



The Old Dairy, Hacche Lane Business Park Pathfields Business Park, South Molton Devon, EX36 3LH Tel: 01769 573555

Email: mail@swarch.net
Author:
D. Laing-Trengove

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Historical Assessment & Building Survey

The Windmill Farm Nature Reserve has been owned and managed jointly by Cornwall Wildlife Trust and the Cornwall Bird Watching and Preservation Society since 2001. The tower windmill at Windmill Farm, located at NGR: SW6933115197, dates from at least the 17th century and is a scheduled monument (CO 532) and a Grade II Listed Building. This historical assessment and building survey has been undertaken as part of the Landewednack Windmill Conservation & Environmental Education Project.

Methodology

The Landewednack windmill is relatively well documented and has been the subject of a small number of modern studies. In the following historical summary a timeline has been devised for the structure using information from the three most recent available works; H. C. Douch *Cornish Windmills* (1963), A. Hitchens Unwin *A Cornish Windmill* (1989) and the Archaeological assessment undertaken by Charles Johns of the Cornwall Archaeological Unit (CAU) (2002) (see Reference section below). Information on the modern use and development of the tower was also added by local resident; Mr G. Ratcliff.

An onsite survey of the structure was also undertaken to indentify historic features and phases. This work was carried in accordance with English Heritage and IfA guidelines on the recording of standing buildings and structures.

Historical Summary

The Landewednack windmill is one of a small number of former windmills, still remaining in Cornwall, which includes Treffy Mill at Fowey and Empacombe Mill at Maker (Windmill World 2013). Tower windmills, comprising a masonry tower topped with a rotating timber structure, are recorded in Britain from the medieval period and one of the earliest, mentioned in records dating to 1296, was formerly located in Fowey, Cornwall (Watts, 2002, 110-11). The surviving windmill at Treffey Mill, Fowey is very unlikely to represent this early recorded structure but the modified building that stands today may have had medieval origins. Little is known of the origin of the tower at Landewednack and the following timeline summarises the known history of the building, already well documented in the sources referenced above.

1695	The Lanhydrock Atlas depicts the windmill as a tower with no sails and marked 'Old
	Windmill'.
1699	The Gascoyne Map shows a post mill in full sail, marked simply 'a windmill' (NOT
	'old windmill').
1748	Thomas Martyn's Map, the windmill is marked as in working order.
1755	Lease of Windmill Croft to Richard Felly – no dwelling house is mentioned
1764	The Dionysius Williams Map - no other buildings on the site are shown or mentioned.
c.1770	Thomas Fonnereau's 'Plan of Windmill Craft', the mill has deteriorated and no other
	buildings are shown or mentioned on the site.
1780	New owner – Sir Christopher Hawkins of Trewithen in Probus.
1787	Lease to James & Philip Charles, with the condition to build a windmill.
1790	Initials BH carved into the masonry of the south doorway.
1800/1803	Samuel Polkinhorne tenant and miller.
1809	Lease for Windmill Tenement advertised in the Royal Cornwall Gazette, and later that
	year in the Sherborne Mercury.
1810	Lease taken by John & James Chittock (7 year).
1817?	Lease continued by Samuel Chittock (3 years).

18	22	Lease to James Charles – 'for building & improvement'.
18	24	Lease advertised in the West Britain – and taken by John Savery from Devon.
18	27	Marked on the Greenwood map.
18	28	Lease advertised in the <i>Royal Cornwall Gazette</i> , the windmill is complete and working on grist at this time.
18	29	Tradition relating the windmill to sheep rustling; a thief or murdered man in a coffin is buried inside the walls!
18	30	The windmill appears to have been disused as a mill from c.1830s.
18	41	John Hoskin listed as part owner of Windmill Tenement.
c.1	873	Rev C.R. Johns notes the 'Old Windmill' as a landmark.
19	16 & 1930	Charles Henderson noted that the structure was recently roofed, but had been roofless prior to this.
19	39-45	Use of the windmill tower as a Home Guard look-out post; modern window inserted above the south doorway.
19	57	The windmill holding is taken on by E.D. Bishop, windmill gradually decayed.
19	67	Roof collapsed.
19	71	Top three feet of the walls were repointed.
20	09	English Heritage visual inspection carried out.
20	13	South West Archaeology building survey undertaken.

References

Douch, H. C. 1963: Cornish Windmills

Hitchens Unwin, A. 1989: A Cornish Windmill, Journal of the Trevithick Soc 16, 35-49

Johns, C. 2002: Windmill Farm, Landewednack, Cornwall: an Archaeological Assessment. CAU

Watts, M. 2002: The Archaeology of Mills and Milling. Gloucestershire

Windmill World 2013: Windmills of Cornwall: Surviving Windmills.

http://www.windmillworld.com/uk/cornwall.htm

Building Survey Results



Figure 1: The approach to the windmill tower from the car park to the east.

