

Demolition of Existing Dwelling and Construction of Replacement Dwelling
at Beach View, Mawgan Porth, Newquay

‘Beach View’



Design and Access Booklet (768) - DAS-01 - Revision B
October 2018

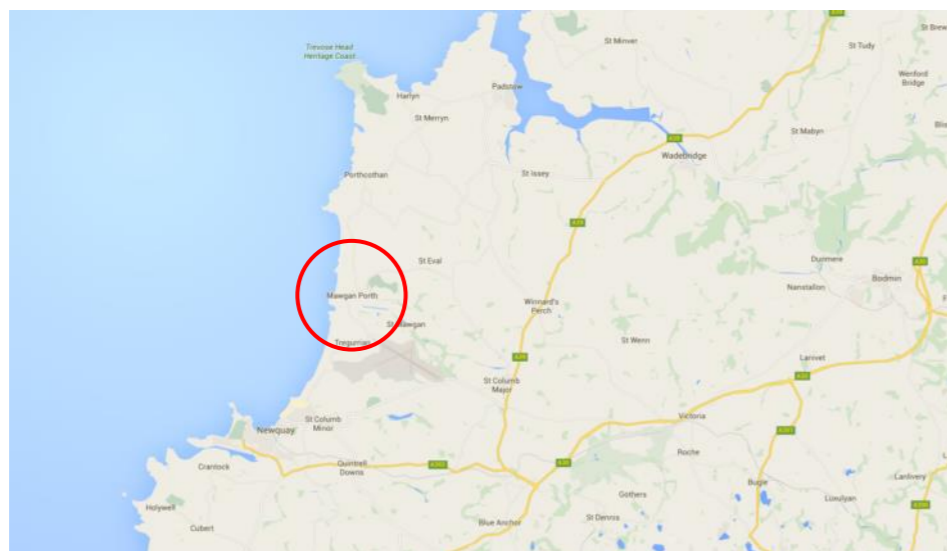
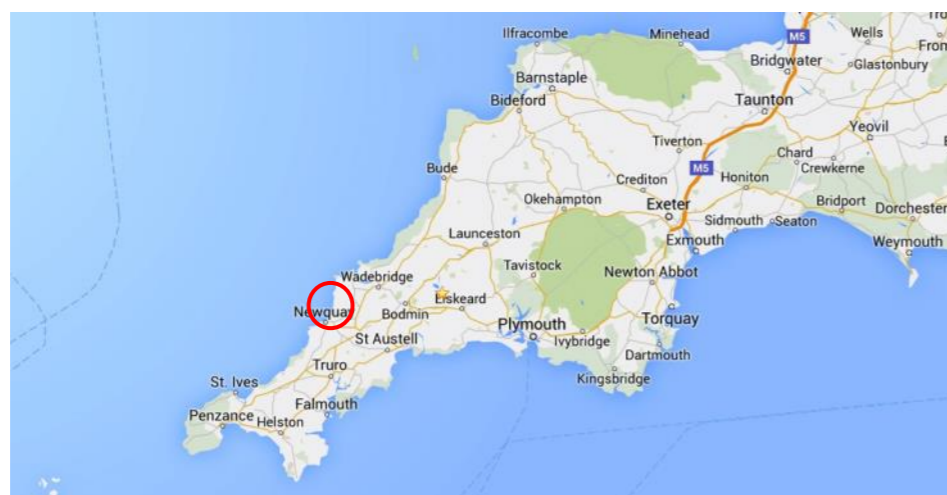
The intention of this document is to provide the reader with information that will describe the background to the intentions of the proposal, analysis works, design development and conclude with the final proposal. It is intended to support the planning application submission and as such should be read in conjunction with the Architect's drawings, supporting reports and Planning Statement provided by Whitehead Planning.

The Information contained within this document will:

1. Describe the location of the proposed site within the county and how the proposal exists within its surroundings
2. Provide information to the site and its existing buildings
3. Provide an analysis of the site and any factors that may influence the proposal
4. Summarise Pre-application guidance received from Cornwall LPA
5. Conclude the design proposal, describe its influences and present it in its actual location to ensure that the reader can formulate their own conclusions to the proposal



Mawgan Porth beach at low tide



Approach to 'Beach View' from access lane

This application proposes the replacement of a mid C20th concrete-constructed dwelling with a new environment-conscious timber and stone house.

'Beach View', (formerly known as 'Dormers') is located on the north-western edge of the large cluster of properties in Trenance and is accessed from Tredragon Road. The site does not lie within an area covered by any landscape designation. Nevertheless, the proposal has been conscientiously designed to respect the landscape character. The material palette has been carefully considered and combined with historic Cornish references and a layering of landscaping strategies, including a living green roof.

These strategies have been synthesised to reinforce local character.

