

- NOTES:**
1. ALL DIMENSIONS AND LEVELS SHALL BE CHECKED ON SITE PRIOR TO CONSTRUCTION WORK COMMENCEMENT.
  2. ALL LANDSCAPE DRAWINGS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ENGINEERS AND ARCHITECTS DRAWINGS AND SPECIFICATIONS.
  3. POSITIONS OF BUILDINGS BASED ON MASTERPLAN BY ARCHITECTS.
  4. ANY DISCREPANCY CONCERNING THE DRAWINGS SHOULD BE REFERRED TO CA IMMEDIATELY.
  5. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.
  6. ALL LEVELS IN METERS.
  7. FINISHED LEVELS SUBJECT TO DETAILED SURVEY.
  8. DO NOT SCALE OFF THIS DRAWING.
  9. EXISTING SERVICE ALIGNMENTS SHALL BE SHOWN AND ANY DISCREPANCY REFERRED TO CONSTRUCTION WORK COMMENCEMENT.

- Detention swales with silt trap and damp meadow planting
- Check grassland with/over meadow planting (high grass density)
- Check grassland with/over meadow planting (low grass density)
- Arvenly grass seed mix
- Native shrub planting mix
- Specimen tree planting
- Hawthorn and Bushhorn hedge

BH 2007/00469

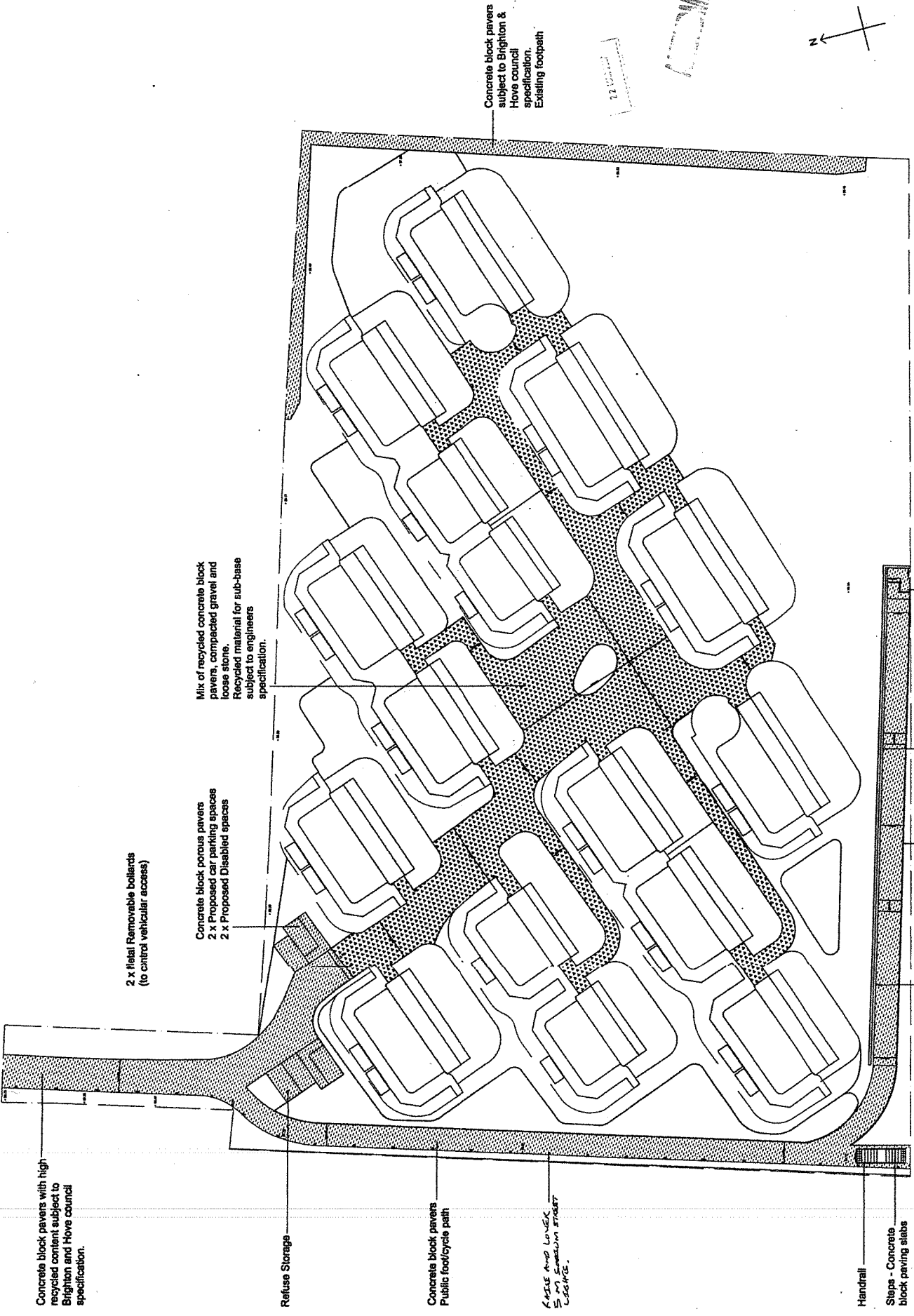
PROJECT: The Liquid  
Client: Earthing Bioscience Europe Ltd

**PLANNING**

WILD DESIGN STUDIO  
Ecological Landscape Design

Handworks Plan

WILSON 270 - 010



Concrete block pavers with high recycled content subject to Brighton and Hove council specification.

