPPF advises that the site-specific FRA includes the Test. NPPF also requires that the FRA includes an “Exception Test” for flood sensitive development proposed in areas with high frequency of flooding. The reason is to demonstrate that flood risk will be safely managed for the lifetime of the development.

1.8.5 According to the latest relevant Planning Practice Guidance, updated in February 2017, present day rainfall rates should be increased by 20% for design and by 40% to investigate the potential impact on flood risk of the current central expectation of climate change occurring in the anticipated 50 year lifetime of the development.

- 1.8.6 "Non-Statutory Technical Standards for Sustainable Drainage Systems" published by Department for Environment, Food and Rural Affairs in March 2015 sets out Government expectations for surface water drainage systems serving major developments to restrict discharges to green field rates. The standards do not address the quality of surface water discharges and state circumstances when the discharge rate can be higher than green field, up to the existing flow in the case of redevelopment of brown field sites.

1.9 Local Policy Guidance

- 1.9.1 The South Staffordshire core strategy, adopted in December 2012, outlines the requirements and considerations developers should follow as part of their proposals. As part of this report, the adopted policies have been reviewed, and the proposal has been developed to comply with their requirements. The relevant planning policies within the district plan, Core Policy 3: Sustainable Development and Climate Change, and Policy EQ7: Water Quality, are outlined below.

- 1.9.2 Core Policy 3: Sustainable Development and Climate Change

"The Council will require development to be designed to cater for the effects of climate change, making prudent use of natural resources, enabling opportunities for renewable energy and energy efficiency and helping to minimise any environmental impacts. This will be achieved by:

a) giving preference to development on previously developed land (brownfield land) in sustainable locations, provided it is not of high environmental value; and supporting and encouraging the reuse of buildings as a sustainable option;

b) supporting and encouraging development which facilitates sustainable modes of transport, including the transport of materials and recycling products, by requiring travel plans for developments which would have significant transport implications;

c) ensuring that development on brownfield land affected by contamination or land instability is remediated in accordance with the NPPF;

d) ensuring that all new development and conversion schemes, are located and designed to maximise energy efficiency, and incorporate the best environmental practice and sustainable construction techniques appropriate to the size and type of development; and minimises the consumption and extraction of minerals by making the greatest possible reuse and recycling of materials in new construction;

e) ensuring that building design is flexible to future needs and users, and reduces energy consumption by appropriate methods, such as high standards of insulation, layout, orientation, using natural lighting and ventilation, and capturing the sun's heat where appropriate;

f) minimising and managing waste in a sustainable way, particularly through re-use and recycling;

- g) protecting and enhancing South Staffordshire's natural and historic assets including natural habitats, the character and quality of the landscape and valued historic landscapes and the wider countryside, mitigation against the worst effects of climate change and pursuing biodiversity enhancement schemes and historic environment management proposals;*
- h) protecting and enhancing the character, local distinctiveness and setting of villages;*
- i) protecting and enhancing essential community facilities and services including sole facilities, buildings and open spaces, primary care and healthcare facilities;*
- j) guiding development away from known areas of flood risk as identified in the Strategic Flood Risk Assessment, Surface Water Management Plan and consistent with NPPF;*
- k) ensuring the use of sustainable drainage (Sustainable Drainage Systems) in all new development and promoting the retrofitting of SUDs where possible;*
- l) ensuring that all development includes pollution prevention measures where appropriate to prevent risk of pollution to controlled waters;*
- m) protecting the amenities of our residents and seeking to improve their overall quality of life through the provision of appropriate infrastructure, facilities and services.*
- n) consideration of the impact that development will have on the sterilisation of mineral resources and the potential for future extraction of these minerals*

Development proposals should be consistent with the adopted Village Design Guide Supplementary Planning Document (or subsequent revisions), the Supplementary Planning Document on Sustainable Development and other local planning policies."

1.9.3 Policy EQ7: Water Quality

"Development will be permitted where proposals do not have a negative impact on water quality, either directly through pollution of surface or groundwater or indirectly through overloading of Wastewater Treatment Works. Consultation must be held with Severn Trent Water ahead of the progression of any potential development to ensure appropriate wastewater infrastructure is in place in sufficient time, particularly where potential development will depend on Codsall, Penkridge and Wombourne Wastewater Treatment Works where there is a known capacity restriction.

Further site specific analysis of any development proposals located in proximity or upstream of environmentally significant sites, including Sites of Special Scientific Interest (SSSIs), and European Sites including Motte Meadows Special Area of Conservation (SAC) will be required in order to validate any relevant planning application to demonstrate that the development will have no adverse effect on environmentally significant sites. Non mains drainage will not be permitted where it is likely to cause adverse effects at sensitive ecological sites. In line with objectives of the Water Framework Directive (WFD), development proposals must not adversely affect the water quality of waterbodies in the District and wherever possible take measures to improve it.

Dunsley Drive, Kinver

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All planning applications must include a suitable Sustainable Drainage (SUDs) scheme, and greater detail will be considered in a Sustainable Development Supplementary Planning Document. Developers are advised to refer to the guidance on SUDs contained in section 4.3 of the Southern Staffordshire Outline Water Cycle Study.

Development proposals should be consistent with other local planning policies.”

the Council is looking to replace the adopted plan with its emerging Local Plan Review. Its policies will be considered when they are published.

2 FLOOD RISK

2.1 Flood Risk from Rivers and Watercourses

2.1.1 As shown in Figure 1, the site is shown to be entirely within Flood Zone 1 and as such has a probability of flooding by rivers and watercourses of less than 0.1%. Therefore, the site is not considered to be at risk of flooding from rivers and watercourses.

2.2 Flooding from the Sea

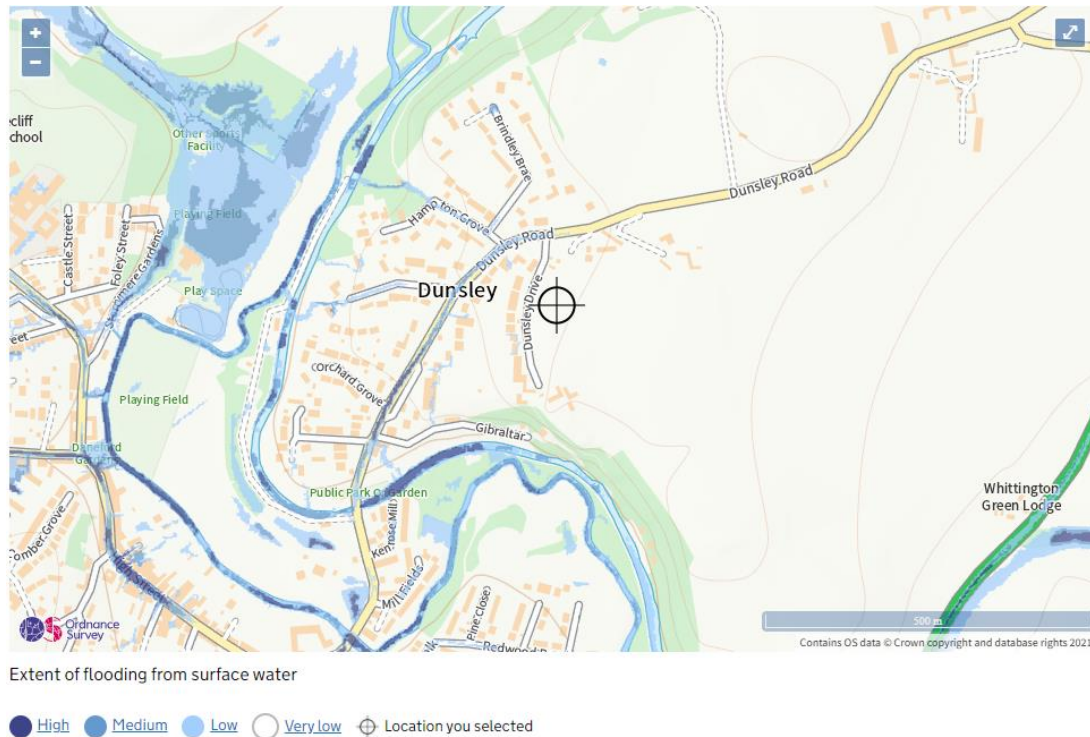
2.2.1 The site is located within Kinver, at a minimum elevation above sea level of 77.3m and at a distance of 98.1km from the sea. Therefore, it can be concluded that the site is not at risk of flooding from the sea.

2.3 Flooding from Land

2.3.1 A source of flood risk to the site is from surface water flooding created by the site itself or adjacent areas. Based on the Surface Water Maps available, see Figure 2 below, the flood risk to the site and the nearby Dunsley Drive is very low from this particular source.

2.3.2 At the time of writing, a site masterplan (and corresponding proposed levels) is currently being developed and this FRA is being prepared to inform it, but it is anticipated that the levels on site are designed such that any potential overland flows generated by the site and the surrounding areas are directed towards the adjacent Dunsley Drive and away from the site.

2.3.3 Therefore, the proposed development will not be affected by surface water flooding and any potential overland flood flows.



2.4 Flooding from Groundwater

2.4.1 The Southern Staffordshire Councils Level 1 Strategic Flood Risk Assessment (SFRA), adopted in October 2019 provides an overview of the groundwater flood risk in Southern Staffordshire. It notes there is very little evidence to suggest that groundwater flooding is a major problem in South Staffordshire and that the majority of the region is considered to be at low flood risk from this source. Furthermore, there are no references in the SFRA to historic flooding from groundwater in Kinver.

2.4.2 Therefore, it can be concluded that the proposed development is at low risk from flooding by groundwater.

2.5 Flooding from Sewers

2.5.1 Flooding can occur from other sources such as blocked drains and sewers. As mentioned previously in Section 1.6, there is a single foul sewer in the vicinity of the site within Dunsley Road as identified in the correspondence with STW in **Appendix B**. The site is located approximately 3m above Dunsley Road and as such would be protected from flooding caused by the failure of the foul sewer. Additionally, the foul sewer would be adopted by STW, and it can be safely assumed that it is regularly maintained by STW, therefore reducing the risk of flooding by this source. Therefore, the proposed development is at low risk from flooding by blocked drains and sewers.

2.6 Flooding from Reservoirs, Canals and Other Artificial Sources

2.6.1 The reservoir flood map shown in Figure 3 shows the extent of flooding should a canal, reservoir, or other artificial source breach upstream of the development. This shows that the site would not be at risk of flooding from this source and as such this source of flooding is not considered a risk.

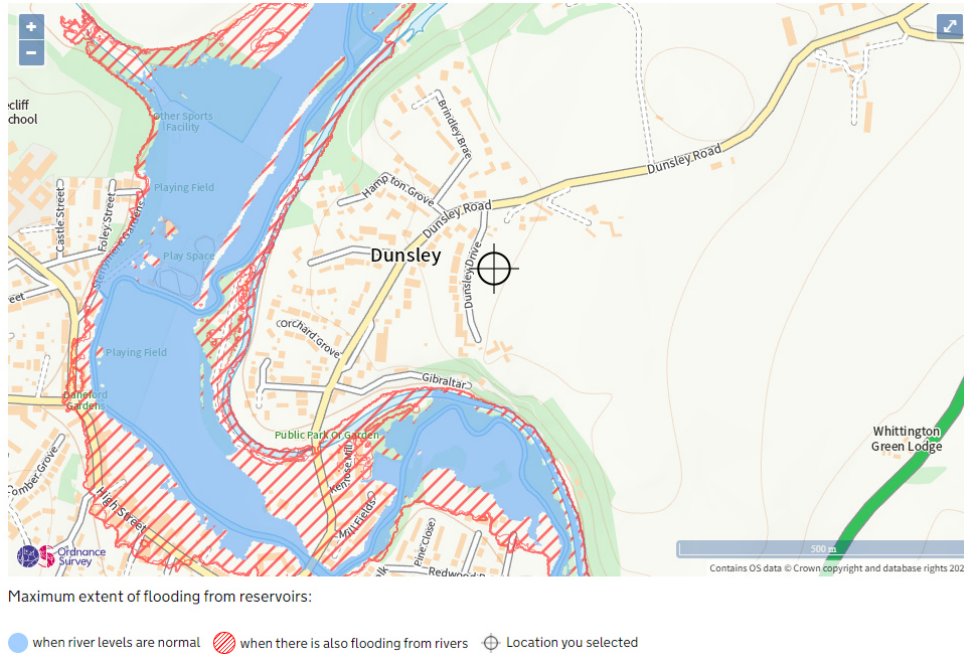


Figure 3: Flooding from Reservoirs

3 MITIGATION

3.1 Flood Risk Management

3.1.1 It is recommended that the following flood risk management measures are considered to mitigate the risks identified above:

- The development finished floor levels are set above the existing levels and at least 150mm above the proposed surrounding external levels.
- Wherever possible, the external ground profile in the development will ensure that surface water is directed away from the residential dwellings.
- The proposed development incorporates a positive surface water drainage system, (elaborated on in Section 4), which will intercept runoff from roofs and paved areas before discharging flows into the underlying geology using infiltration SuDS techniques at a rate no higher than the existing infiltration rate.

3.2 Residual Risks

3.2.1 Residual risks are the risks that remain once the flood risk management measures described above have been implemented. These are typically associated with extreme events that overwhelm drainage systems exceeding the flood levels used to design any mitigation measures. The primary residual risks that will affect this development are:

- An extreme rainfall event which exceeds the capacity of the proposed surface water drainage system to both intercept and convey the flows. During such an event, water that is unable to enter the formal drainage system will flow over the ground through the development. The risk can be reduced by designing site levels to direct any runoff towards the highways or other corridors running through the site.
- A rainfall event that exceeds the capacity of surrounding off-site drainage networks could also result in runoff entering the site via routes other than the highways.

4 PROPOSED DRAINAGE STRATEGY

4.1 Outfall Assessment

4.1.1 As required by Part H of Building Regulations and the paragraph 7-080 in Planning Policy Guidance of the NPPF, the required Drainage Hierarchy has been considered in the development of this strategy as summarised below.

Outfall Option	Available Option	Comment
Infiltration Drainage	✓	The use of infiltration outfall is proposed due to the anticipated permeable geology on site, the location of the site within Flood Zone 1 and the apparent absence of groundwater related issues.
Watercourse	n/a	The nearest watercourse, the River Stour is at a great distance of >120m from the site and thus is not a viable option.
Surface Water Sewer	n/a	Not considered. None exist in the vicinity of the site.
Combined Sewer	n/a	Not considered. None exist in the vicinity of the site.

Table 2 – Outfall Assessment

4.1.2 A suitable discharge consent will need to be agreed with the approving body by the contractor prior to completing the connection to the watercourse.

4.2 SuDS Assessment

4.2.1 As part of the surface water drainage strategy for the site a number of Sustainable Drainage Systems were considered. Table 3 below provides a list of the options considered and a justification for their inclusion or omission.

SuDS System	Used	Justification
Rainwater Harvesting System	No	The use of rainwater harvesting is not considered economically viable on this site considering installation and operational costs.
Green Roofs	No	Green roofs have not been proposed for this site as there is insufficient access to roof areas for maintenance and as such the system could not be effectively maintained to ensure long term performance.
Infiltration Systems	Yes	The use of soakaways are feasible on this site due the anticipated geology.

SuDS System	Used	Justification
Proprietary Treatment Systems	No	The use of proprietary treatment systems are not considered economically viable or required on this site considering installation and operational costs.
Filter Strips	No	Filter strips have not been considered the most effective proposal for this site due to the anticipated site layout.
Filter Drains	No	Filter Drains have not been considered the most effective proposal for this site due to the anticipated site layout.
Swales	No	Swales are not suitable for this scheme due to available space and proposed land use.
Bioretention Systems	No	Bioretention Systems have not been considered the most effective proposal for this site due to the lack of available landscape areas.
Porous Pavements	Yes	Porous paving could potentially be employed to treat the most likely source of site contaminates from the residential parking bays and/or private roads. All surface works from the parking areas shall drain via a voided sub-base offering the required treatment. The available storage within the voided sub-base shall provide the required interception.
Attenuation Storage Tanks (oversized pipes)	No	Attenuation tanks or oversized pipes have not been considered for this site due to the available space.
Detention Basins	No	There is insufficient space for a detention basin on this site.
Ponds and Wetlands	No	There is insufficient space for a pond or wetland on this site.

Table 3 – SuDS Assessment

- 4.2.2 This site will be promoted through emerging Local Plan Review seeking its release from Green Belt and proposed allocation for residential development. It is proposed that suitable features will be provided to support both flood risk and water quality as defined by industry standards and local policies.
- 4.2.3 The outline proposals for the drainage system include private storm and foul pipes combined with infiltration systems such as soakaways and porous paving.

4.3 Proposed Surface Water Drainage Strategy

- 4.3.1 It is anticipated that a new drainage system will comprise gutters, down pipes channels, gullies, pipes, and infiltration systems such as soakaways and porous paving. These drainage features will collect runoff from hardstanding areas such as roofs, roads and car parking, before outfalling via infiltration into the surrounding geology by means of soakaways.
- 4.3.2 In accordance with Core Policy 3: Sustainable Development and Climate Change and the Strategic Flood Risk Assessment for the area, it is proposed that the infiltration system is designed for a 100 year

Dunsley Drive, Kinver

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storm plus 40% allowance for climate change. As mentioned previously, at the time of writing a masterplan for the site is being prepared with this report informing the masterplan and a site investigation to determine the soil composition and properties has not been undertaken. Therefore, for the purposes of design it has been assumed that the percentage impermeability of the site is 65% and the design infiltration rate is $1 \times 10^{-5} \text{m/s}$ (0.036m/hr). This design infiltration rate is recommended for loamy soils (assumed for the sandstone bedrock identified in Section 1.4) in Table 25.1 in the SuDS Manual C753. Furthermore, the required total cellular storage volume for the soakaway(s) on site has been found to be approximately 520m^3 . A calculation extract for this required volume and proposed infiltration rate is included in **Appendix C**, which demonstrates the system's performance.

