



Introduction

This document has been prepared by Hammond Architectural Ltd on behalf of the owner of West Winds, Mr. Rakesh Aggarwal. in support of a full planning application for a replacement dwelling on the site of the existing house, along with associated infrastructure and facilities.

It will comprise:

A 2.5 storey dwelling with dormer accommodation within the roof space, along with rear terrace.

The existing access will be modified to allow safer vehicular access to the site, and the current garages will be retained and refurbished.

A new access lane along the western boundary is also proposed (to allow access to existing stables at the rear of the property).

Purpose

TAN 12 defines a Design and Access Statement as ‘a communication tool which outlines how the design of the proposal has been considered from the outset of the development process and how the objectives of good design have been used to inform this’.

The purpose of this document is to analyse the context of the site in respect of planning policy and the local character of the area, whilst having regard to each of the five objectives of Good Design.

Vision

The vision for the development is to ‘Create a quality, design led, sustainable dwelling which is both visually attractive, delivers healthy lifestyles for its occupants, and enhances the visual amenity of the surrounding area’.

Aim

The aim of this document is to:

explain the design principles and concepts that have been applied to the development;

demonstrate the steps taken to appraise the context of the development and how the design of the development takes that context into account;

explain how specific issues which might affect access to the development have been addressed.





Site location

The existing dwelling is situated on a large plot of land which is located to the West of the village of Dinas Powys. The village is approximately 5.6 miles south-west of the centre of Cardiff and conveniently situated on the A4055 Cardiff to Barry main road.

Its commutable links to Cardiff and its convenient location to the nearby University of Wales Hospital at Llandough has meant Dinas Powys has undergone a period of sustained growth over the past 50 years.

The old village centre of Dinas Powys still has a mostly unspoiled and almost rural feel, retaining a large village common and a traditional village centre complete with a post office and a range of small independent shops, public houses, restaurants and community facilities.

Despite this, the area has enjoyed the addition of several housing developments over the past five decades in order to meet the demands of the population increase in and around Cardiff.

The site is nestled in the 'Westra' to the west of Dinas Powys off Saint Andrews Road. The site lies outside of the Dinas Powys Conservation Area and also existing Local Development Plan [LDP] settlement boundary.



The Site

The site lies along the western boundary of the village. It is defined to the North by St Andrews Road, to the east by residential properties (most immediately 'Larkfield'), to the south by substantial residential gardens, and to the west by agricultural land.

The applicant owns 2.09 acres (0.85 Ha) of the site but less than half of that is subject to this application.

The site currently comprises of a dilapidated dwelling house, two garages and various out buildings. The gardens consist of rough lawn areas, scrub land, haphazard hard landscaping features. A large forecourt exists at the front of the property.

The ground is generally sloping from north to south and has a number of distinct levels: it immediately slopes from the road to the existing house with a drop of approximately 2 meters before reaching the level plateau of the building itself. A small terrace exists at the rear of the house, before the garden drops away to the south in a number of stepped levels.

To the east, the site boundary is ill defined with no real boundary treatment or defining characteristics. To the north, a grass verge and dilapidated fence form the boundary with St Andrews Road. The southern and western boundaries comprise of patchy indigenous hedgerow and wire link fencing.



- Ownership Boundary
- Application Boundary

Site Photos



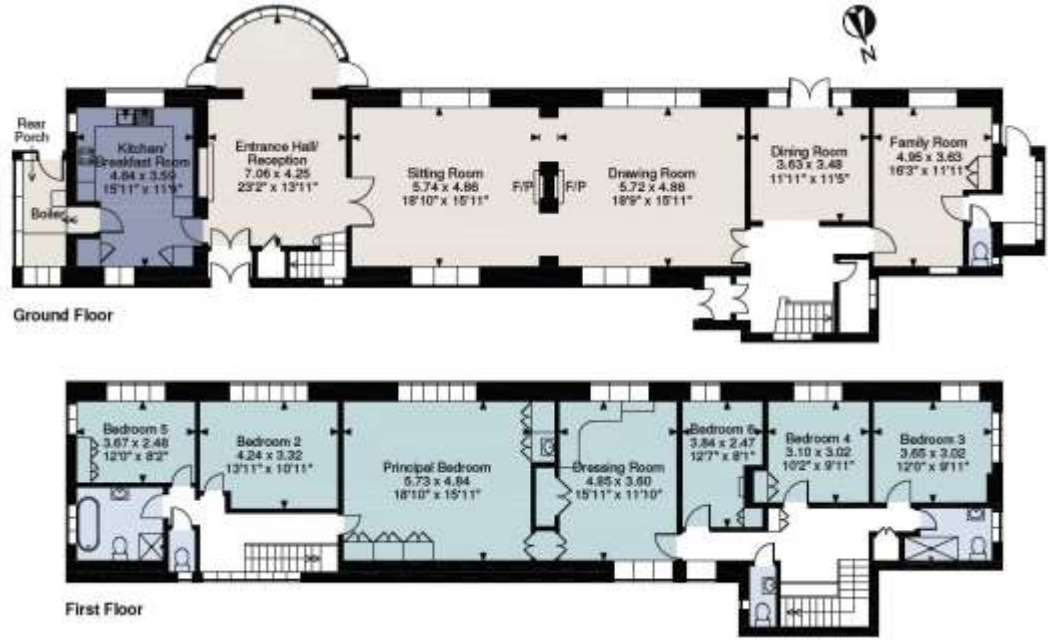
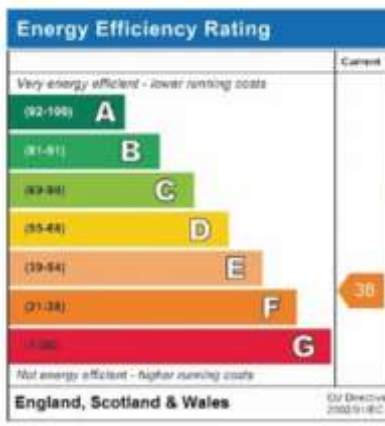
West Winds

The existing dwelling takes up a prominent position at the north end of the site, towards the main vehicle access from St. Andrews Road. It has a prominent fore court with turning circle.

The building itself is in a poor state of repair and is coming towards the end of its usable life.

Refurbishment would not resolve the performance and fabric issues, therefore demolition and new build is the only viable alternative.

Views of the buildings and its grounds have been improved by initial clearance works for access, but the dilapidated building and neglected site as a whole is a considerable eyesore in the immediate public realm and a blot on an otherwise picturesque landscape .



Character & Context

The neighbouring properties that are accessed off St Andrew's Road provide a variety of architectural languages. Typically these are large dwellings situated on large plots though there are examples of infill developments nearby.

It appears that the plots of Tai-Ann, La Grannerie, Wernlas and Melrose were developed pre-1922 though their forms are likely to differ from that which is evident today. The latter development of the land now Hilston appears to have been sometime during the 1940's with Larkfield and West Winds being added by the 1970's.

The adjacent property, previously known as 'Larkfield' is currently under construction with the previous dwelling being demolished and replaced with a large stately styled home with double garage. A rendered image of the proposed dwelling has been indicated, as downloaded from the Vale of Glamorgan's online Planning Portal.

Each of these neighbouring properties is well set back from St. Andrew's Road providing a generous front forecourt or garden. Landscaped areas also provide a buffer between the dwellings and the highway.



LARKFIELD



WERNLAS



HILSTON



MELROSE



TAI-ANN

Character & Context

The local built environment surrounding the site provides a variety of periods and styles. From the neighbouring properties to the wider reaching developments where a number of modern interventions punctuate the local vernacular.

A number of developments have been built over the years in the vicinity ranging in typology, density and market.

Nearest the site at the junction of St. Andrew's Road and Westra Road is a recent addition, completed towards the beginning of the decade. Westra Cross is a development of seven houses within what was once the local quarry.

Most recently, this year, is the completion of Arbor Vale, a new development of two, three and four bedroom homes on a sloping site, designed exclusively for those aged 50 or over.

Another nearby development, completed in the mid 1970's, is Merevale. This is an exclusive development of just twelve houses. The award winning scheme was designed by Hird & Brookes, having been inspired by Scandinavian residential architecture.



