

25 June 2012

CLIENT : Mr and Mrs Elliott
PROJECT : Construction of 1 new dwelling
ADDRESS : Land to the rear of 21 Bound Lane, Hayling Island

1.0 Background

The original 1920's house (now number 21) was owned by Hilda and Charles Elliott who purchased it in the 1970's. In 1980 the plot was subdivided to form a dwelling for their son which is now number 23 Bound Lane. When Hilda passed away in 2006 the central plot was left to Hilda's grandson Stephen Elliott for him to build on. This proposal is for a single family dwelling for Stephen and Claire Elliott who are proposing a high quality, sustainably designed house for them to build and live in for the long term future. Claire Elliott is a qualified Architect who specialises in sustainable design and works for a well-established local practice, PWP Architects based in Havant. This proposal is therefore focused on creating a sustainable building that is geared up for future predicted climate change whilst forming a well-designed family home which is in keeping with and enhances the local character of the area.

2.0 The Site



View of the site looking East



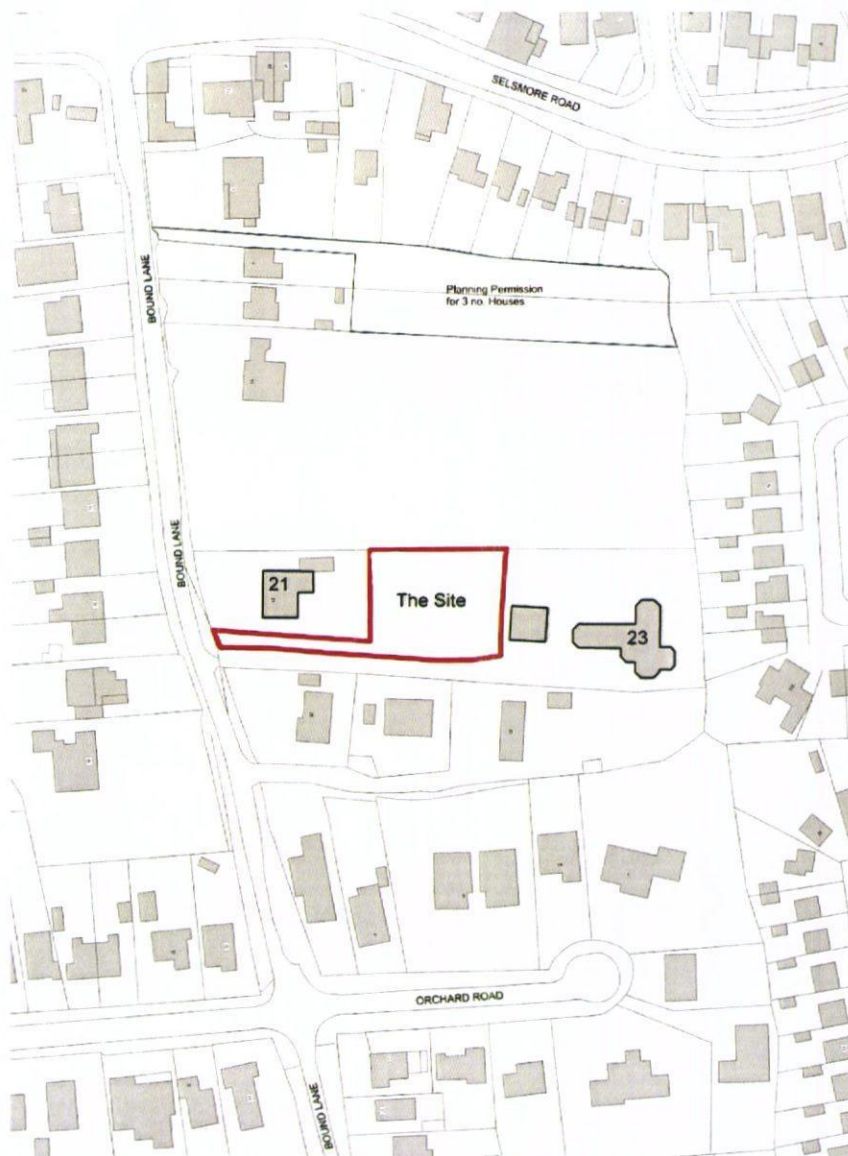
View of the site looking North

The site is at the rear of 21 Bound Lane, Hayling Island. To the East of the site is 23 Bound Lane which occupies the rear third of the once 129m long original plot. The application site is therefore the central portion of the original 1930's plot. The properties to the south have a similar subdivision with three properties occupying the 124m length. The site has its own access off bound lane with the gate intentionally set back 12.5m from the road allowing for cars with trailers to pull fully off the road before opening the gate. The access is 3.6m wide at its narrowest and 38 m long before reaching the main part of the site which opens up to form a significant sized plot of 1,112 m².

The land to the North of the site is the garden of number 11 Bound Lane. The house of number 11 is in the North-West corner of the plot with the majority of the land left as a grass meadow. There is therefore a 93m gap between the site and the next building to the north. There is planning permission for three houses to the east of numbers 7 and 9 but there would still be at least 55m between the two plots.

Other than the uniquely large plot of number 11 the average size plot in Bound lane is 654 m², therefore the proposed site is larger than the average single dwelling plot. Even including the plot of number 11 the proposed site is still larger than the average of 842 m².

The site is very flat with most of the levels being within 300mm of 5.0m AOD. It is surrounded by similarly flat properties. There is an existing foul drain along the southern boundary of the site running the length of the property to number 23. There are two manholes on the site which could be connected in to. There are also gas and electricity supplies to the street.



