

# STAMBRIDGE MILLS, STAMBRIDGE, ESSEX

# HISTORIC BUILDING RECORD

(NGR TQ 8870 9038)



Commissioned by CgMs

Report No. 2011262

# STAMBRIDGE MILLS, MILL LANE, STAMBRIDGE, ESSEX, SS4 2AA

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#### 1.0 Introduction

- 1.1 In October 2011 Archaeology South-East (a division of the Centre for Applied Archaeology, UCL) carried out an Historic Building Record of Stambridge Mills, Mill Lane, Stambridge, Essex, SS4 2AA (Fig. 1). The work was carried out in advance of the development of the site.
- 1.2 Following the stipulations of Planning Policy Statement 5: Planning for the Historic Environment, the mill complex was subject to a programme of historic building recording carried out to English Heritage Level 2 - 3 standard as agreed following consultation with Adam Garwood, Essex County Council Historic Environment Management (ECC HEM) officer.
- 1.3 On approval of the Written Scheme of Investigation created as a result of the recording requirement, the site was visited in October 2011 by Jane Briscoe and Amy Williamson in order to create the historic building record. This report is the result of that record.
- 1.4 None of the buildings are statutorily listed, or included on the Council's list of locally-important buildings.

#### 2.0 SCOPE AND METHODOLOGY

- 2.1 The recording action incorporated the survey of a number of buildings to Level 2 3 standards as defined by English Heritage (2006). The current layout of the site and allocated building identification numbers are shown on Figure 2.
- 2.2 The purpose of a Level 2 survey is to provide a descriptive record of a structure. The Level 2 survey involved gathering data on the exterior of the structure and the interior, wherever possible, which was then described and photographed. The descriptive element is intended to provide conclusions on the development and function of the building being surveyed. No comprehensive drawn record is required of a Level 2 record but illustrations may be included.
- 2.3 For the Level 2 part of the survey, the drawn record was based on checking and annotating existing site plans provided by the client.
- 2.4 A Level 3 record is an analytical record which is intended to provide an introductory description followed by a systematic account of the building's origin, development and use. The elements of the structure informing the results of the analysis will be discussed, such as the particular structural components or plan form which has led to the interpretation of the building.

- 2.5 For this project, the Level 3 part of the record was focussed on a more-detailed analysis of the historical background of the site, rather than on a comprehensive drawn record. No detail plans of the building were created partly because of access issues the historic structures were largely the areas badly damaged by a fire and vandalism. Additionally, the historic areas of the mill that would theoretically have provided some information if planned had been comprehensively changed from their original form.
- 2.6 Subject to accessibility, a photographic record was made of the external and internal elevations and layout of the buildings. The photographic survey included general external and internal elevations and any surviving architectural detail, fixtures and fittings.

#### 3.0 LOCATION AND SETTING

- 3.1 Stambridge Mills are located on the northern side of the tidal section of the River Roach, to the east of the town of Rochford, in the southwestern corner of the parish of Stambridge. The site is accessed at the end of Mill Lane, which leads south from the road leading from Rochford to Great Stambridge village to the north-east. Short rows of houses lie on either side of Mill Lane to the north of the mill, and a nursing home has been built to the east of the mill site.
- 3.2 The immediate area around the mill is agricultural and industrial in character; farmland lies to the north, west and east, and on the southern side of the river is an industrial estate which uses the river for transport.
- 3.3 The site lies at less than 5 metres above Ordnance Datum (O.D.), and the surrounding topography is flat, rising only to 15 metres above O.D. two kilometres to the north. The underlying geology is marine in nature, comprising sand and gravel river terrace deposits on the northern side of the site, moving through tidal flat deposits of clay and silt to clay, silt, sand and gravel alluvium towards the river (British Geological Survey 2011).

#### 4.0 DESCRIPTION OF THE BUILDINGS

Building 1 (1969-74x2011)

4.1 Building 1 (Plate 1) is located to the east of the weighbridges to the south of the main entrance. It is a single-storeyed, brick-built building with a hipped, tiled roof and a projecting entrance-way under an arched roof. There is a large timber window set on a slightly-corbelled section of brickwork wrapping around the south-western corner which seems to have allowed good visibility within the main open area of the site. This

suggests that it was probably used to oversee traffic going in and out of the site. A short corridor to the east (rear) of the building links this structure to Building 2.

Building 2 (1922-23x1938; 1969-74x2011[part])

- 4.2 Building 2 (Plate 2) lies to the east of Building 1 and is linked to that structure by a short, enclosed corridor. In its initial form, this building was of 'L'-plan. It is capped with a fully-hipped roof arranged in 'U'-plan, the base of the 'U' to the west and the northern arm shorter than the southern. The structure has a central entry in the west elevation with rooms to either side and chimneys in each end wall. It is of two storeys. The external walls are brick-built using an unusual bond formed of alternating courses of six headers with a single stretcher at each end and six stretchers with single headers at each end. The bricks are a dark purple-brown colour and there are burnt headers incorporated randomly. At the top of the wall there is a deep, dentillated eaves cornice which supports the base of the slightly-kicked roof slope. The roof is covered with tiles.
- 4.3 The structure is lit by a number of sash windows with flat heads formed by splayed, rubbed bricks laid on end. The windows are all alike, where visible, being of six panes in each sash arranged 3x2, with plain external horns under the top sash. The window cills project slightly from the face of the wall and are all painted white.
- 4.4 A modern extension in the north-eastern corner has regularised the footprint of the building. The decorative eaves detail of the earlier structure has been copied on the extension but on this structure is formed in brighter red-brown bricks laid in stretcher bond. A flat-roofed turret to the rear (east) of the building is of the also original to the structure and probably housed services, perhaps the WCs. A further flat-roofed extension against the southern part of the east wall is only a single storey in height and constructed in red-orange stretcher-bonded bricks. A new entrance has been created against the south wall, where a small hipped-roof, single-storeyed extension has been built with a door in its west wall, accessed by a ramp.
- 4.5 This building was recently used as office accommodation. However, its appearance as a neat, well-appointed, early-20th-century structure suggests that it was originally inhabited as a house rather than as commercial space.