4.4 Foul Water Drainage Strategy

- 4.4.1 In order to establish a foul outfall a developer enquiry was made to STW, the local water authority. As mentioned previously in Section 1.6, there is an existing foul sewer within Dunsley Road which falls in a south-westerly direction. The response to this developer enquiry application confirmed that this foul sewer has sufficient capacity to accept the foul flows from the proposed development and STW would be willing to accept a connection to their network at a preferred location subject to a formal S106 application being made ahead of connection. STW have recommended a connection into Manhole Ref: SO85831803, located to the north west of the site in Dunsley Road, as shown on the STW sewer map included in **Appendix B**.
- 4.4.2 The foul drainage strategy for the site is to convey all foul flows from the development to the proposed connection point in Manhole Ref SO85831803. As discussed above, STW agree with the principal of this connection subject to a formal S106 application. However, if a connection into this manhole is not feasible, a lateral connection into the foul pipe immediately upstream of it may need to be considered.

5 Drainage Management Plan

5.1 Responsibility

5.1.1 For all drainage elements that will be private, the maintenance responsibility shall be with the developer, or a nominated third party, where private assets serve multiple properties. The maintenance requirements are outlined below.

5.2 Maintenance of Pipe Networks

5.2.1 Maintenance and management of main storm sewers and chambers inclusive of pipework from paved areas and buildings (but excluding internal building drainage) should be visually inspected and jetted/cleaned as required. As a minimum, this should be carried out every 5 years. Methods of inspection to give indications of blockages etc. may include:

- Pulling a mandrel through the pipe to identify physical faults (e.g. disjointed pipes).
- Flushing/jetting.
- CCTV.
- Measurement of water depths in pipe entries, catchpits or interceptors along a drain run may identify potentially blocked pipes.

5.2.2 Gully gratings, manhole gratings and channel gratings shall be visually inspected at least once every year and replaced or re-set if damaged or dislodged. Gullies should be inspected at least once every year, ideally during spring time as the autumn and winter seasons produce the most detritus build up in the form of leaves, litter and silt. This material should be removed from the channels and disposed of at a licensed tip. This material should not be tipped in other areas of the development as it may pose a pollution threat to the surrounding drainage system.

5.2.3 Jetting should only be carried out after removal of the silt and debris, as jetting alone will simply wash the debris further downstream without removing the problem.

5.3 Maintenance of SuDS Features

5.3.1 The regular and correct maintenance of the SuDS feature is essential to the continued performance. The SuDS Manual C753 provides advice on the management of the system. The recommended maintenance

regimes for the soakaways and porous paving are given in Table 13.1 and Table 20.15 in the SuDS Manual C753 respectively, which will form the basis of the strategy for the provided development.

Maintenance schedule	Required action	Typical frequency
Regular maintenance	Inspect for sediment and debris in pre-treatment components and floor of inspection tube or chamber and inside of concrete manhole rings	Annually
	Cleaning of gutters and any filters on downpipes	Annually (or as required based on inspections)
	Trimming any roots that may be causing blockages	Annually (or as required)
Occasional maintenance	Remove sediment and debris from pre-treatment components and floor of inspection tube or chamber and inside of concrete manhole rings	As required, based on inspections
Remedial actions	Reconstruct soakaway and/or replace or clean void fill, if performance deteriorates or failure occurs	As required
	Replacement of clogged geotextile (will require reconstruction of soakaway)	As required
Monitoring	Inspect silt traps and note rate of sediment accumulation	Monthly in the first year and then annually
	Check soakaway to ensure emptying is occurring	Annually

Table 5 – Table 13.1 of CIRIA 753

Maintenance schedule	Required action	Typical frequency
Regular maintenance	Brushing and vacuuming (standard cosmetic sweep over whole surface)	Once a year, after autumn leaf fall, or reduced frequency as required, based on site-specific observations of clogging or manufacturer's recommendations – pay particular attention to areas where water runs onto pervious surface from adjacent impermeable areas as this area is most likely to collect the most sediment
Occasional maintenance	Stabilise and mow contributing and adjacent areas	As required
	Removal of weeds or management using glyphosate applied directly into the weeds by an applicator rather than spraying	As required – once per year on less frequently used pavements
Remedial Actions	Remediate any landscaping which, through vegetation maintenance or soil slip, has been raised to within 50 mm of the level of the paving	As required
	Remedial work to any depressions, rutting and cracked or broken blocks considered detrimental to the structural performance or a hazard to users, and replace lost jointing material	As required
	Rehabilitation of surface and upper substructure by remedial sweeping	Every 10 to 15 years or as required (if infiltration performance is reduced due to significant clogging)
Monitoring	Initial inspection	Monthly for three months after installation
	Inspect for evidence of poor operation and/or weed growth – if required, take remedial action	Three-monthly, 48 h after large storms in first six months
	Inspect silt accumulation rates and establish appropriate brushing frequencies	Annually
	Monitor inspection chambers	Annually

Table 6 – Table 20.15 of CIRIA 753

5.3.2 It should be noted that maintenance regimes detailed above are initial recommendations and the actual maintenance work undertaken should be adapted to suit the system performance by the maintenance provider.

6 CONCLUSION

- 6.1.1 This site specific Flood Risk Appraisal has been prepared in accordance with NPPF guidance and local policy on Flood Risk. The government approved flood mapping shows the site to be located entirely within Flood Zone 1 and as such is at a very low risk from flood risk from both fluvial and pluvial sources on the site. Further to this, the proposed levels on the site shall be set such that in the unlikely event of these systems failing the development on the site will remain protected.
- 6.1.2 The drainage strategy demonstrated that an appropriate drainage system for both foul and surface water can be provided on the site which discharges to a suitable outfall. Subject to the mitigation measures proposed, the development may proceed without being subject to significant flood risk. Moreover, the development will not significantly increase flood risk to the wider catchment area.

Bellway Homes Limited

Dunsley Drive, Kinver

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APPENDICES



Bellway Homes Limited

Dunsley Drive, Kinver

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APPENDIX A – Site Location Plan



GENERAL NOTES

1. THIS DRAWING SHOULD NOT BE REPRODUCED IN WHOLE OR PART WITHOUT THE WRITTEN CONSENT OF LINK ENGINEERING.
2. DO NOT SCALE FROM THIS DRAWING. UNITS ARE IN METRES UNLESS OTHERWISE SPECIFIED.
3. THE CONTRACTOR IS TO CHECK ALL INFORMATION PROVIDED PRIOR TO COMMENCING WORKS AND SEEK CLARIFICATION FROM THE ENGINEER IN RESPECT TO ANY AMBIGUITIES FOUND.
4. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL OTHER SCHEME SPECIFIC DRAWINGS.

KEY

— DEVELOPMENT BOUNDARY

Rev.	Amendments	Date	By
-	INITIAL ISSUE.	05.01.22	WJT

Revisions

Client			
			
 <small>Find us @ www.linkeng.co.uk</small>			
Project			
LE21550 - DUNSLEY DRIVE, KINVER			
Drawing			
LOCATION PLAN			
Scale @ A1	Drawn	Checked	Rev
1:1000	WJT	KL	-

PROJECT INFORMATION (S2)

Bellway Homes Limited

Dunsley Drive, Kinver

LE21550 – DD-LE-GEN-XX-RP-CE-FRA01-Flood Risk Appraisal

APPENDIX B – Severn Trent Water Correspondence and Sewer Records

WONDERFUL ON TAP

SEVERN

TRENT

Link Engineering
145 LOMBARD HOUSE
GREAT CHARLES STREET
QUEENSWAY
BIRMINGHAM
B3 3LP

Severn Trent Water Ltd

Leicester Water Centre
Gorse Hill
Anstey
Leicester
LE7 7GU

Tel: 0345 266 7930
www.stwater.co.uk

Email:
Network.Solutions@SevernTrent.co.uk

Our ref: 1023952

FAO: James Hall

6th December 2021

Dear Sir/Madam,

Proposed Development: (30 dwellings) – Land off Dunsley Drive, Kinver, Staffordshire, DY7 6NB - 385162, 283759

I refer to your 'Development Enquiry Request' in respect of the above named site. Please find enclosed the sewer records that are included in the fee together with the Supplementary Guidance Notes (SGN) which refer to surface water disposal from development sites.

Protective Strip

No Public sewers within site boundary.

Due to a change in legislation on 1 October 2011 there may be former private sewers on the site which have transferred to the responsibility of Severn Trent Water Ltd, which are not shown on the statutory sewer records, but are located in your client's land. These sewers would require protective strips of 3 metres either side of the sewer's centreline that we will not allow to be built over. If such sewers are identified to be present on the site, please contact us for further guidance.

Foul Water Drainage

Records show closest public sewers are to the north of site boundary, MH SO85831803. Foul flows generated from 40

dwelling around .41 l/s (2xDWF) will have little impact and can be accommodated in the foul network. A gravity connection is therefore acceptable subject to S106 submission.

Note, if the site requires a pump solution then modelling will be required to understand wider impact to downstream network.

Surface Water Drainage

Under the terms of Section H of the Building Regulations 2000, the disposal of surface water by means of soakaways should be considered as the primary method. If these are found to be unsuitable, satisfactory evidence will need to be submitted. The evidence should be either percolation test results or by the submission of a statement from the SI consultant (extract or a supplementary letter).

Note, STW will not allow surface water discharge to the foul network.

Subject to above, Severn Trent Water expects all surface water from the development to be drained in a sustainable way to the nearest watercourse or land drainage channel, subject to the developer discussing all aspects of the developments surface water drainage with the Local Lead Flood Authority (LLFA). Any discharge rate to a watercourse or drainage ditch will be determined by the LLFA / EA.

Connections

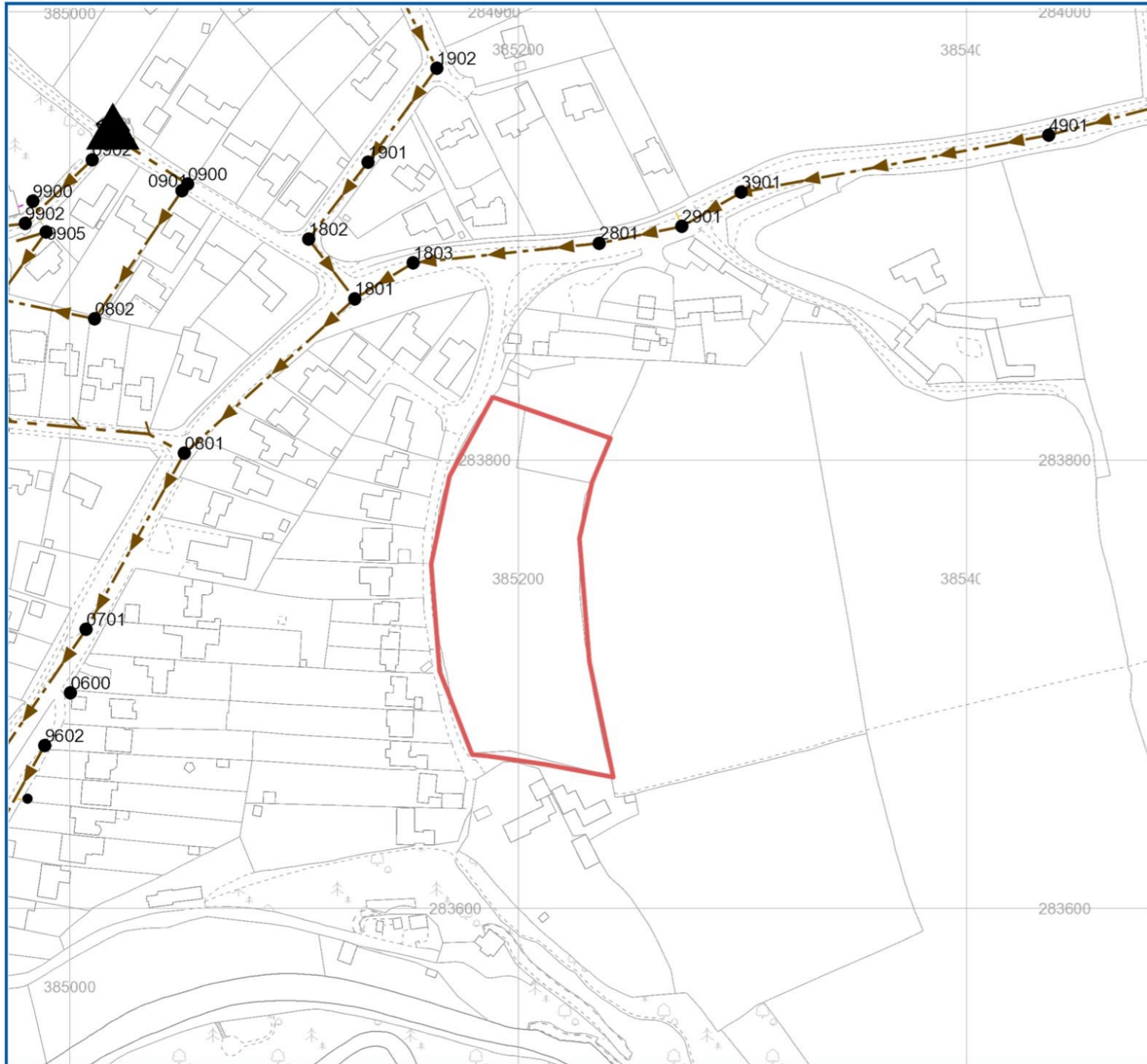
For any new connections (including the re-use of existing connections) to the public sewerage system, the developer will need to submit a Section 106 application form. Our Developer Services department are responsible for handling all new connections enquiries and applications. To contact them for an application form and associated guidance notes please call 0800 7076600 or download from www.stwater.co.uk.

Please quote the above reference in any future correspondence (including e-mails) with STW Limited. Please note that Developer Enquiry responses are only valid for 6 months from the date of this letter.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Belal Ali', with a stylized flourish at the end.

Belal Ali
Network Solutions
Developer Services



Reference	Cover Level	Invert Level Upstream	Invert Level Downstream	Purpose	Material	Pipe Shape	Max Size	Min Size	Gradient	Year Laid
SO84839905	<UNK>	<UNK>	64.3	F	<UNK>	<UNK>	<UNK>	<UNK>	0	31/12/1899 00:00:00
SO85830802	65	<UNK>	64.3	F	VC	C	150	<UNK>	0	31/12/1899 00:00:00
SO85831802	71.46	70.25	69.37	F	VC	C	<UNK>	<UNK>	34.35	31/12/1899 00:00:00
SO85830901	69.41	68.14	<UNK>	F	VC	C	150	<UNK>	0	31/12/1899 00:00:00
SO85831902	77.68	72.58	71.8	F	VC	C	<UNK>	<UNK>	66.92	31/12/1899 00:00:00
SO85831901	74.48	71.79	70.26	F	VC	C	<UNK>	<UNK>	27.97	31/12/1899 00:00:00
SO85830902	70	68.47	73.54	F	VC	C	<UNK>	<UNK>	<UNK>	31/12/1899 00:00:00
SO85833901	79.73	77.99	76.54	F	VC	C	225	<UNK>	20.7	31/12/1899 00:00:00
SO85832901	78.5199	76.53	74.91	F	VC	C	225	<UNK>	23.97	31/12/1899 00:00:00
SO85834901	86.44	83.86	78	F	VC	C	225	<UNK>	23.6	31/12/1899 00:00:00
SO85830701	63.69	61.78	56.17	F	VC	C	<UNK>	<UNK>	15.38	31/12/1899 00:00:00
SO84839902	76	73.53	71.48	F	VC	C	<UNK>	<UNK>	20.15	31/12/1899 00:00:00
SO85831803	72.55	70.8	69.31	F	VC	C	225	<UNK>	21.61	31/12/1899 00:00:00
SO85832801	76.66	74.9	70.85	F	VC	C	225	<UNK>	20.86	31/12/1899 00:00:00
SO85830801	67.49	65.54	61.79	F	VC	C	<UNK>	<UNK>	23.75	31/12/1899 00:00:00
SO84839602	63.51	62.25	56.56	F	VC	C	<UNK>	<UNK>	12.84	31/12/1899 00:00:00
SO85831801	71.1299	69.29	65.55	F	VC	C	<UNK>	<UNK>	26.85	31/12/1899 00:00:00
SO84839900	<UNK>	<UNK>	<UNK>	F	VC	U	150	<UNK>	<UNK>	31/12/1899 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	VC	<UNK>	<UNK>	<UNK>	<UNK>	31/12/1899 00:00:00