Existing Location Plan



Aerial Photograph

3.0 Planning Policies

3.1 NATIONAL PLANNING POLICY FRAMEWORK 2012

6. Delivering a wide choice of high quality homes

49. Housing applications should be considered in the context of the presumption in favour of sustainable development...

International and national bodies have set out broad principles of sustainable development. Resolution 42/187 of the United Nations General Assembly defined sustainable development as meeting the needs of the present without compromising the ability of future generations to meet their own needs.

This development has strong sustainable design principles and will enable the applicants, who will be first time home-owners, to live in a sustainable manner and will also provide housing for future generations.

7. Requiring good design

56. The Government attaches great importance to the design of the built environment. Good design is a key aspect of sustainable development, is indivisible from good planning, and should contribute positively to making places better for people.

This development will be one of high quality individual design, focussed on the specific needs of the site and on providing a valuable addition to the local built environment.

3.2 HAVANT CORE STRATEGY (LOCAL PLAN)

Policy CS 9 Housing

1. Contribute to achieving a net total of 6,300 new dwellings between 2006 and 2026.

4. Achieve a suitable density of development for the location, taking into account accessibility to public transport and proximity to employment, shops and services in addition to respecting the surrounding landscape, character and built form.

Policy CS17 Concentration and Distribution of Development within the Urban Areas

'Development will be permitted that makes the most effective use of land in the borough by granting planning permission that:

Concentrates new housing, employment, retail, leisure and other development within the five urban areas of Havant, Leigh Park, Waterlooville, Emsworth and Hayling Island, as shown on the Proposals Map.

Prioritises development on previously developed land, including redundant, derelict or underused land and buildings within the urban area.'

The proposed development is situated within the Hayling Island Urban Area. It is on a site that is surrounded by similar residential properties and is situated on a formerly underused plot. It is therefore suitable for development in accordance with Policy CS17.



Seaside architecture

Image taken from 'Havant Borough Townscape, Landscape and Seascape Character Assessment (LCA)' section 36i showing seaside architecture with rendered walls and pitched roofs.

Sustainable Construction and High Quality Design

Policy CS14 Efficient Use of Resources

2. Locally contributes to the delivery of the PUSH target of 100MW of renewable energy by 2020 for the whole of the PUSH area.

The proposed development includes Solar Thermal Technology.