WESTRA CROSS



ARBOR VALE



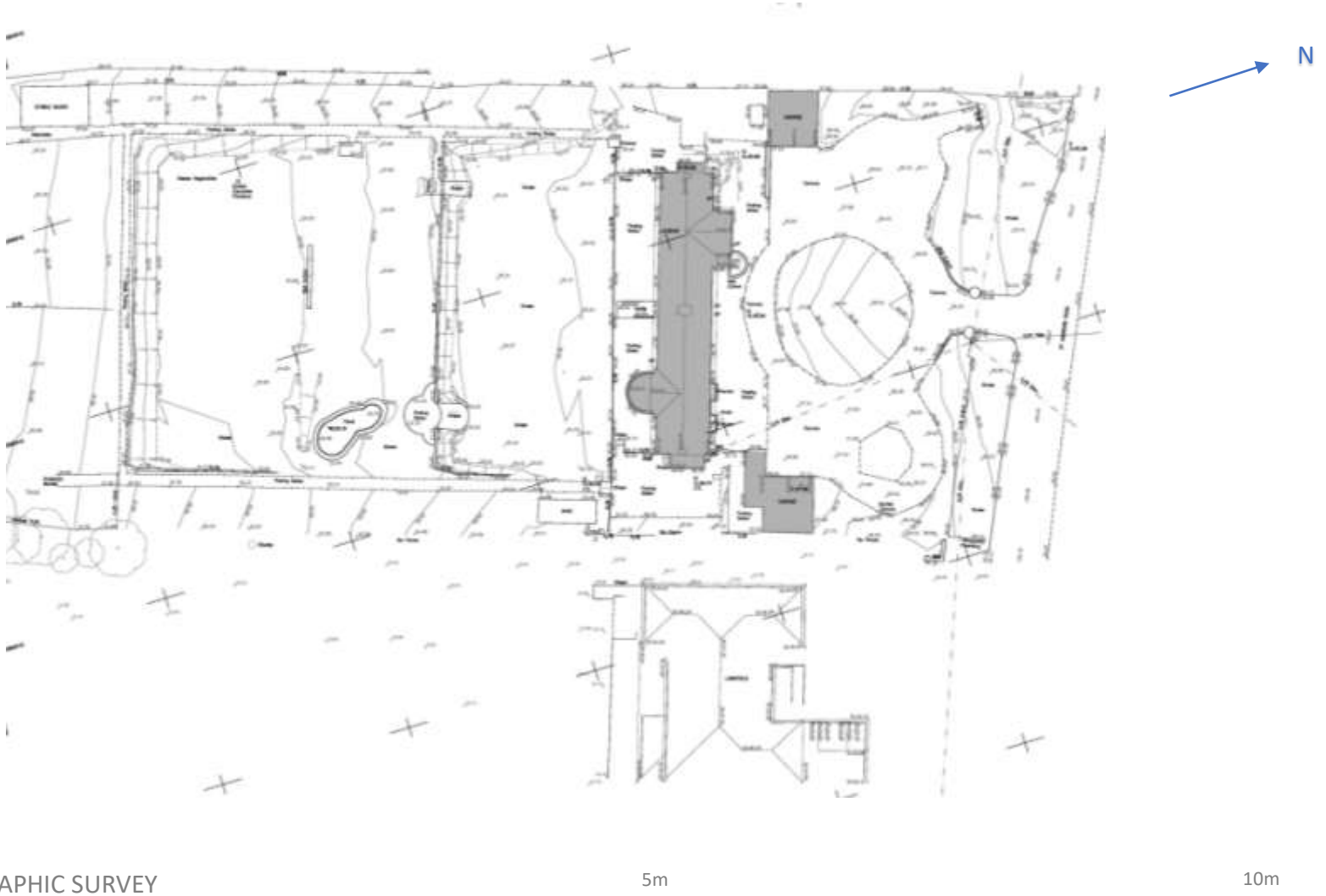
MEREVALE



SITE CONDITIONS

Existing buildings

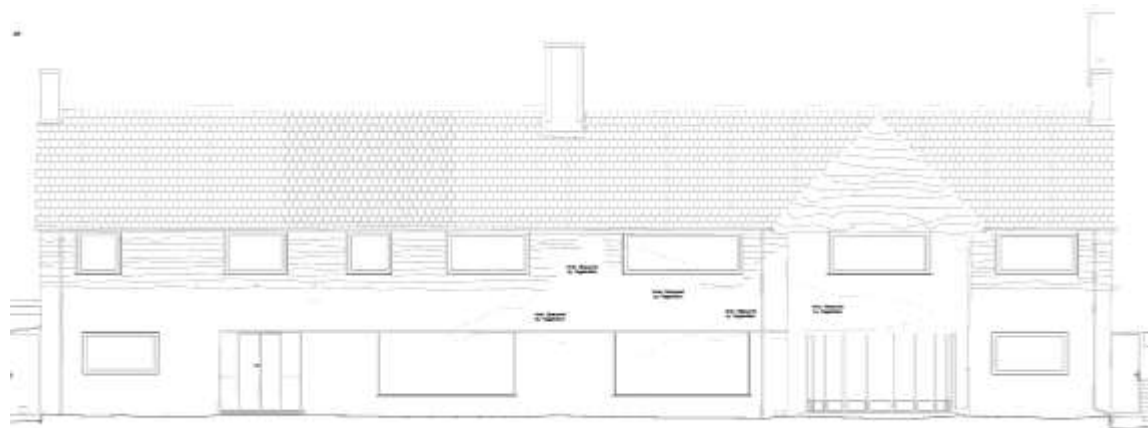
Existing House



Existing House



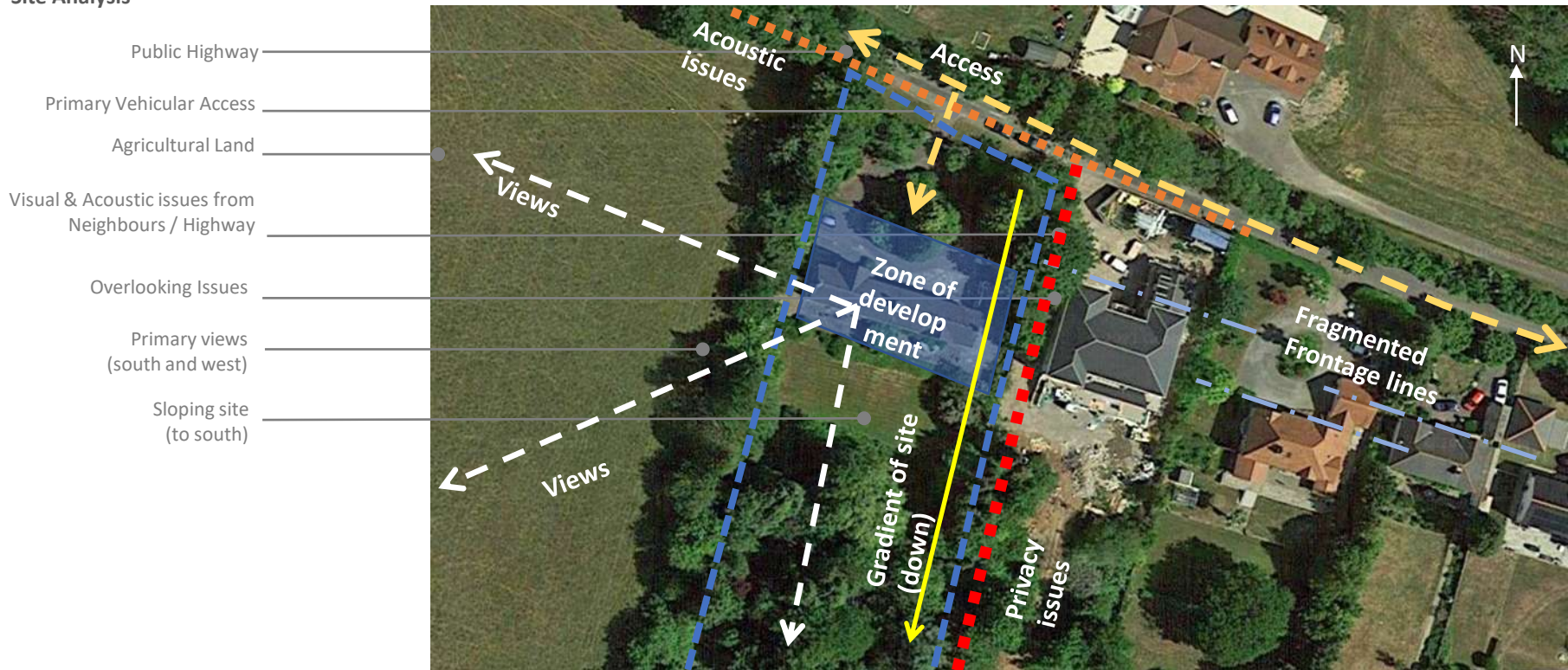
FRONT ELEVATION



REAR ELEVATION

5m

Site Analysis



Strengths and Opportunities:

- Brings a dilapidated site into use
- Provides an attractive roadside frontage at gateway to village
- Close to village centre and other amenities
- Close to urban centres (Cardiff & Barry)
- Views from site to open spaces
- Minimal overlooking from other dwellings
- Minimal disruption to adjoining residential areas & wider village
- Within an established residential area
- Sloping site can help hide building mass

Weaknesses and Constraints:

- Difference in site levels caused by slope
- Limited frontage opportunity
- Limited overlooking and privacy issues to east
- Noise from St Andrews road



Design Development Pre-App scheme

Initial Design Development

Application No. 2021/00028/PRE

In early February 2021 a Pre-application advice enquiry was made for the demolition of the existing house and outbuildings and construction of a replacement dwelling.

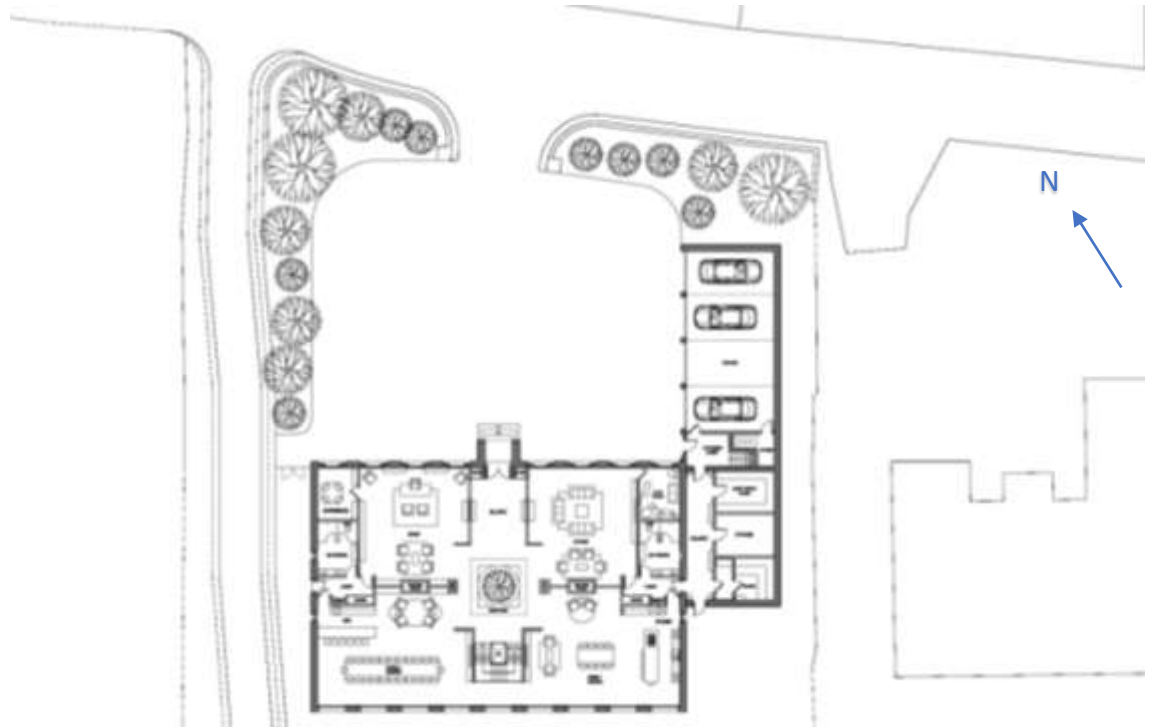
The proposals comprised of a three story dwelling situated around the existing house position, with basement at the rear and a single large garage along the eastern boundary with accommodation above.