2 x field Removable bollards (to control vehicular access)

Concrete block porous pavers  
2 x Proposed car parking spaces  
2 x Proposed Disabled spaces

Mix of recycled concrete block pavers, compacted gravel and loose stone.  
Recycled material for sub-base subject to engineers specification.

Refuse Storage

Concrete block pavers  
Public foot/cycle path

RAIL AND LOW  
5 m SERRAVAL STREET  
Landscape

Handrail

Steps - Concrete block paving slabs

Water drains towards crib wall and gravel strip

Timber Handrail

Timber crib wall planted with sedum/local stinging species

Safety barrier

Concrete block pavers subject to Brighton & Hove council specification.  
Existing footpath



BH 2007 / 00469



**Biotope**

*building with the earth*

**Design Statement  
Earthship Biotope Europe Ltd**

**'The Lizard'**

01 FEB 2007



**November 2006**

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**Design Statement :**

1. *Introduction*
2. *The Site*
3. *Proposals and Design Philosophy*

**1. Introduction****1.1 Introduction**

The following design statement accompanies a full planning application by Earthship Biotechure Europe Ltd to Brighton and Hove City Council (BHCC) for the development of Sixteen Sustainable and Low Carbon Detached Homes. Earthship Biotechure Europe (EBE) is currently lead partner in the UK based Earthship Homes Project. This is a research partnership, which was formed to access the viability of a multi unit Earthship residential development for the UK. The Energy Saving Trust and the environmental Agency are funding the study through the low carbon innovation programme.

**The team behind this project include:**

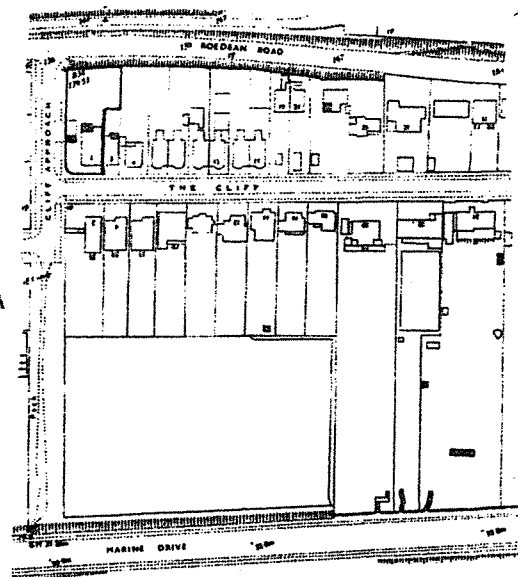
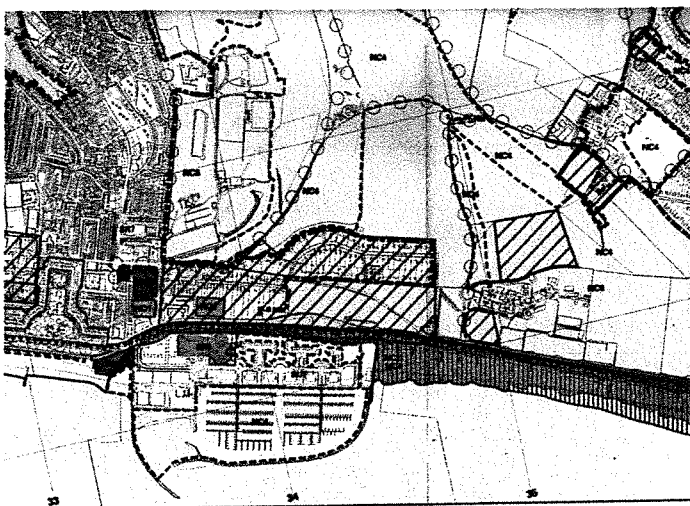
- Earthship Biotechure Europe - design and build orchestration, lead partner
- Brighton & Hove City Council - responsible for planning issues and sustainability agendas
- CDHA (part of Hyde HA) - housing association concerned with delivery of affordable homes
- HCD Group - UK based building inspectors with Earthship experience
- Ecology Building Society - mortgage provider focused on eco renovation and innovative new eco build
- RH Partnership - UK based architects with Earthship experience
- Trinnick Warr - UK based quantity surveyors

**1.2 Consultation**

The proposal has been the subject of consultation with BHCC Development Control team, the BHCC Ecologist, BHCC Traffic Engineer and all parties listed above. Consultation with the city's development control officers has been based on the Brighton and Hove Local Plan (adopted July 2005) and other relevant policies. There will also be a public exhibition for local residents (18 Oct 2006), which will outline the proposals.

**1.3 The site**

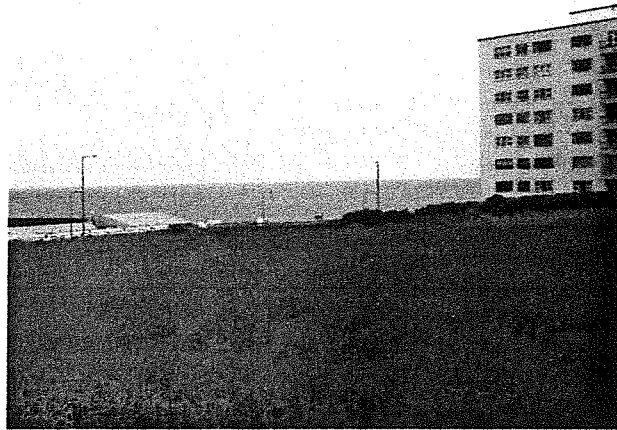
The site is identified as land between Marine Drive and the rear of 2 – 18 The Cliff, Brighton. The site is currently used as a public open space and access from Cliff Road to Marine Drive is via a side access route.