*3. On completion, unless proven to be financially or technically unviable, meets the following standards: Residential development – Level 3 of the Code for Sustainable Homes;...
...Improvements to these standards throughout the plan period will be encouraged.
Particular attention should be paid to water efficiency measures.*

The proposed development will meet the current Code level requirements and strive for higher levels and also incorporates a rainwater harvesting system in accordance with these policies.

4.0 Design

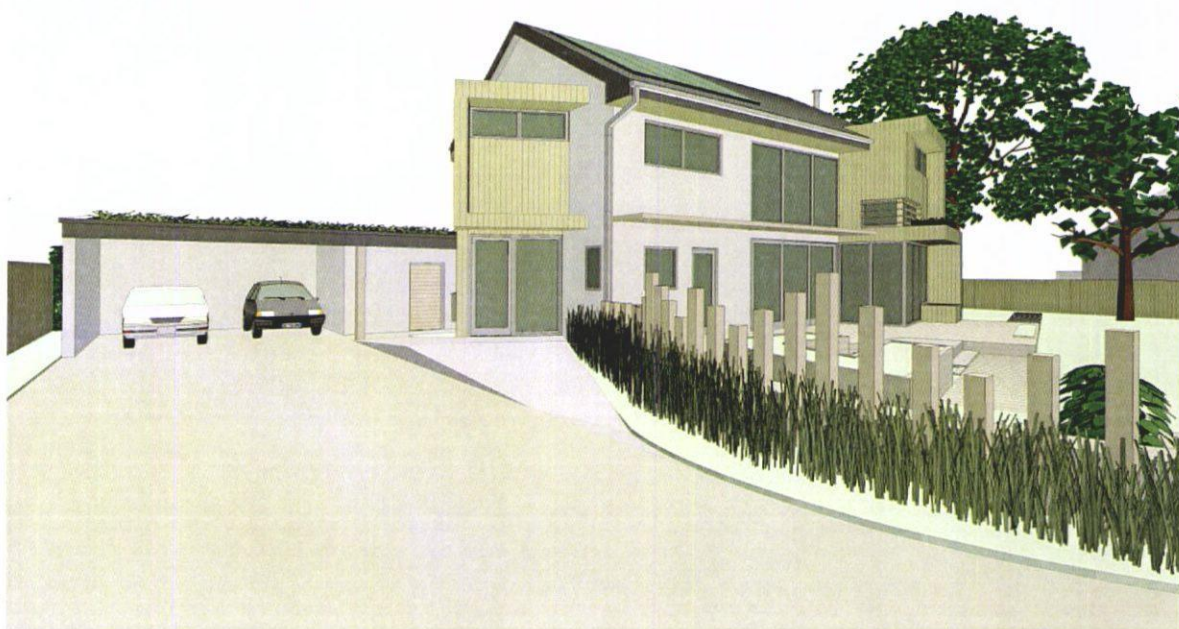
4.1 Massing

The massing responds directly to the location of the access drive, the position of the surrounding houses, the location of the large TPO trees on the eastern boundary and the desire not to overlook any of the neighbouring properties. The two storey element is largely in the centre of the plot but pushed further to the north to allow the properties to the south greater distance between buildings.



4.2 Passive Solar Design

The design is influenced by the aspiration for passive solar design to achieve a sustainable and low carbon development. The car port is set to the north west of the property allowing the main body of the house to benefit from a large area of southern garden. This is not only important for amenity value but also to benefit from largely uninterrupted solar gain throughout most of the day. This should reduce winter energy consumption by utilising the sun's energy at the lower sun angles whilst the solar shading elements of the design protect the building against overheating in the summer months. There are angled elements forming the entrance and the living space at the east and west of the building, this has the effect of increasing the amount of sunlight captured throughout the day. The living space also projects forward which creates a sheltered external decking space which will benefit from the sun right into the evening hours.



2

View of House from South West



3

View of House from South-East

4.3 Materials

Materials found in Bound lane and the local area include brick, painted render and some traditional and modern additions of timber cladding. Roofing materials vary from slate, clay tile and some flat roof buildings.