The windmill is approached from the east, past Windmill Farm to the south of the track, the car park to the north and with the modern timber sheds and Information Centre of the nature reserve lying to the south-east (Figure 1). The area is covered in rough grassland and scrub and the ground is uneven with masonry and some cement rubble beneath the vegetation. Just to the north-east of the windmill is an overgrown depression or pit, which may represent the quarry from which the stone for the construction of the windmill was extracted, as elvan and serpentine are said to be common within the locality (Gary Ratcliffe (Windmill Farm) *pers. comm*). This is bordered to the east by an overgrown bank with the car park beyond; to the north-west and south-west agricultural fields stretch down to the coast, with the remnants of the WWII costal defences, partially camouflaged and overgrown, dotted within them.

The circular tower of the former windmill is well constructed of large undressed semi-coursed masonry boulders and blocks, varying greatly in size, with smaller stones between, bonded in an orangey earth/clay bond. The walls are between 1.10m - 1.20m thick at ground floor level, but taper toward the top of the structure. There are opposing doors to the north and south, to the north the opening has been partially blocked below with a comparatively thin partition of rubble stone in modern cement (Figure 3). The lintels supporting the masonry above the door openings are made up of large serpentine blocks. To the south this is comprised of three blocks through the wall, with the central space between the interior and exterior stones and part of the base of the internal lintel now cemented with pebbly mortar. To the north the lintel is composed of two blocks with some stone patching between. The door openings are not splayed.



Figure 2. The windmill viewed from the south, showing the opposing door openings and south, east and west window openings (2m scale).



Figure 3: The partially blocked north door opening, viewed from the north (2m scale).

There is a window opening at first floor level over the south door and above at second floor level to east and west (Figure 2). There is also a forced window opening just to the west of the north door at first floor level, apparently knocked through and utilised during the Second World War, with insubstantial timber lintels and frame, now propped up with rough timber logs and with the disturbed wall above now failing and with modern pinkish cement repairs (Figure 4).



Figure 4: The forced WWII window opening to the north, with modern cement repairs above and to the upper wall, viewed from the north.

The exterior walls have been re-pointed in cement to the lower levels with much of the upper *circa* 1m rebuilt and flush pointed and with repairs to the windows to south, east and west with partial modern brick infill to the lower exterior portions of both upper openings (east and west windows).

To the interior, the floor is now mud with masonry rubble scattered throughout. However, the threshold of the building to the south is laid with stone slabs, with cobbles to the interior edge, suggesting that the internal floor surface may have formerly been cobbled.

The interior walls are mostly un-pointed and the masonry bonded with earth/clay. The interior may formerly have been plastered with the same material, as there are small patches adhering to the masonry of the upper levels and this appears to be the same in colour and consistency as the bonding within the walls at ground floor level (Figure 5). There are traces of modern cement to the window openings and a cement ring around the interior at first floor level, where a floor was inserted during the Second World War (Gary Ratcliffe *pers. comm*) (Figures 5 & 6). The walls also step back forming ledges, indicating possible former floor levels or ledges to support the former interior machinery (see Figures 13 & 14).



Figure 5: The small patched of former clay plaster remaining on the wall to the east of the south first floor window (with modern cement below), viewed from the north.



Figure 6: The south window, with cement to the lintel and sill, with cement former floor level below and the west window with (reset?) lintel above.

The upper limits of the tower have been re-pointed and at least partially rebuilt; the change in build is particularly visible around the two upper window openings. To the interior the lintels of these east and west windows are now single slabs, not set flush with the internal face of the wall (see Figure 6 - top right). The reveals of the western window are not splayed and are ragged, suggesting that they are recent or have been rebuilt.

The interior lintel of the door to the south has cracked and been repaired with concrete, there is also some modern cement pointing to the reveals of the opening and a line of cement mortar adhering vertically down the sides of the opening just to the north of the exterior face; marking the position of a former doorframe. The wall to the east has two cavities within the interior face of the masonry just below the level of the lowest (first floor) ledge. These do not appear associated with any former internal workings however, and they may simply be where stones have been removed or the wall has partially collapsed.



Figure 7: The cavities in the east wall, viewed from the west (2m scale).



Figure 8: The squint window in the west wall of Windmill Farmhouse, viewed from the west (2m scale).

Windmill Farm lies just to the south east of the windmill, the rubble stone farmhouse clearly dates from a period when the windmill was working and viable. There is a small squint window in the west wall of the building which is currently partially blocked to the interior, but that, when unobstructed, gives a clear view of the windmill. From the comfort of the house the occupants were able to check the operation of the sails without braving the elements themselves.