The main access position was realigned to match the house, while a new access road was proposed off St Andrews road to service stables to the rear.

The house size was approximately 1750sqm / 19,000 sqft GEA, and comprised 6 bedrooms, living areas, dining spaces and kitchens, gym, home office, atrium and various ancillary spaces.

After an initial meeting with the planning officer, a number of concerns were raised about the volume of the building and how its massing, specifically from the front and side elevations, as well as the overall external design concept.

It was agreed that further sketches would be forthcoming to look at reduce the massing of the building, as well as utilising a more natural palette of materials to help make the building feel lighter. The building would also be considerably reduced in overall volume as well as width to give it a better sitting in the landscape.



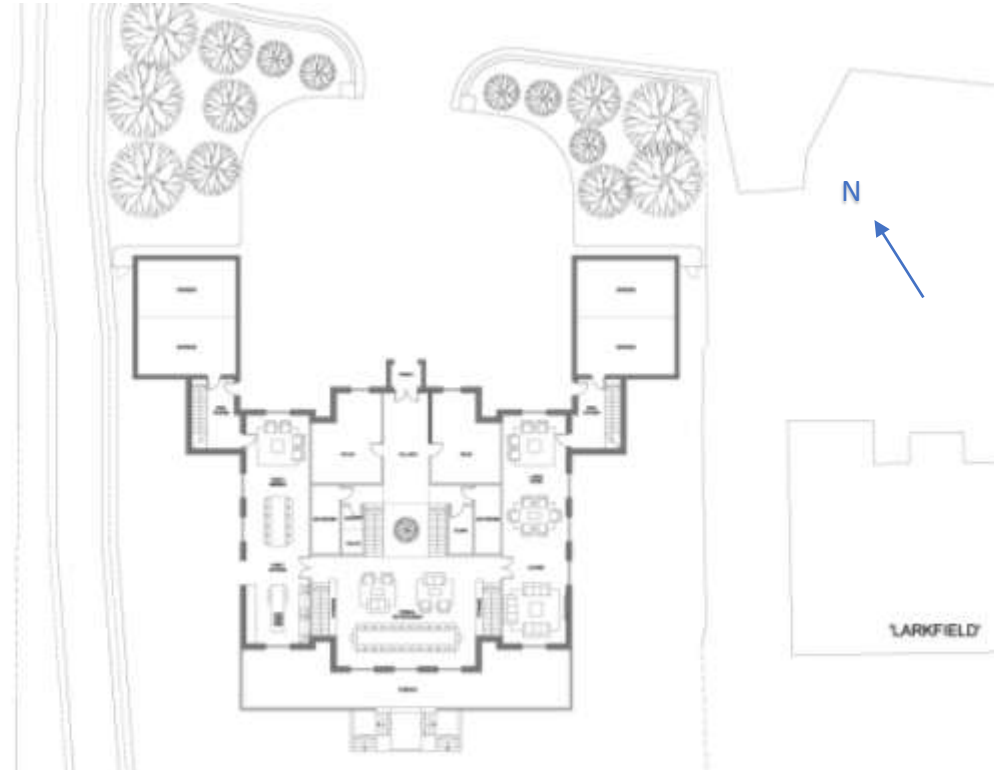
Early sketch layouts & massing studies

Initial Design Development

In relation to those concerns raised at the initial meeting, a second sketch scheme was submitted for consideration, which aimed to address the issues regarding the volume of the building and how the massing needed to be addressed, specifically from the front and side elevations, as well as the overall external design concept.

The mass of the building was subdivided to allow the frontage to be made narrower overall, as well as broken up by introducing setbacks at the sides as well as different roof heights. The end effect was a more conventional facade that was less overbearing than the previous proposal. The garage was also subdivided and split either side of the front entrance to improve the overall composition of the front elevation, as well as offer more variety of scale.

Internal layouts were changed to match the changes in massing, and the building was reduced in size to approx 1,366 sqm / 14,705sq ft GEA, with most of that reduction being on the 1st floor and 3rd floor level.



Early sketch layouts & massing studies

Initial Design Development

Pre Application advice was received on 23 march 2021. Some of the key points raised in relation to design are outlined below:

Visual Impact of replacement dwelling

As discussed, given the siting and set back position and existing planting within the site, the existing dwelling is very well screened. The western boundary of the pre application site is visible from St Andrews Road, and at quite some distance from the west. The site has a strong Sylvan quality and when viewed from its western approach, appears more as a wooded area as opposed to a garden, where the residential use of the site is only really evident when you are to the front of the site. Any proposal would likely reduce the number of trees on the site and would impact on the sylvan character of the site and negatively impact on the countryside.

As discussed and noting that the adjacent dwelling has recently been redeveloped, there is no objection to the principle of a replacement dwelling on the site. However, given its very sensitive location, the siting, scale (massing) and design must be appropriate to ensure that any replacement dwelling does not have a materially greater impact on the landscape.

As you have identified, the neighbouring properties that are accessed off St Andrew's Road provide a variety of architectural languages. Typically, these are large dwellings situated on large plots though there are examples of infill developments nearby. The majority of these dwellings are Arts and Crafts inspired, no doubt with each plot being sold off and built separately. Whilst they all differ in their design, there is a generally consistency in siting and general massing. Each of these neighbouring properties is well set back from St. Andrew's Road, providing a generous front forecourt or garden. Grassed verges also provide a buffer between the dwellings and the highway.

As discussed above, the adjacent property, previously known as 'Larkfield' is currently under construction and I believe now largely completed. This dwelling to some extent sets out what the authority are likely to consider as appropriate in respect of its general size, scale and form of a replacement dwelling.

As we discussed at our meeting and for the reasons set out above in relation to the sensitivity of the site, it is considered that the proposed replacement dwelling as detailed within your Design Brochure would be wholly out of scale and out of character with the site, due to the significant width of the dwelling and the accommodation of over three floors (when viewed from the front). Due to its scale and much greater prominence than the existing dwelling on the site, such a dwelling would be considered to have an unacceptable impact on the countryside and harmful to the rural character of the area. Moreover, a dwelling of 1,500 sq m would be considered wholly inappropriate and at odds with the scale of the dwellings within St. Andrews Road. Moreover due to its sheer size and design, it would not appear as a single dwelling as it would lack domestic scale.

During our meeting you advised that the proposal had further evolved and that the elevations were presented for discussion only and not fully developed. As we discussed, whilst the architectural approach and finishes are still very important, the key initial consideration is the appropriate massing of any replacement dwelling.

Following our meeting, you submitted a brochure for a different design approach and you have developed that into a revised design layout with sketch elevations, to show the direction and intent going forward. You advised that the mass of the building has been subdivided to allow the frontage to be made narrower overall, as well the dwelling being broken up by introducing setbacks at the sides as well as different roof heights. The garage has also been subdivided and split either side of the front entrance to improve the overall composition of the front elevation, as well as offer more variety of scale.

The footprint of the main dwelling has been slightly reduced in width to 22m, although the depth has increase to 19m. Given the forward projecting garage wings (with accommodation in the roof area) are connected to the house, they would be viewed as forming part of the house and therefore the real width of the dwelling would appear as being 36m, which significantly wider than your original proposal.

The floor space of the revised scheme is shown as being some 1366 sq m based on your annotated floor plans and it is not clear whether this figure includes the accommodation above both garage wings. As in the previous scheme the floor space of this proposed dwelling is substantially larger than any other dwelling in the locality.

The sketched elevations are not to scale and I cannot given any real comments on this element, but note the general sudo Georgian design approach. However the dwelling is shown to be developed the full width of the plot and the dwelling when viewed from the front would be out of keeping with the pattern of development along St Andrews Road, even when viewed against Larkfield, which is a very large dwelling. In particular, I feel that the forward projecting garage wings significantly add to the bulk and massing with a built frontage of some 36m (approx.). Whilst the floor space of the dwelling has been reduced, at 1366 sq m (excluding the garage and accommodation above) would be significantly larger than Larkfield which is circa 800 sqm. Larkfield has much less impact from the road as their garage wing is located to the front of the main dwelling and not the side, resulting in a much narrower footprint of 20m.

The proposed dwelling would be closer to the road than any other dwelling and clearly be forward of the established building line and the grand style of enclosed forecourt would be wholly at odds with the rural character of the area and the sylvan character of the area and would urbanise the site and the approach to the Westra from the west.

To conclude there remain significant concerns in respect of the overall siting, size and form of the replacement dwelling and the impact on the character of the site, the rural street scene of St. Andrews Road and rural character of the area.



Proposed Design

Key Design Principles

The proposal seeks not only to provide a purpose-built, comfortable and sustainable home, but also to enhance its local area for both the wider public and the local natural environment. The scheme will seek to deliver a building which is exemplar in design and performance with the ambition of being low energy and highly sustainable. Below are some of the key principles of the proposal to reach a developed design.

ENVIRONMENTAL SUSTAINABILITY

The proposal is to be designed with a 'fabric first' approach, ensuring that the dwelling is well-insulated and sealed in order to reduce heat loss via cold bridging and air loss. The client aspiration is to meet Part L 2025 regulations as well as an EPC 'A' rating.

Cooling loads are also a consideration, and so deep window recesses have been incorporated into the composition of the elevations, in order to minimise solar heat gain in summer, but allow some solar gain in winter.

In addition to the fabric first approach, a ground source heat pump solution will be explored to minimise energy usage and provide thermal stability.

Storm water which runs off the roof and hard landscaping surrounding the building will be directed to a series of rain gardens and soakaways in the garden area to the flanks and rear of the house.

Along with rain garden planting, natural hedgerows' will be restored to the boundaries of the site, as well as tree planting for screening along the north and western boundaries. This will serve to enhance biodiversity, and minimise the visual impact of the dwelling when seen from the higher land to the north/west.