Building 3 (1969-74x2011)

4.6 At the time of the site visit, two-thirds of Building 3 (Plate 3) had been demolished, although the debris had not been cleared and still lay where it had fallen. This structure is of two storeys and had a single-pitched

roof sloping to the north. It was built using yellow London brick with one frog stamped, in most cases, 'L B C', for London Brick Company. The external walls were cavity walls. In the surviving part of the northern wall there is evidence for a blocked window and a blocked door to each storey, suggesting either the location of a fire-escape or an earlier storage building, where external first-floor access was necessary. The internal walls, where visible, are of plasterboard and regular timber studwork. In its most recent use it functioned as offices: the modern office furniture was still partly visible.

4.7 This structure has been built onto the end of a single-storeyed structure to the east (Building 4). Where the two-storeyed east wall of Building 3 rises above the roof of Building 4, it is clad with corrugated metal.

Building 4 (1938x1955[part])

- 4.8 This is a single-storey structure aligned east-west, formed in yellow London brick laid in Flemish bond (Plate 4). It initially had five Crittall windows in the north wall, the western of which has been blocked. The eastern end wall has been rebuilt in brighter yellow brick forming a gable: there are two windows in this wall. Each window has a central, upper, pivoted opening, such as is often seen on workshops or storage buildings, and has a sloping brick cill. The roof is covered with corrugated metal which appears to be a modern covering.
- 4.9 Inside this structure the walls are of exposed and painted brick and the interior of the roof covering is hidden by boards. The roof is supported on metal trusses (Plate 5). The space was probably used as a workshop.

Building 5 (1969-74x2011)

- 4.10 Building 5 (Plate 6) appears to have been constructed as infill between Buildings 4 and 6. It is covered with a corrugated-metal lean-to roof which slopes down from Building 6. The eastern end of the structure is constructed in the same yellow stock bricks as Building 4; indeed, the wall is continuous between the two structures, indicating that this structure was probably built at the same time that the end of Building 4 was truncated. There is a sliding door at the north end of the eastern wall leading to the interior.
- 4.11 In this building the roof is also constructed using metal trusses, although these trusses are more substantial than those within Building 4 (Plate 7). The space in Building 5 is divided into two by a breeze-block partition. The smaller room is positioned in the south-western corner and leaves a corridor against the north wall leading to the western end of the building. The northern wall of the small room is formed by using curtains. This structure also appears to have been used for storage.

#### Building 6 (1938-1955; 1955x1969-74 [part]; 1969-74x2011 [part])

4.12 This building (Plates 4 and 6) comprises a tall structure (approximately five storeys) with a two-storeyed structure projecting at the eastern end. The taller section is flat-roofed; a railing around the outer edge indicates that it was used as a walkway. The two-storeyed section has a roof hipped to the east, although it is mostly hidden below a tall corrugated-metal turret which rises at the eastern end of the taller section and continues for the full length of the building. The lower section has two-pane Crittall casement windows facing the east with concrete lintels, of a mid-20th-century style. There are two first-floor windows and a single ground-floor window on the southern side of the east elevation. In the centre of the ground-floor wall there is a wide, single doorway. The brick forming the walls, visible beneath layers of paint, is laid in Flemish bond.

Building 7 (1969-74x2011)

4.13 Building 7 (Plates 8 and 9) appears to be of late-20th-century date, rising to a height taller than the adjacent Building 6 and separated from that structure by a narrow gap, closed at each end by corrugated metal, which material also forms the walls of Building 7 for their full height. There is a large vehicular doorway at each end of the building on the ground floor, the western of which is set back into the structure a short way, the wall above being jettied over the opening. There is also a pedestrian doorway just above the large doorway and one at the very top in the eastern elevation. An additional ground-floor pedestrian doorway is positioned at the eastern end of the south elevation. Two high-level doors are sited at the western end of the north wall. The remainder of the walls are featureless.

Building 8 (1969-74x2011)

4.14 Building 8 (Plate 10) comprises six tall silos set into a concrete base and connected together at the top by a raised metal walkway which also protects pipes leading from the elevator which is positioned at the southern end. This elevator leads from Intake Pit 2. A second, lower elevator serves Building 9 via a suspended pipe. The silos are constructed using metal plates bolted together and were made by Simplex of Cambridge. The silos have rounded bases sunk into the concrete base below ground level; the concrete base is slightly raised above the level of the road to the west. Each silo has two large-diameter pipes set at 90 degrees to one another at the base which rise to vent heads positioned facing the centre of the group of structures.

Building 9 (1955x1969-74)

4.15 The ground floor of Building 9 (Plate 11) is constructed in panels of brick divided by chamfer-edged concrete columns. Doors and windows pierce

the brickwork in the north elevation, and in the east wall there are vents with louvres as well as doors. Above the ground floor the building rises with shuttered-concrete walls, ribbed at intervals. There are 22 sections of shuttered concrete. It appears to have originally been a rectangular structure, but has had a turret added against the south wall, constructed using brick on the ground floor and corrugated metal above. A white external metal chute leading from Building 11 enters the structure low in the south ground floor wall. The building can be entered at first-floor level in the south wall, and there is second- and third-floor access from Building 9 to Building 12 via raised metal walkways.

4.16 An elevator rising from Intake Pit 2 serves Building 9. The elevator is positioned away from the structure, close to Building 8. Grain is brought into the structure via a pipe which is raised above the road.