LEGEND

<ul style="list-style-type: none"> Ancillary Balancing Lagoon Grease Trap Interceptor Screen Chamber Flushing Chamber Scalway Overflow Fitting Blind Shaft Facility Connector Head Node Lamphole Sewerage Air Valve Sewerage Chemical Injection Point Sewerage Hatch Box Sewerage Pressure Washout Vent Column Waste Water Outfall Control Valve Hydrobrake Penstock 	<ul style="list-style-type: none"> Sewerage Isolation Valve Manhole Foul Bifurcation Manhole Combined Bifurcation Manhole Surface Water Bifurcation Manhole Dual Manhole Foul Single Manhole Combined Single Manhole Surface Water Single Manhole Twin Manhole Foul Adopted Manhole Combined Adopted Manhole Surface Adopted Manhole Transfered Manhole Unsurveyed Manhole Operational Site Waste Water Pump S104 Transfered Asset S102 Null STW Adopted Sewer 	<ul style="list-style-type: none"> None Highway Drain Null Private S24 Storage Disposal Site Off-Line Waste Water Storage On-Line Waste Water Storage Weir Well Waste Water Process Structure S1P Sewage Treatment Point S1S Sewage Treatment Structure S1F Sludge Treatment Point S11 Sludge Treatment Structure Graverty Sewer Pipe Foul Gravity Sewer Combined Gravity Sewer Surface Water Gravity Sewer S104 Surface Water Gravity Sewer S104 Combined Gravity Sewer S104 Foul Gravity Sewer Private Surface Water Gravity Sewer Private Combined Gravity Sewer Private Foul Gravity Sewer Service Pipe 	<ul style="list-style-type: none"> Private Foul Gravity Sewer Surface Water Unserved Pipe Combined Unserved Pipe Foul Unserved Pipe Transfered Surface Water Sewer Transfered Combined Sewer Transfered Foul Sewer Disposal Pipe Overflow Pipe Culverted Water Course Waste Internal Site Pipe Sewer Service Connection Graverty Sewer Others Pressure Sewer Pipe Surface Water Pressure Sewer Combined Pressure Sewer Foul Pressure Sewer S104 Surface Water Pressure Sewer S104 Combined Pressure Sewer S104 Foul Pressure Sewer Private Surface Water Pressure Sewer Private Combined Pressure Sewer Private Foul Pressure Sewer 	<ul style="list-style-type: none"> Surface Water Vacuum Sewer Foul Vacuum Sewer Combined Vacuum Sewer S104 Surface Water Vacuum Sewer S104 Combined Vacuum Sewer S104 Foul Vacuum Sewer Private Surface Water Vacuum Sewer Private Combined Vacuum Sewer Private Foul Vacuum Sewer Surface Water Siphon Combined Siphon Foul Siphon Private Surface Water Siphon Private Combined Siphon Private Foul Siphon S104 Surface Water Siphon S104 Combined Siphon S104 Foul Siphon Surface Water Unserved Pipe Combined Unserved Pipe Foul Unserved Pipe Disposal Pipe 	<ul style="list-style-type: none"> Surface Water Lateral Drain Combined Lateral Drain Foul Lateral Drain S104 Surface Water Lateral Drain S104 Combined Lateral Drain S104 Foul Lateral Drain Private Surface Water Lateral Drain Private Combined Lateral Drain Private Foul Lateral Drain Transfered Surface Water Lateral Da Transfered Combined Lateral Drain Transfered Foul Lateral Drain
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MATERIALS

- NONE
- AC - ASBESTOS CEME
- BR - BRICK
- CC - CONCRETE BOX CULVERT
- CI - CAST IRON
- CO - CONCRETE
- CSB - CONCRETE SEGMENTS (BOLTED)
- CSU - CONCRETE SEGMENTS (UNBOLTED)
- DI - DUCTILE IRON
- GRP - GLASS REINFORCED PLASTIC
- MAC - MASONRY IN REGULAR COURSES
- MAR - MASONRY RANDOMLY COURSED
- PE - POLYETHYLENE
- PF - PITCH
- PP - POLYPROPYLENE
- PSC - PLASTIC STEEL COMPOSITE
- PVC - POLYVINYL CHLORIDE
- RPM - REINFORCED PLASTIC MATRIX
- SI - SPUN (GREY) IRON
- ST - STEEL
- U - UNKNOWN
- VC - VITRIFIED CLAY
- XXX - OTHER

CATEGORIES

- W - WEIR
- C - CASCADE
- DB - DAMBOARD
- SE - SIDE ENTRY
- FV - FLAP VALVE
- BD - BACK DROP
- S - SIPHON
- D - HIGHWAY DRAIN
- S104 - SECTION 104

SHAPE

- C - CIRCULAR
- E - EGG SHAPED
- O - OTHER
- R - RECTANGLE
- S - SQUARE
- T - TRAPEZOIDAL
- U - UNKNOWN

PURPOSE

- C - COMBINED
- E - FINAL EFFLUENT
- F - FOUL
- L - SLUDGE
- S - SURFACE WATER



Severn Trent Water Limited
 Asset Data Management
 PO Box 5344
 Coventry
 CV3 9FT
 Telephone: 0345 601 6616

SEWER RECORD (Tabular)


O/S Map Scale: 1:2,500
 This map is centred upon:
 Date of Issue: 06-12-21
 X: 385227.07 Y: 283766.10

Disclaimer Statement

- Do not scale off this Map.
- This plan and any information supplied with it is furnished as a general guide, is only valid at the date of issue and no warranty as to its correctness is given or implied. In particular this plan and any information shown on it must not be relied upon in the event of any development or works (including but not limited to excavations) in the vicinity of SEVERN TRENT WATER assets or for the purposes of determining the suitability of a point of connection to the sewerage or distribution systems.
- On 1 October 2011 most private sewers and private lateral drains in Severn Trent Water's sewerage area, which were connected to a public sewer as at 1 July 2011, transferred to the ownership of Severn Trent Water and became public sewers and public lateral drains. A further transfer takes place on 1 October 2012. Private pumping stations, which form part of these sewers or lateral drains, will transfer to ownership of Severn Trent Water on or before 1 October 2016. Severn Trent Water does not possess complete records of these assets. These assets may not be displayed on the map.
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APPENDIX C – Hydraulic Calculations


Link Engineering		Page 1
Lombard House 145 Great Charles Street Birmingham, B3 3LP	Dunsley Drive Kinver	
Date 04/01/2022 15:30 File	Designed by WJT Checked by KL	
Innovyze	Source Control 2018.1.1	

Summary of Results for 100 year Return Period (+40%)

Half Drain Time : 1516 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m ³)	Status
15 min Summer	0.342	0.342	2.8	178.8	O K
30 min Summer	0.448	0.448	2.8	234.1	O K
60 min Summer	0.556	0.556	2.8	290.4	O K
120 min Summer	0.661	0.661	2.8	345.2	O K
180 min Summer	0.717	0.717	2.8	374.4	O K
240 min Summer	0.751	0.751	2.8	392.5	O K
360 min Summer	0.790	0.790	2.8	412.5	O K
480 min Summer	0.811	0.811	2.8	423.9	O K
600 min Summer	0.822	0.822	2.8	429.6	O K
720 min Summer	0.826	0.826	2.8	431.7	O K
960 min Summer	0.821	0.821	2.8	428.8	O K
1440 min Summer	0.785	0.785	2.8	410.3	O K


Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
15 min Summer	130.597	0.0	27
30 min Summer	85.825	0.0	41
60 min Summer	53.779	0.0	70
120 min Summer	32.595	0.0	130
180 min Summer	24.012	0.0	190
240 min Summer	19.224	0.0	248
360 min Summer	13.954	0.0	368
480 min Summer	11.125	0.0	486
600 min Summer	9.325	0.0	604
720 min Summer	8.069	0.0	724
960 min Summer	6.417	0.0	962
1440 min Summer	4.640	0.0	1262

Link Engineering		Page 2
Lombard House 145 Great Charles Street Birmingham, B3 3LP	Dunsley Drive Kinver	
Date 04/01/2022 15:30 File	Designed by WJT Checked by KL	
Innovyze	Source Control 2018.1.1	

Summary of Results for 100 year Return Period (+40%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m ³)	Status
2160 min Summer	0.735	0.735	2.8	383.8	O K
2880 min Summer	0.690	0.690	2.8	360.8	O K
4320 min Summer	0.610	0.610	2.8	318.5	O K
5760 min Summer	0.535	0.535	2.8	279.4	O K
7200 min Summer	0.465	0.465	2.8	242.9	O K
8640 min Summer	0.400	0.400	2.8	209.1	O K
10080 min Summer	0.341	0.341	2.8	178.0	O K
15 min Winter	0.384	0.384	2.8	200.6	O K
30 min Winter	0.503	0.503	2.8	262.8	O K
60 min Winter	0.625	0.625	2.8	326.5	O K
120 min Winter	0.745	0.745	2.8	389.1	O K
180 min Winter	0.810	0.810	2.8	423.0	O K
240 min Winter	0.851	0.851	2.8	444.5	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
2160 min Summer	3.350	0.0	1628
2880 min Summer	2.656	0.0	2020
4320 min Summer	1.912	0.0	2816
5760 min Summer	1.513	0.0	3632
7200 min Summer	1.261	0.0	4400
8640 min Summer	1.086	0.0	5192
10080 min Summer	0.957	0.0	5944
15 min Winter	130.597	0.0	26
30 min Winter	85.825	0.0	41
60 min Winter	53.779	0.0	70
120 min Winter	32.595	0.0	128
180 min Winter	24.012	0.0	186
240 min Winter	19.224	0.0	244

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Summary of Results for 100 year Return Period (+40%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m ³)	Status
360 min Winter	0.899	0.899	2.8	469.5	O K
480 min Winter	0.928	0.928	2.8	484.7	O K
600 min Winter	0.944	0.944	2.8	493.5	O K
720 min Winter	0.953	0.953	2.8	498.2	O K
960 min Winter	0.956	0.956	2.8	499.7	O K
1440 min Winter	0.929	0.929	2.8	485.6	O K
2160 min Winter	0.862	0.862	2.8	450.4	O K
2880 min Winter	0.803	0.803	2.8	419.8	O K
4320 min Winter	0.686	0.686	2.8	358.3	O K
5760 min Winter	0.572	0.572	2.8	298.9	O K
7200 min Winter	0.466	0.466	2.8	243.3	O K
8640 min Winter	0.369	0.369	2.8	192.6	O K
10080 min Winter	0.282	0.282	2.8	147.3	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
360 min Winter	13.954	0.0	362
480 min Winter	11.125	0.0	478
600 min Winter	9.325	0.0	594
720 min Winter	8.069	0.0	708
960 min Winter	6.417	0.0	936
1440 min Winter	4.640	0.0	1374
2160 min Winter	3.350	0.0	1740
2880 min Winter	2.656	0.0	2192
4320 min Winter	1.912	0.0	3076
5760 min Winter	1.513	0.0	3928
7200 min Winter	1.261	0.0	4760
8640 min Winter	1.086	0.0	5528
10080 min Winter	0.957	0.0	6248

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Appendix 8: CSA Preliminary Ecological Appraisal



Land at Dunsley Drive,
Kinver

Preliminary Ecological Appraisal

Prepared by
CSA Environmental

on behalf of
Bellway Homes

Report Ref: CSA/5849/01

December 2021

This report may contain sensitive ecological information. It is the responsibility of the Local Authority to determine if this should be made publicly available.

Report Reference	Date	Revision	Prepared by	Approved by	Comments
CSA/5849/01	15/12/2021	-	AP	KC	First issue
CSA/5849/01	21/12/2021	A	AP	KC	Final issue.



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Appendices

Appendix A: Habitats Plan & Photographs

Appendix B: Legislation, Planning Policy and Standing Advice

Appendix C: Desk Study Information

Appendix D: Habitats and Flora Species List

EXECUTIVE SUMMARY

Land at Dunsley Drive, Kinver is to be promoted for new residential development.

CSA Environmental was instructed by Bellway Homes to undertake a Preliminary Ecological Appraisal (PEA) of the Site to identify ecological constraints to development, inform recommendations for design, highlight opportunities for ecological enhancement and determine any additional investigation/survey work necessary.

As part of this PEA, a desk study and extended Phase 1 Habitat survey of the Site were undertaken in September 2021. The Site is comprised of a horse grazed grassland field divided into paddocks, with short, isolated sections of vegetation and shrubs.

No international statutory designations are located within 10km of the Site. One national and one local statutory designation are present within 3km of the Site. The Site lies in close proximity to a number of non-statutory nature designations, including Staffordshire and Worcestershire Canal Biodiversity Action Site (BAS), which is c. 50m south. Potential effects of an increase in visitors to this designation will need to be considered as part of proposals.

Habitats currently present within the Site are generally common and widespread, with the greatest ecological interest associated with the short stretches of boundary vegetation and native semi-mature trees. On-site vegetation and trees should be retained, protected and buffered from development edge effects.

Retention of habitats of higher ecological value, and the delivery of new habitats will help to contribute towards delivering a net gain in biodiversity on-site. Habitat condition assessments should be undertaken to inform baseline information used within the Biodiversity Net Gain calculation.

It is recommended that discussions be opened with the Local Planning Authority to discuss survey scope, namely the need for bat activity surveys, which are not considered to be necessary. A nesting bird check of the on-site stable block should also be undertaken pre-commencement.

There are not anticipated to be any overriding constraints to the principle of development.

1.0 INTRODUCTION

- 1.1 This report has been prepared by CSA Environmental on behalf of Bellway Homes. It sets out the findings of a Preliminary Ecological Appraisal (PEA) of Land at Dunsley Drive, Kinver (hereafter referred to as 'the Site'). The Site is to be promoted for residential development.
- 1.2 The scope of this appraisal has been determined with due consideration for best-practice guidance provided by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2017), and to the *Biodiversity: Code of practice for planning and development* (BS 42020:2013) published by the British Standards Institution (2013).
- 1.3 The Site occupies an area of c. 1ha and is located around central grid reference SO 8519 8375, to the east of Kinver. It consists of a single horse-grazed semi-improved grassland field separated into paddocks and bounded by fencing and short stretches of hedge/shrubs (see Habitats Plan in Appendix A).
- 1.4 A desk study and extended Phase 1 Habitat survey were undertaken of the Site, the findings of which are presented herein.
- 1.5 This PEA aims to:
 - Identify any ecological constraints to the principle of residential development of the Site
 - Highlight opportunities for ecological enhancements that could be secured through development and to achieve Biodiversity Net Gain
 - Inform illustrative design/spatial planning at the site level
 - Identify further ecological surveys and assessments that may be required to inform a full Ecological Impact Assessment (EclA) of any future proposals.
 - Highlight opportunities for ecological enhancement and Biodiversity Net Gain (BNG)
- 1.6 The scope of this appraisal has been determined with due consideration for best-practice guidance provided by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2017), and to the *Biodiversity: Code of practice for planning and development* (BS 42020:2013) published by the British Standards Institution (2013).

2.0 LEGISLATION, PLANNING POLICY & STANDING ADVICE

Legislation

2.1 Legislation relating to wildlife and biodiversity of particular relevance to this PEA includes:

- The Conservation of Habitats and Species Regulations 2017 (as amended)
- The Wildlife and Countryside Act 1981 (as amended)
- The Natural Environment and Rural Communities (NERC) Act 2006
- The Protection of Badgers Act 1992

2.2 This above legislation has been addressed, as appropriate, in the production of this report. Further information on the above legislation is provided in Appendix B.

National Planning Policy

2.3 The National Planning Policy Framework (NPPF) (Ministry of Housing, Communities & Local Government, 2021) sets out the government planning policies for England and how they should be applied. Chapter 15: Conserving and Enhancing the Natural Environment, is of particular relevance to this report as it relates to ecology and biodiversity. Further details are provided in Appendix B.

2.4 The Government Circular 06/2005, which is referred to by the NPPF, provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their effects within the planning system.

Local Planning Policy

2.5 A number of local planning policies relate to ecology, biodiversity and/or nature conservation. These are summarised in Table 1 of Appendix B. These policies have been addressed, as appropriate, in the production of this report.

Standing Advice

2.6 Natural England and Defra's Standing Advice (Natural England & Defra, 2014) regarding habitats and protected species aims to support local authorities and forms a material consideration in determining applications in the same way as any individual response received from Natural England following consultation. Standing advice has therefore been given due consideration, alongside other detailed guidance documents, in the production of this report.

3.0 METHODS

Desk Study

- 3.1 The Multi-Agency Geographic Information for the Countryside (MAGIC) online database was reviewed in November 2021 to identify nature conservation designations within the following search radii:
 - Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Ramsar sites within 10km of the Site (including possible/proposed sites)
 - Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Local Nature Reserves (LNR) within 3km of the Site
 - Other relevant data e.g. Ancient Woodland Inventory within 1km of the Site
- 3.2 A review was undertaken of the location of any such designations, their distance from and connectivity with the Site, and the reasons for their designation. This information was used to determine whether they may be within the Site's zone of influence.
- 3.3 Staffordshire Ecological Record Centre (SER) was contacted for details of any non-statutory nature conservation designations and records of protected/notable habitats and species. This information was requested for an area encompassing the Site and adjacent land within c. 2km of its central grid reference. This search area was selected to include the likely zone of influence upon non-statutory designations and protected or notable habitats and species.
- 3.4 Further online resources were reviewed for information which may aid the identification of important ecological features. The Woodland Trust's online Ancient Tree Inventory was reviewed for known ancient or veteran trees within the Site and adjacent land. Interactive online mapping provided by the charity 'Buglife' was used to determine whether the Site falls within an Important Invertebrate Area.
- 3.5 In accordance with Natural England's Great Crested Newt Mitigation Guidelines (2001), a desktop search was undertaken to identify ponds within 500m of the Site which may have potential to support breeding great crested newts *Triturus cristatus*, using Ordnance Survey (OS) mapping, the MAGIC database and aerial photography.
- 3.6 Where possible under the terms of the data provider, relevant desk study data are presented in Appendix C.

Field Survey

Extended Phase 1 Habitat Survey

- 3.7 An extended Phase 1 Habitat survey was carried out in fine and dry weather conditions on 22 November 2021 by Alex Perry ACIEEM and Lucy Moorhouse, encompassing the Site and immediately adjacent habitats that could be viewed.
- 3.8 Phase 1 Habitat survey is a method of classification and mapping wildlife habitats in Great Britain. It was originally intended to provide "...*relatively rapidly, a record of the semi-natural vegetation and wildlife habitat over large areas of countryside.*" The Phase 1 Habitat survey method has been widely 'extended' beyond its original purpose to allow the capture of information at an intermediate level between Phase 1 and Phase 2 Habitat surveys, and here includes the following:
- More detailed floral species lists for each identified habitat
 - Descriptions of habitat structure, the evidence of management and a broad assessment of habitat condition
 - Mapping of additional habitat types (e.g. hardstanding)
 - Identification of Habitats of Principal Importance in respect of Section 41 (S41) of the NERC Act 2006
 - Identification of Habitats Directive Annex I habitat types
 - Evidence of, or potential for, European Protected Species (EPS) (including bats, great crested newt, dormouse and otter)
 - Evidence of, or potential for, other protected species (including birds, reptiles, water vole, badger and certain invertebrates)
 - Evidence of, or potential for, other notable species (including S41 Species of Principal Importance as well as notable, rare, protected or controlled plants and invertebrates)
- 3.9 Results of the extended Phase 1 Habitat survey are presented on the Habitats Plan in Appendix A. Appendix D provides a list of floral species recorded in each habitat.