[Above 1: The Local Plan, 2: The site of the proposed dwellings]

### 1.4 Planning permission application:

The development is described as 'erection of sixteen sustainable and low carbon detached homes and associated works.' This application follows a recent Outline Planning Application BH2005/01322/OA - for the erection of sixteen detached private dwellings, APPROVED June 2005.



*[Above: View looking West towards corner of Marine Gate]*

### 1.5 Development Specifics

- Four 1 Bedroom Earthships - approx. 84m<sup>2</sup> internal floor area
- Eight 2 Bedroom Earthships - approx. 96m<sup>2</sup> internal floor area
- Four 3 Bedroom Earthships - approx. 116m<sup>2</sup> internal floor area
- 4 Off Road Car Parking Spaces ( two for car club and two disabled spaces)

### 1.6 Applicant Information

Earthship Biotecture Europe (EBE) is a social enterprise set up to enable the further evolution of the Earthship building concept in Europe. The company aims to inspire a fundamental change in the provision of basic needs. Shelter, water, power, food, warmth and stability can all be met by building in line with the earth's systems. EBE was established by Michael Reynolds and Daren Howarth. Michael originated the concept and has overseen the design and construction of hundreds of Earthships, based around Taos, New Mexico. By 2000 the concept had evolved into a high performance, replicable building, and Daren began working with Michael to establish the Earthship concept in the UK and Europe. The main activity to date has been in the UK. In Scotland, Paula Cowie formed Sustainable Communities Initiatives (SCI) - who worked with Michael to build Earthship Fife, near Edinburgh. In England, Daren formed the Low Carbon Network (LCN) - who built the full scale Stanmer Earthship near Brighton. Other projects have been undertaken in Belgium and Spain. All of these ground breaking projects are helping people understand these simple but highly effective buildings.



*[Above: View looking East towards corner of Plot]*

### 1.7 Associated Documentation

The design statement is to be read in conjunction with:-

- drawings submitted by Earthship Bioteecture Europe
- Nature conservation report (QD15, QD16, QD17 and QD18) prepared by EBE November 2006
- Sustainability Checklist (SU2 and SU12) prepared by EBE November 2006
- Wind Turbine Scoping Noise Assessment prepared by Anderson Acoustics October 2006
- Archaeological Desk-Based Assessment prepared by Archaeology South East November 2006
- Brighton and Hove Local Plan (adopted) 2001
- Earthship Home study Brighton – November 2005
- No Environmental Impact Assessments or other documentation were required by BHCC Development Control.
- Site Identification Study – Earthship Homes – June 2005

## 2. The Site

### 2.1 Site Description

The site is located on the Eastern side of Brighton in an elevated position above the main A259 Coast Road. It is directly opposite the Brighton Marina, which is below cliff level. It is bounded to the west by Marine Gate a flat development, to the north by a residential road The Cliff and to the east by the rear gardens of properties located in The Cliff. The site has an overall area of 1.10 hectares. The site is exceptional in its suitability for a 'glass and mass' passive solar building. It has an unobstructed horizon with a vista to the south-east.

### 2.2 Land Designations

The site is located within: -

- Allocated Housing Site (HO1)
- Archeologically Sensitive Area ( HE12)
- Lies within the Boundary of the Built Up Area

### 2.3 Strategic location:

The site is at a key entrance point to the east of the city centre, strategically located in an elevated position and will act as a gateway to the city centre immediately outside built-up area. It is therefore appropriate that the site is developed using innovative design solutions, appropriate for the challenges we face in the 21<sup>st</sup> century.

### 2.4 History

It would appear to have been an open space for many years with no signs of any form of development. It is known that the field was used for horse grazing in the past. Currently it remains an open space, which is used mainly for recreational dog walking.

### 2.5 Ecology

The site had no objections from the BHCC Ecologist at Outline Planning Stage – subject to certain conditions. The site is classified as species-poor, semi-improved grassland comprising of an overgrown and neglected pony paddock with small clumps of Elder scrub. The habitat is suitable for reptiles (such as Common Lizard and Slow Worm) and possibly nesting birds (protected under the Wildlife & Countryside Act 1981). The road verge and associated land adjacent is classified as semi-natural chalk grassland. It includes a range of grassland species, including Hoary Stock. A separate Ecology Statement has been prepared which deals with the biodiversity of the site and its enhancement following discussions with the BHCC ecologist in Pre-Planning meetings.

### 2.6 Archaeology

The East Sussex County Archaeologist requested additional information – this is included in the application. An Archaeological Desk-Based Assessment prepared by Archaeology South East November 2006

### 2.7 Sussex Police

Medium risk crime area, no concerns at outline planning stage.

## 2.8 Southern Water Improvement Works

Earthship Biotecture Europe is aware that a letter has been received from Savills on behalf of Southern Water stating that part of this application site is required for wastewater improvement works (granted planning permission under reference BH2005/05602/FP). Part of this site is required for a temporary construction compound.