Building 10 (1969-74x2011)

4.17 This building (Plate 12) comprises a small silo constructed of riveted plates bearing the name 'HYDROGLAS'. To the north of the silo is a square, flat-roofed structure of grey-blue brick, which is entered via a door in the western elevation. Inside the building is a series of cast-iron pipes: a fluid control system created by Armstrong. This company was founded in 1934 and expanded in 1952, so it is probable that this system post-dates 1952. The equipment has a well-cared-for appearance and seems to be of recent date. Two steam boilers, one by Cochran Ltd called the 'Wee Chieftain', are housed in a white-brick lean-to structure to the south of the silo. There is an opening in the west elevation of this lean-to blocked in dark purple-blue brick to the north of a double-width opening below a concrete lintel. The lean-to roof is covered with corrugated metal supported on 'I'-beams. To the east of this group of buildings and built around the east side of the silo is a second, large leanto shed constructed by widely-spaced timber studs on a low brick sleeper wall, clad with narrow, softwood weatherboarding. There is a set of plywood doors hung on hinges common to the first half of the 20th century in the southern wall. The eastern and northern walls are clad with blue plastic as the weatherboarding has been removed. The roof is covered with softwood boards supported on scaffold poles; these may have been a temporary measure but have been installed for a number of years. The floor of the lean-to is laid with concrete slab. The stucture appears to have been used as a storage shed.

Building 11 (1897x1922-23)

4.18 Building 11 is a brick-built, three-storeyed structure at the south-eastern corner of the group of mill buildings near the wharf. The bricks are golden-yellow stock bricks laid in English bond. At the point at which Building 11 abuts Building 12 to the north the brick rises above a third storey, but this brickwork is very slightly lighter in colour and appears to

be a later addition, suggesting that the two structures were originally separate. The eastern corner of this structure at ground-floor level incorporates bull-nosed bricks, which suggests that there was a thoroughfare between the two buildings.

- 4.19 The north-eastern wall originally had an arrangement of nine windows, three on each floor, capped with brick-on-edge segmental arches. The windows are biased to the north-western end of the building, with an area of blank brickwork to the south-east. These windows have been significantly altered: the second-floor windows being widened and having concrete lintels inserted; the first-floor windows being blocked. northern window on the ground-floor, the central window on the first floor and the southern window on the second floor have been enlarged into doorways reached by an external metal staircase which has been capped by a roof to allow all-weather access. There are segmental-arched windows on the south-western half of the south-eastern wall. There is a door at ground-floor level in the north-eastern half of this elevation and blocked openings above: these appear to have been doorways but may have been altered from window openings.
- 4.20 The structure is capped with a shallow-pitched roof covered with corrugated metal sheets. A turret rises from the roof at the south-eastern end, above which is a ladder tower to allow access to the hoist arm which stands to the south of the building.
- 4.21 The ground-floor space within this building appears to have functioned as 'dead' space, for storage or as a thoroughfare, and to allow access to the base of any machinery. The tiled ground floor seems to have been raised, as the storey height is very low given the height of the building. The first-floor joists are NW-SE aligned and supported by perpendicular 'l'-beams. Cast-iron posts rise to these 'l' beams at centre span. There are trimmed hatches at intervals in the floor which allow grain to be passed from the first to the ground floor. A wide opening leads through from Building 11 to Building 13 in the adjoining wall; a window lights the space in the north-western corner. There are two adjacent doorways in the north-western wall which leads through to Building 12. The walls of Building 11 are plastered internally.
- 4.22 Buildings 9 and 11 are connected by a series of large-diameter pipes. These lead from Building 11, served by air inlets at intervals. The pipes rise in short sections, finally terminating in a steep chute leading in through the ground-floor wall of Building 9. This pipe leads through what were originally two adjacent steel-framed structures positioned in the angle between Buildings 9, 11 and 12. All that remains of these buildings are the frames: their function and form are not known.

#### Building 12 (1872; 1897x1922-23 [part]; 1922-23x1938 [part])

4.23 This structure is constructed in yellow stretcher-bonded brick on the ground floor, with corrugated metal above to the fourth storey and a secondary corrugated wall above that, indicating that the structure has been raised at the same time that the corrugated-metal walls were fitted to Building 9. There is a section with slightly different construction at the south-eastern end, though both structures incorporate vertical 'I' beams in the external faces of the walls. At the south-eastern end of the north-eastern wall there is a door with a concrete lintel. There are six windows across the north-eastern wall of the main part of the building which have been blocked above ground-floor level. The ground-floor windows are fitted as vents; all have flat concrete heads and sloping brick cills. The windows in this wall indicate that this structure was built before Building 9, which blocks the light to the openings.

#### Building 13 (1897x1922-23 [part]; 1922-23x1938 [part])

- 4.24 Building 13 is a long building fronting the wharf, with a step in the southeast wall indicating two construction dates. It abuts Building 11, and is positioned slightly further to the north-west. This building is constructed in part in the same sandy, yellow brick as Building 11, laid in English bond, including the section immediately adjoining to Building 11, which rises to three storeys, and the ground-floor wall for the building's full length. There is a slate damp-proof course at the base of the groundfloor wall, and the south-western corner is formed of purple-black, bullnosed bricks. The first- and second-floor walls have been rebuilt in pale yellow, and above this the walls are constructed in corrugated metal which has been significantly damaged by fire. There are a number of openings evidenced in the surviving ground-floor brickwork which were blocked in the same brick as those which form the upper parts of the walls. There are four openings in the eastern structure and three in the shorter, western structure. The eastern structure had two doors and two windows alternately positioned. The western part had two windows and a central door. The proportions of the windows indicate that they were probably sash windows. There is one opening in the upper part of the wall, just below the corrugated-metal walling, and there are two vents, one in the upper brickwork of the western part and one in the corrugated metal walling of the eastern part.
- 4.25 The break in the walling at first-floor level continues around the south-western wall, against which is positioned a small, single-storeyed lean-to structure with a white, corrugated-metal roof. This structure is butt-jointed to the wall of Building 13.

#### Building 14 (1872 [part]; 1938x1955 [part]; 1955x1969-74 [part])

- 4.26 This structure has been built onto the north end of Building 12. It is a two-storeyed structure built in varicoloured orange-yellow brick which is typical of the mid-20th century. Like Building 12 the upper walls are of corrugated metal, which seem to have been added above an existing corrugated-metal roof. There is a lean-to roof of the same material sloping down from Building 12, above the first-floor part. A door in the north-eastern first-floor wall is accessed by an external stair. There are two doors with louvred fanlights above in the north-western wall, and one with no fanlight in the south-western part of the wall.
- 4.27 The north-eastern wall of Building 14 is continuous with the wall to the south-west, which forms part of Building 16.

