810 Waterlillies

Waterlillies, Ginns Road, Stocking Pelham, Little Hadham, East Hertfordshire, SG9 0JA

Design & Access Statement for Full Planning



Contents

5.0 Access

6.0 Conclusion

1.0	Introduction
1.1 1.2 1.3	The Document Site and Location Client Brief
2.0	Design
2.1 2.2 2.3 2.4	Strategy and Concept Scope of Works Scale and Mass Materials
3.0 3.1 3.2	Sustainability Approach Functional and Flexible
3.3 3.4 3.5	Design for Climate Sustainable Materials Renewable Energy Technologies
4.0	Setting in Relation to Listed buildings

1.0 Introduction

1.1 The Document

This Design & Access Statement has been prepared by Snell David Architects on behalf of the applicants and has been written to support a Planning Application for the demolition and replacement of their existing 4 bedroom dwelling at Waterlillies, Stocking Pelham.

The substantial site comprises a large two-storey four-bedroom property, built in the 1960's, as well as a detached indoor swimming pool and changing rooms. A forward-thinking design intent is clearly evident in the existing 1960's dwelling, which would have been considered state-of-the-art and contemporary at the time; featuring curved walls, bridging first floors, double-height spaces and ample glazing looking out to the surrounding garden. However, the house no longer provides for the needs of modern living as the internal layout is complicated and inefficient with the Kitchen tucked away - rather than the shared heart of the home which is so often required by modern families. The property consists of solid masonry walls, no insulation in the floor slab and is heated by oil (no gas supply to the village). The applicants originally considered refurbishing the house to bring it up to modern, thermal and energy-efficiency standards. However, following a detailed review, it became clear that the sheer extent of modifications required to achieve this hugely out-weighed the benefits of erecting a high quality, new-build property in its place.



Google Maps Image: Aerial view of Stocking Pelham with application site, Waterlillies, highlighted NTS

1.2 Site and Location

Stocking Pelham is a village and civil parish in the East Hertfordshire district of Hertfordshire. It is located on the border with Essex, around 6 miles east of Buntingford. 'Waterlillies' occupies a substantial site of 2.2 acres, located on the north side of Ginns Road, which leads to Berden Road, en-route to the village of Berden. The existing property is located centrally on the site, accessed via a driveway from the highway and looping back to Ginns Road at the east corner of the site boundary. The site is dominated by mature Leylandii (Cyprus) trees, which line the driveway and surround the pool house, within close proximity to the dwelling. The trees have become overgrown and caused excessive shadowing and some structural damage to the property.

The property enjoys open countryside views across fields to the north and a sense of privacy from its neighbouring properties, which are substantially screened by boundary vegetation. The central location of the property on the site helps to provide a sense of its rural isolation - out of sight from both the public highway and neighbouring properties in all directions.

The property is not a Listed Building, or within a local Conservation Area. The Planning Map below indicates various Listed properties that surround the site, including the neighbouring property to the East, Longcroft, and The Barn at White Hart Farm, opposite.

1.3 Client Brief

The applicants have lived at 'Waterlillies' for decades, having raised their family here continuously participating in the village community. The applicants initially appointed Snell David to consider proposals to fully refurbish and extend the house, bring it up to modern sustainable, energy efficiency standards, and rearrange the internal layouts to better suit their present and future needs. It soon became apparent that the introduction of sustainable energy sources (PV panels and ground source heat pumps) would not be worthwhile without introducing modern standards of insulation and the replacement glazing throughout. Combined with various repairs and the ambition to extend and re-arrange the internal layout of the property, this option became evidently unviable and poor value when compared to the demolition of the house and the construction of a new bespoke, contemporary home - designed to meet the exact needs of the family, whilst boasting exemplar standards of modern, sustainable design and technologies.