Phasing of the Building

It was not possible to identify more than three phases of construction or repair within the building, two of which are modern (see Figures 13 & 14). The earliest cement repairs or additions to the structure appear to date to the WWII use of the tower, these include the inserted window to the north, a ring of cement probably formerly associated with an inserted floor at first floor level and concrete and cement repairs to the openings. The later, 1970-80s repairs are clearly visible at the top of the

tower, where the upper walls and openings have been reconstructed. There has also been some repointing in modern mortar to the exterior face of the tower.

The majority of the structure, with the exception of the modern (20th century) repairs, appears to be bonded with orange earth/clay. This can be seen both between the masonry of the exterior and the interior, including within the core of the wall where masonry has been removed or collapsed to the north-east (Figure 9). The main body of the structure as it stands today would therefore appear to date from a single period. The earth bonding of the walls suggests that this is probably the original structure first noted in the late 17th century, for, if as the records suggest the structure was rebuilt during the late 18th century (see section above), one could perhaps expect a stronger mortar to be used, probably containing lime. The rebuilding in this instance may simply refer to the reinstatement of the timber sails and windshaft onto the top of the remaining tower structure. The robust size and thickness of the walls gives these tower structures a particular durability, and where allowed to remain an increased longevity. It is therefore likely that this extant structure dates from at least the 17th century.



Figure 9: The interior of the cavity within the north-east section of wall, viewed from the south-west Note the orange earth bonding.



Figure 10: The windmill, viewed from the east (2m scale).



Figure 11: The windmill viewed from the west (2m scale).



Figure 12: The windmill, viewed from the north (2m scale).

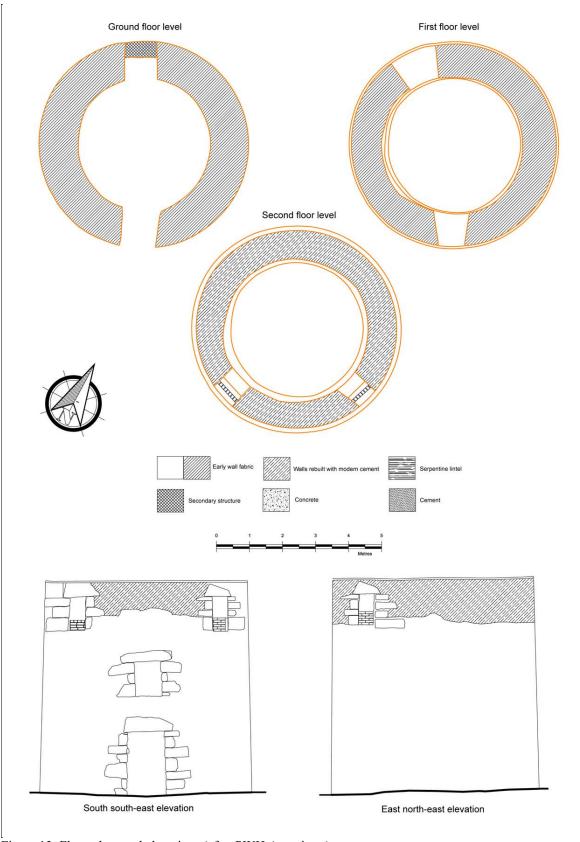


Figure 13: Floor plans and elevations (after PWH Associates).

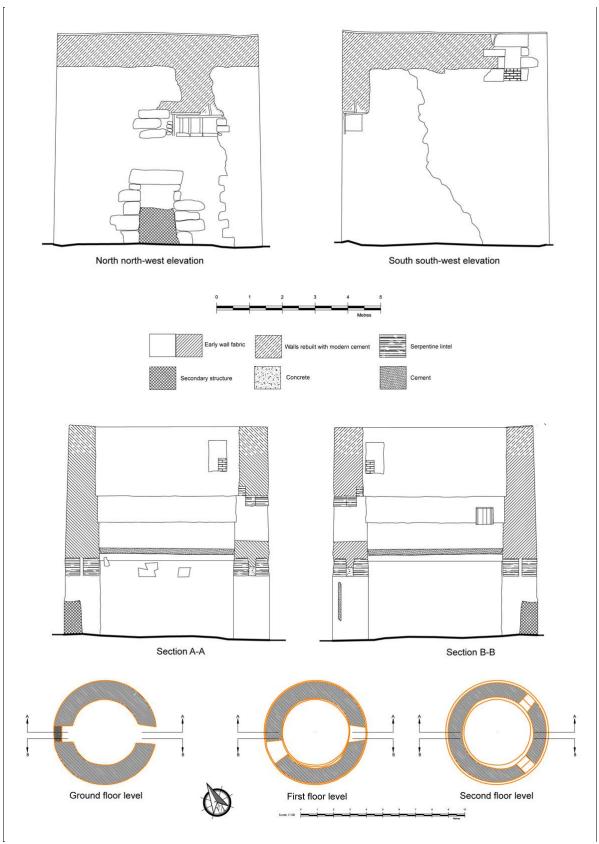


Figure 14: Elevations and sections (after PWH Associates).