The drive for energy efficient buildings means that timber frame construction is becoming the most effective way of providing a highly insulated structure. While it is possible to put brick cladding on this type of construction, the wide use of render in the local area leads this to be the most appropriate cladding material. The render will be a light grey colour to better cope with the coastal location.

In order to add interest and break up the mass of the building the angled elements to the east and west and a section of the wall on the north are to be timber clad in western red cedar cladding. This will add texture to the form and also provides a historical link to the familiar beach huts seen on the beach nearby. Western red cedar is one of the few native species that has natural qualities for resisting the coastal environment without needing protective coatings. For this reason and with careful detailing to protect the end grain it is possible to allow the timber to silver naturally over time.

The roof will be pitched and clad in slate. This pitch forms a perfect angle for the solar panels facing south. The almost uninterrupted view of the sky should help to reduce the energy consumption of the building by providing energy for heating and hot water. The pitched roof also helps provide an element of solar shading to protect the interior from overheating in summer.

The car port roof and elements of flat roof are to be weathered with a single ply membrane.



Render, Timber and Slate

5.0 Access

5.1 Vehicular Access

Bound lane is a single carriageway lane with no pavements but grassy verges on either side. The road is very quiet for vehicles and only really used by domestic traffic to the local residents. The major routes are on the roads to the north and the seafront road to the south. Pedestrians use this road as a safe route from houses to the north, down to the seafront. The vehicle speeds are therefore naturally slow therefore entering and exiting the site is simple with the low levels of traffic. Visibility to either direction is also good. There is no parking on the road therefore sufficient space has been provided for visitor parking on the site.

The access is similar to the access to number 23 to the east. The driveway is wide and sufficient to allow larger vehicles to travel down it without parking on the road. There are existing gates to the driveway which were intentionally set back to allow cars with trailers to pull fully off the road well before reaching the level of the gate. There is also turning space allowed for on site to allow vehicles to enter and exit the site in the correct direction.

There is public transport available in the form of a regular bus route from Mengham to Havant. From there further options such as the main train line into London are available.



Site Entrance



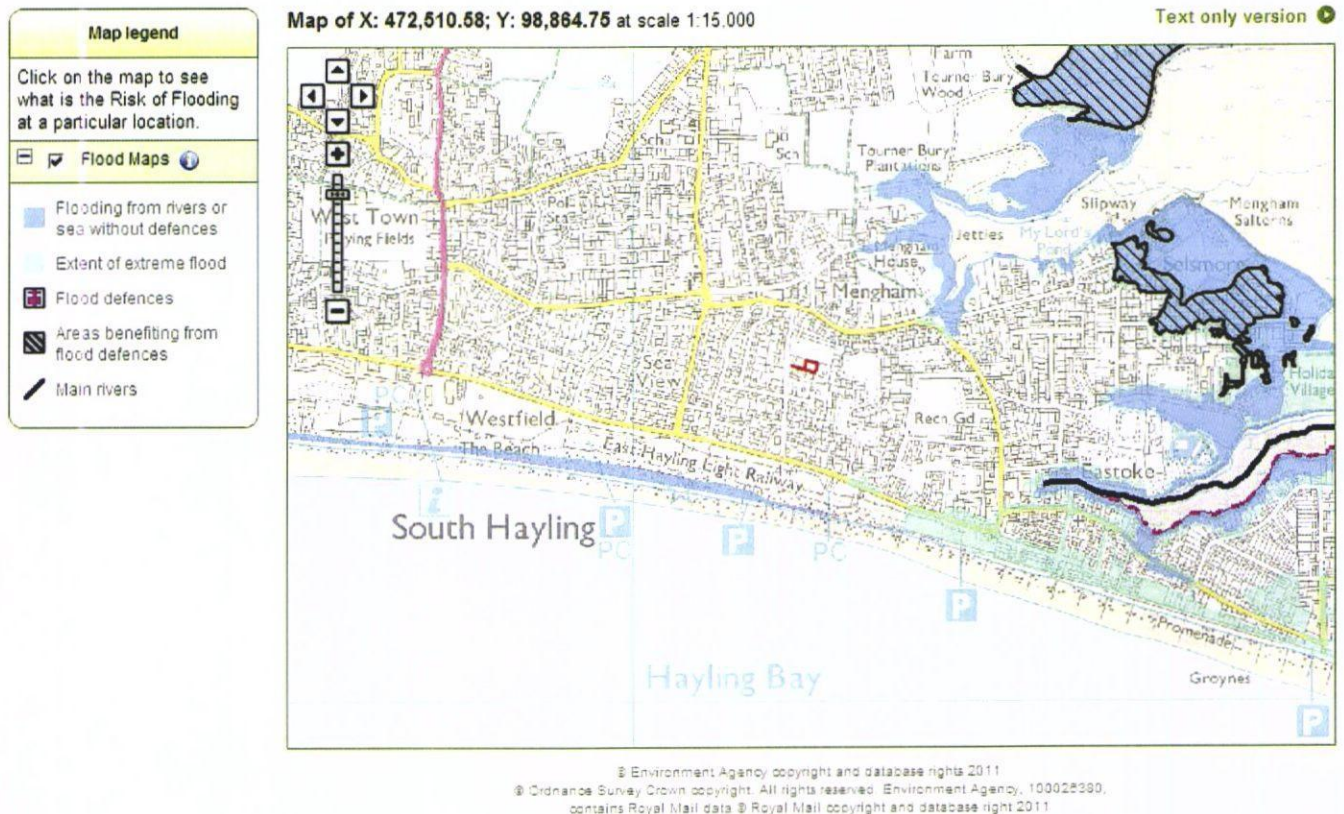
Bound Lane looking South to Seafront Road

