

# LINCOLNSHIRE MUD AND STUD (M&S)

CONTEXT, TECHNIQUE and RESEARCH

## M&S: HISTORY & CONTEXT

Lincolnshire mud and stud (M&S) has likely been the least known and the least appraised part of English heritage. However, 30 years ago something changed. A small group of enthusiasts – architects, historians and practitioners – rediscovered this technique and dedicated their careers to learning about M&S and spreading this *knowledge*.



"In the low rich country they have commonly built of what is called stud and mud... buildings are of timber walled with clay... the stud-pieced as large as man's arm". Young encouraged landowners to build M&S for its cheapness, durability and suitability for the health and well-being for peasantry: "Smaller sort brick cottage for one family will cost £50. But of mud and stud, one third less." (Young *General View of the Agriculture of the Country of Lincolnshire*, 1799).

"The Mud and Stud cottages in Lincolnshire have never been in the forefront of this picture partly because this large county seems so far away from great conurbations and partly because the construction behind rendered walls and beneath the flowing lines has been concealed or, if revealed, has seemed rude and insubstantial when compared to the robust craftsman-based construction of the timber frame" (Brunskill Ronald William, *Forward to Lincolnshire Buildings in the Mud and Stud tradition* by Rodney Cousins)

"Only just over one thousand M&S structures have survived into 20th century but neglect and the stigma that 'mud is primitive' has led to the demolition of many of them' (Rodney Cousins *Lincolnshire Buildings in the Mud and Stud tradition*, 2000)

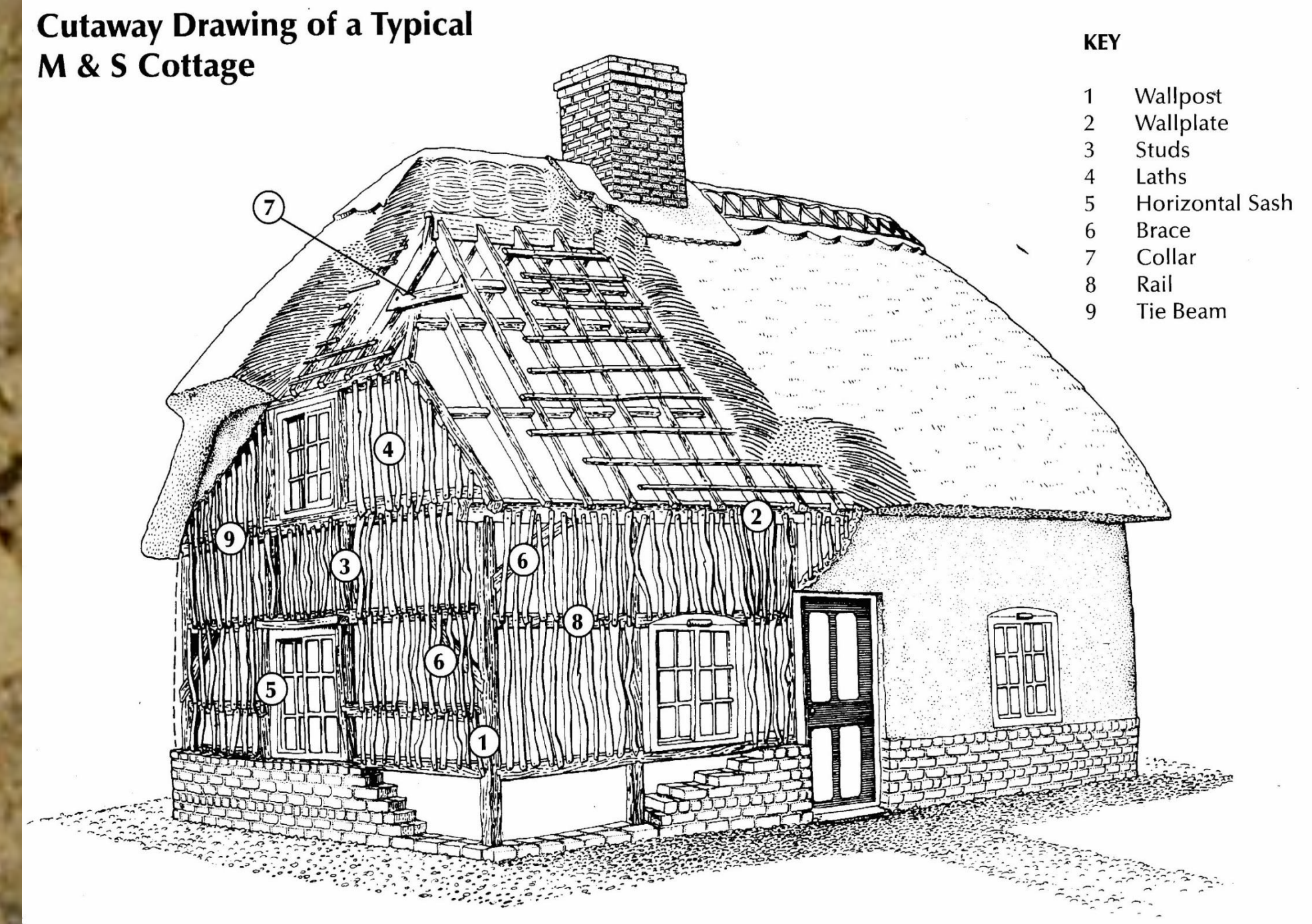
"Such houses required no professional builders in the erection; nothing but the skill of the village carpenter, and a knowledge possessed by the many folk in the village of digging the clay and puddling it" (Maurice Barley, *Lincolnshire and the Fens*)



