Richards Farm, Lower Tale, Payhembury, EX14 3HL
Starlink Satellite Dish
Listed Buildings Consent

Design and Access Statement

Lower Tale is a small hamlet in the Parish of Payhembury, but falling equidistant between the parish centres of Payhembury, Plymtree and Talaton. In recent years, Lower Tale and its neighbour Higher Tale, have been blighted with Class Q barn conversions.

Richards Farm: Historic England listing description: 10.03.1989
PAYHEMBURY LOWER TALE ST 00 SE 3/99 Richards Farmhouse - GV II Farmhouse. Early - mid C16 with major later C16 and C17 improvements, some late C19 alterations. Plastered cob on stone rubble footings, the rear block is partly rebuilt in C19 brick; slate roof, formerly thatch. Plan: L-plan farmhouse. The main block faces north-east. It has a 3-room-and-through-passage plan. At the right (north-west) end is an inner room parlour with a gable-end stack. Next to it is the hall with an axial stack backing onto the passage. At the left (south-west) end is a small unheated service room, probably a dairy or buttery originally. A kitchen block projects at right angles to rear of the left end and overlaps the rear of the passage. It has a gable-end stack. The main block roof is not the original and therefore it is not possible to determine the early structural history of the place. Nevertheless, it seems likely that the house began as some type of open hall house, maybe heated by an open-hearth fire. The hall fireplace was probably inserted in the mid or late C16 and the room was floored over in the early or mid C17. The inner room was refurbished or rebuilt as a parlour about the same time. The kitchen block is also early or mid C17. House is 2 storeys with secondary service outshots to rear of the hall and parlour. Exterior: irregular 3-window front of late C19 and C20 casements with glazing bars. The passage front doorway is left of centre. It is flanked by sloping brick buttresses and contains a late Cl9 part-glazed panelled-door. The roof is gable- ended. Interior: the lower (service room) side of the passage is lined with an oak plank- and-muntin screen, maybe an original low partition screen. The timbers are of large scantling and the screen contains a large Tudor arch doorway, chamfered with diagonal cut stops. The hall fireplace has panelled Beerstone ashlar jambs and a chamfered oak lintel. It contains an inserted cloam oven. Both hall and parlour have chamfered crossbeams. The crosswall between these rooms is another oak plank- and-muntin screen, exposed only on the parlour side. The parlour fireplace is plastered with a chamfered and scroll-stopped oak lintel. Alongside the fireplace is an C18 cupboard with shaped shelves. The rear block kitchen fireplace is blocked although its chamfered and step-stopped oak lintel is exposed. The plain crossbeam here is probably a replacement. The roof over the main house is carried on C18 or C19 A-frame trusses but the kitchen block roof is carried on C17 side-pegged jointed cruck trusses. Listing NGR: ST0677501852

Outside, there is a red-brick barn (assumed to be mid- to late-Victorian) that once housed animals (below) and animal feed (above), according to local sources. The roof is mixed slate with plastic guttering. Internally, the ground floor is made of concrete/brick and the first

floor comprises wooden floorboards. Because of the lack of natural light and adequate ventilation, the first floor is not used, and the ground floor is used for storage only. Attached to the barn is a brick lean-to (assumed to be early to mid-20th C).

Because of Tale's distance from the centre of its own parish as well as from Plymtree, it has not benefitted from any upgrade in broadband, and still relies on copper wires running considerable distance from the Plymtree exchange. Broadband in Tale is very slow and very unreliable. Maximum speed is 6Mbps download (but usually much less) and 1 Mbps upload. The speed is very erratic, and the provision is intermittent with total loss happening on average 4 times per week. Open Reach attends regularly to patch up the system and has confirmed that there are no plans to upgrade the existing copper wires.

Other options for the provision of broadband have been explored, including:

- Bringing fibre to Tale through a self-funded project. The confirmed cost was approx £115k, which is beyond the means of the small hamlet.
- Microwave link to 4G is not viable for Richards Farm because of its location in a fold of the ground and because it is screened by trees and other buildings. This option was investigated in detail.
- Traditional satellite broadband would require a dish that is about twice the size of the proposed solution and Richards Farm is screened in the direction of the signal (approx due east) by Cider and Rose Barns.
- Mobile signal is very poor in the hamlet due to its micro-topography so using 3G/4G is not possible.

Slow and unreliable broadband has a significant impact on the quality of life within Richards Farm. It impedes the ability to work from home (the primary means of employment of the current occupants), to study from home (the current occupant is midway through a Masters degree that is run online), and to have access to everyday services. Also, it has significant impact on the enjoyment of, and access to, online entertainment and digital streaming services. For example, it is not possible to watch catch-up TV without constant buffering, or to conduct online family occasions without buffering or loss of signal.

Design

The Starlink satellite system has been designed to bring internet to hard-to-reach places such as Tale. It is more expensive than broadband provided by fibre (about twice the monthly cost) but it negates the need for hard-wired fibre. It operates via a system of low-orbit satellites and requires a small dish with an unobstructed view of the sky.