The contemporary form has evolved from the constraints and opportunities afforded by the site's character and topography. From the initial site analysis, through the entire design process, the over-arching design objective has been to create a composition which gently assimilates with the topography and locale.



Image: Google Maps (accessed 19.04.2018)

Red Circle shows 'Beach View' location

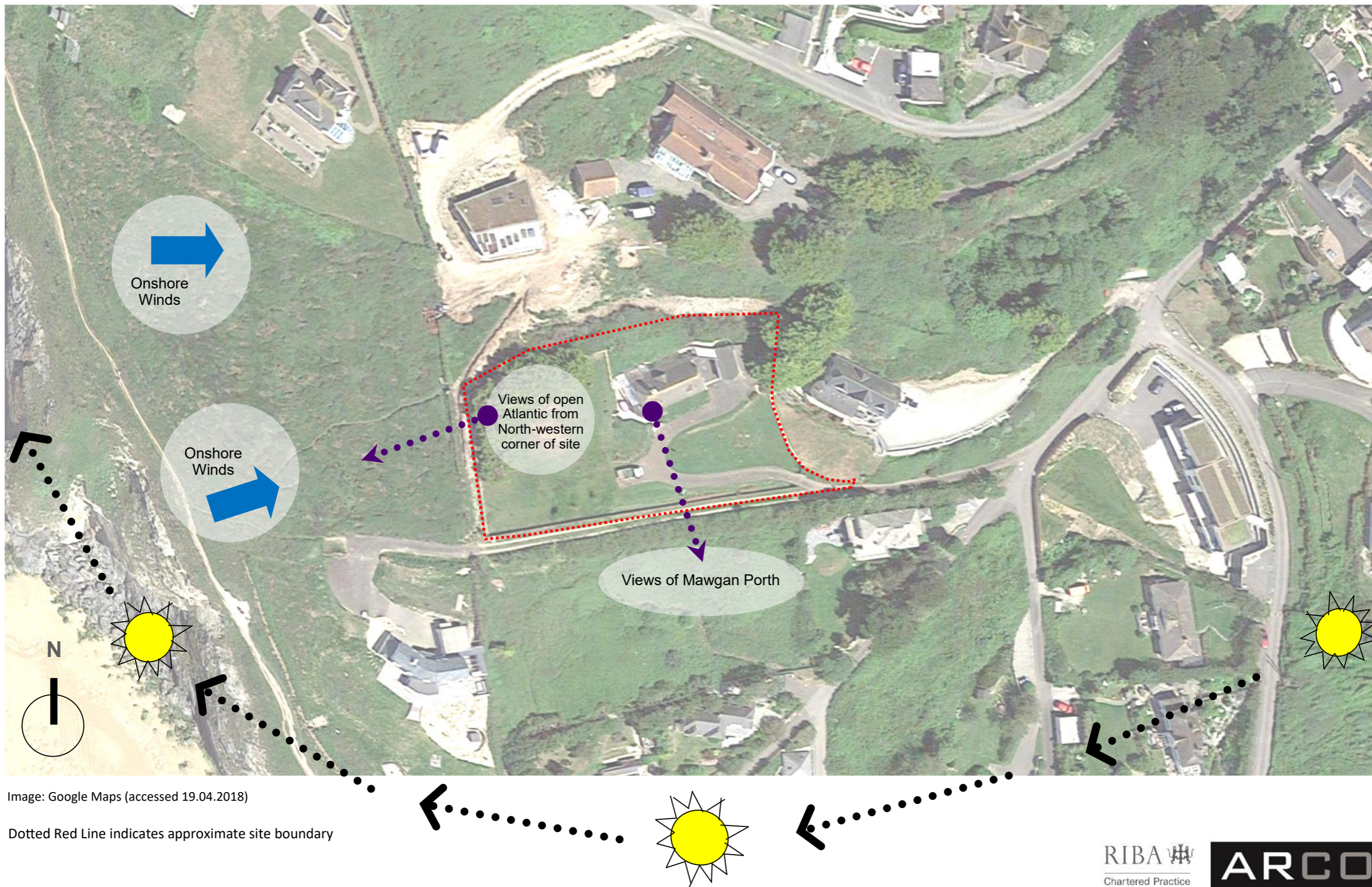


Image: Google Maps (accessed 19.04.2018)

Dotted Red Line indicates approximate site boundary



Top: Panoramic view from existing house

Bottom Left: View of open Atlantic from the top of the site, looking south-west. It is this exceptional view that the applicants are keen to avail of, in the location of the replacement dwelling on the site

Bottom Right: Existing house, known as 'Beach View' is constructed from concrete with little or no insulation. As a consequence, the house suffers from very high levels of cold-bridging, making it unnecessarily environmentally demanding.