In 1980s many of M&S has been demolished and even burned to the ground with the authorities' approval. Owners feared that once listed, buildings would be impossible to refurbish. This situation changed in 1980 thanks to a project initiated by Rodney Cousins and the Museum of Lincolnshire Life. This project became a catalyst for the subsequent formation of a grassroots organization which since 1995 has been known as the East Midlands Earth Structure Society.

## M&S: TECHNIQUE

Cutaway Drawing of a Typical M & S Cottage



Only primary load-bearing M&S structures require better quality timber. Rails and studs are relatively thin (approximately 125mm x 125mm) and are located at approximately two metre centres. Unlike most historical frame constructions, M&S walls do not have externally exposed timber. Load-bearing elements are covered under a thick external layer of earth. This solution eliminates cracks which usual appear between load-bearing and non load-bearing elements and thus minimises draughts. Timber exposed inside together with ceiling beams creates characteristic interiors often appreciated by inhabitants.



Vertical laths fixed to rails, which serve as the construction's secondary reinforcement, were made out of poorer quality timber (approx. 15mm x 50mm). Laths create a ridged underpinning for earth walling and good background for plasters as they can be well wetted, this assisting the slower drying of the plaster and thus giving a stronger key. Using this inner frame allows walls to be more economic and thinner. M&S walls can typically be as thin as 250mm.

The plan of an M&S cottage is determined by the central chimney stack which traditionally divides the building into two parts. Access to the upper rooms is usually via ladder. These rooms, typically possessing a 500mm knee wall are often entirely within the roof space. Half-hipped roofs covered traditionally with thatch or reed gave those cottages their distinctive picturesque look.

## M&S: RESEARCH

In 2015, 35 years after the first project that attracted public attention toward M&S, a piece of mixed method research was undertaken in order to shed light on the impact of the historical context on EMESS as an organisation.

A survey was sent by mail to all 85 M&S dwellings, out of which 23 have been returned. 12 households have agreed to participate in an extended research project looking at comfort and cost of living in M&S houses. The research through 1 hour long structured interview and a walk-through the house, with the inhabitants commenting on various aspects of living and happiness. Additionally 1 hour long structured interview has been undertaken members of between from EMESS and other M&S popularizers.

Analyses of interviews and surveys identified main themes which reappeared in Discussions with both M&S popularisers and inhabitants of M&S cottages. Those opinions and shade a light on differences between those two groups

### OPINIONS OF M&S POPULARIZERS

(1) Belief that vernacular architecture needs to be preserved more because it bears unique values:

"M&S is not found anywhere else other than Lincolnshire and some places in America where it was brought by emigrants"

(2) The belief in good environmental properties of earth architecture which should be appreciated more by the wider community

Opinions on the thermal qualities of M&S vary greatly: from "best material, warm in winter, cold in summer" to "rather primitive ancient techniques which is valuable mainly from a historical point of view"

(3) The belief that earth architecture could initiate positive social dynamics.

"architecture is important in the community, a building can alienate people if they don't think it's part of the community or it can help bring people together. A building has got that ability to be part of a community."

### OPINIONS OF INHABITANTS OF M&S COTTAGES

(1) Emotional attachment to the houses

"We love the property and we will live here all our lives"

When asked an open question "What do you believe are the positive aspects of living in your house?"

47% of respondents mentioned the aesthetically pleasing values of their cottage without any prompting ("Pleasing to the eye"; "Beautiful");

39% mentioned the fact that they enjoyed the connection with history ("It is a privilege of being a guardian of heritage");

30% admit that they love the uniqueness of the building ("None other is exactly the same");

22% mentioned that they value the atmosphere of the cottage ("it makes you feel good").

(2) Need for experts

Many inhabitants living in M&S houses poses challenges which could be overcome only with the help of M&S specialists.

"We knew nothing about old buildings like this at all. We wanted to restore it to its former glory. We were fortunate when somebody mentioned EMESS, and we made quite a lot of friends. We went to a lot of different meetings and we got to know the people who knew an awful lot, who knew how it was actually built, how old it was."

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When asked about the negative aspects of the houses they live in. 52% without any prompt mentioned poor thermal performance; whilst 52% also noted the high cost of living related to heating and the high price of maintenance.

### RESEARCHED M&S COTTAGES



Thimbleby, White Cottage



Bardney, Silver Birch Cottage



Cockerington, Holme Farm



Tattershall, Pow Cottage



Moorside, Rose Cottage



Horncastle, Wold Cottage



Coningsby, Penny Place



West Rasen, Post Box Cottage



Mareham Le Fen, Finch Cottage



Skendleby, Wayside Cottage



Moorby, Field Cottage



New mud & Stud cottage Near Skendleby