On this basis Southern Water have requested that a condition be attached to any approval which would prevent any development taking place in the south-east corner of the site until works required to be undertaken by Southern Water are complete or alternatively until the applicant has provided documentary evidence that that the land is no longer required in connection with the sewerage-related development.

Earthship Biotecture Europe – have no objections to this condition and following a planning approval will seek further clarification from Southern Water for a programme of works and dimensions of the restricted area.

## 3. Proposals and Design Philosophy

### 3.1 Design, safety and the quality of development

Design is critical to this site, as it is sensitive in visual terms, being located on high ground on the edge of the urban area. This new development has carefully been designed to have low impact visually with its surroundings and to blend in with the existing landscape. The nature and use of materials is just one element of design, which has been included in this development. At its simplest and most powerful, the Earthship concept enables people to re-integrate with nature through their homes. Conventional house building only encourages further dis-integration at all levels. This Earthship development takes into account a “sense of place” in the wider built and natural environment and seeks to integrate all the elements that are essential to the quality of life by providing a healthy, safe and pleasant environment.

To further the above, the integration of elements such as, recycled materials, sustainability and nature conservation into the design of this new development helps to create interest, diversity and a more pleasant environment. Earthships are solar independent buildings that heat and cool themselves, are self-powered, harvest their own water and deal with their own waste. With free energy from the sun and free materials from waste, the Earthship is based on earth rammed tyre walls giving thermal mass to store heat. They are ‘heavyweight’ high quality buildings, designed with a comfortable low cost future in mind. Earthships are free from utilities and yet can be realised at similar costs to the conventional utility dependant dwellings that are currently proliferating the urban areas and greenfields sites of the UK.

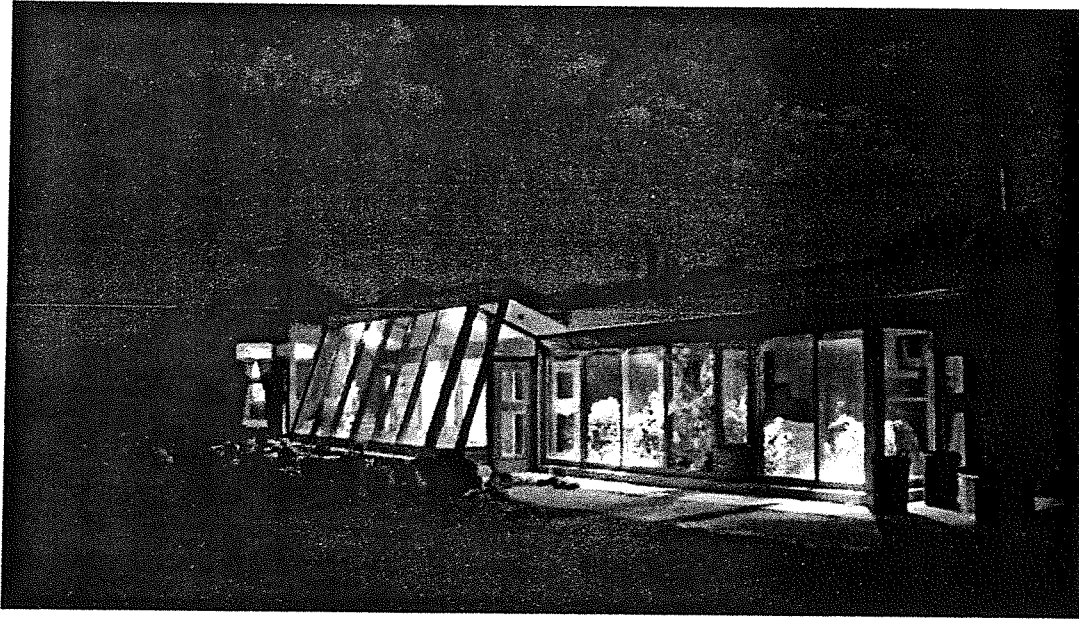
### 3.2 The Earthship Defined

The Earthship is a completely independent globally oriented dwelling made from materials that are indigenous to the entire planet. The major structural building component of the Earthship is recycled car tyres filled with compacted earth to form a rammed earth brick encased in steel belted rubber. This brick and the resulting bearing walls it forms are virtually indestructible.

The concept of thermal mass housing works both to cool and to heat. Natural dehumidification is also possible. These dwellings have been specifically designed and orientated due to their global position to maximise the performance of cooling, heating and/or dehumidification.

Thermal mass structure can be achieved with many materials (concrete, stone and adobe), although in this case earth rammed tyres are being used due to economic, low carbon and waste utilisation criteria. All other aspects of the Earthship concept, the catch water, waste water treatment systems and the solar/wind power systems are again designed for this specific site location. The Earthship is a concept - it is a building that will take care of you by interacting with and encountering the biology and physics of the earth.

*[Below: Earthship Dwelling – Taos, New Mexico, USA]*



### **3.3 QD1 Design - quality of development and design statements**

Earthships are a relatively new concept to the UK and this site has been chosen to showcase a new style of imaginative, sustainable construction and living. This in turn demands a high standard of design and also a high specification to achieve a positive contribution to the visual quality of the environment. The location has a wide range of architectural designs and styles dominated by Marine Gate (adjacent flat development).

This development provides a creative design and fresh approach to tackle global issues, which integrates successfully into its geographical context. A modern design, which utilises contemporary and sustainable materials in a unique way.