Panoramic views of Mawgan Porth from the beach — Yellow circles show location of Beach View



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Mawgan Porth: A varied mix of architectural styles

An analysis of Mawgan Porth's built form identifies a plethora of architectural styles, building scales and uses. It is this very mix which characterises the settlement.

Expanding upon this diversity, the buildings of Mawgan Porth are not represented by a single form-typology; rather they exhibit a mixture of forms and design language. One can clearly identify a mix of flat, pitched, angled, green (living) and mono-pitched roof types. Massing types display a fusion of rectilinear, curved and angular forms. Materiality too traverses a wide gamut; from asbestos roof tiles, to metal seamed panels and, at the opposite end of the spectrum, living green roofs. The absence of uniformity is further compounded by a variety of wall finishes, including, natural stone, timber cladding, vertically hung slate, copper, brick, pebbledash and render in a variety of light colours (with some unpainted).

As older properties are being replaced over time, contemporary architectural style is becoming more prevalent.



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All images: Googlemaps accessed 24.04.2018—Except *, which were taken by Arco2 Architecture Ltd



Black arrows show trees at the western fringe of the site, as seen from the coastal path. This location has been approximately translated to the photograph on the right of the page (white arrows). These trees will screen the western elevation of the proposal.



Above: View of 'Beach View' from the coastal path (yellow arrow)



The design references the geological landforms of the headland - both in plan and in elevation

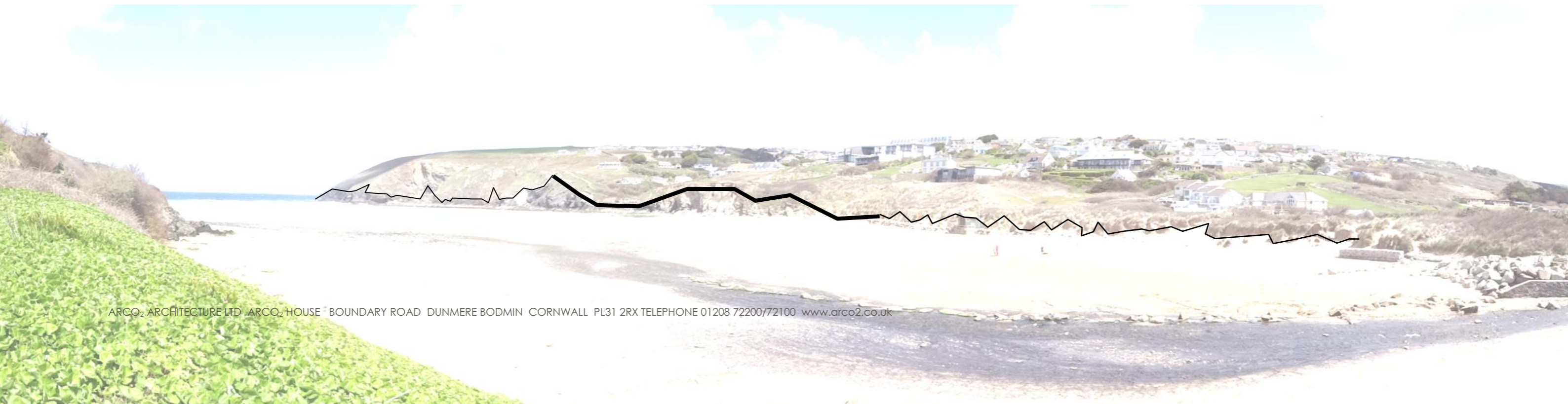
The shadowing is an important attribute of the rock formations and this characteristic has informed the design



The design language of the proposal has been informed by analysis and deconstruction of Cornwall's historical and industrial heritage. These design 'prompts' have been synthesised with the topography and landscape character of Mawgan Porth.

Far left: Cornwall's industrial heritage: The form and materiality of the iconic Cornish mines have informed the design proposal.

Left: The dolmen known as Lanyon Quoit is an important part of Cornwall's Celtic history: Its form has underpinned the proposal as a conceptual reference throughout the design process, to ensure a design language which is unequivocally Cornish.





Artist's impression
Indicative Landscaping — refer to separate Landscaping Strategy



The design is predominantly single-storey, comprising two elements; divided by a central timber and glazed stairwell. The entry level element is of local stone. The composition of these forms cross-reference historical Cornish built form with the characteristics of the nearby angular cliff-forms, notably the shadowing (as mentioned on pages 10 & 11 of this document).

The roof edges compound this concept, simultaneously providing solar shading to mitigate against over-heating. The design does not feature large swathes of glass and indeed much of the glazing has been deeply recessed to minimise visual impact and avoid glare as much as possible. Movable screens have also been incorporated – giving the occupants greater control of shading and privacy in day-to-day living. These timber screens will further soften the recessed glazed elements and the overall visual impact of the scheme from public vantage points.

