

Queen's Marsh Bird Hide Design Brief

Business name: The Dartington Hall Trust

Background: www.dartington.org/our-work/our-land/conservation/queens-marsh/

Due date for completion: 15th December 2017. Access to the site will be more achievable under dry conditions as the site is prone to flooding.

Product name: Queen's Marsh Wetland Restoration – Bird Hide

Key objectives: A bird hide which offers closer views of birds in Queen's Marsh and the surrounding area than could be achieved in the open without causing disturbance; provides protection from the weather; a structure the design of which is completely unique and extraordinary.

Target audience: The primary audience is keen bird watchers – people who like to sit quietly for hours with a thermos and pair of binoculars.

General members of the public ought to feel welcome and encouraged to engage with the site as a gateway to bird watching but understand that a certain environment needs to be maintained in order to have the opportunity to observe wildlife.

Scope:

- Include access to the hide.
- It must be possible to disassemble and relocate the structure if necessary.
- A wide view (horizontal and vertical), predominantly north facing if achievable, of significant habitats in the area without vision being impaired by physical features, light reflection/direction of the sun, passing traffic or the height of the individual viewer.
- Enable observation of wildlife in habitats where they're likely to remain undisturbed by noise or physical intrusion.
- The design needs to ensure that any movement into, out of or within the hide doesn't disturb the wildlife. A darker interior can help prevent the silhouettes of observers from scaring off any wildlife.
- Dogs must not be able to gain entry into the marsh from either the hide or any access paths or boardwalks to the hide.
- Accommodate between 8 and 12 bird watchers or between one wheelchair and 5 to 8 bird watchers.
- Fully accessible regardless of physical ability or age.
- The hide should be safe to gain access to, safe to use and individuals should feel safe using the hide by themselves.
- A weather proof and wind firm structure, the main body of which is safe from flooding whilst the supporting structure needs to be resilient to being situated in wet ground where regular flooding occurs.
- Cattle will graze in Queen's Marsh and so around the bird hide, cattle are fond of rubbing themselves on posts and fences, the current bull weighs just under a ton. The structure

would need to be able to withstand any pressure from grazing animals and prevent them from becoming a nuisance to users of the hide.

- Non drip detailing on the front eaves to prevent rain blowing onto lenses.
- Well considered ergonomics, comfortable to remain in for extended periods of time. It should contain seating but also allow for users to utilize both binoculars and telescopes (i.e. both standing and sitting).
- Ledges need to be available to be utilized by users for taking notes on, sketching on, attaching their telescope to, resting their thermos and packed lunch on. The angle and a lip ought to be considered to prevent items from sliding off.
- There needs to be adequate circulation space at the back of the room for people to circulate behind a second row of standing observers with tripods. Waiting observers may also appreciate a place to sit.
- The floor needs to be very solid to prevent tripods and scopes shaking when people move inside the hide.
- Designed based on the input and involvement of future users – the existing conservationists already operating in the local area – and those responsible for ongoing maintenance of the structure.
- Reduce the likelihood of damage by vandalism or occupation by rough sleepers equating to either fully securable or sufficiently open as to deter rough sleeping, detailing also needs to be vandal resistant.
- Consider impact on existing habitat and the ability of the design to deliver biodiversity enhancement. Examples include: green roofs, bat roosting space, bird nest boxes and platforms.
- Views from the building need to be orchestrated so as to protect the privacy of any residential properties in close proximity, such as the Dartington Lodge.
- Glass can distort images seen through binoculars so any glass viewing windows need to be easy and safe to open or there need to be alternatives available. Windows or viewing slots need to be quiet to open, able to stay firmly open or firmly shut. They need to be storm force wind proof when left open. Windows also need to be easily and safely cleanable from the outside. When in situ the angle of windows needs to prevent light reflection into the viewing area and birds flying into the glass.
- The entrance should ideally face away from Queen's Marsh, if achievable, and not face any windows or viewing slots inside the hide. If it does face a window/ viewing slot then there should be a screen between the door and the window/viewing slot. Any doors need to open and shut quietly.
- Does not detract from the beauty of the surrounding area but compliments and enhances the landscape character, a structure that is completely unique and extraordinary in keeping with Dartington's historical and artistic heritage. Queen's Marsh is situated at one of the two main entrances to the Dartington Estate and the structure ought to reflect that this is a key entry point to the estate.
- Prioritises material sourcing in the order of reclaimed; recycled; locally and sustainably sourced; sustainably sourced and also sourced with end of life in mind.
- Timber available from the estate includes redwood, chestnut, cedar and douglas fir. Timber available locally includes oak and larch.

- You are invited to engage with the potential opportunities offered by efficient and cost-saving manufacturing techniques for prefabrication, particularly those of laser cutting and flat-bed milling for the production of screens or screen-like building elements. The available milling machine can cut pieces of timber that fit within a volume of 1200 mm (width) x 800 mm (height) x 150 mm (thickness) volume. Less than 30 mm thickness is ideal. Appropriate timbers include redwood and cedar.
- Have space to display up to 10 species ID boards.
- Materials or constructed elements of the project need to be transportable to and from site on a trailer measuring 4m by 2m with a weight limitation of 8 tons.
- A construction method statement should accompany the design.
- A cost plan should accompany the design.
- A cutting list should accompany the design.

Selection Process:

The winning design will be selected based on its fulfilment of the brief criteria, imagination and buildability with those criteria being equally weighted.

Design Project plan: (list the project milestones, what is needed to complete them and who is responsible.)

Announce competition	18 th September 2017
Visit Slapton Ley National Nature Reserve	19 th September 2017
Consultation with key stakeholders at Dartington	20 th September 2017
Submission of hide designs	26 th September 2017
Selection of the successful hide design	26 th September 2017
Commence construction	2 nd October 2017
Community presentation of hide designs	TBC October 2017
Monthly check-ins on construction process	1 st Oct, Nov, Dec 2017
Completion of construction	15 th December 2017
Project evaluation	January 2018

Measures of success:

- A design selected by experienced bird watchers for its function and approved by the wider community for its aesthetics.
- A construction project delivered to budget in a timely manner with no accidents and no RIDDOR incidents or incidents relating to environmental pollution and biodiversity loss.
- A durable bird hide which can stay in situ for at least 20 years without requiring significant refurbishment.
- A bird hide which is fully accessible.