The dish is approx 58cm in diameter and approx 38cm in profile (see diagram below). It does not have a projecting feed element and therefore provides a low profile when viewed from the side. As the dish is designed to point upwards, it is the side profile which will be most visible.

The Starlink app allows locations to be tested for their suitability based on obstructions. Numerous locations around the Richards Farm have been assessed using the app but only two options appear to be viable:

Option 1: atop the chimney stack at the south west end of the farmhouse (next to the existing TV aerial).

Option 2: the south east gable end of the barn.

Option 1 is our preferred option because it will give the best broadband performance.

These locations have been chosen for a variety of reasons, as follows:

Option 1: Atop the chimney:

- This location provides the best unobstructed view of the sky within the whole curtilage and therefore will provide the best internet reliability.
- The existing concrete slab that caps the chimney will provide a robust base for the Starlink dish without the requirement for any other fixings.
- Existing TV aerial cables already run into the farmhouse, meaning that the cable from the dish can follow the same route.
- While this location is visible from the road, there is already a TV aerial fixed here, which is much bigger than the Starlink dish. The dish would not look out of place next to the TV aerial.

Option 2: South East gable end of the brick-built barn:

- This location provides a suitably unobstructed view of the sky as required by Starlink, although not as good as atop the chimney.
- The brick of the barn provides a secure mounting point when compared to the cob of the main farmhouse.
- It is completely out of sight of the road, facing only into our own garden.

- Existing cables run between the barn and the house mean that the cable from the dish can follow the same route.
- It has the same aspect as a previous TV satellite dish that we removed when we had the farmhouse re-rendered in 2013.

In Option 1, the dish will be secured to existing structures without any further modification, simply using 4 x screws.
In Option 2, the dish will be mounted on a small wooden plinth fitted to the gable end of the brick barn. This plinth will be made from 15mm external ply, of approx dimensions 600mm x 400mm. It will be attached to the barn using 2 x metal brackets (approx 400mm x 25mm) each requiring 2 x 10mm screws. The plinth will be entirely removable when/if alternate broadband provision is available.

Option 1: Atop the chimney stack, next to the existing TV aerial

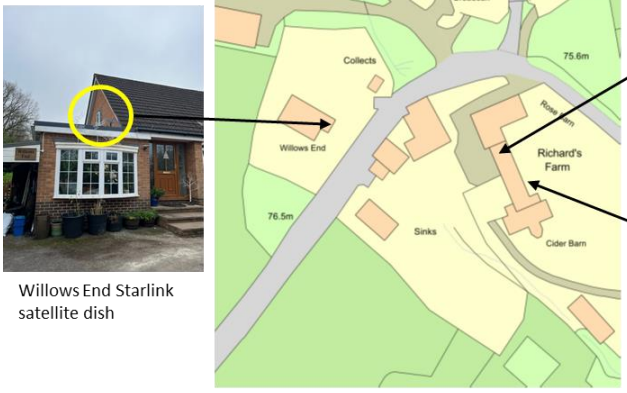
Option 2: South East gable end of the barn

In both options, existing cable routes will be used for the cable from the Starlink dish, removing the need for any further holes in the cob of the farmhouse to be made.

As can be seen in this photo taken from the lane, the south east gable end of the barn (the one on the right of the photo) is not visible from the road. Therefore, Option 2 will have no visual impact whatsoever on infrequent passers-by. In option 1 (atop the chimney) the dish will be visible from the road but will not look out of place as it will be adjacent to the existing TV aerial.

Both proposed sites for the Starlink dish causes minimal physical and visual harm to the listed property, Option 1 because it is next to the existing TV aerial and Option 2 because it is completely out of sight of all passers-by. In both cases, all fixings will be completely removable, and existing cable runs will be used, minimising harm and the need for any permanent alterations.

As shown in the diagram below, the three nearest neighbours to Richards Farm (Willows End, Rose Barn and Cider Barn) all have satellite dishes and have indicated that they will have no issue with us fitting one as described.



Willows End Starlink satellite dish

Rose Barn TV satellite dish

Cider Barn internet satellite dish

The other listed building in Tale (Tale Head Cottage) also has a satellite dish fitted which is visible form the road. Therefore, not only will this proposal for Richards Farm cause no harm to the fabric of the building, but satellite dishes are already prevalent in the immediate locality, including on listed buildings.

Access

The Starlink satellite dish does not have any physical access implications. However, its installation will significantly improve Richards Farm's access to the world wide web and modern means of communications, which are currently very poor and very unreliable. This will greatly improve the occupants' ability to work and study from home, as well as their ability to enjoy their home, as safeguarded in law within Section 8 of the Human Rights Act 2010.

The Government has set a requirement for 10Mbps download to be the minimum standard for every property and, for the foreseeable future, the only technology that can provide this at Richards Farm is Starlink.

Reliable broadband is considered an essential element of modern living and so means to provide it in listed rural properties should be viewed positively when measures are taken to minimise any harm, as is the case in this application.