The aim of this synthesis is to offer a unique home which assimilates with the landscape character of the area.

A Pre-application was submitted to Cornwall Council, ref. PA17/01681/PREAPP. Following a site meeting, a positive response was received 26th July 2017.

Salient excerpts from the planning officer's report are shown below. The guidance received has helped inform the submitted design proposal.

Summary of Officer Report

*"It is considered that the basic principle of re developing the site by **replacing the existing dwelling with a modern contemporary design is acceptable and likely to gain officer support**, subject to assessment and consultation at the full planning application stage.*

Design

I can offer my support to the design of the proposed replacement dwelling.
It appears to have taken into consideration potential overlooking of neighbouring properties and has been orientated in such a way as to make the most of the sea views and minimise negative impact on neighbouring properties.

The architect has incorporated aesthetically pleasing landscaping into the proposal
which creates a multi levelled garden area to the front of the dwelling. It is recommended that the applicant consider incorporating the stonework design utilised along the coastal path which lays the rocks in a vertical position in layers. This would create a sense of consistency with the surrounding area.

*The proposal does intend to increase the ground floor area of the dwelling compared to the existing however the proposal [will] remain as a low level building with a roof form constructed of gently sloping angled planed roof areas which are to be sedum. ***This design has responded to its locality and responds to the contours of the surrounding coastal landscape.*** Within the submitted documents the architect makes specific reference to this and provided illustrations and outlines the inspiration for the design.*

The proposed palette of materials of stone, glass, timber cladding and sedum roofing are contemporary however have been shown to have been successfully adopted in the immediate area of Trenance/ Mawgan Porth. The design which has been submitted appears to have combined the positive elements suggested within the previous pre application response. The design will need to be shown to assimilate well into its surrounding, to not be overbearing or out of keeping along with other requirements at the full application stage. This being said, although the design is not a dormer bungalow design similar to some neighbouring properties ***the design is in keeping with the emerging designs which have been offered support within the North Cornwall Coastal areas.***"

"It was noted from a site visit that timber cladding/ stone is already present in other nearby buildings visible from the site and I also noted examples of sedum covered roofs and stone boundary walls.

It is recognised that the proposal intends to extend the foot print of the dwelling and partially move the dwelling to the West. It was an area of concern at the previous pre application stage that the proposal would need to take into consideration the recent planning history of Westward. Therefore it is advised that drawings/ reference is made to the fact that this predominantly single storey dwelling has taken the proximity of neighbouring dwellings into the design making process. Reference to Policy 3 of the Restormal Local Plan 2001 was made in the previous pre application (PA16/01711/PREAPP) however since the time advice was given in 2016 the Cornwall Local Plan Strategic Policies 2010-2030 has been adopted and Policy 3 of the Restormal Local Plan has been replaced by those contained within the Local Plan.

*Paragraph 53 of the National Planning Policy Framework (NPPF 2012) seeks to prevent inappropriate development of garden areas where it would cause harm to the local area. ***The proposal does not intend to increase the number of residential units and it is considered that the residential curtilage is of a substantial size and capable of accommodating the proposed increase in ground covered by buildings whilst providing a large area of amenity space for future occupiers.****

It is considered that the proposed design does not raise any obvious conflicts with neighbouring properties. The proposal is located in a slope and it will need to be proved at full planning stage that an unacceptable level of overlooking/ overbearing is not caused to neighbouring properties.

Conclusion

To conclude I can advise that the replacement of a residential dwelling is acceptable in principle however please note that there is potential for objection from consultees in relation to landscape character and opposition to extending the proposal in a westerly direction.