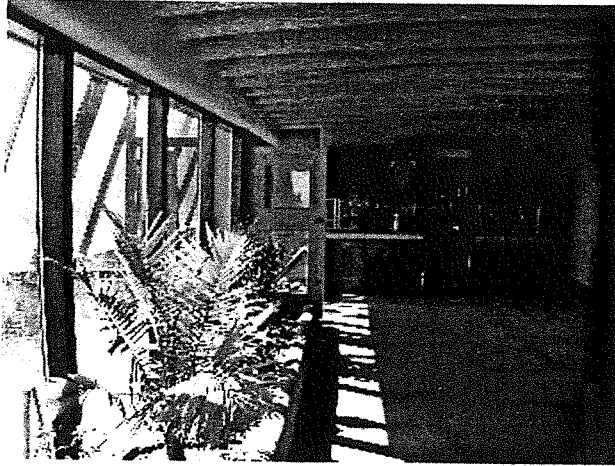
#### **3.3.1 scale and height of development**

Taking into account the landscape, adjacent architectural styles and the sites relationship to adjoining buildings and the surrounding area, this development has taken a step further than the approved outline planning application for conventional pitched roof chalet bungalows. An inherent benefit of Earthship construction in this case is that all the dwellings will be single storey in the main with the three bedroom dwellings having a round hut structure of two storey proportions (see schematic of site). The layout of the site clearly indicates that 16 dwellings can be accommodated easily, allowing for amenity space, gardens, associated access road/paths and public open space. The dwellings all have a south-east orientation, with all fenestration facing towards the south-east. All other elevations form part of the earth bund, which surrounds the dwelling up to roof level. It is clear that this design blends into the surrounding landscape with a natural balance, traditional housing cannot achieve. From all visual aspects no strategic view is infringed and a solution resulting in a low visual impact is achieved. It is a key factor that all units have a reasonable garden space to allow for individual homes to grow their own food.



### 3.3.2 architectural detailing and quality of materials

Architectural detailing is an integral part of Earthship design. Each element has a function in more than the traditional sense. The Earthship is a living machine and therefore the design has over 20 years been adapted to reflect this. The dwellings are compact living units, which operate on a linear basis, with avoidance in this case of disjointed construction. A high standard of materials is a requirement of the design as the building as a whole is reliant on material performance and integration. All materials are to be locally sourced where possible from sustainable sources. The building also has a high level of recycled materials used in its construction.



*[Above: Internal Photo Earthship Dwelling – Taos, New Mexico, USA]*

### 3.3.3 visual interest particularly at street level

At street level, the development has introduced an entrance designation as required in HOMEZONE design. This will give a clear signal of entering a designated area. There will be a mixed variety in elements of the dwelling designs such as the entrances, round turrets (huts), large fenestration, garden walling, communal seating areas, introduction of dew pond, woodland and Chalkland meadows.

### 3.3.4 appropriate levels and type of landscaping.

Landscaping is an important feature of Earthship design and is an integral and functional component of the development. The black water catchment areas provide each dwelling with external flora and fauna, within their own garden area. All dwellings have internal landscaping which provides a grey water treatment solution. The new path/bike lane will be integrated with current public access paths and be provided streetlights, as will the main development (low-level lighting). There will be a large chalkland meadow planting project and woodland area as shown (BHCC ecologist approved). The dwellings will be landscaped to integrate fully with the surroundings, with each earth bund forming part of the overall landscape design with the chalkland meadow extending over the earth bunds.



*[Above: Internal Planter Earthship Dwelling – Taos, New Mexico, USA]*

### 3.3.5 The Lifetime Homes Compliance

It is an important aspect of the Earthship design to be designated 'Lifetime Homes'

The table in Appendix sets out the full Lifetime Homes standards for reference. Homes that meet all the standards are entitled to be designated 'Lifetime Homes'. They will also meet the Part M Building Regulations, the relevant parts of the Housing Corporation Scheme Development Standards as indicated in the table, and the requirements of most local authorities for accessible housing

### 3.3.6 Affordable Housing

The scheme will incorporate 6 units as affordable housing – to include 1 no three bed, 3 no two bed and 2 no one beds. Early discussions have been carried out with CDHA who were part of the original feasibility team. The affordable housing allocation equates to 37.5% which falls below the 40% target identified in HO2. In real terms 40% equates to 6.4 units, which we have rounded down to 6 units. As a compensatory factor, in pre-planning discussions held with council officers, Earthship Bioteecture Europe were asked if the six units could include a 3 bedroomed unit, which we agreed as indicated above, to make allowance for the slight shortfall in the overall percentage.