5.2 Disabled access

The building is designed to allow disabled access to the ground floor, with the requirements of lifetime homes to be met by provision of a ground floor bedroom and shower room.

6.0 Flood Risk

The Environment Agency's Flood Map shows that the site is not in any of the identified flood risk zones. There is no river flooding in this sort of coastal site and the property is far enough away from the sea that it would not be affected by tidal flooding.



Flood map with site highlighted in red

7.0 Trees and Landscaping

The site used to be a back garden and therefore has landscape value typical of that. The majority of the site is poor quality lawn with some ash and sycamore at the rear of the site, two large Monterey Cypress on the eastern boundary and a number of fruit trees in the centre of the site.

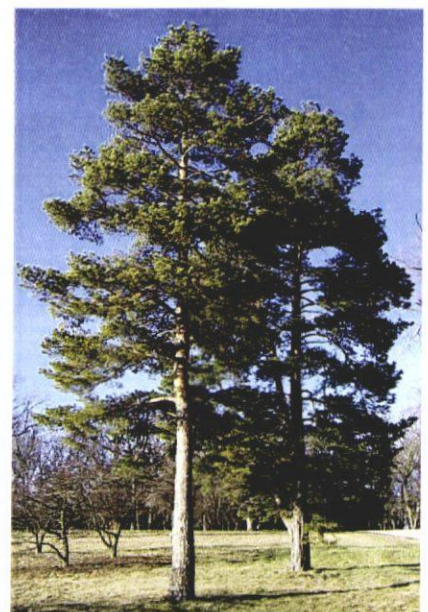
The ash and sycamore were originally hedge trees but have matured into a quite dense bank of trees. These are to be retained and work done to improve their condition if necessary.

The two Monterey Cypress have tree preservation orders on them from 1980. The trees would have been planted as wind break boundary planting and historically there were a lot of similar trees planted on the south coast for this effect. A large number of these trees in the local area came down in the storm of 1987. This type of tree is not a native species and is susceptible to being damaged in high winds due to the dense canopy and poor root system.

The smaller M.Cypress T2 in the corner was part of a group tpo of 5 trees, none of the others are there anymore and probably came down in 1987. The tree itself is of very poor quality and the majority of its branches are dead. The tree would not be affected by the development but for sound arboricultural reasons should be removed. Number 11 and number 23 have both reported this tree dropping branches over the boundary. The tree proposed for replacement is a scots pine. This is the only native pine species to Britain and the ability to lift the crown means it is easier to maintain throughout its life and creates an attractive shaped tree without reducing light quality to properties below.