Limitations

- 3.10 There were no specific limitations to the desktop study. The extended Phase 1 Habitat survey was undertaken in November, which is outside of the core flowering period for many plant species. As such, some species may have been undetectable.

Evaluation and Assessment

- 3.11 The evaluation and assessment of ecological features is beyond the scope of a PEA and has therefore not been undertaken here. Formal evaluation and assessment of any identified important ecological features should be undertaken as part of either a full EclA, or receptor-

specific survey and assessment in accordance with the published CIEEM method (CIEEM, 2018).

4.0 BASELINE ECOLOGICAL CONDITIONS

Nature Conservation Designations

Statutory

- 4.1 There are no statutory designations covering any part of the Site.
- 4.2 One international statutory designation was identified within 10km of the Site; Fens Pools SAC (c. 7.7km north-east).
- 4.3 One national statutory designations were identified within 3km of the Site; Kinver Edge SSSI (c. 1.3km south-west).
- 4.4 One local statutory designation was identified within 3km of the Site; Kingsford Forest Park LNR (c. 2.1km south-west).
- 4.5 These statutory designations are described in Table 1 below. Based on the reasons for designation of Fens Pool SAC, aquatic bodies noted for amphibian interest, and the distance from the Site, potential impacts to the qualifying features are not anticipated, hence not considered to pose a constraint to the proposed development.
- 4.6 It is likely that residents of the new development will utilise both Kinver Edge SSSI and/or Kingsford Forest Park LNR for recreational opportunities, given their size and proximity to the designation however due to the small scale of the Site, only a small increase in residents and recreation trips is anticipated. The majority of Kinver Edge SSSI is currently in favourable condition, with only southernmost parcels (and further from the Site) in unfavourable recovering (as shown on MAGIC online mapping). The Impact Risk Zones for SSSI's as shown on MAGIC online mapping does not include residential development within the Site area as a potential impact. Similarly, Kingsford Forest Park LNR is managed in such a way to accommodate visitors, and due to the small scale of the Site, the increase in recreational visitors is anticipated to be small. Neither of these designations anticipated to pose a constraint to the principle of development.

Non-Statutory

- 4.7 A total of eight non-statutory designations were identified within 1km of the Site. The nearest of these is Staffordshire and Worcestershire Canal Biodiversity Action Site (BAS), located c. 50m south. These non-statutory designations are described in Table 1 below.
- 4.8 A number of the nearest records are located adjacent to the Staffordshire and Worcestershire Canal, and a small increase in visitors to this designation for recreation may occur as a result of the proposed development. Although the number of dwellings planned at the Site is

small, (up to 35), consideration should be given to the potential impacts relating to an increase in recreation at these designations.

4.9 There are good footpath connections from the Site into Kinver and the canal, and to the east. There is potential that residents of the new dwellings will utilise local designations for recreation, although the total number of new trips is anticipated to be small and dispersed throughout the local area at a range of different designations. The remaining non-statutory designations are not anticipated to pose a constraint to the principle of development.

Table 1. Statutory and Non-Statutory Designations within search radii

Site Name & Designation	Distance & Direction from Survey Area	Special Interests or Qualifying Features
International Designations within 10km		
Fens Pool SAC	c. 7.7km north-east	This site comprises three canal feeder reservoirs and a series of smaller pools supporting an important assemblage of amphibians, including great crested newt <i>Triturus cristatus</i> .
National Designations within 3km		
Kinver Edge SSSI	c. 1.3km south-west	A site supporting a mosaic of heathland, grassland and woodland. A number of notable flora species are present including grey-hair grass <i>Corynephorus canescens</i> . Adder <i>Vipera berus</i> and common lizard <i>Zootoca vivipara</i> are known to persist on the heathland.
Local Designations within 3km		
Kingsford Forest Park LNR	c. 2.1km south-west	Kingsford is located on the edge of a sandstone ridge, supporting open heathland, sandy tracks, pine forests and broadleaved woodland.
Non-Statutory Designations within 2km		
Staffordshire and Worcestershire Canal, Kinver BAS	c. 50m south	The canal has little emergent vegetation, and what there is may have been planted by neighbouring homeowners. There is little floating vegetation. The western bank of the canal beyond the towpath is generally wooded.
Hyde Lock BAS	c. 0.3km west	An area comprising some fields alongside the canal with the River Stour running through the middle. To the north and north west are areas of broad-leaved woodland
The Hyde BAS	c. 0.4km north	A broad-leaved woodland, an area of ruderal vegetation adjacent to the river and a former pond site.
The Hyde (south-west of) BAS	c. 0.4km west	An alder carr woodland (now dried out) with some areas of poor semi-improved grassland. The site is low-lying and has been invaded by Himalayan Balsam which dominates the ground flora, as well as bramble.

Potters Cross (east of) BAS	c. 0.5km west	A young regenerating woodland, a ruderal habitat and a remnant neutral grassland area.
Penhole Coppice and the Bogs, Kinver BAS	c. 0.8km south	This large woodland west of the River Stour and the Staffs and Worcs Canal at Kinver is overgrown and dense with nettles and Himalayan Balsam throughout on the lower section next to the river.
Caunsall (north of) BAS	c. 0.8km south	The area consists mainly of hawthorn, with some dog's mercury, nettle and butterbur along the canal. The withy bed on the east side of the canal has been largely destroyed.
Comber Copse BAS	c. 0.9km south-west	This was probably originally part of the Kinver Edge complex of habitats which adjoins the site to its west. It now consists of an open mixed woodland with little undergrowth in most places.

Ancient Woodland

- 4.10 There is no ancient woodland covering any part of the Site or immediately adjacent land. No trees on or adjacent to Site are listed on the Ancient Tree Inventory.

Habitats and Flora

- 4.11 Habitats recorded on-site were classified in line with current Phase 1 Habitat survey guidance (JNCC, 1990), as illustrated in Appendix A. Detailed species lists for each habitat are provided in Appendix D.

Notable Flora Records

- 4.12 The SER provided 61 records of 14 notable plant species from within the search area. Those of potential relevance to the Site include two records of bluebell *Hyacinthoides non-scripta*, which were located closest to the Site (c. 0.3km north and 0.3km south).
- 4.13 No notable flora was recorded on-site during the field survey.

Semi Improved Grassland

- 4.14 The Site is dominated by short grazed semi-improved grassland. At the time of the field survey, three horses were present.
- 4.15 Post and wire fencing divides the field into various sized paddocks but the floral diversity was found to be consistent throughout. Gates between each of paddocks was open, allowing the horses to graze all areas of the Site.
- 4.16 Due to the sward height and time of year, the number of identifiable plant species recorded within the fields was low, with most species recorded along taller field edges. Species recorded include false oat-grass *Arrhenatherum elatius*, cock's-foot *Dactylis glomerata*, perennial rye *Lolium perenne*, yarrow *Achillea millefolium*, cleavers *Galium*

aparine, dove's-foot cranesbill *Geranium molle*, ragwort *Jacobaea vulgaris*, ribwort plantain *Plantago lanceolata*, greater plantain *Plantago major*, creeping buttercup *Ranunculus repens*, dock *Rumex* sp., chickweed *Stellaria media*, dandelion *Taraxacum officinale* agg., clover *Trifolium* sp., nettle *Urtica dioica*, germander speedwell *Veronica chamaedrys* and periwinkle *Vinca* sp.

Hedges and Trees

- 4.17 Mature, intact hedgerows are generally absent from the Site. For the most part, boundaries comprise short stretches of unmanaged shrubs or small trees.
- 4.18 Boundary B1 lies adjacent to Dunsley Drive and supports short stretches of vegetation and semi-mature trees in places. Species recorded along this boundary include field maple *Acer campestre*, sycamore *Acer pseudoplatanus*, silver birch *Betula pendula*, hawthorn *Crataegus monogyna*, holly *Ilex aquifolium*, blackthorn *Prunus spinosa*, *Prunus* sp., oak *Quercus robur*, bramble *Rubus fruticosus* agg, elder *Sambucus nigra*, snowberry *Symphoricarpos albus* and elm *Ulmus* sp.
- 4.19 Boundary B2 comprises a short stretch of snowberry with small patches of bramble and blackthorn planted as part of an ornamental garden hedge for the dwelling to the south. A semi-mature silver birch tree (c. 8m tall) is located at the easternmost end of the boundary.
- 4.20 The eastern boundary (Boundary B3) comprises a double post and wire fenceline and supports very little vegetation. Small, isolated stands of hawthorn and holly are present along the boundary.
- 4.21 Boundary B4 lies adjacent to a residential garden to the north. A managed ornamental laurel *Laurus* sp. hedge is present in the north-eastern corner. A small off-site tree group is also present in the north-western corner and contains bramble, hawthorn, *Cupressus* sp. and silver birch.
- 4.22 A small tree group comprising yew *Taxus baccata* and holly is present centrally along Boundary B4.

Scrub

- 4.23 A short stretch of scattered bramble scrub is present along Boundary B1 and has begun to colonise into the field through lack of management, with dense bramble scrub also forms part of this boundary.

Other Habitats

- 4.24 Bare ground is present on the Site, predominantly within gateways in the northern paddocks, likely to have been caused by grazing livestock.
- 4.25 A small corrugated-metal stable (S1) is located in the north of the Site; it has three stable doors on the southern side, and is in use by the on-site

horses. The inside of the building is lined with plywood; gaps in the roof and along the top of the plywood are extremely cobwebbed.

- 4.26 A small area in the north-western corner of the Site is currently used as storage for horseboxes, although at the time of the survey it appeared that this area had not been recently accessed.

Fauna

Bats

- 4.27 A total of 279 bat records were identified within the search area, dating from 1988 to 2019. They include the following species: common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, noctule *Nyctalus noctula*, brown long-eared *Plecotus auritus*, Leisler's bat *Nyctalus leisleri*, serotine *Eptesicus serotinus*, Natterer's bat *Myotis natterii*, Daubenton's bat *Myotis daubentonii*, *Myotis* sp. and lesser horseshoe *Rhinolophus hipposideros* bats. The closest records are of common pipistrelle, soprano pipistrelle, noctule and serotine bat species within a four-figure grid square, located c. 0.2km north-west at its closest point.
- 4.28 Suitable habitat on-site for bats is limited, with well vegetated dispersal corridors generally absent, with the short grazed grassland on-site providing limited foraging opportunities.
- 4.29 The on-site building (S1) was assessed for its potential to support roosting bats. The high internal light levels from open doors, metal construction of the building and regular use reduces the suitability of the structure for use by day roosting bats. In addition, high levels of cobwebs were recorded around the ceiling and walls, indicating lack of activity in these areas by bats. A systematic search was undertaken to look for evidence of feeding by bats, with none recorded. On balance of the above, the building was found to have negligible potential for roosting bats.
- 4.30 As stated above, the structure on-site offers limited potential for day roosting bats and trees with bat roosting potential are absent from the Site.

Badger

- 4.31 The SER have provided 20 records of badger *Meles meles* from within the search area, dating from 1998 to 2018, the closest of which are c. 1km south-west from the Site and comprise road casualties along the A449.
- 4.32 Vegetation on-site has limited potential to support to support sett-building activity, with suitable habitat limited to dense scrub on the western boundary. No setts, latrines or other evidence of badger was recorded during the survey.

Dormouse

- 4.33 No records of dormouse *Muscardinus avellanarius* were returned in the data search.
- 4.34 Woody vegetation on the Site comprises short, isolated sections. Connectivity between the Site and areas of suitable high quality habitat such as parcels of woodland is generally absent. The nearest woodland parcel is located adjacent to the canal corridor but separated from the Site by housing and residential development. On the basis of the absence of biological records in the area, and the sub-optimal habitats on-site, this species is not anticipated to pose a constraint to the principle of development.

Riparian Mammals

- 4.35 No records of water vole *Arvicola amphibius* were returned in the data search.
- 4.36 A total of 17 records of otter *Lutra lutra* were identified within the search area, dating from 1998 to 2017. Of the records returned, 11 relate to locations along the Staffordshire and Worcestershire Canal, with the nearest records c. 0.2km south of the Site.
- 4.37 Despite the nearby canal corridor, no suitable aquatic or terrestrial habitats are present on-site for water vole, who rely on vegetated streams and ditches for dispersal and sheltering. Whilst otters are known to deviate from canal corridors onto nearby terrestrial land, on-site habitat offers a closely grazed grassland sward with no significant dense vegetation sufficient to provide shelter. Whilst otters may rarely disperse across the Site if in the area, the Site is not likely to form a significant part of their territory. Riparian mammals are not considered to pose a constraint to the principle of development.

Other Mammals

- 4.38 No records of brown hare *Lepus europaeus* or harvest mouse *Micromys minutus* were returned in the data search.
- 4.39 Brown hare rely on open areas of habitat, such as large arable fields. Open farmland is present to the east of the Site, with only the fence line separating the Site from the open landscape. As such, it is possible that brown hare may use on-site habitats, but a notable population is not likely to be present.
- 4.40 Harvest mouse typically utilises tall grassland or reedbed habitats, which are absent from the Site.
- 4.41 The data search returned eight records of hedgehog *Erinaceus europaeus* from within the search area. All records are located within the residential area of Kinver on the opposing side of the Staffordshire

and Worcestershire Canal. The nearest record is located c.0.9km south-west.

- 4.42 Hedgehogs may use the short stretches of on-site vegetation for dispersal and grassland for foraging. A notable assemblage of hedgehogs is not thought to be present due to the lack of cover available for sheltering and limited foraging opportunities within short-sward grassland.
- 4.43 The above species are not anticipated to pose a constraint to the principle of development

Birds

- 4.44 A total of 3020 records of 71 bird species were identified within the search area, dating from 1948 to 2019. Most of the bird records returned in the data search are for four-figure grid references rather than specific locations. Those of potential relevance to the Site include skylark *Alauda arvensis*, mallard *Anas platyrhynchos*, black-headed gull *Chroicocephalus ridibundus*, lesser black-backed gull *Larus fuscus*, grey wagtail *Motacilla cinerea*, house sparrow *Passer domesticus*, dunnock *Prunella modularis* and mistle thrush *Turdus viscivorus* located within a km grid square, c. 0.2km north at the closest point.
- 4.45 The short grazed grassland and small sections of vegetation offer limited opportunities for birds. It is likely that breeding generalists will utilise on-site vegetation but a notable assemblage is not likely to be present.
- 4.46 The building was inspected for evidence of nesting swallow/swift/house martin activity, with none recorded. It is possible that the stable offers nesting habitat for these species.

Reptiles

- 4.47 A total of 21 records of three reptile species were identified within the search area including slow worm *Anguis fragilis*, adder *Vipera berus* and common lizard *Zootoca vivipara*. The majority of records are located at Kinver Edge, c. 1.5km west and on the opposite site of the canal, with most of the remaining records recorded at Million Plantation, c. 1.7km north.
- 4.48 Habitats on-site are well maintained through grazing and as such sward height at the grassland is low. The habitat mosaic required by reptiles is generally absent. Reptiles are not anticipated to pose a constraint to development.

Amphibians

- 4.49 A total of two records common toad *Bufo bufo* were returned in the data search, both records are located at Kinver Edge, with the nearest c. 1.6km west. There were no records of great crested newt.

- 4.50 A more detailed appraisal of the Site in respect of great crested newt is provided below.

Great Crested Newt

- 4.51 On-site habitats are mostly unsuitable for terrestrial great crested newts, with short-grazed grassland dominating the Site. Whilst short sections of hedge and scrub may support this species, opportunities are limited.
- 4.52 Despite spending much of their annual lifecycle within the terrestrial environment, great crested newts are dependent upon the presence of suitable aquatic breeding habitat in order for a population to persist. No potential breeding ponds were identified on-site during the site survey, while one appears to be present within a dispersible range of the Site, based on OS mapping, c. 0.3km north.
- 4.53 Given that the pond is located over 250m from the Site (typical dispersal distance for great crested newts), and well-connected, good quality terrestrial habitat is absent from the Site, this species is not likely to pose a constraint to the principle of development.

Invertebrates

- 4.54 A total of 417 records of 159 invertebrate species were identified within the search area. The nearest record is for small heath *Coenonympha pamphilus*, located c. 0.2k north. The majority of records relate to surveys undertaken at designated sites such as Kinver Edges and Gibbetts Wood. As such, invertebrates recorded within these designations will likely rely on specific habitats which are not present on-site. The Site is not situated within an Important Invertebrate Area (IIA).
- 4.55 The closely grazed habitats and short stretches of vegetation are likely to support a range of generalist invertebrate species, therefore it is unlikely that a notable assemblage is present and as such, invertebrates are not considered to pose a constraint to the principle of development.

5.0 DISCUSSION AND RECOMMENDATIONS

Nature Conservation Designations

Non-Statutory

Staffordshire and Worcestershire Canal BAS

- 5.1 The Staffordshire and Worcestershire Canal BAS is located close to the Site and it is possible that there may be an increase in recreation visits as a result of the proposed development. Although the number of new dwellings is low and the number of additional visits is considered to be low, measures should be considered to maximise on-site recreational opportunities within the development thereby reducing the number of visitors to the canal path.

Other Non-Statutory Designations

- 5.2 Although the remaining designations are not anticipated to pose a constraint to development, measures should be taken on-site to provide local alternative recreational opportunities for new residents, to further minimise the number of additional trips to nearby non-statutory designations.