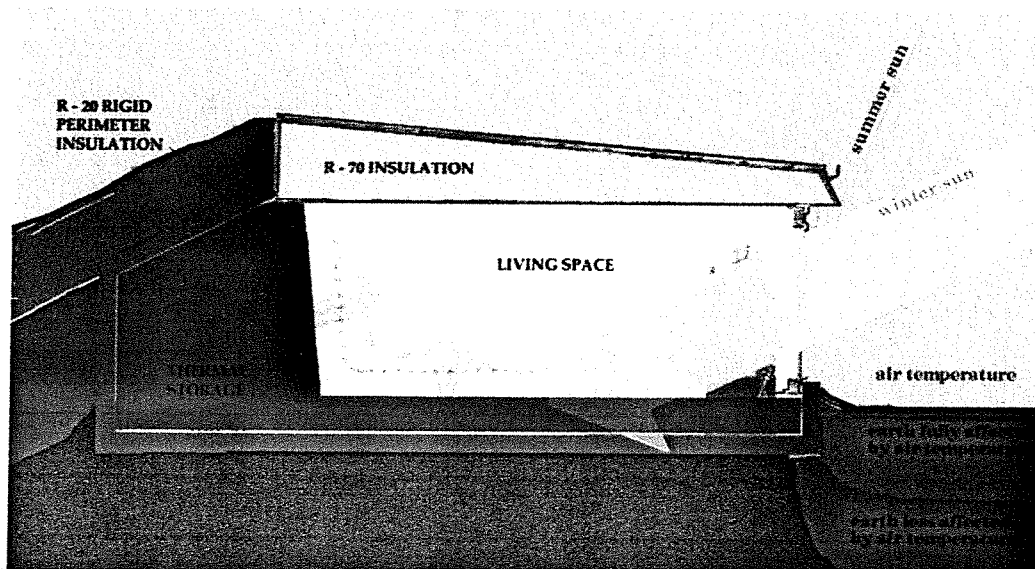
## 3.4 QD2 Design principles for neighbourhoods

The appearance of the proposed Earthship development and its relationship to its surroundings are matters that relate to the design of buildings and to urban design. Government guidance (PPG1 'General Policy and Principles') refers to urban design as meaning the relationship between different buildings and the streets and other spaces, which make up the public domain itself.

With this policy for guidance the development seeks to ensure that spaces created around buildings are enclosed, in this case with a low level wall to reduce visual impact and are functional and attractive to the intended users. The Earthship site layout has a high level of pedestrian circulation and cycle routes and as part of the pre-planning discussions an upgrade to the current Western boundary footpath was agreed. Primarily the development has been designed to emphasise and enhance the positive qualities of the local neighbourhood, this has been achieved by taking into account the local characteristics:

### 3.4.1 the height, scale, bulk and design of existing buildings;

The majority of the properties in the area are large two storey, detached dwellings with varying plots of land. The main overriding architectural feature is the adjacent Marine Gate, which is a large nine-storey flat development. With these types of properties in mind a low level Earthship development, with fenestration kept to the south-east provides low impact on neighbouring properties. The orientation of the earthships is on a south-easterly axis, which does not accord with the surrounding properties, which have a southerly axis. The reason for this orientation is so that the Earthship can maximise solar gain. It is a fundamental design feature to orientate the units in this manner, approx 15 degrees off south.



#### 3.4.2 topography and impact on skyline

The skyline impact is very low due to the site sloping away from adjacent properties. This in addition to the low-level design of the Earthships and their earth bunds gives a low skyline impact. There will be a low visual impact from the main coast road, but this is overshadowed by the Marine Gate development.

#### 3.4.3 natural and built landmarks

The site has no natural and built landmarks, other than those landscaped issues discussed previously.

#### 3.4.4 layout of streets and spaces

The road has been designed to reflect the criteria required by the Fire Brigade and BHCC Traffic Manager. The layout is simple with an entrance design, along with reduced speed restrictions envisaged. Communal spaces will be developed into areas for socialisation and meeting fellow residents. Children's spaces will be encouraged with a possible eco-play area. A financial contribution of £32647.00 is envisaged towards some form of equipped play space or similar.

#### 3.4.5 linkages with surrounding areas, access to local amenities

The area is well served by shopping facilities, boosted by the large shopping mall at the marina. The public transport provision is good within the area and a financial contribution of £24000 is envisaged towards public transport provision. Pre-planning discussions with Mark Hillyer of City Car Club support a proportion of this allocation being used as set up costs for the two car club. Community facilities are limited but accessible from the site.

#### 3.4.6 patterns of movement within the neighbourhood

Due to the nature of the properties within the area high car dependence is calculated. The Earthship development will introduce a city car club scheme (two cars one of which will be electric if possible) and a high priority has been a design suitable for all pedestrians, cyclists and users of public transport.

#### 3.4.7 Crime

The development has taken the opportunity to minimise the opportunities for crime to take place, through the integration of its design into the neighbourhood.

### **3.5 OD3 Design - efficient and effective use of sites**

The site is unusual in that it has a restrictive covenant, which limits the development of the site to sixteen dwellings, this has implications in terms of meeting planning guidelines on density and the efficient and effective use of a site.

Currently, in planning policy terms, the issue of development density is a key concern at national level. Local planning authorities are expected to follow a guideline laid out in Planning Policy Guidance 3 of a 30 unit minimum per hectare of land. This guideline is normally applied without flexibility as to the type and quality of the development.

Working from existing drawings of the site and from ariel photographs, we have worked with planners to reduce the overall footprint of the development.

The developed area equates to 51.35% of 1.1 Hectares which is equal to 28.33 units per hectare. It is clear that the density does not quite meet the requirements of PPG 3 which states a minimum of 30 units per hectare, but surely allowances can be made for the type of development and also because the footprint of the development is contained within the site boundaries. A standard housing development has a footprint which extends well beyond the site boundaries (e.g electricity, sewage, gas, water) but developers do not have to include these services within any density calculations, otherwise no standard development would be able to meet PPG 3 density criteria also.