CHARACTER

The proposal is a clearly legible addition to the built environment, adding to the narrative of traditional style buildings that can be seen along St Andrews road approach to Dinas Powys. It promotes sustainable modern design, with environmental considerations expressed in a traditional materiality and form.

The main choice of material palette is equally legible. The brick, stone trims and slate roof gives a natural softness which will weather over time, serving to knit the building into the landscape. The lighter tones will also help the give the building a 'lighter' feel.

The massing is deliberately fragmented, with a series of set backs and recesses combined with changing roof lines to help break up the overall volume of the building as well as create visual interest. This is most prominent along the northern boundary which, along with the drop in levels away from the road to the house, serve to minimise the impact on the landscape from the road. Screening trees to each flank of the entrance serve to further minimise the visual impact.

The same applies of the western boundary, where the building begins at a single storey before stepping up and away towards the east in a series of fragmented rooflines. Combined with enhanced tree planting and hedgerow restoration, the impact on the surrounding landscape is minimised when viewed from the western approach along St. Andrews road.

LANDSCAPE

The landscaping proposal has been carefully developed to integrate seamlessly with the built elements.

To the north of the dwelling, areas flanking the entrance will be planted to create a native copse in order to enhance biodiversity whilst also screening the building as seen from the north. The grass verge will be retained to allow vision splays for the access to St Andrews road, but will be re-colonise as natural grassland, providing further ecological benefits.

To the south of the dwelling, the existing grass lawns will be complimented by planted borders of native wild flora grasses, bulbs and shrub planting to boost ecology and provide drainage and water retention benefits.

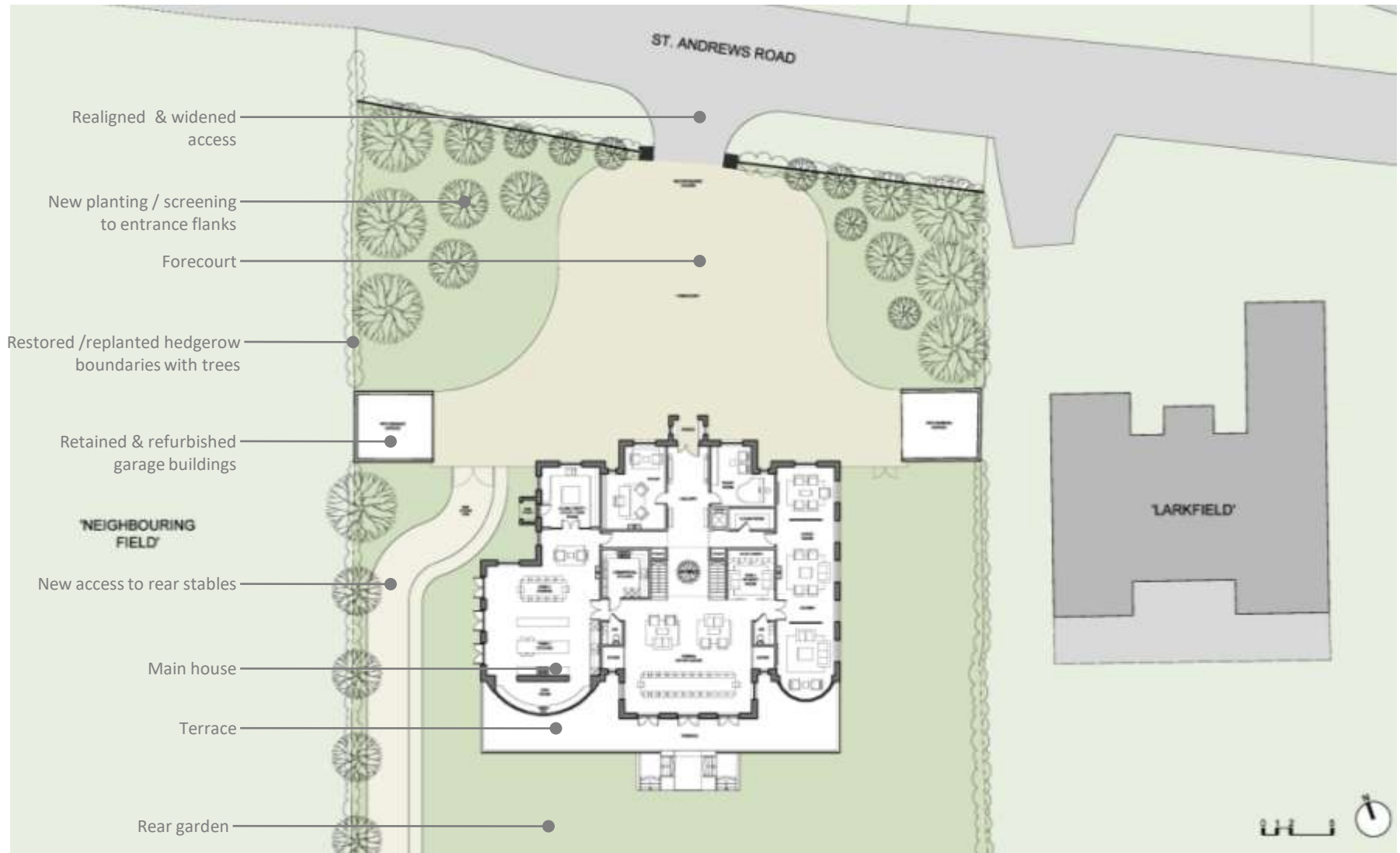
To the west and east planted borders will also be introduced, as well as restored and enhanced native species hedgerows and new tree planting, to further boost ecology as well as provide screening for the site and help it knit into the existing landscape.

ACCESS & MOVEMENT

The site is accessible either by car or on foot, and can be reached by public transport via nearby Dinas Powys with bus and rail connections.

There is covered parking in the garage, with access from here to the front entrance of the house. Alternatively, one enters the house via the covered side entrance via the boot room. All these access points are on the ground floor (the same level as the driveway), with level thresholds into the house.

The house is divided into communal areas on ground floor, with two levels of bedroom accommodation above accessed via the central staircase. A lift is also provided. Bathroom and WC facilities on all floors. There are no steps within the house apart from the main staircase..



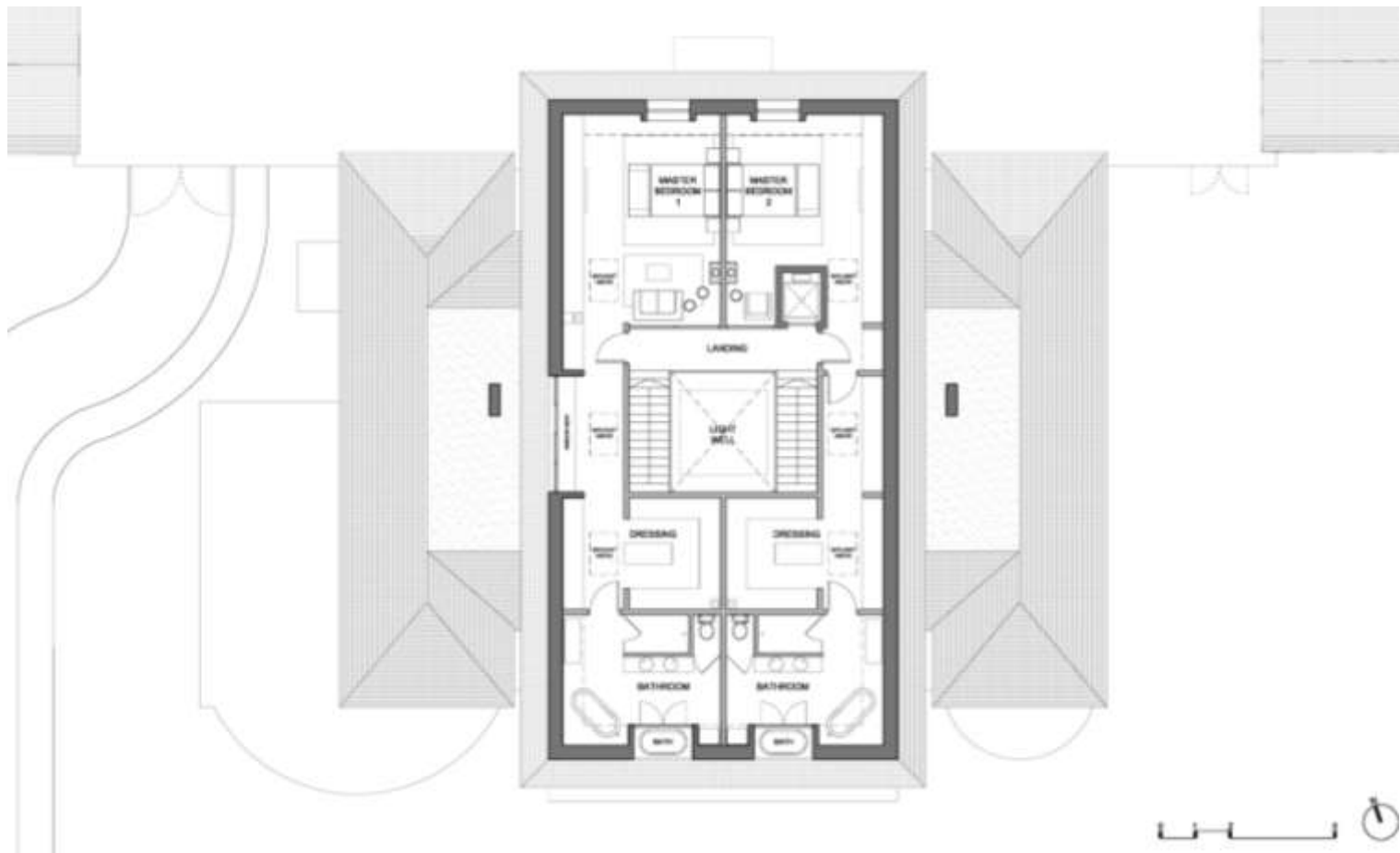
Proposed Site Layout



Ground Floor



First Floor



Second Floor



Front (North) Elevation



Rear (South) Elevation



Side (East) Elevation



Side (West) Elevation

Material Palette

A simple material palette has been proposed, one that both reflects the site's context and allows the design to be both visually interesting, distinct enough to garner visual appeal and cohesive enough to provide character without spectacle.