Habitats and Flora

- 5.3 Emerging legislative frameworks and policy seeks to leave biodiversity in a better state than prior to development, i.e. development should deliver a Biodiversity Net Gain (BNG).
- 5.4 The Site is dominated by habitats of limited ecological interest. Development of the Site would present opportunities to deliver measurable ecological enhancement through habitat restoration or creation alongside proposals, i.e. as part of the Site's green infrastructure provision. Subject to scheme design, it is considered that such measures are likely to be capable of delivering BNG on-site.
- 5.5 It is recommended that the scheme design be informed by the application of a 'Biodiversity Impact Assessment Calculation', making use of the latest Biodiversity Metric (Version 3.0 at the time of writing) published by Natural England, to provide a quantitative assessment of losses or gains in biodiversity. This will enable future planning applications to be made in-line with emerging legislative frameworks and policy.

Hedges and Trees

Short stretches of vegetation and occasional semi-mature trees are present on-site. Hedges present along Boundary B2 and the east of Boundary B4 comprise ornamental features, offering lower ecological value than unmanaged, native features. Existing gaps in vegetation

should be subject to infill planting to create intact, species-rich features and increase connectivity to the wider landscape.

- 5.6 Where possible, trees on and adjacent to the Site should be retained and protected as part of proposals. New tree planting should be provided as part of on-site landscaping to provide habitat diversity and in time, mature features.

Fauna

Bats

- 5.7 Due to the unsuitability of the on-site stable for roosting, and the absence of suitable foraging and dispersal habitats on-site for bats, further survey work has not been recommended. Discussions should be opened with the LPA to confirm whether they are in agreement

Breeding Birds

- 5.8 The on-site stable has potential to support nesting swallow/swift or house martin. A pre-commencement check should be undertaken to determine whether the building is in use by nesting birds. If nesting birds are present, a Construction Exclusion Zone should be implemented around the building until checks have fledged.

Summary of Recommendations

- 5.9 Based on the ecological constraints identified above, Table 2 summarises recommendations for further work necessary to determine the need for, and scope of, any avoidance, mitigation and/or compensation measures to address potential adverse effects of development.

Table 2. Recommendations for further investigation/survey

Ecological Feature	Further Work	Applicable Timescales
Biodiversity Net Gain	Habitat condition assessments in the suitable season	April - July
	Production of Metric	Pre-planning
LPA Consultation	To discuss survey scope and confirm that bat surveys are not anticipated.	Pre-planning
Breeding Birds	Nesting bird check of stable block	Pre-commencement

Opportunities for Ecological Enhancement

- 5.10 To promote adherence to the NPPF and Core Policy 2 of the South Staffordshire Core Strategy 2012 the following opportunities for ecological enhancement have been identified:

- Aquatic habitat creation to provide new aquatic opportunities and increase biodiversity, potentially to the south of the Site where the land drops away towards the canal.
- Incorporation of native plants and those of wildlife importance in to landscaping scheme to provide foraging opportunities for birds, invertebrates and bats
- Improved connectivity of green infrastructure with new hedgerow planting and infill planting along existing boundaries, particularly along the eastern boundary
- New tree planting along boundaries and within the Site to offer habitat diversity and increased tree cover
- Delivery of new thicket and wildflower planting at the Site, along boundaries if possible, to provide habitat diversity and increase connectivity to the wider landscape
- Provision of new bat roosting opportunities within new buildings
- Provision of bird nesting opportunities within new buildings, including swallow cups to account for the loss of potential nesting habitat within the stable block
- Provision of hedgehog gaps in new fencing to promote habitat connectivity across and within the Site

6.0 CONCLUSIONS

- 6.1 Confirmed ecological constraints to development at the Site have been identified as the presence of:
- Worcestershire and Staffordshire Canal BAS
 - Hedges and Trees
- 6.2 It is recommended that habitat condition assessments be undertaken in the suitable season, and Biodiversity Net Gain calculation undertaken using the latest Metric.
- 6.3 Discussions should be opened with the Local Planning Authority to discuss the conclusions of this report.
- 6.4 Recommendations for ecological enhancement measures that could be delivered as part of development at the Site have been provided here-in, which will aid accordance with the South Staffordshire Core Strategy.
- 6.5 No overriding constraints to development have been identified subject to the implementation of appropriate mitigation measures in respect of confirmed ecological constraints, and further recommended survey work.

7.0 REFERENCES

British Standards Institution, 2013. *BS 42020:2013 Biodiversity — Code of practice for planning and development*. London: BSI.

British Standards Institution, 2012. *BS 5837:2012 Trees in relation to design, demolition and construction: Recommendations*. London: BSI.

Buglife, no date. *Important Invertebrate Areas*. [online] Available at: <<https://www.buglife.org.uk/resources/important-invertebrate-areas/>> [Accessed December 2021].

Chartered Institute of Ecology and Environmental Management, 2016. *Guidelines for Assessing and Using Biodiversity Data*. Winchester: CIEEM.

Chartered Institute of Ecology and Environmental Management, 2017. *Guidelines for Ecological Report Writing*. Winchester: CIEEM.

Chartered Institute of Ecology and Environmental Management, 2017. *Guidelines for Preliminary Ecological Appraisal*. 2nd ed. Winchester: CIEEM.

Chartered Institute of Ecology and Environmental Management, 2018. *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*. Version 1.1. Winchester: CIEEM.

Chartered Institute of Ecology and Environmental Management, 2020. *Guidance on Ecological Survey and Assessment in the UK During the Covid-19 Outbreak*. Version 2, published 9 June 2020. Winchester: CIEEM.

Collins, J., ed., 2016. *Bat Surveys for Professional Ecologists: Good Practice Guidelines*. 3rd ed. London: The Bat Conservation Trust.

Defra, 2011. *Biodiversity 2020: A strategy for England's wildlife and ecosystem services*. London: Defra.

Eaton, M., Aebischer, N., Brown, A., Heam, R., Lock, L., Musgrove, A., Noble, D., Stroud, D. and Gregory, R., 2015. Birds of Conservation Concern 4: the population status of birds in the UK, Channel Islands and Isle of Man. *British Birds*, 108, pp.708-746.

English Nature, 2001. *Great Crested Newt Mitigation Guidelines*. Peterborough: EN.

Joint Nature Conservation Committee, 1990. *Handbook for Phase 1 habitat survey – a technique for environmental audit*. Revised reprint 2010. Peterborough: JNCC.

JNCC and Defra (on behalf of the Four Countries' Biodiversity Group), 2012. *UK Post-2010 Biodiversity Framework*. [pdf] Peterborough: JNCC. Available at: <<http://jncc.defra.gov.uk/page-6189>> [Accessed December 2021].

Ministry of Housing, Communities & Local Government, 2021. *National Planning Policy Framework (NPPF)*. London: Ministry of Housing, Communities & Local Government.

Multi-Agency Geographic Information for the Countryside (MAGIC), 2013. *Interactive Map*. [online] Available at: <<http://www.magic.gov.uk/MagicMap.aspx>> [Accessed December 2021].

Natural England and Department for Environment, Food & Rural Affairs, 2014. *Protected species and development: advice for local planning authorities*. [online, last updated January 2021] Available at: <<https://www.gov.uk/protected-species-and-sites-how-to-review-planning-proposals>> [Accessed December 2021].

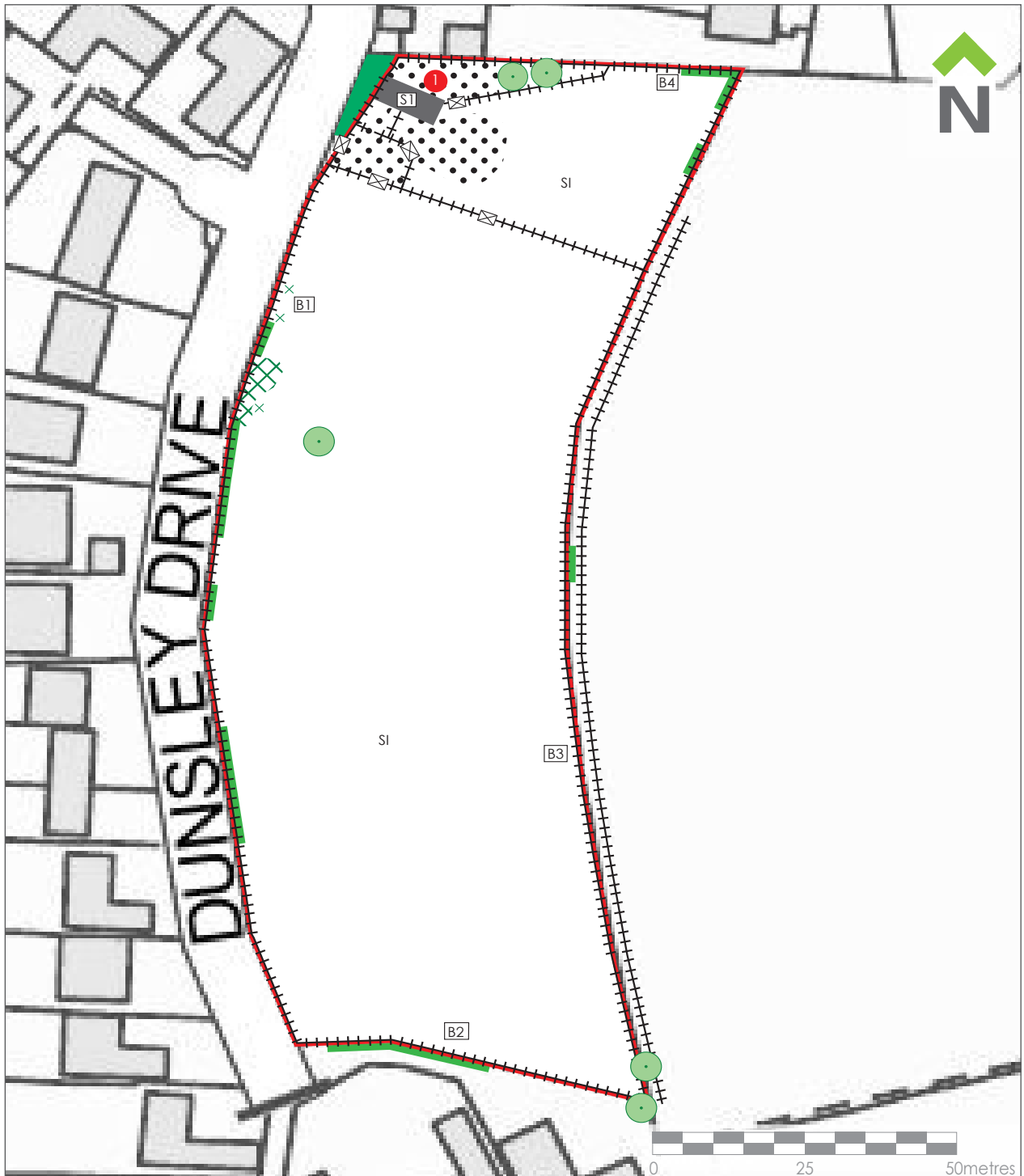
Oldham, R. S., Keeble, J., Swan, M. J. S. & Jeffcote, M., 2000. Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*). *Herpetological Journal*, 10(4), pp.143-155.


South Staffordshire Council, 2012. *South Staffordshire Core Strategy DPD* [online] Available at: <https://www.sstaffs.gov.uk/doc/179760/name/Core%20Strategy%202012%20Corporate%20Version%20.pdf/> [Accessed December 2021]

The Woodland Trust, no date. *Ancient Tree Inventory*. [online] Available at: <<https://ati.woodlandtrust.org.uk/>> [Accessed December 2021].

Appendix A

Habitats Plan & Photographs



 Site boundary	 Hedge/woody vegetation	 Gate
 Semi-improved grassland	 Individual tree (Indicative location)	 Boundary reference
 Native tree group	 Bare ground	 Structure reference
 Dense scrub	 Building	 Target note: 1. Horsebox storage area
 Scattered scrub	 Fence	

 <p>Suite 1, Deer Park Business Centre, Eckington, Pershore WR10 3DN</p> <p>  01386 751100  pershore@csaenvironmental.co.uk  csaenvironmental.co.uk </p>	Project Land at Dunsley Drive, Kinver	Drawing No. CSA/5849/100	Rev -
	Drawing Title Habitats Plan	Scale Refer to scale	Drawn LM
	Client Bellway Homes	Date December 2021	Checked AP



Photograph 1. View of the Site, looking south.



Photograph 2. On-site storage area to north.



Photograph 3. Boundary B1.



Photograph 4. Boundary B3.



Photograph 5. View of on-site structure, looking north



Photograph 6. View of the Site, looking north.

Appendix B

Legislation and Planning Policy

- 1.1. The **Conservation of Habitats and Species Regulations 2017** (as amended) make prescriptions for the designation and protection of Sites of Community Importance ('European sites', i.e. Special Areas of Conservation and Special Protection Areas) and European Protected Species (EPS). The latter include all native bats, great crested newts, dormice, otters and certain reptiles, listed under Annex II of the Regulations. Following the UK's departure from the European Union, the provisions of the Regulations have been retained through enactment of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, which came into force on 31 December 2020.
- 1.2. The **Wildlife and Countryside Act 1981** (as amended, principally by the Countryside and Rights of Way Act 2000) forms the basis for protection of statutory designated sites of national importance (e.g. Sites of Special Scientific Interest; SSSIs) and native species that are rare and vulnerable in a national context. Additionally, badgers are protected under the **Protection of Badgers Act 1992**.
- 1.3. Section 40(1) of the **Natural Environment and Rural Communities (NERC) Act 2006** states that each public authority, "must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity." This legislation makes it clear that planning authorities should consider impacts to biodiversity when determining planning applications, with particular regard to the Section 41 (S41) lists of 56 habitats and 943 species of principal importance. The UK Biodiversity Action Plan (BAP) has been superseded by the Biodiversity 2020 Strategy, however Local BAPs continue to influence biodiversity management and conservation effort, including through the spatial planning system, at the local scale.
- 1.4. The **National Planning Policy Framework (2021)** (NPPF) sets out government planning policies for England and how they should be applied. With regards to ecology and biodiversity, Chapter 15: Conserving and Enhancing the Natural Environment, paragraph 174, states that the planning system and planning policies should minimise impacts on and provide net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.
- 1.5. Paragraph 180 sets out the principles that local planning authorities should apply when determining planning applications:
 - If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts).
 - Development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the

development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest.

- Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists.
- Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

1.6. The **Government Circular 06/2005**, which is referred to within the NPPF, defines statutory nature conservation sites and protected species as a material consideration in the planning process.

1.7. Local planning policies of relevance to ecology, biodiversity and/or nature conservation have been set out in Table 1 below.

Table 1. Summary of regional and local planning policy relating to ecology

Policy	Summary
South Staffordshire Core Strategy Adopted 2012	
Core Policy 2: Protecting and Enhancing the Natural and Historic Environment	<p>The Council will support development or other initiatives where they protect, conserve and enhance the District's natural and heritage assets including ecological networks internationally, nationally and locally important designations. Particular support will be given to initiatives to improve the natural environment where it is poor and increase the overall biodiversity of the District including the development of green infrastructure links and to improve the historic environment where it is identified as at risk.</p> <p>Development or initiatives will generally be supported which:</p> <ul style="list-style-type: none"> a) will not have a detrimental impact upon the interests and significance of a natural or heritage asset; b) are not contrary to the control of development within internationally, nationally or locally designated areas including the Green Belt and Open Countryside, Cannock Chase Area of Outstanding Natural Beauty and Motte Meadows Special Area of Conservation, and contribute to the conservation and enhancement of the character of the landscape and local distinctiveness; c) are consistent with the sustainable management of the asset including the repair and reuse of historic buildings; d) protect and improve water and air quality; e) provide mitigation or compensatory measures to address any potential harmful implications and supporting enhancement measures.

Policy	Summary
	<p>Development proposals should be consistent with the NPPF, the Supplementary Planning Documents on the Historic Environment and Biodiversity and other local planning policies.</p> <p>Development proposals should have regard to and support the actions and objectives of the Severn and Humber River Basin Management Plans (RBMPs) and also have regard to the River Severn and River Trent Catchment Flood Management Plans (CFMPs).</p>
<p>Policy EQ1: Protecting, Enhancing and Expanding Natural Assets</p>	<p>Permission will be granted for development (alone or in combination) which would not cause significant harm to sites and/or habitats of nature conservation, geological or geomorphological value, including ancient woodlands and hedgerows, together with species that are protected or under threat. Support will be given to proposals which enhance and increase the number of sites and habitats of nature conservation value, and to meeting the objectives of the Staffordshire Biodiversity Action Plan (SBAP).</p> <p>In line with the objectives of the Water Framework Directive (WFD), development proposals must not adversely affect the ecological status of a water body and wherever possible take measures to improve ecological value in order to help meet the required status.</p> <p>International Sites Any proposed development that could have an adverse affect on the integrity of an international wildlife, geodiversity or landscape site (e.g. Natura 2000 or Ramsar site, Special Area of Conservation) or on ground water flows to those sites, alone or in combination with other plans or projects, will not be permitted unless it can be demonstrated that the legislative provisions to protect such sites can be fully met.</p> <p>National Sites Protected wildlife, geodiversity and landscape sites designated under national legislation are shown on the Policies Map [e.g. Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs)] and will be protected under the terms of that legislation.</p> <p>Local Sites Locally important sites are also identified [e.g. Sites of Biological Importance (SBIs), Regionally Important Geological Sites (RIGs), Local Nature Reserves (LNRs)] and will be protected and enhanced. Outside the areas designated, the interests of nature conservation must be taken into account in accordance with national guidance.</p> <p>The restoration or creation of new habitats and the expansion of habitats in South Staffordshire will be supported where these contribute to priorities in the UK Biodiversity Action Plan and the Staffordshire Biodiversity Action Plan including priority habitats such as native woodland, hedgerows, and lowland heathland. Areas or sites for the restoration or creation of biodiversity priority</p>

Policy	Summary
	<p>habitats will be identified through Biodiversity Opportunity Mapping working in partnership with Natural England, Staffordshire Wildlife Trust and Staffordshire County Council.</p> <p>Wherever possible, development proposals should build in biodiversity by incorporating ecologically sensitive design and features for biodiversity within the development scheme. Development proposals should be consistent with the Supplementary Planning Document.</p>

Appendix C

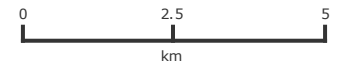
Desk Study Information



Legend

-  Ramsar Sites (England)
-  Proposed Ramsar Sites (England)
-  Special Areas of Conservation (England)
-  Possible Special Areas of Conservation (England)
-  Special Protection Areas (England)
-  Potential Special Protection Areas (England)

Projection = OSGB36
 xmin = 353000
 ymin = 268000
 xmax = 416500
 ymax = 299000



Map produced by MAGiC on 15 November, 2021.
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Site Check Report Report generated on Mon Nov 15 2021
You selected the location: Centroid Grid Ref: SO85218375
The following features have been found in your search area:

Special Areas of Conservation (England)

Name	FENS POOLS
Reference	UK0030150
Hectares	20.24
Hyperlink	http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?euocode=UK0030150

Ramsar Sites (England)

No Features found

Proposed Ramsar Sites (England)

No Features found

Possible Special Areas of Conservation (England)

No Features found

Special Protection Areas (England)

No Features found

Potential Special Protection Areas (England)

No Features found



Legend

-  Local Nature Reserves (England)
-  National Nature Reserves (England)
-  Sites of Special Scientific Interest (England)

Projection = OSGB36

xmin = 377000

ymin = 280000

xmax = 393600

ymax = 287800



Map produced by MAGiC on 3 December, 2021.