Building 15 (1872; 1922-23x1938 [part])

- 4.28 This structure is built in brickwork to the third floor and has corrugatedmetal walls above that, standing taller than Building 13 to the south-east. The north-western end is formed of corrugated metal for its full height. Building 17 abuts the south-eastern elevation, obscuring all but the northwestern part of the ground and first floors. There are plain, timber double doors positioned towards the end of the building, set into an area of rebuilt brickwork. The windows on the ground and first floor have brickand-a-half, segmental-arched heads. These windows are also within areas of rebuilt brickwork. A row of windows on the second floor have been blocked in paler-yellow brickwork: if these windows were evenly positioned along the length of the building, there would have been five openings. Four are evidenced; the second to the north-west has been obscured by the cutting-through of a double door. This door has narrow side-lights and a rectangular fanlight, in a style typical of the second half of the 20th century. Four windows above the blocked openings can be seen lighting the third floor. The jambs of these windows are formed in pale yellow brickwork, suggesting that they have been cut in or reformed in the existing wall. The openings have one-brick, segmental-arched heads. Vents have been cut through the upper part of the wall. The surviving fenestration and doors indicate that there are no original windows remaining in this elevation. The north-western elevation is of corrugated metal; the ground-floor wall is obscured by Building 16.
- 4.29 Only the ground floor of the structure is visible internally. This is an empty space, interrupted at regular intervals with supports for the first floor and pipes to the machinery which must have been positioned above.

Building 16 (1872 [part]; 1955x1969-74 [part])

4.30 Like Building 14, this lean-to structure is built in mid-20th-century brick and the north-western and south-western elevations are rendered. A

small lean-to shed is positioned at the south-western end with a ply-wood box above. There are two steel frames positioned over Building 16 which support a horizontal ventilation shaft. To the south-west is a fenced area containing an electrical sub-station.

Building 17 (1938x1955 [part]; 1969-74x2011 [part])

4.31 Only the north-western elevation of Building 17 is visible. This is built upon a low, modern-brick sleeper wall with boarding above. Just off-centre is a tall loading door closed by a metal rolling shutter. Adjacent to the loading door is a small pedestrian door.

Building 18 (1955x1969-74 [part]; 1969-74x2011 [part])

- 4.32 Building 18 is formed in two parts, the north-western part butted up to a smaller south-eastern part. Both sections of the building are of the same height. The ground-floor wall is built in stretcher-bonded brick, straight-jointed at the junction between the two parts, and the upper walls are formed in corrugated metal. The north-western end of the building incorporates four loading bays which each originally had a loading door opening out onto the bay. All but the north-eastern door has been blocked. A shallow sloping roof weathers these loading bays. A turret on the north-eastern side forms a drive-through loading bay, where hoppers positioned high over a tall 'carriage-way' would have deposited milled grain into a vehicle below. The grain appears to have been transported into Building 18 via pipes leading from Building 16 to Building 18 at a high level.
- 4.33 There are two inlet valves in the brickwork of the north-eastern wall, one for brown flour and one for white flour. The brown flour inlet valve is positioned in an area of blocking representing a former opening which may have been a loading door. A pedestrian door is sited just to the north-west of this loading door.
- 4.34 Inside the south-eastern end of the building the space is open to the second floor, with a series of pipes rising up the south-western wall. The second floor is constructed of narrow joists aligned along and across the building, supported from underneath by 'I' beams. The south-western wall is formed in breeze-block. To the north-west are visible the lower parts of large hoppers. This area was viewed remotely and therefore no further details were visible.
- 4.35 The northern end of the building, just inside the former loading doors, is also open, but incorporates posts supporting the first floor and thus access was somewhat restricted. The ground-floor area containing the hoppers is separated from the north-western end: against the dividing wall rises a concrete staircase which gives access to the first and second floors. The first floor also houses supports for the second floor: the

plastered ceiling is supported by large-section 'l'-beams which indicate that the second floor carried a great weight. A large chute is positioned in the centre of the first floor, leading from the second to the ground floor; another pipe to the north-east leads through this space from the floor above to the floor below. Although this space is now empty, it was clearly used for milled grain processing, as a sign on one post indicates 'Hats and hairnets must be worn inside this line', which would not have been necessary if the space was used for offices or storage. The floor above this houses a number of large hoppers, similar to those seen on the ground floor to the south-east. These hoppers reach up to the top of the building and were obviously designed for storage, with the milled grain being funnelled from the bottom of the hoppers to the chutes over the carriageway and to bagging machinery on lower floors of the building. Sacks left in this space were labelled 'Durum wheat semolina sacks', indicating one type of grain that was stored and bagged in this building.

#### Building 19 (1969-74x2011)

4.36 This structure is a large, open hanger-like building, probably used for storage and distribution of bagged flour. The north-east elevation is open; it would have formerly been open to Building 20, which has been demolished. The remaining walls are formed of breeze-block, with the upper parts formed of metal sheets. The pitched roof is aligned NE-SW and is supported on two simple 'I'-beam trusses. The roof covering is of metal sheet of the same type as the walls. The floor is laid with concrete slab. Some of the north-western wall is constructed in brick, suggesting that the adjacent structure, Building 21, was constructed prior to Building 19, and that Building 19 has incorporated the walling of Building 21 into its wall construction.

#### Building 20 (1969-74x2011)

4.37 This building has been demolished, but the remaining rubble indicates that it was constructed using brick and concrete, with an upper section and roof structure framed in metal and covered with metal sheet.

#### Building 21 (1969-74x2011)

4.38 Building 21 is also a large, open space, the lower parts of the walls built in brick laid in Flemish bond. The upper parts of the walls are formed in metal sheets of the same type as Building 19. The pitched roof is aligned SE-NW and is formed in five bays, supported by 'l'-beam trusses. The floor of the building is laid in concrete slab. From the stacks of unused flour sacks in this building it appears that this structure was used for storage. These sacks include those for Coarse Durum Semolina, Fine Durum Semolina and White Flour.