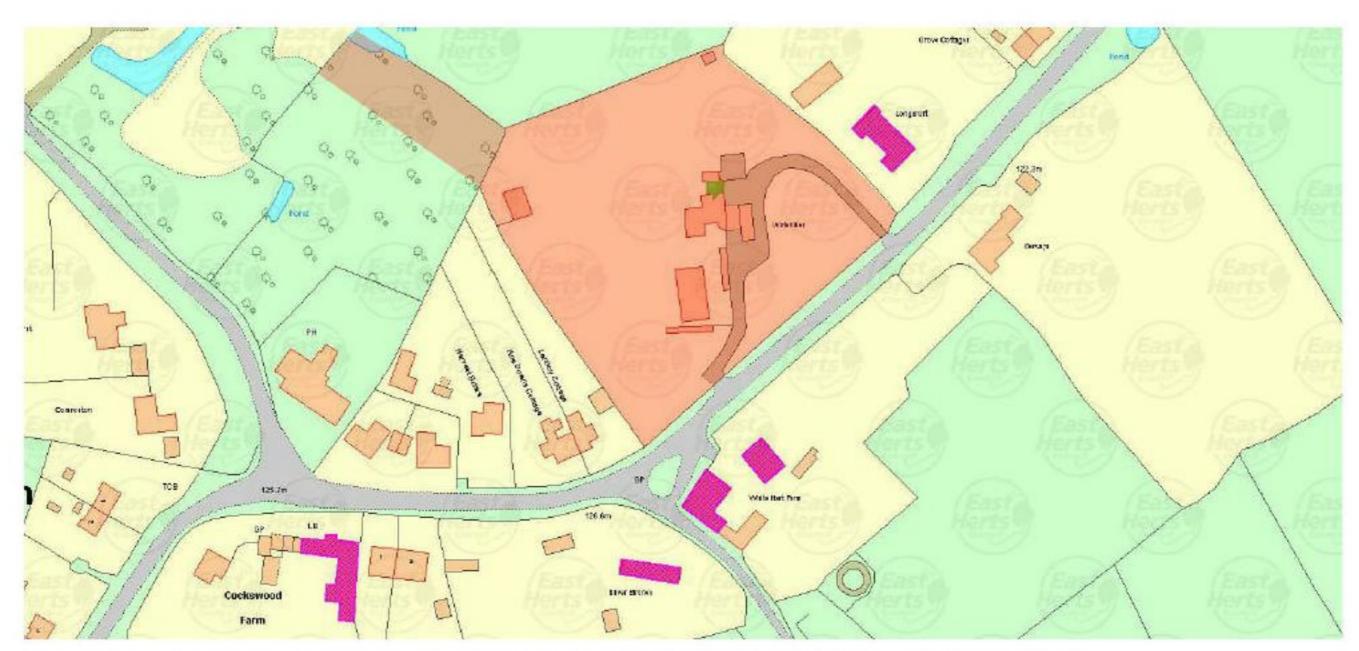


Image taken from East Herts 'Interactive Planning Map, indicating Listed Buildings highlighted in pink, surrounding the application site.

Properties in Stocking Pelham



Google Street View: Longcroft (neighbouring Listed building)



Google Street View: White Hart Farm (Listed building opposite)



Google Street View: Silver Birches (local Listed building)



Google Street View: Cockswood Farm (local building opposite)



Google Street View: Local housing at Mead View



Google Street View: Neighbouring properties, West of Waterlillies

Waterlilies Site Photos



PHOTO: view of existing house from driveway approach



PHOTO: existing house north elevation



PHOTO: existing house west elevation



PHOTO: existing house east elevation



PHOTO: existing house view from garden



PHOTO: existing pool house

2.0 Design

2.1 Strategy and Concept

Given the applicants' emotional associations to the site and the existing property, the design brief was developed by first understanding the elements that they enjoyed most about the current house as well as those that do not currently work for them. This process identified great merit in the original architects' concept for the site. In particular, the entrance driveway which features a brick garden wall that lead visitors deeper into the site - slowly revealing the house in a rather theatrical manner. This sense of controlled reveal has practical relevance also - it maintains a sense of privacy and security. Furthermore, it was felt that the T-shape plan of the existing house is appropriate and successful in capturing sunlight and views - out towards the surrounding garden and landscape beyond throughout the day. Both these concepts have been adopted and built-upon in the proposed design. Of course, there are many aspects of the current house that are no longer fit for purpose or indeed suitable for the applicants' future comfort in the house; the lack of family kitchen space, the opportunity for ground floor bedroom accommodation, long-term the expense of heating and maintaining.

The over-arching concept for the proposed dwelling is a building that embraces it's beautiful countryside surroundings and it's occupant's way of life. In this sense; a traditional country house, fit for purpose in an age where sustainability and efficiency is a key driver for design.

2.2 Scope of works

The following provides a summary of the proposed works:

- Demolition of existing four-bedroom property, including the pool house, outbuildings, and many of the existing Leylandii trees.
- Erection of a new two-storey, five-bedroom dwelling, including attached swimming pool and garages. Note: the fifth bedroom is located on the ground floor.