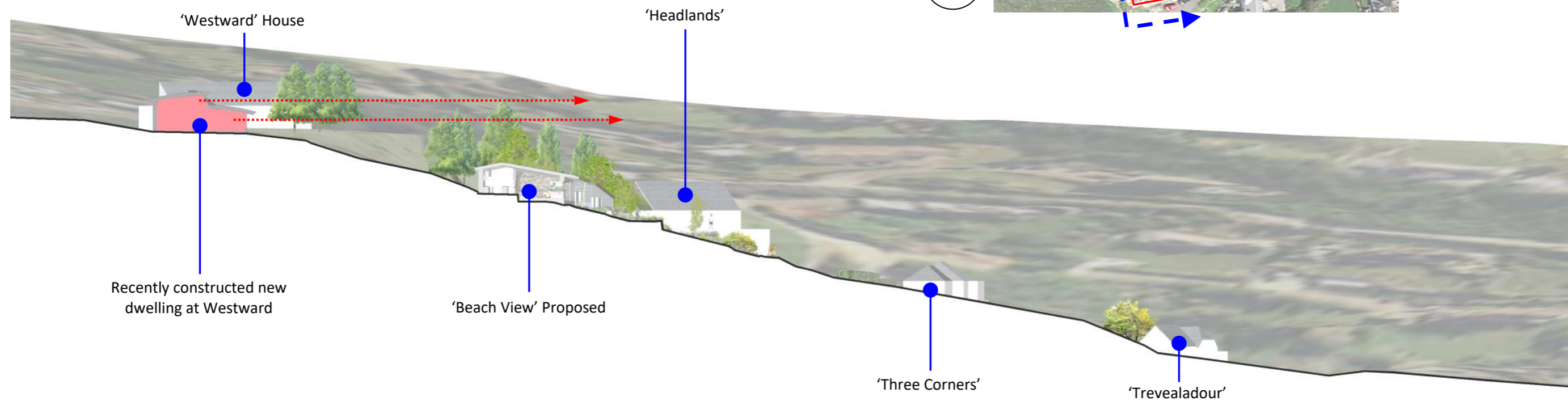
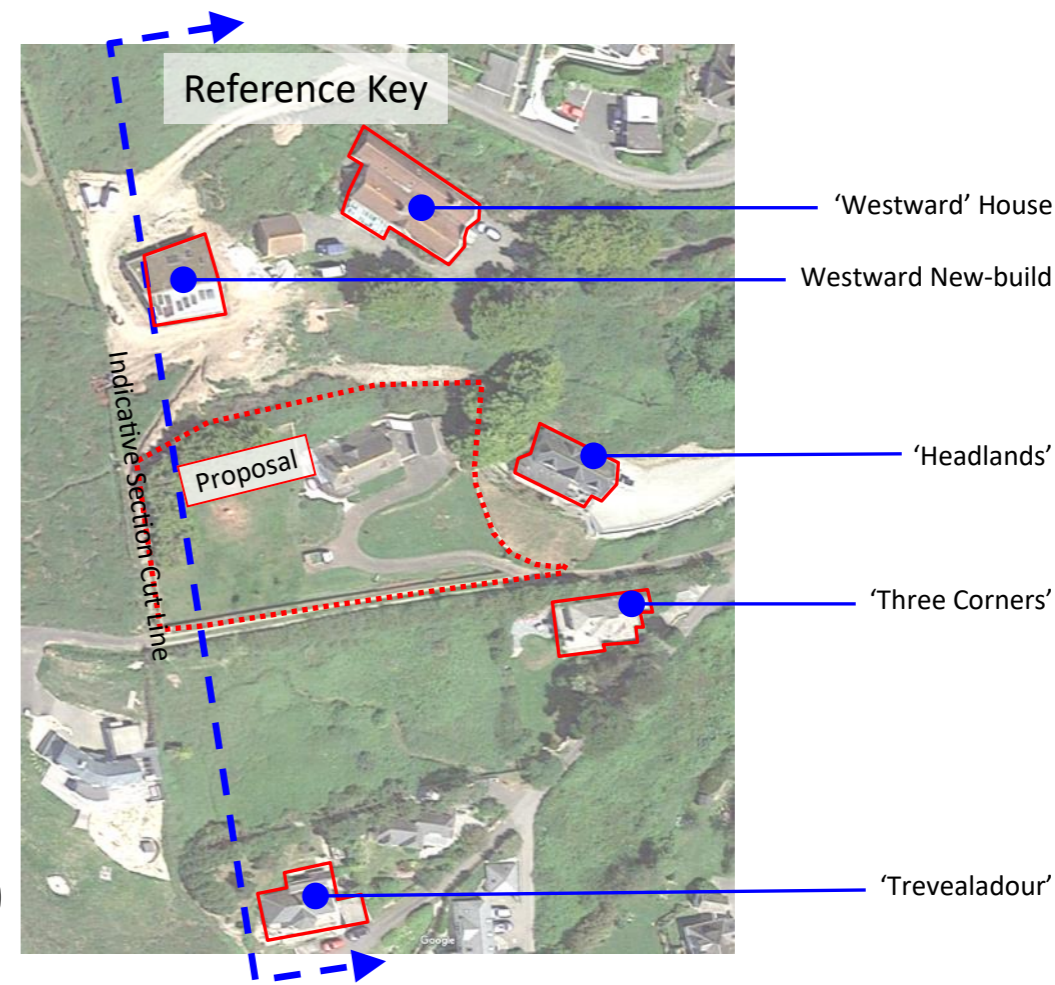
The design is contemporary but sympathetically designed and utilised natural materials that allow the proposal to blend into its landscape and have a lower level of visibility that the existing white rendered dwelling presently occupying the site. The design, landscaping, ridge height and other material planning consideration will be fully assessed through the full planning application process, however ***it is my opinion that the proposal is worthy to pursue.***"

Aligned with Pre-Application Guidance - PA17/01681/PREAPP (Please refer to excerpt below), an indicative site section demonstrates no issues of overlooking.