#### Building 22 (1969-74x2011)

4.39 This structure, like Buildings 19 and 21 and probably Building 20, is a single open space. It is constructed using breeze blocks in the lower parts of the walls and corrugated metal in the upper parts. The southeastern section is open to the exterior, although it would have been open to Building 20, and there is a wide opening in the south-western wall leading to Building 21. The roof is formed using metal trusses which, instead of being supported on the walls, are free-standing, the roof beams supported on posts which are slightly set in from the inner faces of the walls. The floor is laid with concrete slab. This area also appears to have been used for storage.

Building 23 (1969-74x2011)

4.40 Building 23 appears to be a two-vehicle garage, aligned on a SE-NW axis, with two tall doors in the south-eastern wall, each closed by a rolling metal shutter. The lower parts of the walls are constructed in varicoloured mid-20th-century brick with corrugated metal upper parts and a roof covered with the same material. There are three windows in the north-east wall, all now blocked with plywood. A flat-roofed late-20th century shed has been built against the north-west wall.

Building 24 (1810; 1969-74x2011 [part])

4.41 This structure has a very different appearance to the other buildings on the site, being completely rendered and only of two storeys, with no corrugated-metal raising to the walls. It is positioned at an angle to Buildings 18 and 17, to which it is attached, being aligned with the sluice gates and bridge over the river to the south-west, on a SSW-NNE axis. It has a roof covered with corrugated metal, gabled to the south. In the west elevation there are two window openings on the ground floor and four on the first floor. There is also a further ground-floor opening which has been hidden by metal sheeting. The windows are biased towards the northern end, leaving the southern quarter of the building plain. The two ground-floor windows have glazing of the hopper-head type, the northern window being positioned under a segmental-arched head with UPVC glazing. The southern window is timber-framed. The four upper windows are in two pairs, the northern two having sloping tile cills and the southern two having plain projecting cills. All are under slightly-projecting, splayed heads. The proportions of these suggest sash windows, the southern two being taller than the northern two. Above these windows the top of the wall splays out to the eaves of the building in a shallow coping: this feature is missing from the southern part of the building, suggesting that this section is of a different date.

- 4.42 The end wall of the building incorporates three first-floor, square openings, now blocked, with three directly below these lighting the ground floor. The remainder of this elevation is plain.
- 4.43 One room was visible through a ground-floor window. This room was fitted as a WC, with the cubicles against the south wall. A spine wall ran the length of the visible space, with a door leading into the eastern room. The first-floor is constructed using north-south aligned joists jointed to an east-west timber girder: the only timber girder to be seen on the site. Both joists and floorboards are of softwood. There is a breeze-block partition intruding into this room from the north.

#### 5.0 CARTOGRAPHIC EVIDENCE

- 5.1 The earliest plan of the site was drawn in 1796 as part of an effort to map the Rochford Estate, of which the mill was part. The plan (D/DCw P13; Fig. 3) shows the tide mill, wharf and flood gates, as well as an assortment of other structures within the enclosure. The mill is the largest building depicted, aligned north-south and projecting into the river on a spit of land. It is a structure of irregular plan. Connected to the north end of the mill by what appears to be a freestanding wall is a much smaller structure lying upon the same axis. At an angle to both and lying close to the more northerly building is a roughly 'L'-plan structure. To the north-west of this is a rectangular parcel of land separate from the main plot. On the remainder of the main plot there are five buildings: three small rectangular structures; one long, narrow structure on the river side which may represent a wall rather than a building; and a larger, irregularplan structure in the north-eastern corner of the plot. None of these buildings are named on the plan. To the north there is a small orchard and to the south-west of the orchard is a pond. The windmill is not shown on the plan, suggesting that it had not been built by this date.
- 5.2 The tithe map of 1838 (D/P 395/27/1; Fig. 3) depicts ten buildings, including a windmill (No. 6 in the tithe apportionment), which is positioned to the north-west of the site, north of a pond (No. 5). The tide mill is the narrow structure aligned north-south which projects on a spit of land into the Rochford River at the southern end of the site. On the western side of the road through the site (No. 5) there are two further buildings. These are much smaller and rectangular in plan, one lying at right angles to the mill, the other parallel to the road. To the east are four enclosures, three of which contain structures. The northern parcel of land (No. 7) has not been built upon. The southern three plots are all labelled No. 3. The central plot has three buildings within the boundary and one small structure outside the boundary line. The structure against the northern boundary is large and irregular in plan, with a small projection from the south wall of a larger rectangular part of the structure and a narrow extension to the west. All of the remaining structures are

rectangular in plan and comparatively small. They are all positioned against the boundary lines of the plots of land, leaving large open spaces between the structures. The tithe apportionment lists the plots as follows:

Plot	Description	Acres	Roods	Perches
no.				
3	Yards and Outhouses	1	2	30
4	House, watermill &c	0	0	25
5	Road to mill and Pond	0	2	11
6	Windmill and yard	0	0	32
7	Orchard	0	2	14
8	Four Acres (arable)	4	3	35
9	Mill Field (arable)	10	2	9

Table 1. Extract from tithe apportionment of Little Stambridge Parish (D/CT 325)

The owner of all these plots is given as the Honourable William Pole Tylney Long Wellesley, and the occupants are given as Samuel Tabor and William Hugh Rankin.