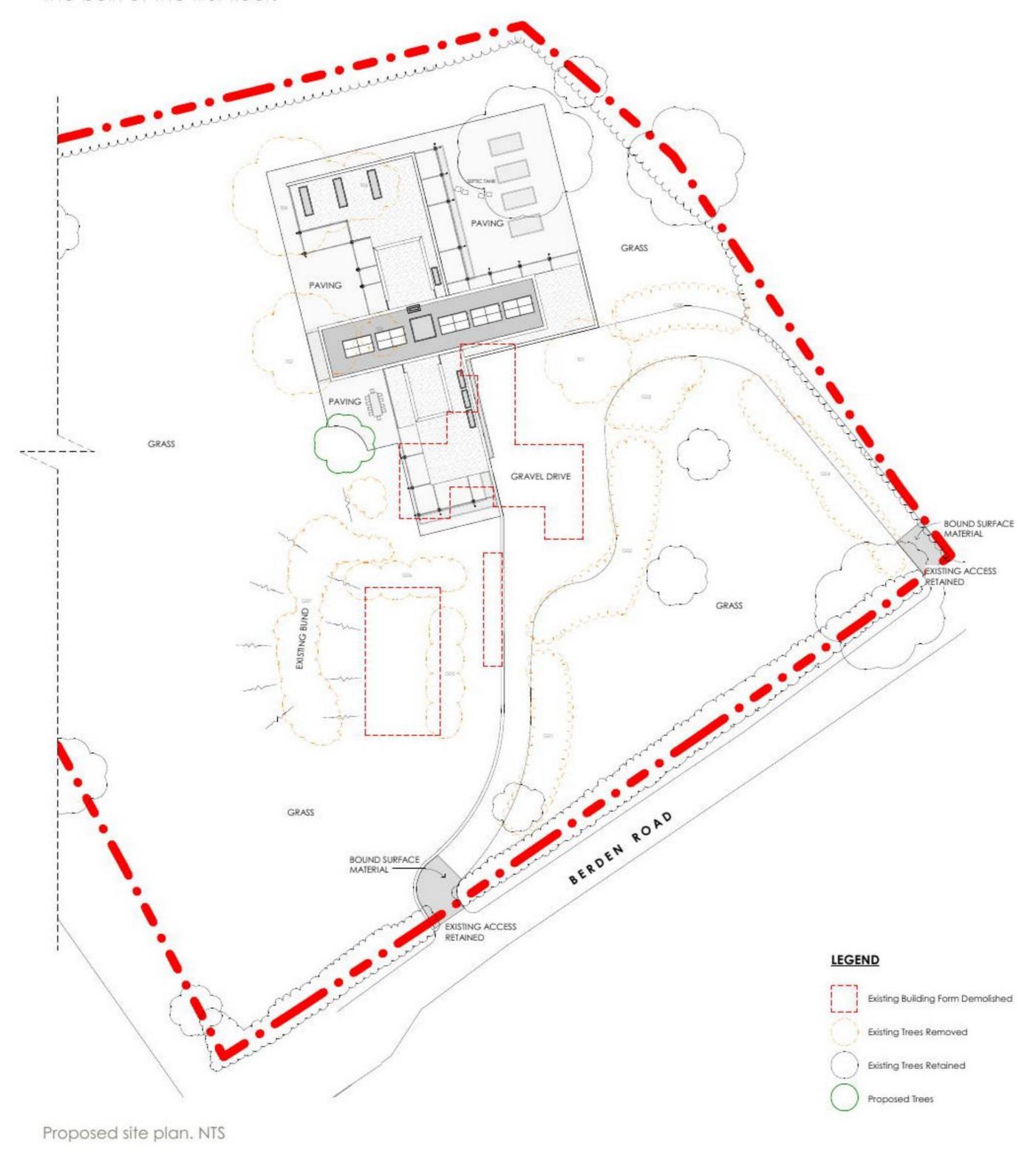
2.3 Scale and mass

The proposed dwelling takes the general form of a 'cross - shape', which has evolved from the ambition to align ground floor living spaces from south-to-north in order to address the main expanse of garden to the west - making the most of the garden views and evening sunlight - whilst on the first floor the important westerly views are reserved for the master bedroom, which dramatically cantilevers across the ground floor structures, and out into the garden.