Rustic brick

Sash panel windows

Ivory recon. stone

Slate effect roof

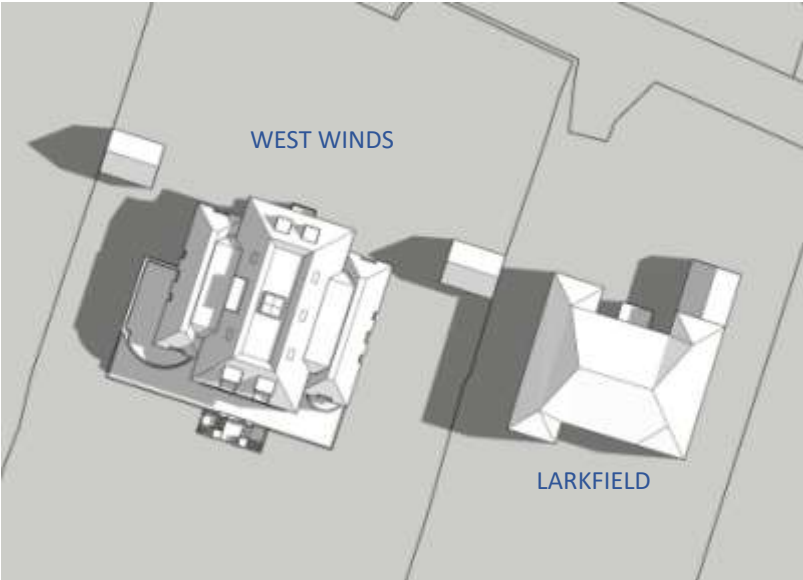
Timber doors & trims



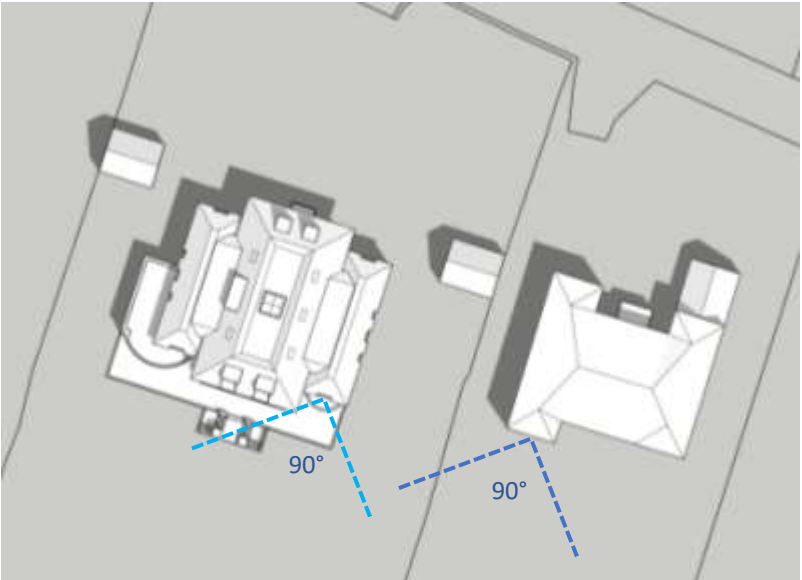
Perspective View
From St Andrews Road



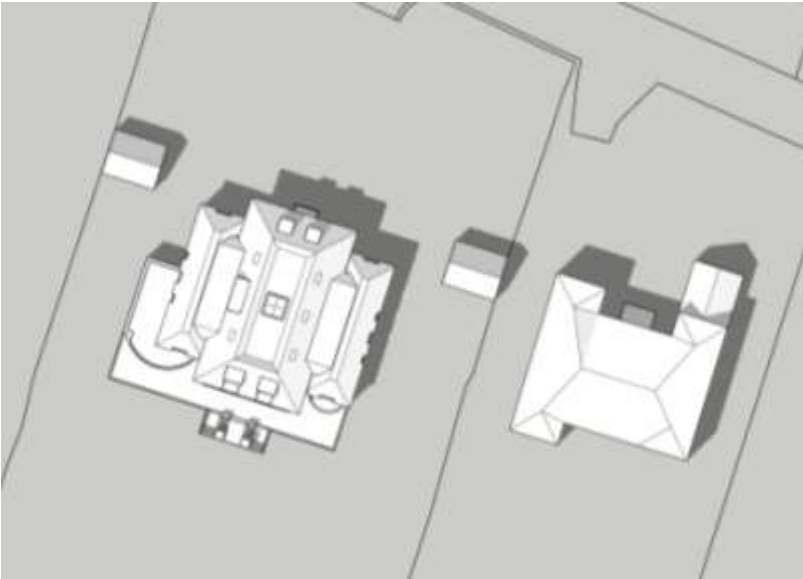
Proposed Design Analysis



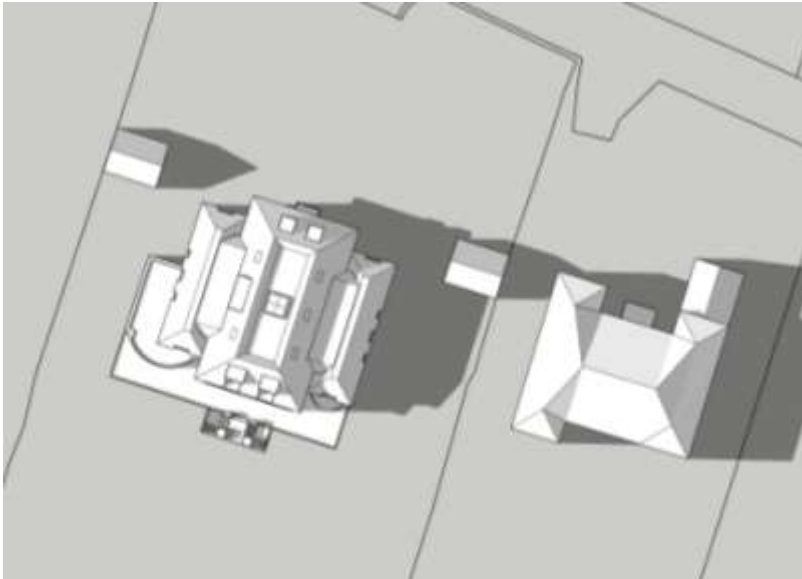
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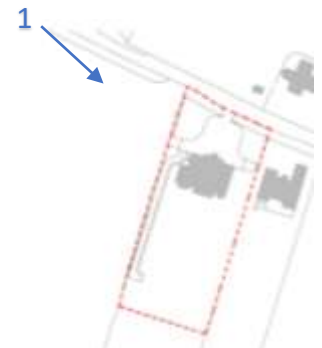


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Visual Impact Study

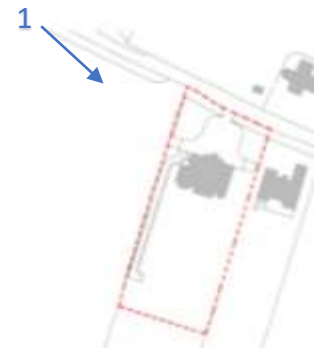
View from Western Approach along St Andrews Road



View 1: Current dwelling

Visual Impact Study

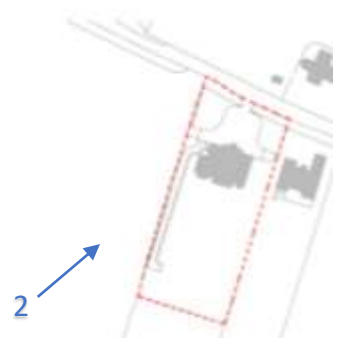
View from Western Approach along St Andrews Road



View 1: Proposed dwelling

Visual Impact Study

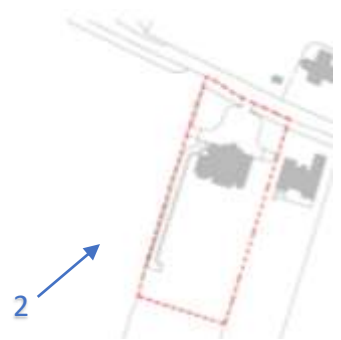
View from South West (from neighbouring field as not visible from Westra road to south)