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Site Check Report Report generated on Fri Dec 03 2021
You selected the location: Centroid Grid Ref: SO85218375
The following features have been found in your search area:

Local Nature Reserves (England)

Reference	1082915
Name	KINGSFORD FOREST PARK
Hectares	80.76
Hyperlink	https://designatedsites.naturalengland.org.uk/SiteLNRDetail.aspx?SiteCode=L1082915

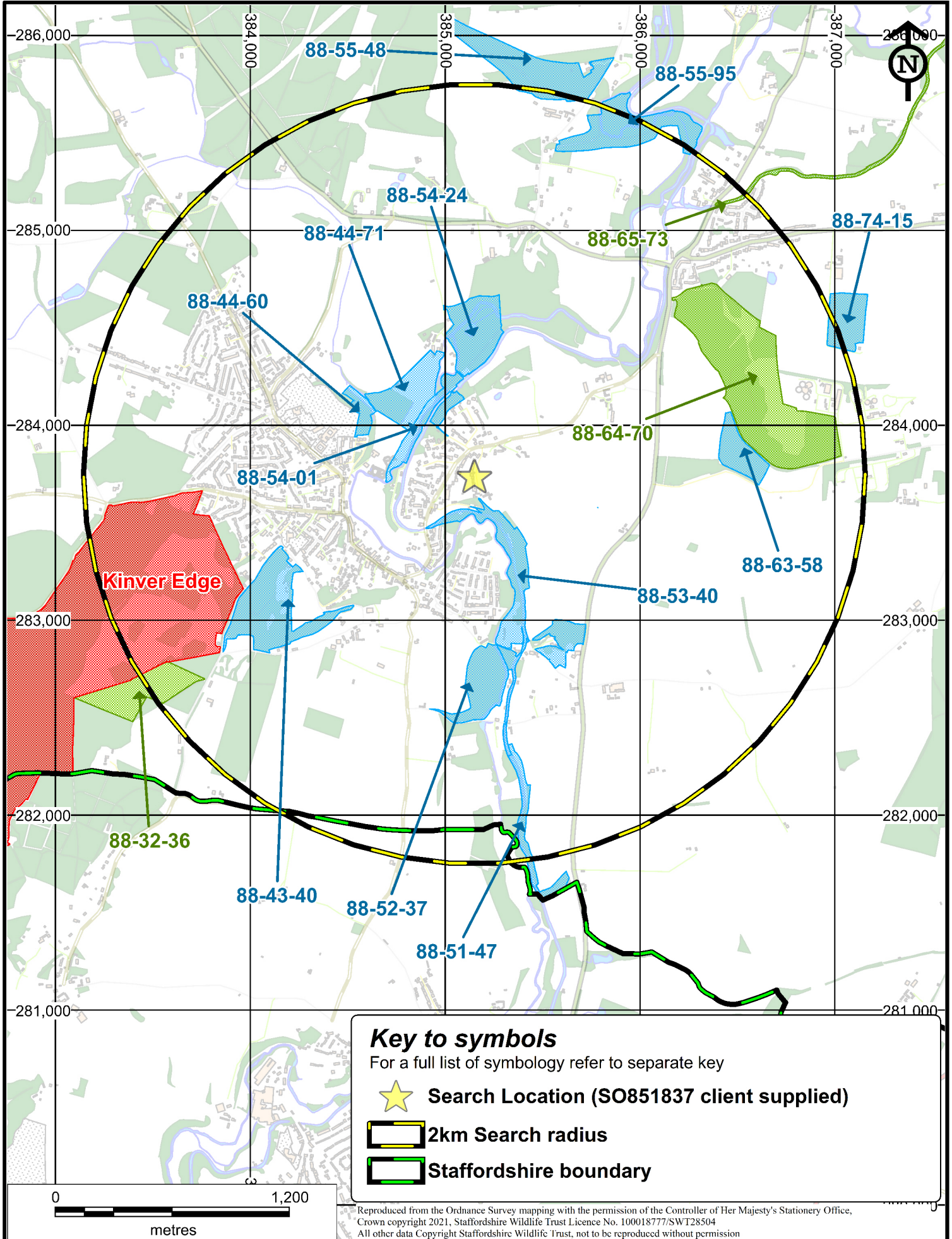
Sites of Special Scientific Interest (England)

Name	Kinver Edge SSSI
Reference	1002238
Natural England Contact	Area Team West Midlands
Natural England Phone Number	0845 600 3078
Hectares	124.2
Citation	1000202
Hyperlink	http://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s1000202

National Nature Reserves (England)

No Features found

Nature Conservation Sites within 2km of Dunsley Drive, Kinver (SO851837)



Appendix D

Habitats and Flora Species List

Table D. Habitats and Flora Species List

Site name		Land at Dunsley Drive, Kinver					
Survey date and surveyor		22/11/2021 AP/LM					
Scientific name	Common name	Habitat Type					
		F1	F2	B1	B2	B3	B4
Herb species							
<i>Achillea millefolium</i>	Yarrow	X	X				
<i>Galium aparine</i>	Cleavers	X	X				
<i>Geranium molle</i>	Dove's-foot cranesbill	X	X				
<i>Jacobaea vulgaris</i>	Common ragwort	X	X				
<i>Plantago lanceolata</i>	Ribwort plantain	X	X				
<i>Plantago major</i>	Greater plantain	X	X				
<i>Ranunculus repens</i>	Creeping buttercup	X	X				
<i>Rumex</i> sp.	Dock	X	X				
<i>Stellaria media</i>	Common chickweed		X				
<i>Taraxacum officinale</i> agg.	Dandelion	X					
<i>Trifolium</i> sp.	Clover	X	X				
<i>Urtica dioica</i>	Common nettle	X	X				
<i>Veronica chamaedrys</i>	Germander speedwell		X				
<i>Vinca</i> sp.	Periwinkle	X					
Grasses							
<i>Arrhenatherum elatius</i>	False oat-grass	X					
<i>Dactylis glomerata</i>	Cock's-foot	X	X				
<i>Lolium perenne</i>	Perennial rye grass	X	X				
Woody species							
Coniferous							
<i>Cupressus</i> sp.	Cypress sp.						X
<i>Taxus baccata</i>	Yew						X
Broadleaved							
<i>Acer campestre</i>	Field maple			X			
<i>Acer pseudoplatanus</i>	Sycamore			X			
<i>Betula pendula</i>	Silver birch			X	X		X
<i>Crataegus monogyna</i>	Hawthorn			X		X	
<i>Ilex aquifolium</i>	Holly			X		X	X
<i>Ilex</i> sp.	<i>Ilex</i> sp.			X			
<i>Laurus</i> sp.	Laurel						X
<i>Prunus spinosa</i>	Blackthorn			X	X		
<i>Prunus</i> spp.	Prunus (domesticated)						X
<i>Quercus</i> sp.	Oak			X			
<i>Rubus fruticosus</i> agg.	Bramble			X	X		
<i>Sambucus nigra</i>	Elder			X			X
<i>Symphoricarpos albus</i>	Snowberry			X	X		
<i>Ulmus</i> spp.	Elm			X			



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**Appendix 9: Barton Hyett Associates / CSA
Arboriculture Survey**

ARBORICULTURAL SURVEY REPORT

Land off Dunsley Drive,
Kinver

March 2022



Barton Hyett Associates

Arboricultural Consultants

In association with

CSA
environmental

Summary table		
Site Name:	Land off Dunsley Drive, Kinver	
Project reference:	4927	
Site Address:	Dunsley Drive, Kinver, Stourton, South Staffordshire,	
Nearest Postcode:	DY7 6NB	
Central Grid reference:	<u>SO 85199 83759</u>	
Local Planning Authority:	South Staffordshire Council	
Relevant planning policies:	South Staffordshire Core Strategy 2012 - 2028 - CS7 Environmental Quality; CS4 Vision for South Staffordshire; CS6 The Spatial Strategy	
Statutory Controls:	Tree Preservation Order	Conservation Area
	None	No
Soil Type: (Source: BGS online soils map © NERC 2022)	Superficial/Drift	Bedrock
	No superficial deposits recorded	Chester Formation - Sandstone and conglomerate, interbedded
Topographical Survey:	Drawing No: 38125NGLS-02, dated: 06-12-2021	
Notes:	No ancient or veteran trees recorded.	
Report author:	David Holmes <i>FdSc, MArborA</i>	
Checked by:	Paul Barton MSc, BSc (Hons), MArborA, RCarborA	
Date of issue:	30th March 2022	

REPORT CONTENTS:

SECTION 1:	SUMMARY, SITE DETAILS & SURVEY FINDINGS
SECTION 2:	TREE SURVEY & CONSTRAINTS PLAN
SECTION 3:	TREE SURVEY SCHEDULE & SITE IMAGES
SECTION 4:	METHODOLOGY
SECTION 5:	DESIGN GUIDANCE AND GENERIC ADVICE

THIS REPORT HAS BEEN PREPARED TO PROVIDE ADVICE AND GUIDANCE ON THE POTENTIAL FOR DEVELOPMENT OF LAND IN RELATION TO TREES. IT IS THEREFORE INTENDED FOR 'INTERNAL USE' ONLY BY THE NAMED CLIENT AND DESIGN TEAM. IT MAY NOT THEREFORE BE SUITABLE FOR SUBMISSION TO A PLANNING AUTHORITY WITH A PLANNING APPLICATION.

1. INSTRUCTION

- 1.1. I am David Holmes, an arboriculturist with 13 years of experience, and a professional member of the Arboricultural Association.
- 1.2. Barton Hyett Associates Ltd have been instructed to survey trees located at land east of Dunsley Drive, Kinver ('the site') in accordance with the recommendations of British Standard 5837:2012 'Trees in relation to design, demolition and construction - recommendations'.
- 1.3. The scope of the instruction was to inspect trees at the site and provide written advice on how they inform feasibility and design options for the site.

2. SITE DESCRIPTION

- 2.1. The site is a small paddock demarcated by post and mesh fencing, located to the east of a residential area and is presently used for grazing horses. To the north-west corner of the site is a collection of stables and outbuildings.



Figure 1: aerial photo (Google Maps) showing the site in its local context.

- 2.2. The site is approximately 1.2 hectares in size and situated at the western edge of the hamlet of Tarmfield. The site boundaries to the north and south abut residential sites. There is agricultural land to the east and the site is parallel with the residential street of Dunsley Drive to the west.
- 2.3. The site is relatively flat throughout and access is via a field gate from Dunsley Drive at the north-west corner via a sloping ramp leading upwards from Dunsley Drive. The site itself is elevated above the level of Dunsley

Drive by approximately 4m, the boundary to the west has a sloping verge down to Dunsley Drive. There are overhead telecomm lines running along the western boundary.

3. TREE SURVEY FINDINGS

- 3.1. A total of 15 trees, 4 group features and 3 hedgerows were surveyed. These are summarised in terms of their quality in accordance with the recommendations of BS5837 below, and shown in more detail on the Tree Survey and Constraints Plan (**Section 2**) and within the Tree Survey Schedule (**Section 3**).

	Total	A - High quality trees whose retention is most desirable.	B - Moderate quality trees whose retention is desirable.	C - Low quality trees which could be retained but should not significantly constrain the proposal.	U - Very poor quality trees that should be removed unless they have high conservation value.
Trees	15	-	12	3	-
Groups	4	-	3	1	-
Hedgerows	3	-	1	2	-
Total	22	-	16	6	-

Table 1: Summary of arboricultural features of each BS5837 quality category

4. KEY ARBORICULTURAL FEATURES

- 4.1. There are no veteran or ancient trees located within the site nor Ancient Woodland associated to the site.
- 4.2. There is an area of woodland outside the survey area, located approximately 130m to the south of the site listed as broadleaved woodland on the '2014 National Forestry Inventory' and as deciduous woodland on the '2021 Priority Habitat Inventory' hosted by DEFRA.

5. CONSTRAINTS AND OPPORTUNITIES

- 5.1. Trees recorded as offsite (T1 - T5; T10 - T15; G3; G4 and H3) will have an influence on the developable area of the site. The Root Protection Areas (RPA) of these trees encroach into the site and these areas should be free from construction wherever possible.
- 5.2. It is feasible that the Leylandii T1 could be retained in the short to mid-term, however, in the long-term, the tree may require pruning; as the tree gains height this will cause shading across the site and there is an increased risk of limb failure. Post-development resentment of the tree would create a perceived need to prune T1 or eventually fell the tree. Conifers of this species are difficult to prune in a safe and sustainable manner.
- 5.3. The opportunities for new planting on a site such as this are plentiful. The boundaries would benefit from being demarcated with hedgerows to offer screening and resilience to strong winds. Where new planting is proposed, attention is drawn to allowing space for future growth of the tree(s).

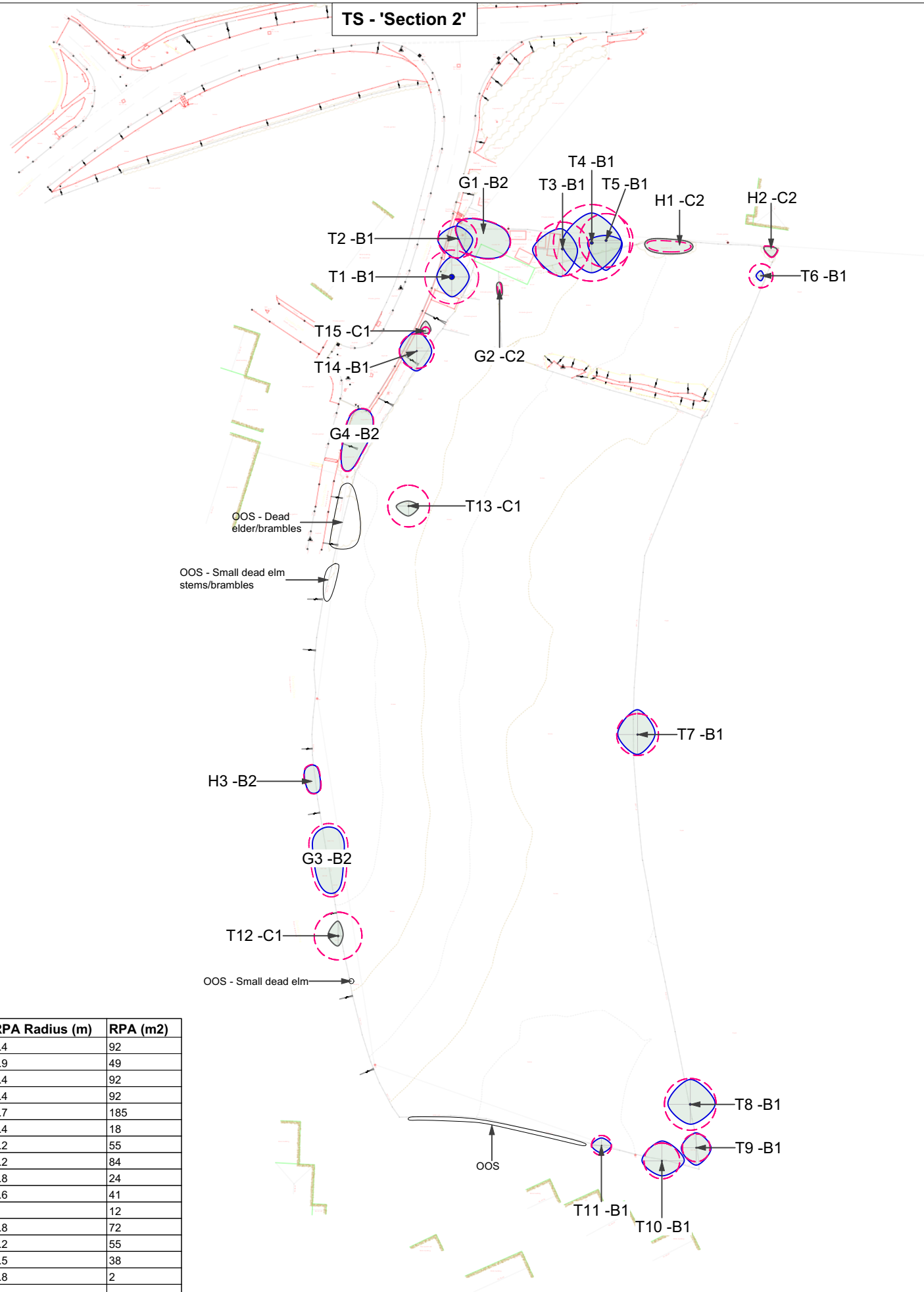
5.4. Please see **Section 5** for further advice and guidance on designing new developments near to trees.