It is without doubt that the development we propose offers a global solution to the increasing environmental pressures we are experiencing, and therefore a shortfall density should not be an obstacle to earthship developments in the UK.

However PPG3 also advises that “Considerations of design and layout must be informed by the wider context, having regard not just to any immediate neighbouring buildings but the townscape and landscape of the wider locality.” (para. 56). So the character of the surrounding area may mean that the densities quoted above are inappropriate for the particular site being put forward.

In the locality of the development site and mainly boundary partners, all dwellings are situated on larger plots with very low densities:-

20 The Cliff, Roedean – a single dwelling on a 0.34 hectare plot equates to 2.95 dwellings per hectare  
 24 The Cliff, Roedean - a single dwelling on a 0.42 hectare plot equates to 2.38 dwellings per hectare  
 2 – 18 The Cliff, Roedean - 9 dwellings on a 0.71 hectare plot equates to 12.60 dwellings per hectare

It is clear that the PPG 3 if taken into a wider context it would seem to confirm that a density of 28.33 sits comfortably in an area where densities are very low as detailed above.

With this density the development has been sensitively designed and well landscaped in order to fit successfully into the restrictive vacant site. It secures the retention of existing and the provision of new open space, trees, grassed areas, nature conservation features and recreational facilities within the urban area. The density and the proposed development creates a quality of life and vitality that makes urban living desirable.

### **3.5 OD4 Design - strategic impact**

A review of the considered strategic views as laid down in the Local Plan, indicates that the three views below are the points to be considered. In order to preserve or enhance strategic views, important vistas, the skyline and the setting of landmark buildings, all new development should display a high quality of design.

The following features are considered to be of strategic importance:

- a. Views of the sea from a distance and from within the built up area;
- b. Views along the seafront and coastline;
- h. Initial views of Brighton & Hove from access points by all modes of transport.

It is clearly evident that the City of Brighton & Hove has a rich and varied natural and built landscape; its topography enables spectacular views which are valued by local people and visitors alike. With this in mind the Earthship development has been designed to take into account the natural and built landscape and no reduction in visual impact is envisaged, for any neighbouring properties.

There will be a visual impact when travelling along the main coast road, by all modes of transport, particularly walking. The importance of this view will influence peoples’ first impressions of Brighton and Hove, but the development will be carefully landscaped to enhance the visual impact. It is also providing an imaginative architectural landscape, one that will provide the City of Brighton and Hove with a Sustainable showcase.

### **3.6 OD 5 Design - street frontages**

The development presents an interesting and attractive frontage particularly at street level for pedestrians. The unique earth bund design gives the appearance of an undulating landscape, which cleverly hides the dwellings within. The frontages of the properties are also unique in the expanse of fenestration used. These homes will be a major environmental attraction, for the city.



*[Above: Internal View - Earthship Dwelling – Taos, New Mexico, USA]*

### **3.7 OD15 Landscape design**

#### **Subject to an Ecological report prepared separately**

The design for the development will show that:

- a. adequate consideration has been given to landscape design, including all the spaces between and around buildings, at an early stage in the design process;
- b. the proposal includes suitable open space provision;
- c. high quality materials have been selected which are appropriate to the site, its use, and locality including new planting of trees and shrubs;
- d. effective use has been made of existing landscape features;
- e. where appropriate, existing nature conservation features have been retained and new suitable ones created.

### **3.8 OD16 Trees and hedgerows**

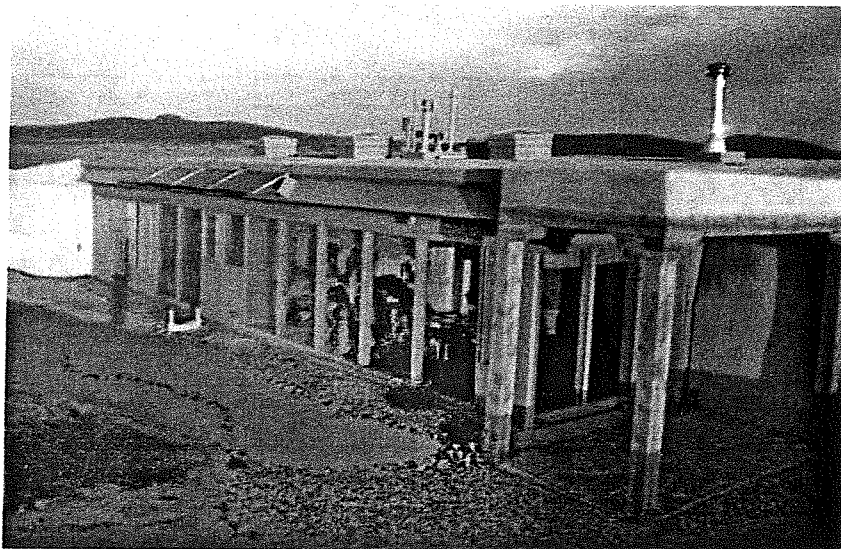
#### **Subject to an Ecological report prepared separately**

The design for the development will include details on trees and hedgerows. The development will seek to retain existing trees and hedgerows and to include new tree and hedge planting.

### **3.9 OD17 Protection and integration of nature conservation features**

#### **Subject to an Ecological report prepared separately**

Development proposals affecting nature conservation features outside protected sites will confirm that the impact is minimised. As many existing features as possible are protected and enhanced and compensating and equivalent features are provided for any that are lost or damaged. New nature conservation features will be provided as part of the development. These features will be provided for early on in the design stage so that they are appropriate to the location, suitably sited and are fully integrated within the scheme.