- 5.3 The sale of the Rochford Estate in 1867 gave another reason to map the mill lands (SALE/A1001). These are shown in Figure 4. The site is labelled as Stambridge Mill, and the numbers used to denote the different spaces are the same as those used in the tithe apportionment. Perhaps as a result of an error, the tide mill is not shaded in the same way as the other buildings on the site. The majority of the structures have not altered. The large building on the central Plot 3 has had the western extension removed by this date, and the structure immediately to the east has been removed. The sale particulars describe the structures depicted in the same way and with the same acreage as the tithe map. The description of the property in the sales particulars is given below.
- 5.4 The windmill is extant on the 1874 1st Edition Ordnance Survey map (Fig. 5) and by this date the steam mill has been built to the north-east of the tide mill. This is a large, almost-square building clearly labelled, with a coal depot to the east. The long tide mill structure is shown in two parts, divided approximately in the centre. This appears to have been enlarged since the drawing of the tithe map, but the earlier plans may not have shown the true proportions of the structure. Although the structures are not shaded, the buildings on the site can be picked out. Two square structures lie to the north of the tide mill, fronting the western side of the road. The remaining buildings lie to the east of the road. The large building aligned approximately east-west survives, extended to the east, with an odd arrangement of small enclosures to the south. projection against the south wall appears to be open-fronted suggesting that it is a porch. A pump is situated to the west of this structure. Three buildings lie to the west and one to the east of this: these are probably the same buildings depicted on the earlier plans. To the north of the site

- is a large orchard and most of the southern boundary of the site against the river is given over as a wharf.
- 5.5 The 2nd Edition Ordnance Survey map dating to 1897 (Fig. 6) shows that there has been extension to the existing structures but that the windmill had been demolished by this date, its enclosure being subsumed into the large field to the north-east of the site. The orchard to the north was not shown as such on this map. The structures to the north of the tide mill were extended to the north, the building showing subdivisions into many small parts, suggesting that this was an ancillary or storage structure. A tiny building had been constructed between the north-eastern corner of the steam mill - at this date not labelled - and the NE-SW-aligned structure to the east. The large building at the north was extended to the west, and an additional structure to the east of the building fronting the east side of the road had been erected. Moreover, a large, open-sided structure had been built on the site of the coal depot. This was probably a storage facility for the coal, as it occupies a situation close to the wharf. The northernmost structure on the site, fronting the road, is also depicted as being open-fronted. The pump was still extant at this date.
- 5.6 By 1922-23, shown on the 3rd Edition Ordnance Survey map (Fig. 7), the steam mill building had been greatly extended towards the wharf, with a stepped south wall. The tide mill building and the structures to the north were unchanged, as was the open-sided structure to the east. The structures immediately north of the steam mill had been removed, including the small structure to the north-east and the end of the building to the north. The large complex of structures to the north of this was further extended in the south-western corner; this building by this date had an apparently-enclosed area to the south, bounded on the east by the earlier building. A new, small structure was constructed to the west, its shorter end against the road. The building to the north of this, in 1897 shown as being open-fronted to the west, is shown on this map to be open-fronted to both east and west.
- 5.7 A great deal of building work had been carried out by 1938, as shown on the 4th Edition Ordnance Survey map (Fig. 8). Buildings had been constructed to east and west of the structure situated on the wharf and the open-sided structure had been demolished. The steam mill had been extended to the north and possibly as a result the structures between the steam mill and the larger structure to the north had been demolished. The smaller open-fronted building at the north of the site was also demolished by this date and a square structure had been built just to the east, away from the former road front; the road was widened at this point. Upon the former orchard an 'L'-plan structure had been built, in the centre of the plot. Even further to the north, in four separate plots, a terraced house in four parts had been built. To the east of the main mill buildings large structures had been built, one aligned along the road

incorporating a chimney at the south end, which replaces an earlier structure.

- 5.8 Little had changed by 1955 (Fig. 9). The square structure by the widened section of road was extended to the east and an 'L'-plan building had been built close by to the east. In order to place this building the northern and eastern parts of the large, irregular building were removed. A tank was added to serve the site, positioned to the south of the eastern pond.
- 5.9 There was another widespread building scheme between 1955 and 1969-75 (Fig. 10). The only structure demolished by this date was the southernmost part of the old tide mill, which had survived until this date. The northern part of the old mill building was extended with an angled structure to the north, and the building immediately to the north was extended to the south. A large building had been constructed to the east of the steam mill, necessitating the truncation of the eastern pond. The eastern end of the building to the south of the large 'L'-plan structure was extended, as was the eastern side of the building to the west of the 'L'plan structure. On the western side of the site two large structures had been built, the southern much larger than the northern. In order to construct these, the pond on the western side of the site was infilled. A weighbridge was positioned at the centre of the site and an electrical sub-station had been constructed to the north-west of the steam mill building.
- 5.10 The development of the site can be seen clearly in the historic maps and is shown in summary form on Figure 11. The map evidence indicates the following dates for the extant buildings:

#### Pre-1874

- Building 24
- Part of Buildings 12 and 15
- Possibly some material within Buildings 14 and 16

#### 1874x1897

Nothing survives from this period

#### 1897x1922-23

- North-eastern part of Building 12
- Building 11
- North-eastern half of Building 13

#### 1922-23x1938

- Building 2
- South-western part of Building 13

- Small part of Buildings 12 and 15 where they abut Buildings 11 and 13
- Building 26 (frame only survives)

#### 1938x1955

- Northern part of Building 4
- Building 6
- Possibly part of Building 14
- Possibly part of Building 17

#### 1955x1969-74

- Building 9
- Eastern end of Building 6
- Small part of Buildings 14 and 16
- Southern end of Building 18

#### 1969-74x2011

- Building 1
- Eastern part of Building 2
- Building 3
- Western part of Building 6
- Building 7
- Building 8
- Building 10
- Part of Building 17
- Western part of Building 18
- Buildings 19-23
- Southern end of Building 24
- Modifications to all buildings

## The mill environs and surrounding industry

- 5.11 The earliest cartographic sources (maps of 1796 and 1838) show the main mill building located upon a spit of land that dammed the tidal river at this time. This dam would have allowed the incoming tide to enter the mill head through a one way sluice gate, which closed automatically when the tide began to fall. When the tide was low enough, the stored water was released via the water lane to turn the water wheel.
- 5.12 In May 1858 (D/DS 253/7/10), W.H. Rankin carried out work to deepen and enlarge the Mill Pool "to ensure it gives a good supply of water at each tide". By 1867 a significant mill pond had been created to the western (upriver) side of the dam. When milling took place, water from the mill head was channelled through the water lane to power the water wheel. At Stambridge the race was positioned immediately to the south of the long mill building, powering an undershot water wheel. The sluice

was located just to the south of this. Opening the sluice would have allowed water to bypass the mill race when milling was not being carried out.