6. RECOMMENDATIONS AND CONCLUSION

- 6.1. The information contained within this report should be used in the preparation of design proposals for the site, in order to minimise negative arboricultural impacts.
- 6.2. The potential provision of new tree planting could enhance the surrounding tree stock and help further improve the habitat value across the site.
- 6.3. Once the design proposal has been agreed, an Arboricultural Impacts Assessment report should be prepared for submission to the LPA in order for the planning application to be validated and to provide the LPA with sufficient information in order to determine the application.



David Holmes *FdSc, MArborA*, Arboriculturist



- KEY**
- Category A Tree - High quality (Retention highly desirable)
 - Category A - Hedgerow, Group, Woodland - High quality (Retention highly desirable)
 - Category B Tree - Moderate quality (Retention desirable)
 - Category B - Hedgerow, Group, Woodland - Moderate quality (Retention desirable)
 - Category C Tree - Low quality (May be retained but should not constrain development)
 - Category C - Hedgerow, Group, Woodland - Low quality (May be retained but should not constrain development)
 - Category U Tree - Very low quality (Mostly unsuitable for retention)
 - Category U - Hedgerow, Group, Woodland - Very low quality (Mostly unsuitable for retention)
 - Root Protection Area (RPA) - Layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and soil volume to maintain the tree's viability
 - Shrub mass/offsite tree/out of scope (OOS)

Note: The original of this drawing was produced in colour – a monochrome copy should not be relied upon. This drawing should be interpreted with reference to the accompanying tree schedule and written advice



Ref	Species	Height (m)	Life Stage	RPA Radius (m)	RPA (m2)
T1	Cypress (Leyland)	11	EM	5.4	92
T2	Birch (Silver)	10	EM	3.9	49
T3	Yew (Common)	7	SM	5.4	92
T5	Yew (Common)	6	SM	5.4	92
T4	Birch (Silver)	10	SM	7.7	185
T6	Holly	3	SM	2.4	18
T7	Hawthorn	5.5	M	4.2	55
T8	Hawthorn	6.5	M	5.2	84
T9	Hawthorn	4.5	EM	2.8	24
T10	Birch (Silver)	9	EM	3.6	41
T11	Birch (Silver)	6	EM	2	12
T12	Sycamore	6	EM	4.8	72
T13	Elder	5.5	EM	4.2	55
T14	Apple	5	EM	3.5	38
T15	Hawthorn	2.5	Y	0.8	2
G1	Holly; elder	6	EM	3	-
G2	Elder	2.5	SM	1	-
G3	Oak; birch; elm; goat willow	11	EM	5.2	-
G4	Holly	7	EM	3	-
H1	Laurel	2.5	Y	0.8	-
H2	Laurel	1	Y	0.6	-
H3	Hawthorn	5.5	M	1.5	-

PROJECT TITLE
Dunsley Drive, Kinver

DRAWING TITLE
Tree Survey & Constraints Plan

SCALE: **1:1000 @ A3** DRAWING NUMBER: **BHA_4927_01**

DRAWN BY DV	APPROVED BY DH	REVISION -	SHEET -	DATE 24/02/2022
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LAYOUT USED WITHIN DRAWING **xxxxxxxxxx**

CLIENT **CSA Environmental**

COORDINATE SYSTEM / DATUM **British National Grid / Newlyn Datum (AOD)**

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INDIVIDUAL TREES

Ref	Species	On/off site	Top Height (m)	No. of Stems	Est diam?	Calc. / Actual Stem Dia. (mm)	Crown radii (m) N-E-S-W	Avg. low crown height (m)	1st branch ht (m)	1st branch dir.	Life Stage	Special importance	General Observations	Health & vitality	Structural condition	Estimated Remaining Contribution (Years)	BS5837 Category	RPA Radius (m)	RPA m ²
T1	Cypress (Leyland)	Off	11.0	8	Yes	450	4-3-4-3	0.0	0.0	-	EM	None	Typical for species; telecoms overhead lines passing through crown	Good	Fair	20+	B1	5.4	92.0
T2	Birch (Silver)	Off	10.0	1	None	330	2-3-4-4	1.0	1.0	W	EM	None	Adjacent to telecoms pole with overhead lines passing through crown	Good	Fair	20+	B1	3.9	49.0
T3	Yew (Common)	Off	7.0	4	Yes	450	4-3-5-6	0.0	0.0	-	SM	None	Bonfire lit to east of tree causing minor damage to lower limbs	Good	Fair	20+	B1	5.4	92.0
T4	Birch (Silver)	Off	10.0	2	Yes	640	6-6-6-6	2.0	2.0	S	SM	None	Bonfire lit to west of tree causing minor damage to lower limbs; small branches removed to north for overhead power line clearance	Good	Fair	20+	B1	7.7	185.0
T5	Yew (Common)	Off	6.0	5	Yes	450	1-3-6-3	0.0	0.0	-	SM	None	Bonfire lit to west of tree causing minor damage to lower limbs; heavily reduced to north for overhead power line clearance	Good	Fair	20+	B1	5.4	92.0
T6	Holly	On	3.0	6	Yes	200	1-0-1-1	0.0	0.0	-	SM	None	Typical for species	Good	Fair	20+	B1	2.4	18.0
T7	Hawthorn	On	5.5	2	Yes	350	5-3-4-4	0.0	0.25	W	M	None	Remnant part of hedge; growing between 2 fences	Good	Fair	20+	B1	4.2	55.0
T8	Hawthorn	On	6.5	3	Yes	430	5-5-4-4	0.0	0.0	-	M	None	Remnant part of hedge; growing between 2 fences	Good	Fair	20+	B1	5.2	84.0
T9	Hawthorn	On	4.5	3	Yes	230	3-3-3-3	0.0	0.0	-	EM	None	Remnant part of hedge; growing between 2 fences	Good	Fair	20+	B1	2.8	24.0
T10	Birch (Silver)	Off	9.0	3	None	300.0	4-4-3-4	1.5	1.5	E	EM	None	Typical for species	Good	Fair	20+	B1	3.6	41.0
T11	Birch (Silver)	Off	6.0	2	None	160.0	1-2-1-2	1.0	1.0	E	EM	None	Typical for species	Good	Fair	20+	B1	2.0	12.0
T12	Sycamore	Off	6.0	20	None	400.0	3-1-2-2	0.0	0.0	-	EM	None	Prolific young re-gen from early-mature stump; telecoms overhead lines passing crown to east	Fair	Fair	10+	C1	4.8	72.0

Ref	Species	On/off site	Top Height (m)	No. of Stems	Est diam?	Calc. / Actual Stem Dia. (mm)	Crown radii (m) N-E-S-W	Avg. low crown height (m)	1st branch ht (m)	1st branch dir.	Life Stage	Special importance	General Observations	Health & vitality	Structural condition	Estimated Remaining Contribution (Years)	BS5837 Category	RPA Radius (m)	RPA m ²
T13	Elder	Off	5.5	10	None	350.0	1-2-2-2	0.0	0.0	-	EM	None	Decay to main stems with associated decay; mild dieback to upper crown; prolific basal shoots	Fair	Fair	10+	C1	4.2	55.0
T14	Apple	Off	5.0	2	Yes	290.0	4-3-4-3	0.0	0.0	NW	EM	None	Telecoms overhead lines passing above crown	Good	Fair	20+	B1	3.5	38.0
T15	Hawthorn	Off	2.5	2	None	70.0	2-1-0-1	0.0	0.0	-	Y	None	Self-seeded within verge	Good	Fair	10+	C1	0.8	2.0

GROUPS OF TREES

Ref	Species	On/off site	Height range (m)	No. of trees	Est diam?	Max stem diam (mm)	Av. Crown radius (m)	Avg. low crown height (m)	Life Stage	Special importance	General Observations	Health & vitality	Structural condition	Estimated Remaining Contribution (Years)	BS5837 Category	RPA Radius (m)
G1	Holly; elder	On	6	3	Yes	250.0	3.0	0.0	EM	None	Typical for species; 3x holly & 1x elder	Good	Fair	20+	B2	3.0
G2	Elder	On	2.5	2	None	80.0	1.25	0.0	SM	None	Typical for species; self-seeded growing through fence	Fair	Fair	10+	C2	1.0
G3	Oak; birch; elm; goat willow	Off	11	7	None	430.0	4.5	0.0	EM	None	1x oak; 1x goat willow; 2x birch; 3x elm; elm stems in decline, telecoms overhead lines passing through crowns, mild ivy cover to lower stems	Good	Fair	20+	B2	5.2
G4	Holly	Off	7	3	Yes	250.0	3.0	0.0	EM	None	Telecoms overhead lines passing through crowns	Good	Fair	20+	B2	3.0

HEDGES

Ref	Species	On/off site	Av. Height (m)	Av. width (m)	Av. Stem diam (mm)	Avg. low crown height (m)	Life Stage	General Observations	Health & vitality	Structural condition	Estimated Remaining Contribution (Years)	BS5837 Category	RPA Radius (m)
H1	Laurel	On	2.5	2.5	70	0.0	Y	Topped @ approx 2.5m; plot becoming colonised by brambles	Good	Fair	10+	C2	0.8
H2	Laurel	On	1.0	1	50	0.0	Y	Small maintained section	Good	Fair	10+	C2	0.6
H3	Hawthorn	Off	5.5	3	120	0.0	M	Remnant part of hedge; mild ivy cover to stems & scaffold limbs	Good	Fair	20+	B2	1.5



IMAGE 1: A view looking east at the entrance into the site, taken from Dunsley Drive.



IMAGE 2: A view looking north-east, taken from the site entrance looking at the offsite boundary features.



IMAGE 3: A general view of the site looking north, with the boundary trees labelled for reference.



IMAGE 4: a view looking north along the boundary fence, showing an older intermittent metal fence and newer post & mesh fencing.



IMAGE 5: A view looking north-west, at the boundary of the site with Dunsley Drive.



IMAGE 6: A view looking south-west, showing the boundary group G3 and the in-field self-seeded elder T13.

- The tree survey was carried out with reference to the methodology set out in BS5837:2012 'Trees in relation to design, demolition and construction – Recommendations'.
- Trees were surveyed individually or as groups where it was considered that they had grown together to form cohesive arboricultural features either aerodynamically (trees that provide companion shelter), visually (e.g. avenues or screens) or culturally (including for biodiversity). However, where it was considered that there was an arboricultural need to differentiate between attributes trees within groups and / or woodlands were also surveyed as individuals.
- The full tree survey findings are recorded in the following tree survey schedule.
- Within the tree survey schedule, each surveyed TREE (T), GROUP (G), HEDGEROW (H), WOODLAND (W) or SHRUB MASS on or adjacent to the site is given a reference number which refers to its position on the tree survey and constraints plan.
- TREE SPECIES are listed by common name.

The **DIMENSIONS** taken are:

- STEM-No. Indicates the number of main stems (i.e. whether the trunk divides at or below 1.5m; (Used in the calculation of RPA.) "m-s" = Multi-stemmed.
- STEM DIAMETER (measured in millimetres), obtained from the girth measured at approx. 1.5m. For trees with 2 to 5 sub-stems a notional figure is derived from the sum of their cross-sectional areas. For multi-stemmed trees, the notional diameter may be estimated on the basis of the average stem size x the number of stems. (A notional diameter may be estimated where measurement is not possible.)
- HEIGHT (measured in metres), recorded to the nearest half metre for dimensions up to 10m and to the nearest whole metre for dimensions over 10m.
- The CROWN SPREAD, taken at the four cardinal points to derive an accurate representation of the tree crown, recorded up to the nearest half metre for dimensions up to 10m and to up the nearest whole metre for dimensions over 10m.
- CROWN CLEARANCES are expressed both as existing height above ground level of first significant branch along with its direction of growth (e.g. 2.5m-N), and also in terms of the overall crown e.g. the average height of the crown above ground level. Measurements are recorded to the nearest half metre for dimensions up to 10m and to the nearest whole metre for dimensions over 10m.
- ESTIMATES. Where any measurement has had to be estimated, due to inaccessibility for example, this is indicated by a "#" suffix to the measurement as shown in the tree survey schedule.

LIFE STAGE is defined as follows:

- Y Young: Normally stake dependent, establishing trees. Should be growing fast, usually primarily increasing in height more than spread but as yet making limited impact upon the landscape.
- SM Semi-mature: Established young trees, normally of good vigour and still increasing in height but beginning to spread laterally. Beginning to make an impact upon the local landscape and environment. Semi-Mature (still capable of being transplanted without preparation, up to 30cm girth and not yet sexually mature).

- EM Early-mature: Not yet having reached 75% of expected mature size. Established young trees, normally of good vigour and still increasing in height but beginning to spread laterally. Beginning to make an impact upon the local landscape and environment.
- M Mature: Well-established trees, still growing with some vigour but tending to fill out and increase spread. Bark may be beginning to crack and fissure. In the middle half of their safe, useful life expectancies.
- LM Late-Mature: In full maturity but possibly beyond mature and in a state of natural decline). Still retaining some vigour but any growth is slowing.
- A Ancient: A tree that has passed beyond maturity and is old/aged compared with other trees of the same species. Typically having a very wide trunk and a small canopy.

PHYSIOLOGICAL CONDITION (HEALTH & VITALITY):

Essentially a snapshot of the general health of the tree based upon its general appearance, it's apparent vigour and the presence or absence of symptoms associated with poor health, physiological stress etc. (Fungal infections may be recorded here but decay giving rise to structural weakness would be recorded under 'Structural Condition' – see next parameter):

- Good: No significant health issues.
- Fair: Indications of slight stress or minor disease (e.g. the presence of minor dieback/deadwood or of epicormic shoot growth).
- Poor: Significant stress or disease noted; larger areas of dieback than above.
- Dead: (or Moribund).

STRUCTURAL CONDITION:

Defects affecting the structural stability of the tree including decay, significant dead wood, root-plate instability or significant damage to structural roots, weak forks (e.g. those where bark is included between the members) etc.

Classified as:

- Good: No obvious structural defects: basically sound.
- Fair: Minor, potential or incipient defects.
- Poor: Significant defect(s) likely to lead to actual failure in the medium to long-term.
- Dead: (or Moribund).

ESTIMATED REMAINING CONTRIBUTION:

An estimate of the length of time in years that a tree might be expected to continue to make a useful contribution to the locality at an acceptable level of risk (based on an assumption of continued routine maintenance):

- Less than 10 years
- 10+ years
- 20+ years
- 40+ years

SPECIAL IMPORTANCE:

Trees that are particularly notable as high value trees such as ancient trees/woodland or veteran trees. Such trees may be regarded as the principal arboricultural features of a site and pose a significant constraint to potential development.

An *ancient* tree is one that has passed beyond maturity and is very old compared with other trees of the same species. Very few trees reach the ancient life-stage.

Veteran trees are often very old but not necessarily so; they may be regarded as ‘survivors’ that have developed some of the characteristic features of an ancient tree but have not necessarily lived as long. All ancient trees are veterans but not all veteran trees are ancient.

An ancient woodland is an area that has been wooded continuously since at least 1600 AD. It includes ancient semi-natural woodland (ASNW), plantations on ancient woodland sites (PAWS) and ancient replanted woodland (ARW)

QUALITY CATEGORY:

Trees are classed as category U, A, B or C, based on criteria given in BS5837:2012; summary definitions as follows (see BS5837 for further details). Categories A, B and C are further characterised by the use of sub-categories, which attempt to identify what aspect of the tree is the main source of its perceived value, These are:

- (1) arboricultural qualities
- (2) landscape qualities, and
- (3) cultural, historic or ecological/conservation qualities.

Examples of these qualities for each of the three categories are given below, although these are indicative only.

Note: This is NOT a health and safety classification; the classification does not take into account any requirement for remedial tree care or ongoing maintenance apart from that which may affect the trees’ general suitability for retention.

CATEGORY A: HIGH QUALITY:

Trees or groups whose retention should be given a particularly high priority within the design process. Normally with an expected useful life expectancy of at least 40 years.

- A1: Notably fine specimens; rare or unusual specimens; essential component trees within groups, semi-formal or formal plantings (e.g. dominant trees within an avenue etc.).
- A2: Trees, groups or woodlands of particular visual importance as landscape features.
- A3: Trees, groups or woodlands of particular significance by virtue of their conservation, historical, commemorative or other value (e.g. veteran trees or wood pasture.)

CATEGORY B: MODERATE QUALITY:

Trees or groups of some importance with a likely useful life expectancy in excess of 20 years. Their retention would be desirable; selective removal of certain individuals may be acceptable but only after full consideration of all alternative courses of action.

- B1: Fair quality but not exceptional; good specimens showing some impairment (e.g. remediable defects, minor storm damage or poor past management.)
- B2: Acceptable trees situated such as to have little visual impact within the wider locality. Also numbers of trees, perhaps in groups or woodlands, whose value as landscape features is greater collectively than would warrant as individuals (such that the selective removal of an individual would not impact greatly upon the trees’ overall, collective value).
- B3: Trees, groups or woodlands with clearly identifiable conservation or other cultural benefits.

CATEGORY C: LOW QUALITY:

Trees or groups of rather low quality, although potentially capable of retention for at least approx. 10 years. Also small trees with stems below 15cm diameter.

Potentially retainable, but not of sufficient value to be regarded as a significant planning constraint.

- C1: Unremarkable trees of very limited merit or of significantly impaired condition.
- C2: Trees offering only low or short-term landscape benefits; also secondary specimens within groups or woodlands whose loss would not significantly diminish their landscape value.
- C3: Trees with extremely limited conservation or other cultural benefit.