*[Above: External View - Earthship Dwelling – Taos, New Mexico, USA]*

## APPENDIX A

## The Lifetime Homes standards

Lifetime Homes standards	Specifications and dimensions which meet Lifetime Homes standards	Housing Corporation Scheme Development Standards compliance (3rd Edition) (E=essential, R=recommended)										
1 Where there is car parking adjacent to the home, it should be capable of enlargement to attain 3300mm width	The general provision for a car parking space is 2400mm width. If an additional 900mm width is not provided at the outset, there must be provision (e. g. a grass verge) for enlarging the overall width to 3300mm at a later date	1.1.3.4 E (requires actual provision at the outset rather than provision for later enlargement)										
2 The distance from the car parking space to the home should be kept to a minimum and should be level or gently sloping	It is preferable to have a level approach. However, where the topography prevents this, a maximum gradient of 1: 12 is permissible on an individual slope of less than 5 metres or 1: 15 if it is between 5 and 10m, and 1: 20 where it is more than 10m.* Paths should be a minimum of 900mm width	1.1.3.2 E (but covers natural surveillance, not distance)										
3 The approach to all entrances should be level or gently sloping	See standard 2 above for the definition of gently sloping	relevant parts of 1.3.1.1 E										
4 All entrances should: a) be illuminated b) have level access over the threshold and c) have a covered main entrance	The threshold upstand should not exceed 15mm	1.1.1.12 E										
5 a) Communal stairs should provide easy access and b) where homes are reached by a lift, it should be fully wheelchair accessible	NOT APPLICABLE - EARTHSHIP SCHEME											
6 The width of the doorways and hallways should conform to the specifications in the next column .	<table border="0"> <thead> <tr> <th>Doorway clear opening width (mm)</th> <th>Corridor/ passageway width (mm)</th> </tr> </thead> <tbody> <tr> <td>750 or wider</td> <td>900 (when approach is head- on)</td> </tr> <tr> <td>750</td> <td>1200 (when approach is not head- on)</td> </tr> <tr> <td>775</td> <td>1050 (when approach is not head- on)</td> </tr> <tr> <td>900</td> <td>900 (when approach is not head- on)</td> </tr> </tbody> </table> <p>The clear opening width of the front door should be 800mm. There should be 300mm to the side of the leading edge of doors on the entrance level</p>	Doorway clear opening width (mm)	Corridor/ passageway width (mm)	750 or wider	900 (when approach is head- on)	750	1200 (when approach is not head- on)	775	1050 (when approach is not head- on)	900	900 (when approach is not head- on)	1.3.1.2 E 1.3.1.3 E 1.3.1.4 E
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7 There should be space for turning a wheelchair in dining areas and living rooms and adequate circulation space for wheelchair users elsewhere	A turning circle of 1500mm diameter or a 1700x1400mm ellipse is required	1.3.1.12 R										
8 The living room should be at entrance level		1.3.1.10 R										
9 In houses of two or more storeys, there should be space on the entrance level that could be used as a convenient bed- space		1.6.3.6 R 1.3.1.11 R										
10 There should be: a) a wheelchair accessible entrance level WC, with b) drainage provision enabling a shower to be fitted in the future	The drainage provision for a future shower should be provided in all dwellings Dwellings with three bedrooms, the WC must be fully accessible. A wheelchair user should be able to close the door from within the closet and achieve side transfer from a wheelchair to at least one side of the WC. There must be at least 1100mm clear space from the front of the WC bowl. The shower provision must be within the closet or adjacent to the closet the WC could be an integral part of the bathroom. In small two bedroom dwellings where the design	1.3.1.5 E 1.3.1.9 R 1.6.3.6 R										

	has failed to achieve this fully accessible WC, the Part M standard WC will meet this standard	
11 Walls in bathrooms and toilets should be capable of taking adaptations such as handrails	Wall reinforcements should be located between 300 and 1500mm from the floor	1.6.3.1 E
12 The design should incorporate:		1.3.1. 6 E
a) provision for a future stair lift		1.6.3.6 R
b) a suitably identified space for a through-the-floor lift from the ground to the first floor, for example to a bedroom next to a bathroom	NOT APPLICABLE - EARTHSHIP SCHEME	
13 The design should provide for a reasonable route for a potential hoist from a main bedroom to the bathroom	Most timber trusses today are capable of taking a hoist and tracking. Technological advances in hoist design mean that a straight run is no longer a requirement	1.6.3.2 E 1.2.1.31 R
14 The bathroom should be designed to incorporate ease of access to the bath, WC and wash basin	Although there is not a requirement for a turning circle in bathrooms, sufficient space should be provided so that a wheelchair user could use the bathroom	
15 Living room window glazing should begin at 800mm or lower and windows should be easy to open/ operate	People should be able to see out of the window whilst seated. Wheelchair users should be able to operate at least one window in each room	1.4.1.1 E 1.2.1.32 R
16 Switches, sockets, ventilation and service controls should be at a height usable by all (i. e. between 450 and 1200mm from the floor)	This applies to all rooms including the kitchen and bathroom	1.3.1.14 R (switches, door handles and thermostats at 900- 1200mm) 1.3.1.15 R (sockets at 450- 600mm)