The existing brick garden wall, leading from the highway access to the property, will be retained (re-built) and will merge into the building to form the outer-skin of the more 'utilitarian' internal spaces (garages, WC, utility and circulation spaces) that wrap around the front driveway.

The proposed dwelling, including the pool house and garages, represents a gross internal area of 630 sqm, which is an uplift of 130 sqm from the existing 500 sqm property. The additional area is predominantly accounted for in the larger pool house, additional ground floor bedroom accommodation and open-plan family kitchen with larder storage.

The proposals feature flat roofs to all building elements in order to maximise ceiling heights and panoramic views out whilst minimising the visual impact on the site. The existing property has a ridge height of 8.2 meters, whilst the proposed dwelling reaches a maximum of 6.4 meters along the bulk of the first floor.



Despite the overall footprint of the proposed built-form is a net uplift from the existing house, pool-house and changing rooms, the position of the new dwelling is set further to the northern boundary of the site - closer to the open fields and further away form the public highway and neighbouring properties.

The property cannot be seen from the public highway and does not impact on any neighbouring properties in terms of bulk and mass, over-looking or over-shadowing.



Indicative perspective view of proposed dwelling from the rear garden, looking south-east

2.4 Materials

As described above, the proposed dwelling has been conceived as a traditional country house, albeit featuring contemporary technologies, ideologies and indeed, aesthetic form. Therefore, it is felt that the materials used to construct the property should relate to local traditional styles. As shown in the photographs of local housing above, the classic traditional farmhouse or country cottage in the area will typically consist of timber frame construction, with rendered external finish, around a large central brick fireplace and chimney stack. Often, timber frame structures are constructed above a perimeter brick plinth and larger properties are often accompanied by agricultural outbuildings (barns and sheds), which are also timber framed but feature external timber cladding, often painted black. It is this palette of vernacular materials that has informed these design proposals for the new 'Waterlillies'.

The existing brick garden wall lining the driveway (currently low-quality 'commons' red brick) will be replaced using a high-quality clay 'buff' brick. As mentioned above, the garden wall will connect to the building at ground-floor level, wrapping around the building along the east and south elevations, whilst making way for large glazed openings around the west (rear) of the property that addresses the private gardens. The same brick will be used to create piers that support a timber pergola that extends into the garden from the rear of the property. The pergola helps to connect the house with the gardens allowing plants to be grown alongside and up the house as well as providing natural solar shading to the glazed areas facing the garden.

The first floor elements are proposed as timber frame structures set upon the solid brickwork at ground level. They are to be clad in timber of differing finishes: the predominant axis will express a natural timber colour and the side-wings will be blackened, again reflecting the vernacular of blackened agricultural barns and outbuildings.

This simple and familiar combination of materials will help to provide visual clarity to the building - the solid masonry walls surrounding the driveway give a sense of privacy and solidity, whilst clearly separating the ground floor from the lightweight and more open first floor structures.



Indicative perspective view of proposed dwelling from the front driveway, looking north-west



Indicative perspective view of proposed west elevation, from the rear garden, looking east

3.0 Sustainability

3.1 Approach

Sustainability is at the heart of this building project. The purpose of this application is to remove a failing and unsustainable property in order to construct a dwelling that will sustain the current occupants for their lifetime, and indeed for generations of home-owners to come. The principle of re-building the existing house has already been explained in this document as a trade-off between cost-effectiveness and performance, both in terms of functionality, thermal efficiency and renewable energies.

3.2 Functional and flexible

The bedroom accommodation on the ground floor has been designed with flexibility in mind; presently for use by elderly and less-able relatives, and in the future as a potential master bedroom suite for the current owners, when accessibility may become an issue. The property has been designed for a large family, however in the event that the first floor bedrooms are not occupied, the entire first floor can be 'closed-off' and left as unheated space.

3.2 Design for climate

The majority of glazed elements are orientated towards the west and south elevations, which will encourage solar heat gain through the winter months of the year, whilst the timber pergola structures act as solar shading devices during the summer months when the sun is high in the sky.

The extensive areas of flat roof will be quilted with sustainable green roof systems, such as Sedum, wild meadow flowers and grasses. The green roofs will provide a biodiverse environment, increase the thermal efficiency of the structures and help to control the effects of flash-flooding by retaining a high capacity of storm rain water.