“It is considered that the proposed design does not raise any obvious conflicts with neighbouring properties. The proposal is located in a slope and it will need to be proved at full planning stage that an unacceptable level of overlooking/ overbearing is not caused to neighbouring properties.”

The following dimensions have been taken from the topographical survey and represent the shortest distance between the proposed ‘Beach View’ and neighbouring dwellings. All distances are well over the 25 metre separation guideline (ref: Cornwall Design Guide 4.11) and do not obstruct views from any of the neighbouring properties. Consequently, this separation distance aligns with local feeling towards the promotion of creating green areas of relief between dwellings. Furthermore, locating the proposed replacement dwelling to the western side of the site creates more balanced spacing between the neighbouring houses, especially ‘Headlands’, which is currently 23.64 metres away from ‘Beach View’ existing.

- Distance from ‘Beach View’ to ‘Westward’ House: 35.07 Metres
- Distance from ‘Beach View’ to Westward new dwelling: 28.81 Metres
- Distance from ‘Beach View’ to ‘Headlands’: 31.69 Metres
- Distance from ‘Beach View’ to ‘Three Corners’: 50.83 Metres
- Distance from ‘Beach View’ to ‘Trevealadour’: 62.36 Metres



Red arrows illustrate sightlines from recently constructed dwelling at Westward
 Indicative drawing (not to scale) produced from scaling and cross-referencing Westward plans and elevations off planning portal (PA15/07497) and topographical model for Beach View



Artist's impression



Artist's impression

Massing Comparison

Since consideration of the draft scheme by Cornwall Council and Mawgan in Pydar Parish Council at pre-application stage, further revisions have been carried out. These revisions, reflected in the scheme now submitted for planning permission, include the lowering of the west element of the dwelling by 1.37m to further reduce visual impact on landscape character and a reduction in the length of the building's principal elevation by 1.5 metres.

Top image shows a perspective visualisation submitted with PA17/01681/PREAPP

Bottom image shows a massing comparison of the design iteration submitted for PA17/01681/PREAPP and the evolved timber-clad scheme.

..... Red dotted line denotes ridge line of Pre-app scheme

..... Blue dotted line denotes ridge line of evolved scheme



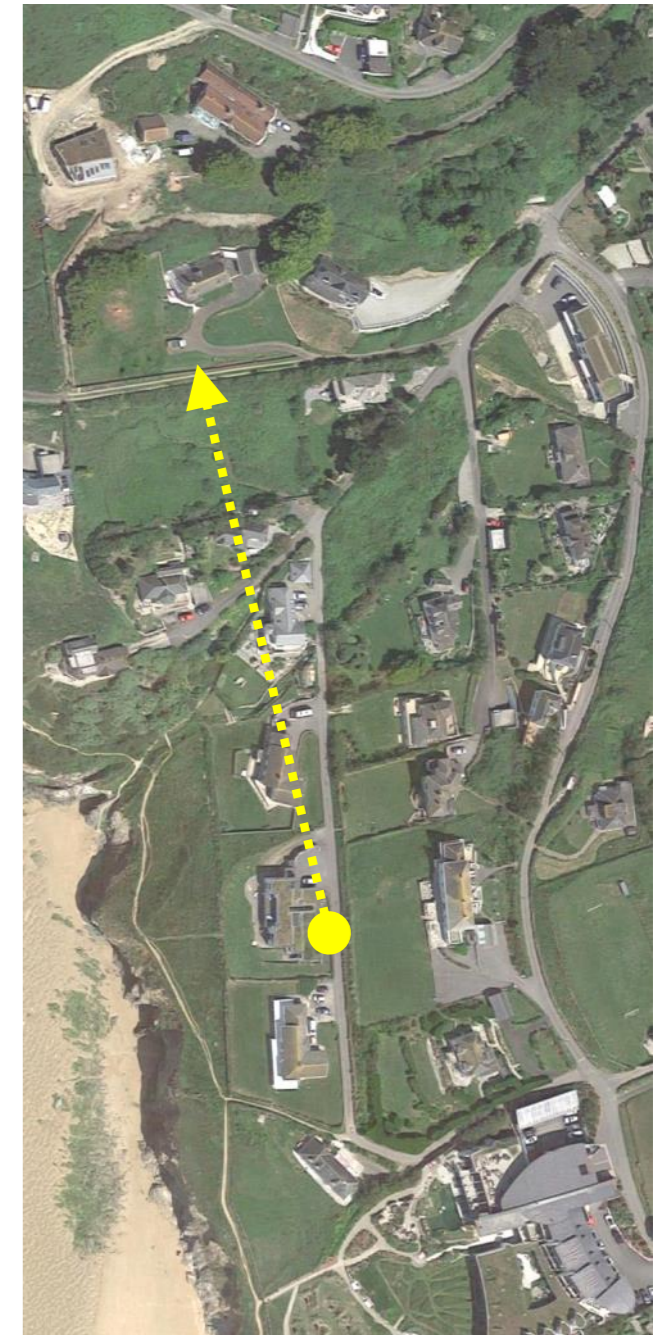
Following on from the preceding page, this page is a diagrammatic analysis of the design journey since pre-application stage. The perspective image top left shows the western element of the pre-application submission as a yellow massing block (for illustrative purposes). The image centre left shows the Planning submission massing block in red. Image bottom left shows the revised Planning submission, following consultation with Planning officer John Rudge and as a response to comments on the Planning portal from Mawgan in Pydar Parish Council and members of the public. A series of vertical and horizontal guides are over-laid to demonstrate reduction in massing and visual impact.