- 5.13 In 1874 the Mill Head, as it is labelled on the O.S. map, comprised over 10 acres, and it retained this size clear until 1938. This large size would have taken longer to fill but would have allowed for longer milling times. After this time, the mill head was gradually allowed to silt up. At the present time the former mill head comprises mud flats, through which the River Roach flows along the northern edge.
- 5.14 The land to the south of the mill, on the opposite river bank, was under arable cultivation until some time between 1897 and 1922-23, after which time the area of land served by both the River Roach and the Fleethall Creek became much more industrial in character. The easternmost parcel of land was taken over by the Rochford Shipyard, a grafting dock created on the River Roach just to the south-east of the mill. The area of land to the west of the shipyard, and the land on the south side of the river between the shipyard and Rochford town, was being exploited for clay to be used in a brickworks with two kilns. Of a different nature was a hospital for infectious diseases, lying to the south of the brickworks: an isolated plot of land surrounded by fields.
- 5.15 By 1955 the shipyard was disused but the brickworks was thriving. A series of ponds in the vicinity of the old clay pits is suggestive of clay extraction over time followed by water infill. By this date the brickworks was known as 'Featherby's Brickworks'. The hospital had been transformed into 'Riverside Works', which carried out textile printing.
- 5.16 The brickworks had disappeared by 1969-74, but a small boatyard had been reinstated on the site of the old shipyard, and the old textile printing factory had become a motor bodyworks.

#### 6.0 DOCUMENTARY EVIDENCE

- 6.1 The first reference to a mill on this site dates to 13th November 1776, in a lease between John, Earl Tylney and James Davis of Little Stambridge for "all that messuage or tenement together with the mill, barns, stables, outhouses, edifices, buildings, gardens and wharfs called New Mill" at a rent of £70 per year (D/DCw T47/15). The mill seems to have been built since 1740, as a lease of that date does not mention the mill. However, since there is no reference to the type of mill in 1776, it is not known whether the lease refers to a wind or tide mill.
- 6.2 No clarification is needed to ascertain whether the tide mill had been built by 1809, as an inventory was made for the trustees of the James Davis on the "going gears, goods and chattels of Little Stambridge Tide Mill"

(D/DS 253/7/7). The inventory has been carried out on a floor-by-floor basis, which gives us an idea of the main spaces, but it is not clear whether there has been a specific route around the building. The first area assessed was the 'Stage', which was presumably the open area in front of the mill. Then it appears that the assessors moved through the mill from the top downwards, first valuing the items in the 'Floor Chamber' which seems to be an assortment of small parts. The 'Catch Mill floor' was valued next, moving down to the 'Hirst' floor [often spelled 'hurst', referring to the sturdy timber frame which supports the heavy millstones], which was the main working floor, containing the most goods and working parts, including two pairs of French mill stones. The 'Lower Floor' housed many bags and sacks, as this is where the flour would have fallen from the stones and been bagged. The 'Water House' may refer to the space that housed the pit wheel and wallower. It was evidently also used for storage, as is suggested by the sundry items that are listed within. The full inventory is given as Appendix 1.

6.3 One month prior to the inventory of the mill the lease of the property had passed into the hands of John Kemp for £500 (D/DS 253/7/6). John Kemp and his brother Robert Kemp worked the mill, and in agreement with Miss Catherine Tylney Long, rebuilt the mill, apparently at their own Plans dated 14th January 1811 (D/DCw P64) show the proposed mill building, drawn up by William Cureton, millwright, who was one of the men who had valued the existing mill for the trustees of John Kemp in 1809. The plans for the mill are extant but in fragile condition and could not be photographed or traced from. They show plans and sections for the granary and mill, the mill placed on one side of the water course, which was regulated with tide gates and crossed via a swing bridge. The granary and kiln occupied a single rectangular structure with the kiln at the northern end, capped with a pointed roof and cowl. The granary was of three bays, entered from either side of the central bay. Both parts of the structure were of two storeys, the first floor of the kiln being the drying floor and the first floor of the granary set at the same level but being solid. Both floors of the building were lit with windows set into the west, and possibly east wall. Running parallel to and adjacent to the main river course was the new water lane housing the vertical water mill. which was presumably undershot. The mill building was set with its end towards the water wheel, and is positioned above the old water lane. This structure is of seven bays, and rises to three floors with a loft above. It has a steeply-pitched mansard roof. The building is entered at the east end of the north wall and is lit by windows set high in the wall of each floor. A diagram of the first floor shows that it housed five pairs of stones set in a semi-circle around the main shaft, which rises into the second floor and drives what appears to be a sack hoist, just below the attic floor. The mill sits upon battered foundation walls. It is not made clear on the drawings from what fabric the walls are constructed.