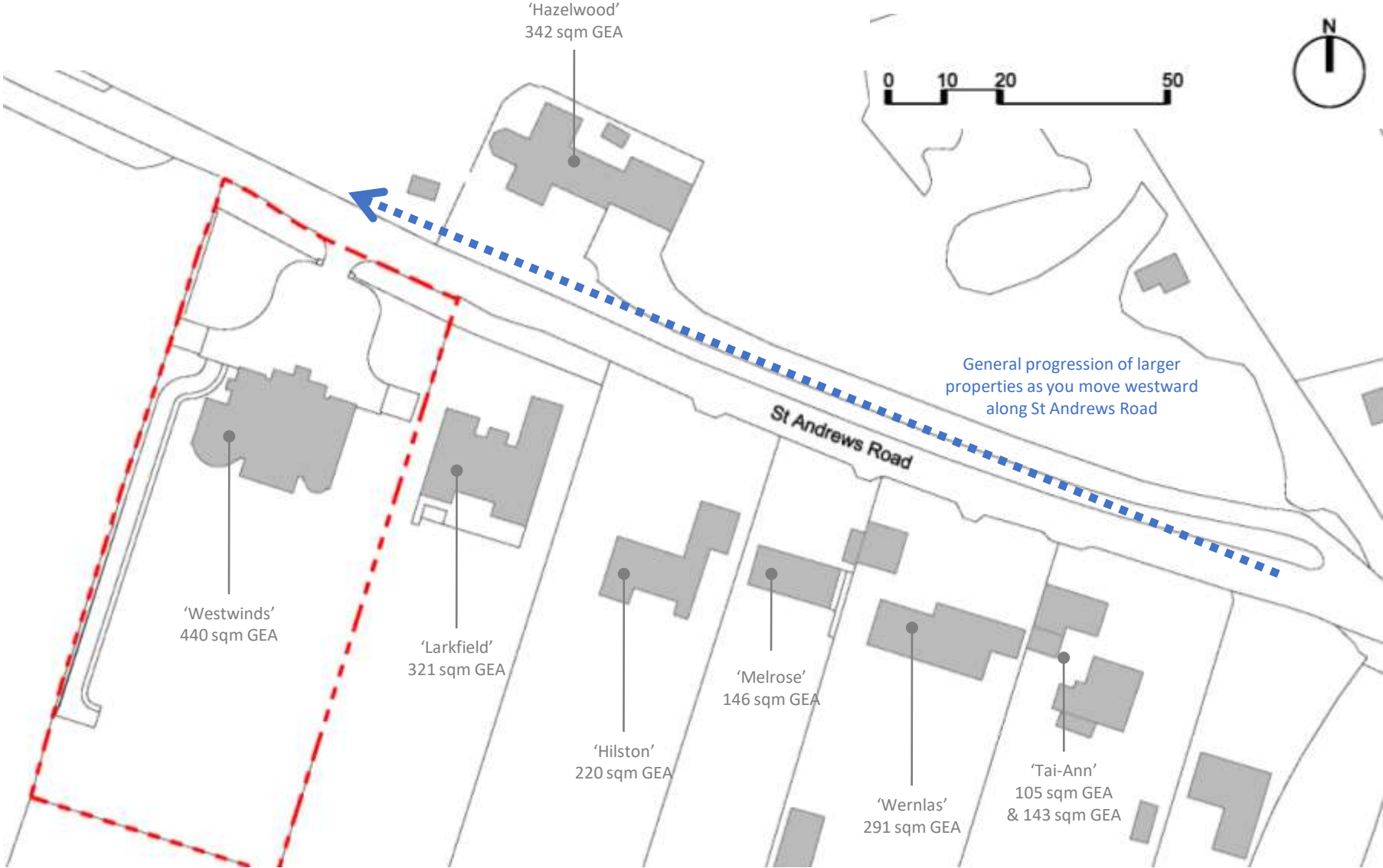
View 2: Existing dwelling

Visual Impact Study

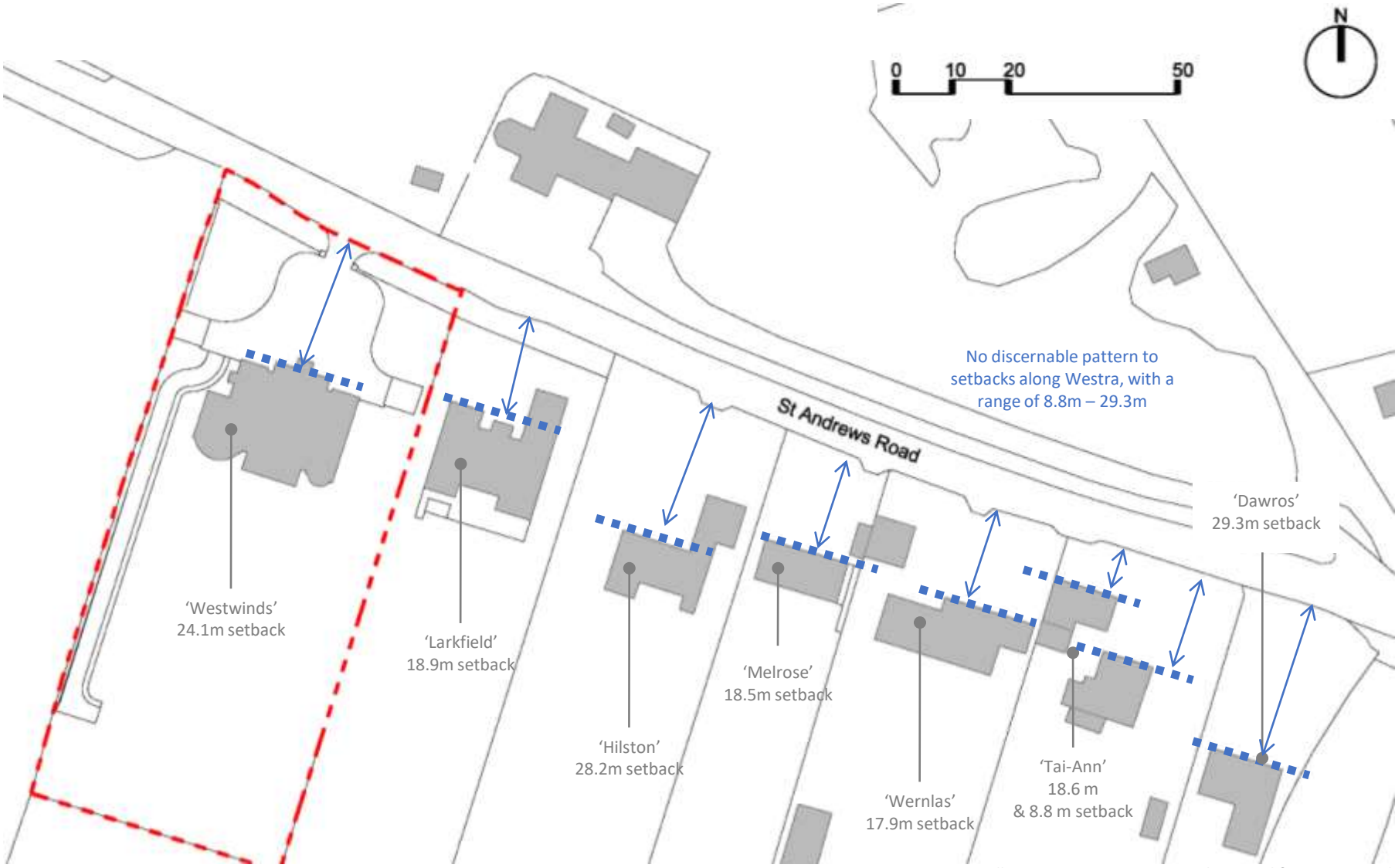
View from South West (from neighbouring field as not visible from Westra road to south)



View 2: Proposed dwelling



All areas are approximate and sourced from OS Map data



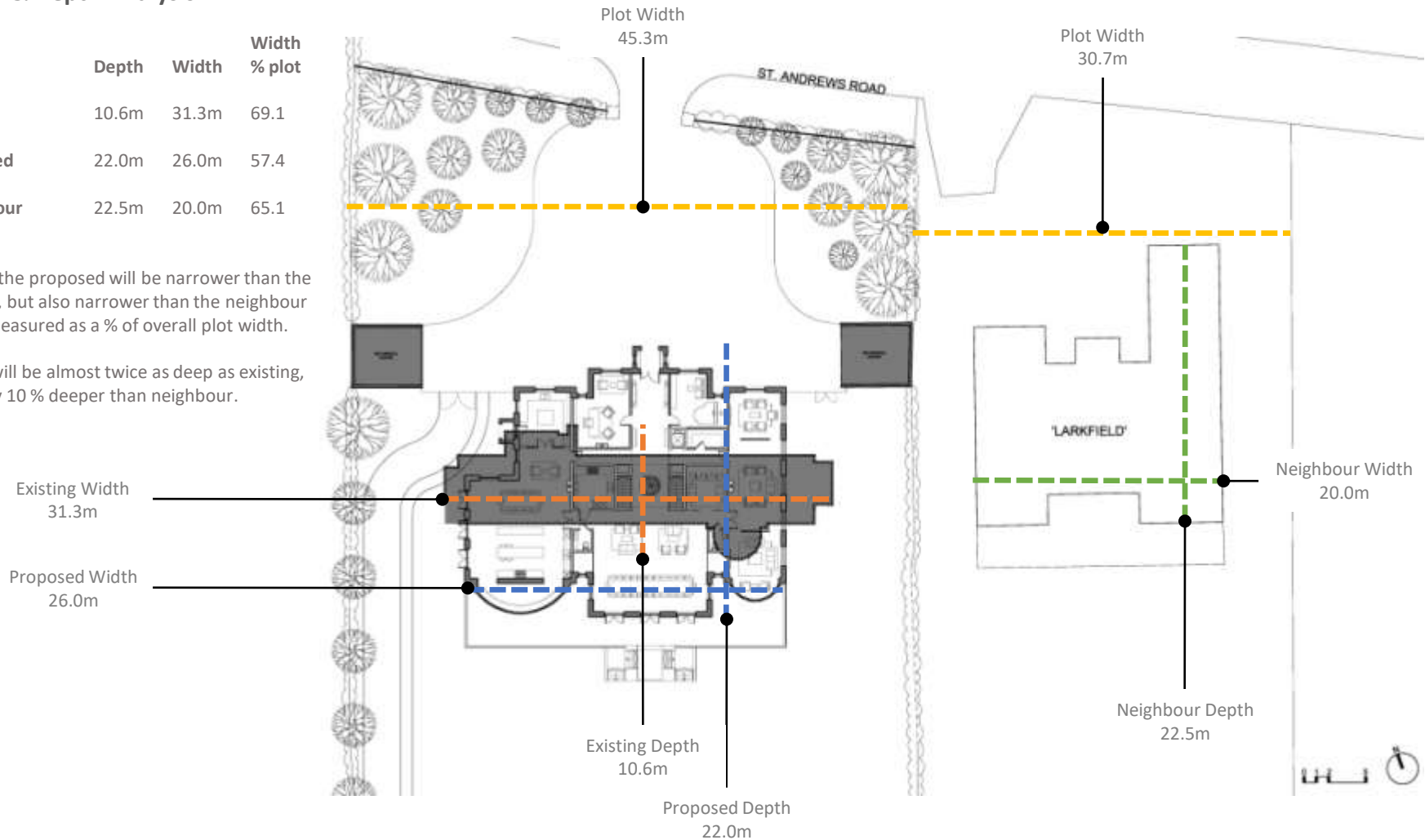
All areas are approximate and sourced from OS Map data

Width & Depth Analysis

	Depth	Width	Width % plot
Existing	10.6m	31.3m	69.1
Proposed	22.0m	26.0m	57.4
Neighbour	22.5m	20.0m	65.1

Overall the proposed will be narrower than the existing, but also narrower than the neighbour when measured as a % of overall plot width.

Depth will be almost twice as deep as existing, but only 10 % deeper than neighbour.



Size of Development

The scheme proposes to replace a dilapidated 6 Bed residential property with a new purpose-built, comfortable and sustainable 6 bed home.