In simple terms, the western element has been moved 3.64 metres in an easterly direction (away from the western boundary). Additionally, the entire western element has been lowered by 0.34 metres. This translates to a lower roof line, fewer internal steps, larger garden space and reduced visual impact.





Artist's impression
Indicative Landscaping — refer to separate Landscaping Strategy



Access and Parking

The proposed access into the site is via the existing tarmac track. It was identified that the existing turning facility is challenging at best. In order to improve safety, the driveway has been increased. However, rather than using tarmac (as existing), the proposal features a permeable hardstanding area, such as 'Grasscrete'. The use of this material came about following useful discussions with Councillors from St. Mawgan-in-Pydar Parish Council, who suggested its inclusion.

There is sufficient parking for 4 - 5 vehicles. The expanded drive means vehicles can enter and exit the dwelling with much improved safety, as a result of increased turning space. The design includes an integrated double garage, which offers security for our clients. With regard to visual impact, it also keeps cars off the drive.

Siting of the dwelling

The dwelling has been located to the western side of the site for three reasons:

1. To increase the driveway for reasons of convenience and safety
2. To increase the separation space between the proposal and neighbouring property 'Headlands'
3. To make the most of views afforded by the site

Overall, the landscape character has been carefully considered. In fact, one could say it has been the driving force of the design process. A layered landscaping strategy of banked earth with an abundance of planting has been implemented to partially screen the house and to minimise the visual impact of the scheme. The gentle slope of the site has been embraced to create terraced areas, which enable access to the garden from multiple doors.

The property is sited on an area of land amounting to approximately 2877 square metres or 0.71 acres. (0.288 Hectares)

Materiality

The proposal utilises a palette of materials that are prevalent in the village of Mawgan Porth. (Please refer to images on page 20 for supporting text and visuals.) Materials proposed comprise, timber cladding, natural stone, living green/brown roof and copper fascia.

Sustainability

The intervention has been conceived around the need to provide a sustainable building that embraces the following:

Heating - The building will have a vastly reduced heat load due to the high levels of insulation and airtight construction implemented.

Cooling - Passive stack cooling techniques may be used via the opening of low level windows to allow cooler air in, expelling the hot air via high level opening roof windows.

Passive solar gains - West facing glazing has been carefully considered to maximise on solar gains without over-heating. This strategy will have a direct impact in reducing the space and water heating energy loads.

Insulation - It is proposed to utilise insulations that will support a breathing wall construction such as sheep wool or cellulose insulations.

Carbon footprint - Where possible, new materials will be selected for their reduced carbon footprint. Timbers will be sourced from locally grown managed woodlands and processed locally.

Privacy

The property is located in the North-west corner of the site to increase privacy to neighbouring 'Headlands'. Predominantly recessed windows have been carefully located to provide views to open Atlantic to the west and into a the bay of Mawgan Porth (to the south). A simple timber fence to the south and west boundaries, plus a pair of timber entrance gates offer privacy from the road and neighbouring land.

Site forces

Panoramic views - The fenestration of the buildings has embraced the need to collect the panoramic views of open Atlantic to the west and the bay of Mawgan Porth and countryside beyond (to the south).

Parking area - 2 hidden parking spaces are provided in a secure integral garage, with an additional guest parking for 2 no. cars onto 'Grasscrete' (or equivalent) hardstanding

Sun path - The overwhelming majority of rooms benefit from south facing daylight to embrace the sun path and maximise afternoon and evening solar thermal gains.

Fringe setting - Colours, materials, massing and scale have all been considered inline with the seaside village setting.

Access road - The design utilises an existing access track to serve the property.

Foul water drainage - The property proposes replacing the existing septic tank with a modern water treatment plant. Please refer to details on page 21 of this document.