3.3 Sustainable materials

As described above, the ground floor outer-skin will comprise glass and brick, however the core and predominant structures of the building are timber framed. This is a highly sustainable method of building for the following reasons:

The timber frame will consist of local (UK) sustainable timber sources.

- Elements of the structural timber frame can be pre-fabricated off-site which is an efficient and low-waste construction methodology with minimal local site impact and transportation requirements.
- Timber naturally has a low thermal conductivity, helping to improve the buildings' thermal
 efficiency throughout its lifespan.
- Timber is a low-impact waste material and can either be recycled or disposed of responsibly at the end of the building's life-span.

The property will be designed to exceed the minimum Building Control standards for thermal insulation and air-tightness.

3.1 Renewable energy technologies

The new-build will incorporate the latest of renewable energy technologies, and the applicants' intention to include the following specifications:

- A Ground Sourced Heat Pump System will provide thermal energy to heat both the
 house and the indoor swimming pool. The house will have wet underfloor heating across both
 floors requiring a low-heat water system. The extensive lawn garden will be used to host the
 ground Source Heat Pump 'coils'.
- Photo Voltaic solar panels will be used across the top flat roof structure (out of sight from ground level and free from the shadow of surrounding trees), which will provide electricity to the property throughout the year, helping to power the Ground Source Heat Pump system. An in-house battery will be used to store un-used energy from the daytime to be used at night.
- An MVHR (mechanical ventilation and heat recovery) system will be incorporated to
 property, which will negate the requirement for passive ventilation (trickle vents in windows)
 and therefore circulate clean fresh air throughout the house without any heat loss during the
 winter months.
- An electric car charging point will be provided within the Garage.

4.0 Setting in relation to Listed buildings

Stocking Pelham boasts a high proportion of interesting historic Listed Buildings, two of which are located adjacent to the application site at 'Waterlillies'.

LONGCROFT:

Longcroft is a neighbouring property to the east side of 'Waterlillies'. It is a Grade 2 listed property (LEN: 1347751), and is described as a:

"CI7 cottage, timber framed and rendered, plain tiled roof. One storey and attics, casement windows, tiled front entrance porch, three tiled gabled dormers with modern casements. Axial chimney stack. Large modern addition to the rear."

As described above, the principle interest of 'Longcroft' is the historic cottage element of the building that fronts the public highway. The proposed development will have no effect on the visual setting or amenity of 'Longcroft', as the proposed development will never been seen along side the listed building.

THE BARN AT WHITE HART FARM:

The Barn at White Hart Farm is a property opposite (across the road, to the south) of 'Waterlillies'. It is a Grade 2 listed property (LEN: 176596), and described as a:

"C18 barn, timber framed and weatherboarded with half hipped slate roof, brick plinth, one storey, three bays, central double doors."

The proposed development will have no effect on the visual setting or amenity of The Barn at White Hart Farm, as the proposed development will never been seen along side the listed building.



Panoramic view of Waterlillies front boundary in relation to White Hart Farm opposite and neighbouring Lenhoy Cottage

5.0 Access

The existing vehicular access arrangement is unaltered. However, it is intended that the front driveway proposals, located more centrally within the site, will provide improved vehicular manoeuvrability and increased provision for guest parking - as the submitted plans indicate. The surface material to the driveway approaching the access to the public highway will be a bound material such as stone sets or cobbles in order that debris is not driven into the highway. The remainder of the drive will be permeable gravel.

6.0 Conclusion

This application seeks permission for the demolition of an existing 1960's masonry 4 bedroom dwelling, which is generally in a poor state of repair, and the erection of a new, sustainable, contemporary, family home.

It is felt that a sound justification for the replacement of the existing dwelling has been provided on the basis of longevity and sustainability; both in terms of the building's life span, functionality and energy efficiency.

Although the proposed dwelling will occupy a larger footprint than the existing, it will consolidate the poolhouse and changing rooms as part of a single built form, and will not have an adverse effect on the setting of the property within the local context. The height of the building will be significantly reduced and its position relocated on the site, distanced further away from the public highway and surrounding listed properties.

The new house has been designed for future generations to enjoy and will display an exemplar of sustainable building techniques and renewable technologies, featuring pre-fabricated timber frame structural elements, a ground source heat pump system, PV solar panels and a large expanse of green roof with sustainable drainage.

The proposed dwelling has been conceived as a traditional country home and as such has been designed with the quality, durability and flexibility to suit future generations of families.