A summary areas is given in Table 1 opposite, showing the initially proposed areas and the series of reductions that have been made in response to planning concerns raised during the pre-app process.

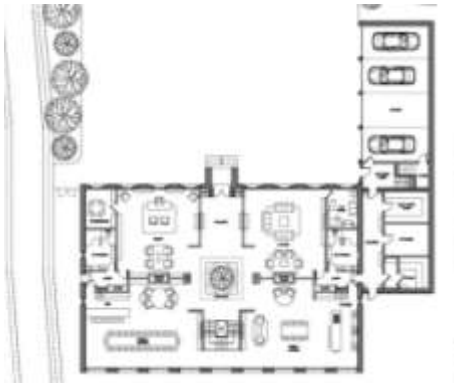
Parking

Parking provision is to comply with VoG Council Parking Standards.

Table 1. Accommodation schedule – show design revs for GEA & width

	Gross External Area m ²	Footprint m ²	Footprint as % of plot
Existing	308	190	2%
Pre-App Proposal	1750	671	8%
Pre-App Proposal 2	1366	503	6%
Proposed	999	440	5%
Neighbour	827*	321*	7%

•Estimated from planning drawings & OS Map data, includes basement
 •Westwinds plot approx. 8437 sqm
 •Larkfield plot approx. 4587 sqm



Pre-App 1 GF Plan



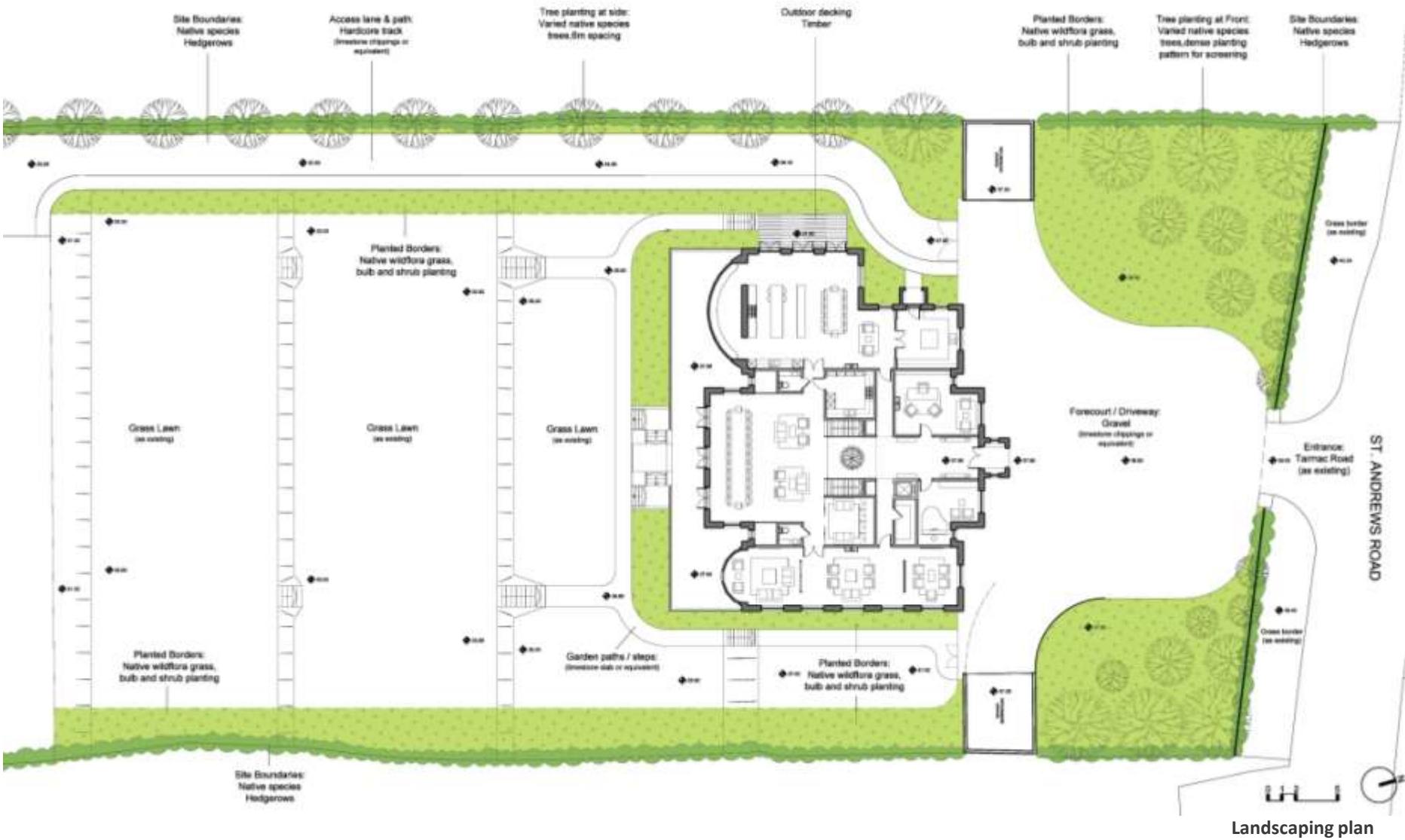
Pre-App 2 GF Plan



Proposed GF Plan

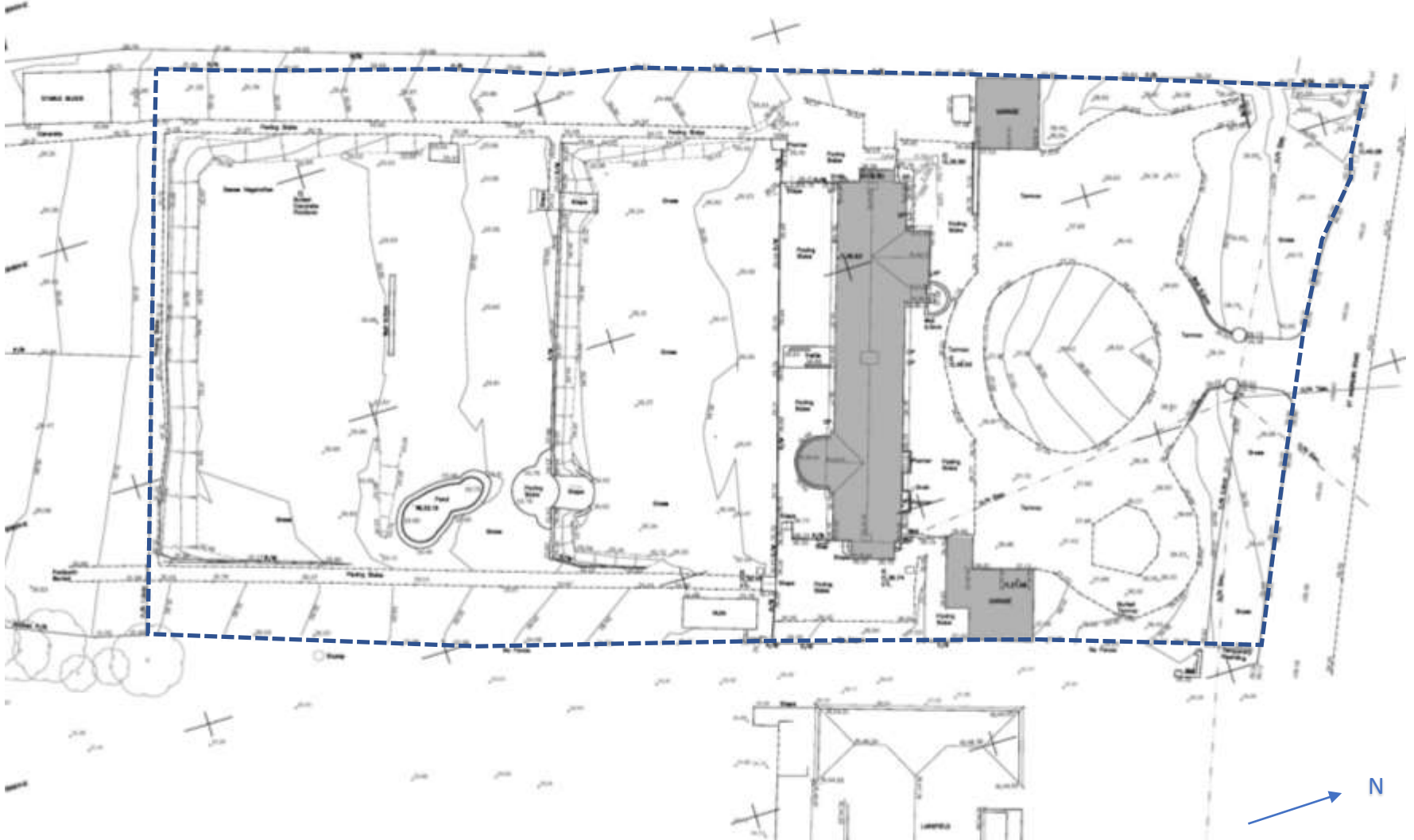
Landscaping Strategy

Refer to Landscape drawing PL 09 PROPOSED LANDSCAPING PLAN for more detail



Ecology – trees

Topographic survey and subsequent site visits have identified no trees on site within the application boundary.



Ecology – bats

Below is a summary of the Bat survey, its findings and recommendations for mitigation. Please refer to the full Bat Survey report submitted with this application for more detail,

Summary

A maximum of 26 bats were observed using the building as a day roost.

The building is now a confirmed bat roost. No work that could affect the bat roost is permitted by law, without the permission from Natural Resources Wales, including any works to the roofs. Direct illumination of the building is also not permitted, as this could constitute disturbance.

The bats using the buildings are:

A single brown long ear was observed using the front western garage as an occasional day roost. This bat was either a male or non breeding female. These types of bat are found roosting in rural buildings. These bats are less tolerant to light than other species of bat. The bats require dark areas to fly around prior to exiting the site. These bats will also require protected dark corridors from the roost to the wider environment.

A single Common Pipistrelle was observed using the eastern garage as an occasional day roost. This bat was either a male or non breeding female. These are common species of bat who can tolerate higher light levels than some other species of bat.