Ground water drainage will be integrated with the proposed landscaping strategy. (Please refer to the supporting Landscape Strategy produced by award-winning landscape architect, Patrick Collins. All ground surrounding the building will have a permeable nature.

Rainwater drainage - Simple soakaways will be installed a minimum of 5 metres from the dwelling. The green roof system will provide attenuation to the rainfall and vastly reduce the rainwater run off into the water course.

Topography - The land currently rises over 14 metres from the south to the north boundaries. Its lowest point it is at the access point from the road. The new proposal takes into consideration the extreme slope to the ground and provides a terraced garden areas at appropriate levels to serve the internal spaces directly.

Prevailing winds - A Cornish Hedge on neighbouring land which runs adjacent to the western site boundary provides a screen from westerly winds. A row of trees currently exists within the site which offers additional screening and soften the boundaries.



Proposed Materials:

Walls: Timber Cladding, natural local stone and a living green wall

Roof: Living green/brown roof

Fascia: Copper

Above Right: A view of the existing dwelling from the coastal path

Top Left: A combination of natural stone, slate, copper and timber, also at Mawgan Porth by Arco2 Architects

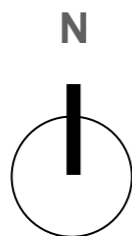
Middle Left: Materiality Precedent: Image shows a living green roof combined with stone walls and copper fascia detailing on a recently completed Arco2 Project in Portwrinkle. (Copper aging time: 11 months)

Bottom left: Living green wall example. Image: www.biotope.uk.com (accessed 24.04.2018)

In contrast to the bright, prominent render of the existing house, a natural material palette is proposed; similar (but minus the vertically-hung slate) to a beachfront replacement dwelling (also in Mawgan Porth) by Arco2 Architects (photo top left). The darker 'stealth' colours of these materials will offer a building which visually recedes into the hillside. This soft, natural material palette would be combined with new planting and sensitive, layered landscaping to screen the building; and to engender a recessive, subservient character, which assimilates sensitively with the topography.



Image: Google Maps (accessed 19.04.2018)



Location of existing septic tank

As part of the proposal, the existing septic tank will be replaced with a more environmentally conscious treatment plant comprising a 2 metre diameter tank x 3 metres in length , plus a drainage field/soakaway 10 metres x 2 metres.

Conclusion

The scheme's references to Mawgan Porth's geological context and Cornwall's historical built-form procure strong contemporary ties to the area, imparting a robust Cornish identity. This is compounded by the natural material palette, which will feature local stone and be built by Cornish Stonemasons, to create a dwelling of exceptionally high quality, deeply rooted to the area.

This is not a short term speculative project for our clients, but a home for them to enjoy from now into their retirement years. In their design brief, they have been clear in the specification of high quality materials and the highest levels of construction detailing.

The construction methodology reflects the significant advancements in sustainable building technologies of recent years to provide a home with excellent environmental credentials.

The massing and organisation have been determined by the characteristics of the site, alluding to what is essentially single storey accommodation, which follows the lie of the land. The sensitivity of this approach is strengthened by a layered landscaping strategy which has been carefully considered to minimise the visual impact of the scheme. This will be augmented by a living green/brown roof. As previously mentioned, by locating the house on the western side of the unusually large site increases the perceived green space between the proposal and neighbouring dwelling 'Headlands'. This will be particularly noticeable from distant vantage points.

The combination of the strategies described will provide a high-quality, contemporary house, carefully considered to make a sensitive, positive contribution to the surrounding local landscape and setting.

Further to the positive pre-application report from Cornwall Council and consultation with planning officer John Rudge, it is hoped that the revised planning submission of reduced massing and visual impact will be seen as enhancing the area for the reasons outlined in this document and as such will gain the support of the Planning Authority.

Summary of Design Strategies

- Massing and organisation informed by the characteristics of the site
- Pre-dominantly single storey accommodation follows the lie of the land
- Layered landscaping strategy augments assimilation with the site
- High level material specification, featuring natural materials
- Living green/brown roof compliments recessive material palate
- House located to the western side of the site increases the green space between the proposal and neighbouring dwelling 'Headlands'.

Design reinforces:

- Mawgan Porth's geological context
- Cornwall's historical built-form

Design Procures:

- Strong contemporary ties to the area
- A robust Cornish identity: compounded by the use of local stone; built by Cornish Stonemasons, propagating traditions

Construction methodology reflects:

- Contemporary best practice
- Advancements in sustainable building technologies which exude excellent environmental credentials

Overall

- Combined design strategies provide a high-quality, contemporary house
- Design visually 'gives back' green space to the landscape, by virtue of its siting, design language and materiality.
- Scheme carefully considered to make a sensitive, positive contribution to the surrounding local landscape and setting