CATEGORY U:

Trees likely to prove to be unsuitable for retention for longer than 10 years should any significant increase in site usage arise as a result of development.

E.g. dead or moribund trees; those at risk of collapse or in terminal decline; trees that will be left unstable by other essential works such as the removal of nearby category U trees; trees infected by pathogens that could materially affect other trees; low quality trees that are suppressing better specimens.

(Category U trees may have conservation values that it might be desirable to preserve. This category may also include trees that should be removed irrespective of any development proposals.)

ROOT PROTECTION AREA (RPA):

These are normally represented as a circle centred on the base of each tree stem with a radius of 12 times stem diameter, measured at 1.5m above ground level. The shape of the RPA may be altered where site conditions dictate that there are sound reasons to do so.

VETERAN OR ANCIENT TREE BUFFER (VTB/ATB)

In line with the Standing Advice produced by the Forestry Commission and Natural England this is a buffer zone (in metres) around an ancient or veteran tree that should be at least 15 times larger than the diameter of the tree. The buffer zone should be 5m from the edge of the tree’s canopy if that area is larger than 15 times the tree’s stem diameter.

ANCIENT WOODLAND BUFFER (FOR ASNW, PAWS OR ARW)

In line with the Standing Advice produced by the Forestry Commission and Natural England this is a buffer zone of at least 15 metres to avoid root damage. Where assessment shows other impacts are likely to extend beyond this distance, a larger buffer zone may be required.

THE IMPORTANCE OF TREES

Wider benefits:

There is a growing body of evidence that trees bring a wide range of benefits to the places people live.

Some *Economic* benefits of trees include:

- Trees can increase property values
- As trees grow larger, the lift they give to property values grows proportionately
- They can improve the environmental performance of buildings by reducing heating and cooling costs, thereby cutting bills
- Mature landscapes with trees can be worth more as development sites
- Trees create a positive perception of a place for potential property buyers
- Urban trees improve the health of local populations, reducing healthcare costs

Some *Social* benefits of trees include:

- Trees help create a sense of place and local identity
- They benefit communities by increasing pride in the local area
- They can create focal points and landmarks
- They have a positive impact on people's physical and mental health
- They can have a positive impact on crime reduction

Some *Environmental* benefits of trees include:

- Urban trees reduce the 'urban heat island effect' of localised temperature extremes
- They provide shade, making streets and buildings cooler in summer
- They help remove dust and particulates from the air
- They help to reduce traffic noise by absorbing and deflecting sound
- They help to reduce wind speeds
- By providing food and shelter for wildlife, they help increase biodiversity
- They can reduce the effects of flash flooding by slowing the rate at which rainfall reaches the ground
- They can help remediate contaminated soil

On new development sites:

Trees bring many benefits to new development. Where retained successfully they can form important and sustainable elements of green infrastructure, contribute to urban cooling and reduce energy demands in buildings. Their importance is acknowledged in relation to adaptation to the effects of climate change. Other benefits brought by trees include:

- Increasing property values
- Visual amenity
- Softening, complementing and adding maturity to built form
- Displaying seasonal change
- Increasing wildlife opportunities in built-up areas
- Contributing to screening and shade
- Reducing wind speed and turbulence

NATIONAL PLANNING POLICY

The National Planning Policy Framework 2021 (NPPF paragraph 180) states that, when determining planning applications, local planning authorities should apply the following principle:

c) 'development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists.'

In this respect the following definitions apply:

'Ancient woodland: An area that has been wooded continuously since at least 1600 AD. It includes ancient semi-natural woodland and plantations on ancient woodland sites (PAWS)', and

'Ancient or veteran tree: A tree which, because of its age, size and condition, is of exceptional biodiversity, cultural or heritage value. All ancient trees are veteran trees. Not all veteran trees are old enough to be ancient, but are old relative to other trees of the same species. Very few trees of any species reach the ancient life-stage.'

Note: Further information from the National Planning Policy Guidance Suite and Standing Advice is provided in the design guidance section.

Other paragraphs of the NPPF 2021 of relevance to this report are:

Paragraph 131: *'Trees make an important contribution to the character and quality of urban environments, and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined, that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users.'*

Paragraph 174: *'Planning policies and decisions should contribute to and enhance the natural and local environment by:*

b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland.'

STATUTORY CONTROLS

Statutory tree protection

Works to trees which are covered by Tree Preservation Orders (TPOs) or are within a Conservation Area (CA) require permission or consent from the Local Planning Authority. Where information is available on any Statutory designations such as this they are identified within the summary table in Section 1 and on the Tree Survey and Constraints Plan at Section 2.

Notwithstanding specific exceptions and in general terms, a TPO prevents the cutting down, uprooting, topping, lopping, wilful damage or wilful destruction of protected trees or woodlands without the prior written consent of the LPA.

Penalties for contravention of a TPO tend to reflect the extent of damage caused but can, in the event of a tree being destroyed, result in a fine of up to £20,000 if convicted in a Magistrates' Court, or an unlimited fine if the matter is determined by the Crown Court.

Similarly, and again notwithstanding specific exceptions, it is an offence to carry out any works to a tree in a Conservation Area with a trunk diameter greater than 75mm diameter at 1.5 height without having first provided the LPA with 6 weeks written notification of intent to carry out the works.

On many non-residential sites (excluding specific exemptions) there is also a statutory restriction relating to tree felling that relates to quantities of timber that can be removed within set time periods. In basic

terms, it is an offence to remove more than 5 cubic metres of timber in any one calendar quarter without having first obtained a felling licence from the Forestry Commission.

Any proposed tree works that are planned to be carried out on site must be carried out in accordance with the statutory controls outlined.

Statutory Wildlife Protection

Although preliminary visual checks from ground level of likely wildlife habitats are made at the time of surveying, detailed ecological assessments of wildlife habitats are not made by the arboriculturist and fall outside of the scope for this report.

Trees which contain holes, splits, cracks and cavities could potentially provide a habitat for protected species such as bats in addition to birds and small mammals. It is advised that in some instances specialist ecological advice may be required. This may result in tree works being carried out following a detailed climbing inspection to the tree to ensure that protected species or their nests/roosts are not disturbed. If any are found, the site manager, site owner or consulting arboriculturist should be informed and appropriate action taken as recommended by the appointed Ecologist or the relevant Statutory Nature Conservation Organisation (SNCO): Natural England, Scottish Natural Heritage or Natural Resources Wales.

It is advised that tree/hedgerow works are carried out with the understanding that birds will generally nest in trees, hedges and shrubs between March and August. This time period only provides an indication of likely nesting times and as such diligence is required when undertaking tree works at all times.

Irrespective of the time of year and other than any actions approved under General Licence, it is an offence to intentionally kill, injure or take any wild bird or to intentionally take, damage or destroy the nest or eggs of any wild bird. Ideally, tree operations should be avoided during the likely bird nesting period. However, any tree works should always only be carried out following a preliminary visual check of the vegetation.

For information, the Wildlife and Countryside Act 1981 (as amended), The Countryside and Rights of Way Act 2000 (as amended) and the Conservation of Habitat and Species Regulations 2010, form the basis of the statutory legislation for flora and fauna in England and Wales. A different legislative framework applies in Scotland and Northern Ireland.

Any proposed tree works that are planned to be carried out on site must be carried out in accordance with any relevant statutory controls, outlined above.

DESIGN GUIDANCE

Approach

The approach adopts the guidelines set out in the British Standard BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations. The process is broken down to coordinate with the key elements within both the RIBA Plan of Work (2013) and British Standard 5837:2012 as set out in the table below:

Information Stage	RIBA Stage	BS5837:2012
Stage A – Tree Survey	2: Concept	4: Feasibility
Stage B – Arboricultural Impact Assessment	3: Developed design	5: Proposals
Stage C – Arboricultural Method Statement	4: Technical design	6: Technical Design
Stage D – Arboricultural Site Supervision	5: Construction	7: Demolition and construction

A hierarchical approach is adopted in order to achieve optimum use of the site and location of built structures. This is set out below:

Avoid

The starting point of Site layout design should be to avoid the RPA of retained trees and provide suitable clearance from above ground constraints [tree canopies]. Where possible building lines should be at least 2m outside the RPA to provide working space for construction. However, protection measures can be taken if such clearance is not achievable.

Mitigate

Where intrusion within the RPA is unavoidable then its impact on the tree can be mitigated by specialist measures:

Foundations that avoid trenching e.g. screw piles, suspended floor slabs or casting at ground level for lightweight structures such as bin and cycle stores.

Limited use may be made for parking, drives or hard surfaces within the root protection areas, subject to advice from a qualified arboriculturist. Cellular confinement systems that enable hard surfaces to be built above existing soil levels are acceptable methods subject to site-specific soil conditions.

Service runs that cannot be routed outside the RPA(s) can be installed by, for example, thrust boring, directional drilling, air excavation or hand digging. These operations often require supervision by the project arboriculturist.

Compensate

Replacement planting can ensure the continuity of tree cover where tree removal is unavoidable or desirable. Off-site provision may be considered in some circumstances but this will require negotiation with the local planning authority.

Considerations:

For proposed residential developments, consideration must be given to numerous factors future tree growth and orientation.

Tree constraints

Root Protection Areas:

With reference to BS5837:2012, a root protection area (RPA) is defined as “a layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree’s viability, and where the protection of the roots and soil structure should be treated as a priority”. **“The default position [when considering design layout in relation to RPAs] should be that structures are located outside the RPAs of trees to be retained”.**

BS5837:2012 states (4.6.2) that, “where pre-existing site conditions or other factors indicate that rooting has occurred asymmetrically, a polygon of equivalent area should be produced.” The BS goes on to state that, “modifications to the shape of the RPA should reflect a soundly based arboricultural assessment of likely root distribution,” and that any deviation from the original circular plot should take into account:

- Morphology and disposition of roots;
- topography and drainage;
- soil type and structure;
- the likely tolerance of the tree to root damage/disturbance.

Additional buffer zones beyond the RPA:

The following text is taken from the Standing Advice produced by the Forestry Commission and Natural England as included in the National Planning Policy Guidance:

'A buffer zone's purpose is to protect ancient woodland and individual ancient or veteran trees. The size and type of buffer zone should vary depending on the scale, type and impact of the development'.

Ancient woodland buffer:

'For ancient woodlands, you should have a buffer zone of at least 15 metres to avoid root damage. Where assessment shows other impacts are likely to extend beyond this distance, you're likely to need a larger buffer zone. For example, the effect of air pollution from development that results in a significant increase in traffic'.

Ancient and veteran tree buffer:

'A buffer zone around an ancient or veteran tree should be at least 15 times larger than the diameter of the tree. The buffer zone should be 5m from the edge of the tree's canopy if that area is larger than 15 times the tree's diameter'.

Above ground:

Above ground constraints posed by trees describe the capacity for trees to have an overbearing or dominating effect on new developments; usually post occupancy. Typical above ground constraints include a number or combination of inconveniences including shading, branch spread, movement of trees during strong winds and so on. If not adequately considered, above ground constraints can lead to repeated requests to fell or heavily prune retained and protected trees.

Shade:

Adverse shading and blocked views from windows raise concerns for incoming residents, which may lead to pressure to fell or remove trees in the future. Wherever possible it is advisable to arrange fenestration away from tree canopies to lessen the conflict, or increase window size to accommodate ambient light. Conversely, appropriate designed development can use existing or new trees to create necessary and welcome shade and screening.

As part of the adopted approach the above considerations and constraints are assessed cumulatively in order to provide clear and site-specific advice on the areas of a site most suitable for the location of development.

Dependent on the site and nature of the proposed development, the Tree Survey and Constraints Plans may show the following:

Recommended Developable area - an advisory area defined in order to minimise arboricultural impacts using standard approaches to construction. Restricting proposed development to this area will limit the risk of harm to retained trees and of the Local Planning Authority objecting to the proposed development. It may be possible to propose development outside of this area but specific 'low impact' construction techniques may be needed recommended.

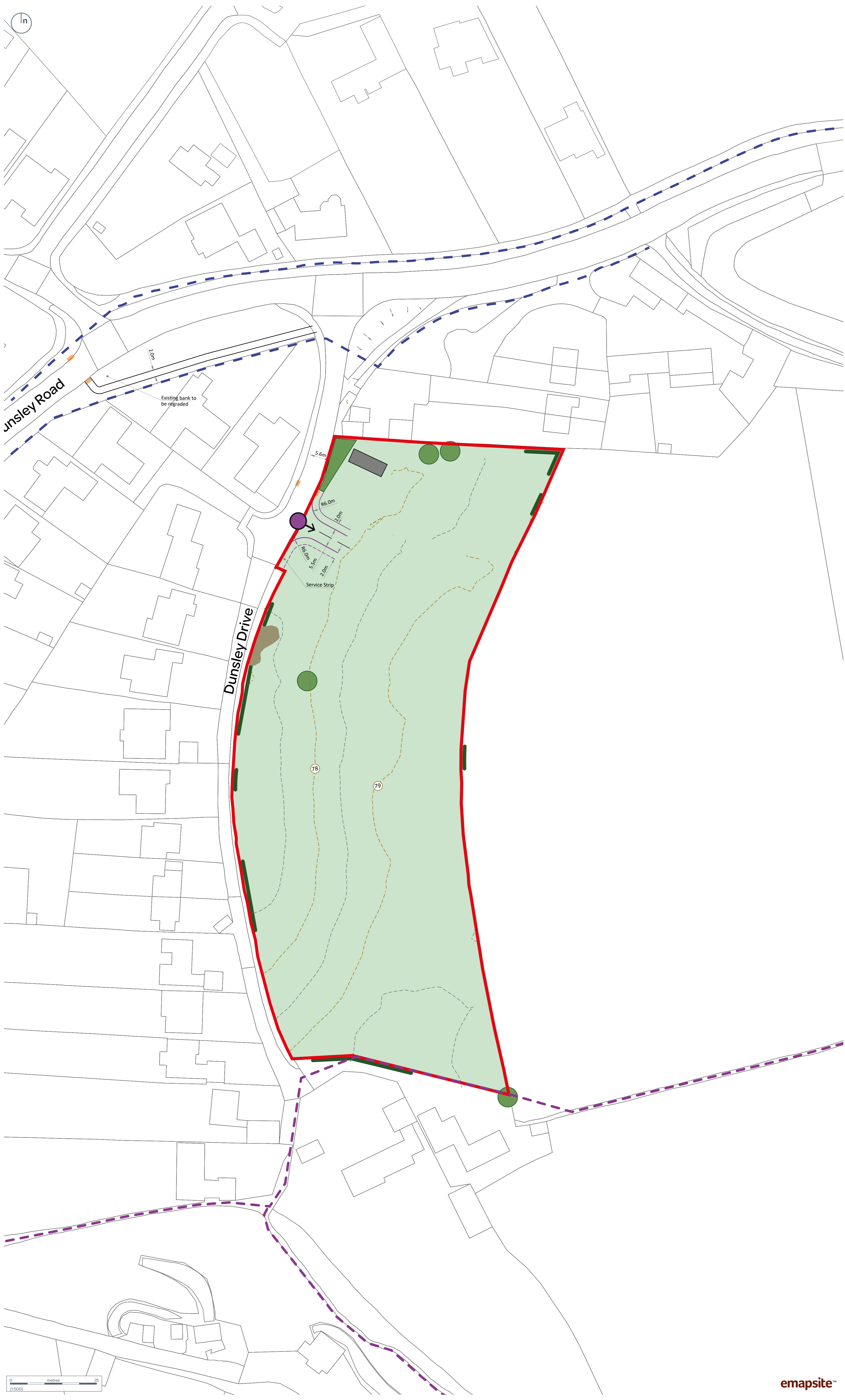
Recommended Buffer to development - similar to the Recommended Developable Area but defined as a line marking a suitable buffer to retained trees. More commonly used on large sites or sites where the presence of trees is localised.

Tree Opportunities

Depending on the scale of developments existing trees can often provide opportunities to enhance the existing arboricultural resource of a site by bringing it into good management or by putting in place remedial measures e.g. soil amelioration.

Appropriately designed new tree planting is extremely important in maintaining healthy and sustainable tree populations. For the reasons highlighted, new trees can bring many benefits to new developments. It is critical to the establishment of new tree planting that the locations, species and specification of new trees is appropriate. Subsequently the sourcing of high-quality stock, suitable planting and the provision of post planting maintenance are essential to allow new trees to establish and to allow them to mature.

Appendix 10: Turley Constraints Plan



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- Site boundary
- Approximate alignment of Public Right of Way
- Highway Boundary
- Topography (MAOD)
- Vehicle Access
- Existing Tree
- Existing Hedgerow
- Dense Scrub
- Existing Building

CLIENT: _____
 Bellway Homes

PROJECT: _____
 Dunsley Drive, Kinver

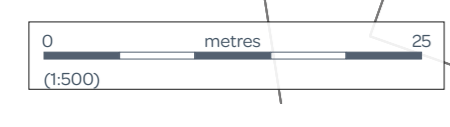
DRAWING: _____
 Constraints Plan

PROJECT NUMBER: _____
 BELQ3007

DRAWING NUMBER: _____ CHECKED BY: _____
 10_03 NW

REVISION: _____ STATUS: _____
 01 Final

DATE: _____ SCALE: _____
 March 2022 1:500 @ A1



emapsite™

Turley

Appendix 11: Turley Illustrative Masterplan



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KEY

Site boundary

AREAS

Site Area: 1.17 Ha (2.89 Acres)
Developable Area: 0.97 Ha (2.40 Acres)
Public Open Space: 0.20 Ha (0.49 Acres)

CLIENT:
 Bellway Homes

PROJECT:
 Dunsley Drive, Kinver

DRAWING:
 Development Framework

PROJECT NUMBER:
 BELQ3007

DRAWING NUMBER: 10_06 **CHECKED BY:** NW

REVISION: 01 **STATUS:** Final

DATE: April 2022 **SCALE:** 1:500 @ A3

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