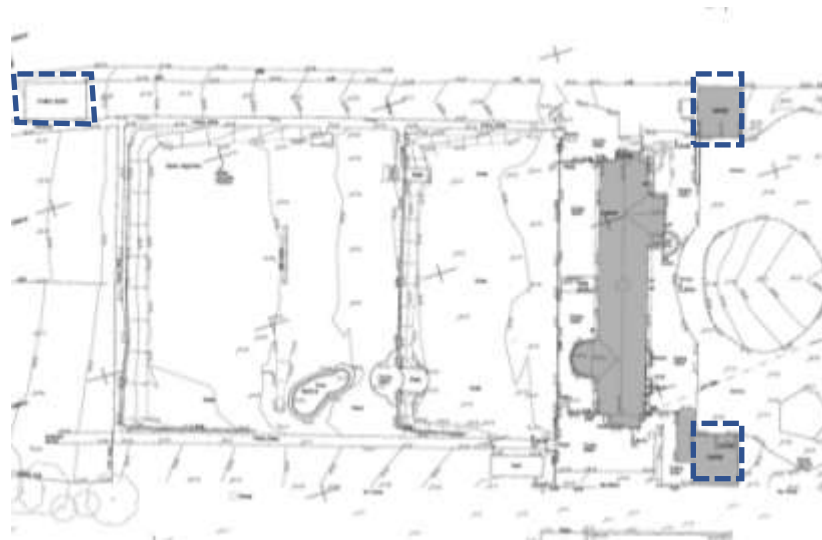
A single Serotine bat was observed using the west gable of the main building. This bat was either a male or non breeding female. This is a nationally rare bat.

A single Common Pipistrelle was observed using the western gable of the main house as an occasional day roost. This bat was either a male or non breeding female. These are common species of bat who can tolerate higher light levels than some other species of bat.

9 Soprano Pipistrelle bats was observed using the roof of the south elevation. These bats were thought to be a small maternity colony. These are common species of bat who can tolerate higher light levels than some other species of bat.

16 Brown Long Eared bats were observed using the western gable of the main house. These bats were likely to be a maternity colony. These are a relatively common species of bat are found roosting in rural buildings. These bats are less tolerant to light than other species of bat. The bats require dark areas to fly around prior to exiting the site. These bats will also require protected dark corridors from the roost to the wider environment.

The buildings did not offer significant potential for hibernating bats.



Mitigation

The Brown Long Eared bats will require an internal attic space to internally fly around prior to exiting the roost. This will also add ecological gain for the Lesser Horseshoe bat that was observed flying around the site.

One new large internal attic space will be created above the exiting stable-block. This is a more quiet and dark aspect of the site. Offering a dark corridor away from the site. The new internal roosting area will have the following:

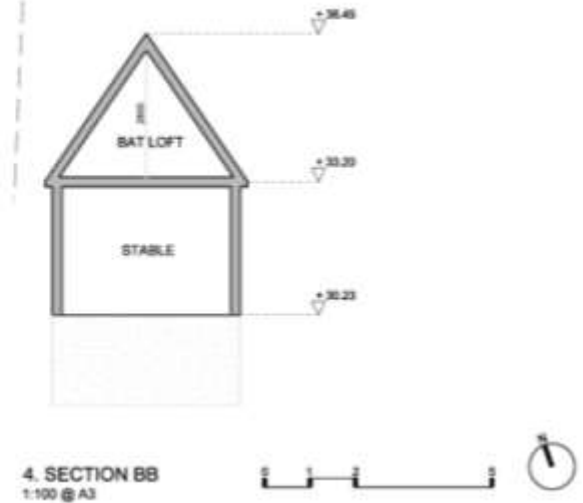
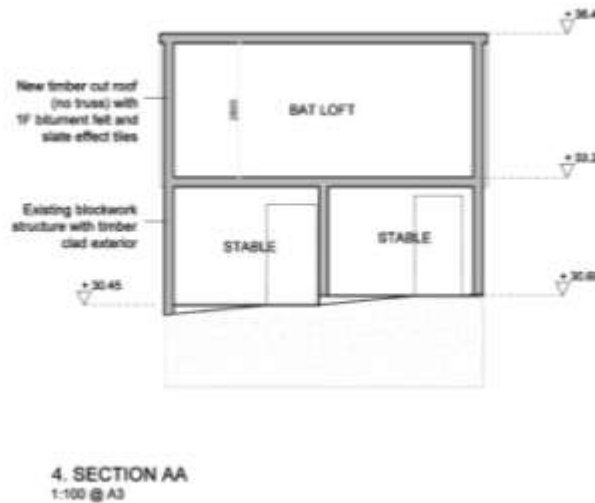
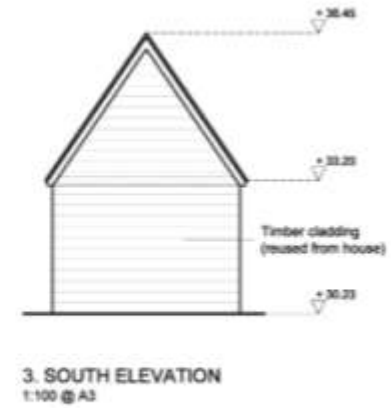
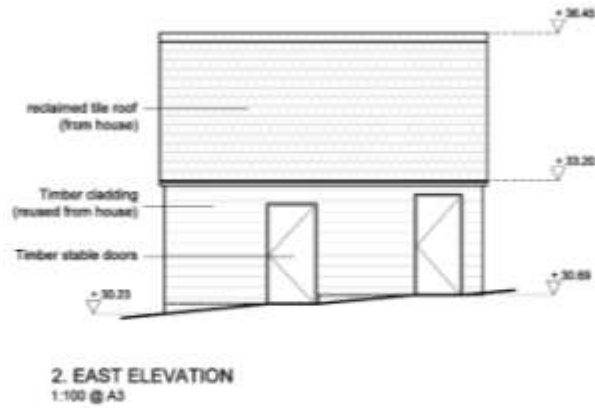
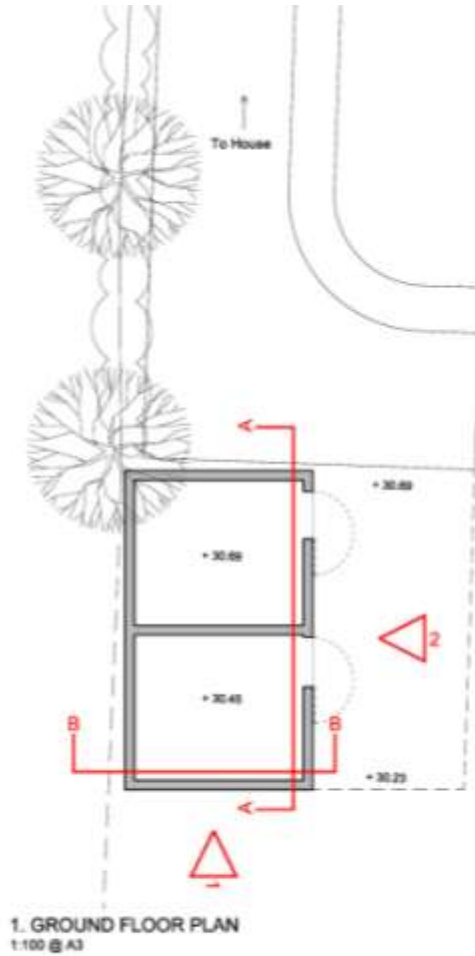
- The stable building is located at the south of the site, this will have the benefit of being in a quiet aspect of the proposed site layout.
- This building will not be obscured from direct sun light.
- The building will be thermally stable with a tile roof.
- The building will have a ceiling which will separate the ground floor from the attic space.
- The roof will be traditionally cut and not trusses, so there will be unimpeded internal flight space. The roof of the internal roosting areas will be slate with a 1F bitumen felt liner. No bats will have access to breathable membranes as this can be harmful to bats.
- The new internal roosts will be for the use of bats only. No storage or access will be permitted into these areas other than for maintenance purposes. Access will be via 750x750 hatchways.
- Horseshoe bats will access the internal roost via a 350x250 open letter box type aperture located in a gable wall. A “L” shaped vertical baffle will be created internally behind the opening to shield the interior from, any external light and bad weather.
- Brown Long Eared bats will access the car port building via 2 bat access slates on each pitch of the roof. Long Eared bats will access the roost above the kitchen area via gaps created behind the barge board on the east gable. A hot box Plywood bat roost will be created inside the apex of the building, offering increased warmth that may be utilised as a maternity roost.

New roosting will also be created for crevice dwelling species of bats. This includes:

- A number of Kent bat boxes will be fitted to the internal walls making it suitable for Myotis and Pipistrelle species of bat. The barge board will have regular 100x25 apertures left around the building making it suitable for roosting crevice dwelling species of bat. These apertures will give access to the top of the wall plate. The roof will over hang the walls, where the purlings and rafters extend over the external walls gaps will be left to the side of these at wall level. These small pockets will allow access by crevice dwelling bats.
- Around the elevations the rafters will be left exposed. There will be apertures created around the building to allow bats and nesting birds to access the top of the stone walls. In any areas that have breathable membrane fitted then timber boarding will be used to form an open box that allows bats to access for the exterior but does not allow direct contact to the breathable roof membrane.
- Timber cladding from the house will be reused to clad the stable block suitable gaps will be left in the cladding for access for bats and nesting birds. The cladding will not be fitted flush to the block work but instead will be battened off the main building creating a minimum 150mm gap between the cladding and the block work.
- Crevice dwelling features will be created under raised ridge tiles. One in the middle of the roof and two at each end, located one ridge tile in from the end tile. The raised ridge tiles will be bedded up on mortar which a 100x25mm gap retained for access. The roofing felt will not be cut at the apex. The two end ridge tiles will not have the ends mortared up, allowing further crevice dwelling access. The entire ridge tile line will have a retained internal linear cavity through out its length with no mortar obscuring this internal cavity.
- No breathable roofing membrane will be used on the stable block. Traditional 1F bitumen felt will be used in its place.



Ecology – Bat roost: Proposed design of replacement bat roost, in line with ecologist recommendations & details.





Date: 12/06/2021
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Job No.: 2080
Revision: A

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