Photograph of T2 Monterey Cypress



Photograph of a Scots Pine

The other larger M. Cypress T3 has an individual tpo and is of better quality than its neighbour to the north. It is of significant size and a very mature specimen with a trunk diameter of 95cm. It should be mentioned that it has recently dropped a previously healthy looking 5 m long branch into the property of number 23 following some strong winds. It also has a significant angle of lean away from the prevailing wind but as yet no evidence of soil destabilisation. We are therefore proposing works as recommended by the arboricultural consultant to reduce the crown and therefore attempt to manage the impact of the wind on the tree. The proposed building is designed not to impact on the root protection area therefore the tree will be retained with improvements to its crown proposed to extend its life and improve the safety of the tree. Its health can therefore be monitored without impacting on the proposed development.



Photograph of T3 Monterey Cypress

The 3 apple trees at the west of the site are relatively mature for their species but have little value due to the relatively short lifespan of fruit trees and years of not being maintained sufficiently. The fruit harvest is typically of low quality. These trees are therefore proposed for removal in order to make the best use of the site. For sentimental reasons the applicants are taking cuttings from the apple trees to then be grafted onto new root stock forming new higher quality trees which will be genetically identical to the old ones. This should lead to

higher quality fruit and forms the low level line of trees framing the proposed garden to the south of the house. A cherry tree is also proposed in this location to complement the apple trees and the existing cherry in number 21.

There is another apple tree that is situated in the root protection zone of the retained M. Cypress therefore is to be retained itself.

A further three silver birch trees are proposed for the Northern boundary to provide some light screening without impacting heavily on the light in the house.

The landscape theme will be heavily influenced by coastal species with swathes of ornamental grasses providing a backdrop for the garden trees. Vegetable bed planting is proposed close to the kitchen and outdoor BBQ area in raised beds to encourage maintenance and use. The majority of the garden will be easily maintained lawn with the northern half left as meadow grass with wildflower species to improve biodiversity.

In summary the proposals will improve the landscape quality of the site by removing or maintaining poor quality trees and proposing a greater number of higher quality native trees to be planted in their place. The landscape design and tree choice will complement the domestic scale of the buildings and the drive for natural materials and sustainable design.

7.0 Sustainability

The drive to create a sustainable design has been embedded in every aspect of this house.

- The large southern windows and smaller northern windows is evidence of a strategy to minimise heat loss and maximise solar gains.
- The rainwater harvesting tank will reduce water demand and prevent rainwater run-off and the effect this has on the existing local drainage systems.
- The interior of the house has been designed to maximise flexibility for the future and meet with lifetime homes standards.
- Natural daylighting has been allowed for in all parts of the house including the first floor corridor which gains the benefit of light from the stairwell and rooflight above. The bathrooms and dressing room have high level windows to avoid overlooking but retain natural daylighting which in turn reduces energy demand in the form of electric lighting.
- High levels of insulation will be provided to reduce heat loss.
- Thermal mass is provided in the floor slab which will store heat during the day and release it at night.
- The solar panels will provide hot water throughout the year and will also link to the underfloor heating system.
- A woodburning stove is incorporated to provide extra heating during the winter months.
- Due to high levels of air tightness a mechanical ventilation system will be provided with heat recovery.
- The improvements in landscaping and addition in number of trees will improve biodiversity on the site.
- The use of natural materials during construction such as timber will minimise the carbon impact of the build.

8.0 Community Consultation

The applicants have visited each of the neighbouring properties on a couple of occasions throughout the design stage in order to explain the intentions and listen to any concerns. The only concern that was voiced was that it would be preferred by the neighbours to remove T3 the large TPO M. Cypress due to its dominating size and concerns over the poor health of the tree. The proposals have not been able to respond to this request as this tree has a TPO on it and therefore the presumption must be in favour of retaining in the first instance with works undertaken to improve the health and stability of the tree. With the exception of this comment the response to the proposals was totally positive.