- 6.4 William Cureton drew up the estimate for the work in 1810 (D/DS 253/7/5). This document is very detailed, and indicates which the plan does not that the existing mill building was altered to create the new. The estimate states: "Altering the floors and moving and raising the old mill with an additional new end to mill 16 ft long and 23 ft wide with brick piers plank and Story (sic) post thereto the old mill to be new weather boarded the same as the new part with Battens painting &c". The granary and kiln building is described as well: "Kiln 10 ft square with a Granary attached thereto 24 ft by 24 ft 20 feet upon the stud with 2 floor Girders 12<sup>ln</sup> by 12<sup>ln</sup> Joice (sic) 3 by 6 story (sic) post 6 by 6. Floor ¼ In thick plates for the roof 4 by 8 principal Rafters 6 by 4 purlines (sic) 4 by 4 brick foundations with tiled Roof Doors Windows and Ladder". The building estimate was given as £2907.4.2.
- 6.5 On the 24th July 1815, John and Robert Kemp agreed with William Pole Tylney Long Wellesley (now married to Catherine Tylney Long and presumably having taken part of her name) to build a 'good and substantial post windmill which with the going gears should be of the value of £700'. The rent was accordingly reduced to £50 per year (D/DS 253/7/8). This indicates that the earliest mill on the site was the tide mill, its working later augmented by the post windmill. Less than a year later. the partnership of John and Robert Kemp was dissolved, and it was probably on this occasion that the mill passed into the hands of the Rankin and Tabor families. William Rankin and John English Tabor, both gentlemen of Bocking, Essex, had been involved financially in the transactions of the Kemp brothers, and as in the Maldon Agency insurance instruction book the mill is said in 1838 to be occupied by Messrs Tabor and Rankin, it is assumed that they themselves worked the mill. However, later references to the mill list William Hugh Rankin and Samuel Tabor as millers. These may be family members working the mill, or perhaps sons, to whom the mill and workings have passed.
- 6.6 The entry for the Little Stambridge mills in the Maldon Agency instruction book for 1838 (D/F 21/8) values the "Water corn mill, brick, timber and tiled, with Kiln" for £1000 and the "water wheel, iron pit wheel + five stone hirsts as fixed" for £300. The post windmill, timber-built, was valued at £500, with the "going gears therein" at £200. This policy (no. 26034) was made to the Honourable William Long Wellesley, the owner of the site, whereas the "going gears and machinery in water mill" were valued at £450, the policy (no. 26035) belonging to the millers, Tabor and Rankin. This entry is useful as, due to the risk of fire in such a property, the dwelling house (valued separately from the mill at £400) is said to be divided from the mill by brickwork. This implies that the house adjoined the mill building, but had a brick dividing wall, rather than that the house was freestanding a little distance from the mill. This may explain the great length of the mill building as shown on the maps, and the separation of the structure into two parts on the Ordnance Survey maps; it is probable, therefore, that the northern part of the mill structure formed

the dwelling house. The other buildings on the site are also listed, each described with their construction fabric. The granary and kiln - those built in 1811 – are of brick and slate, suggesting that they are fully brickbuilt. There is also a lean-to waggon shed adjacent which is of timber and tiled. The granary is not identified on the tithe map or on the later O.S. maps: it may be one of the "Outhouses" on plot 3. In addition, there was a stable (timber and tiled), and a "barn, stable and piggeries" which were timber, tiled and thatched. These, joined in the same valuation, were probably part of the same structure. There were two small buildings, each valued at £25, half of the valuation of the separate stable and a sixth of the value of the barn, one listed as a workshop and one as a hen house, both timber and tiled. Based upon the size and footprint of the large, irregular structure on the earliest maps, this was probably the barn, with the stable or piggery extending to the west (shown on the Tithe map, Fig. 3).

- On 11th December 1841, a lease was agreed between the Honourable William Pole Tylney Long Wellesley of Brussels in Belgium and Samuel Tabor of Little Stambridge and William Hugh Rankin of Great Stambridge, Millers and Copartners. The lease referred to "All that messuage or tenement and Tide or water Corn mill called or known by the name of Little Stambridge or Rochford Mill Together with the water wheel, Water wheel shaft Pit wheel Tide Gates and Machinery thereunto belonging...And also all that Messuage or Tenement and Windmill with the going Geer (sic) and machinery thereunto belonging...with all and singular the Barns Stables Kiln Granary Yards Gardens Orchards Wharf Mill Pond Banks Walls rights and appurtances to the same belonging...", all to be had for £250 per year with extra small sums for tillage and extra land. The mill by this date had become established in its own small complex of ancillary buildings.
- William Hugh Rankin and Samuel Tabor worked the mill until 1847, when the Maldon Agency instruction book notes in a memorandum that "The interest in Policy 26034 is now vested in WP Wellesley and William Hugh Rankin. 26035 + 16316 [formerly held by William Hugh Rankin and Samuel Tabor] the interest is now vested in William Hugh Rankin 17672. WH Rankin is interested as Lessee." Samuel Tabor therefore must have been bought out of the partnership. This is confirmed by a letter from the Wellesley estate manager to his employer in May 1858 (D/DS 253/7/10), which discusses the work that W.H. Rankin (the present tenant) has carried out in deepening and enlarging the Mill Pool "to ensure it gives a good supply of water at each tide". At the same time he carried out permanent repairs to the mill building, though there is no indication that this included major building work; the mill repairs cost £210 and the repairs to the house cost £120.
- 6.9 By 1862, William Hugh had been joined in the mill enterprise by an A. Rankin (D/F 21/16). The buildings are listed exactly as in 1838, though

the values are slightly different, and by this date waggon sheds (timber and thatched) had been added, as well as a cart shed + ?chain shed adjacent, timber, tiled and thatched. A. Rankin had not been admitted to the interest in the mill workings for which the occupier – rather than the property's owner – was liable, as the policy was under the sole name of William H. Rankin (D/F 21/17). This situation had been altered by 1865, when the Policy was made out to W.H. and A. Rankin (*ibid.*).

6.10 The Rochford Estate was sold in 1867, all parts being described and mapped (see Cartographic Evidence above). Stambridge Mill was described as a valuable freehold property, "Superior water corn mill of four floors driving six pairs of stones": a sixth pair must have been added to the original five by this date. "Adjoining the mill is a convenient dwelling house containing:

Upper Floor
Four attics and a small room

First Floor
Four good bedrooms

Ground Floor
Two sitting rooms
Breakfast room
Kitchen
Washhouse
Cellar and counting house"

There were also listed detached workshops and hen houses, said to be on the opposite side of the road from the farm yard, suggesting that the western small buildings shown on the tithe map and 1st edition O.S. map (Figs. 3 and 5), as well as that accompanying the sale particulars (Fig. 4) were the workshop and hen house. Around the farm yard are listed the barn, shed, "Nag's stable", stabling for 5 cart horses, piggeries, granary, kiln, large coal yard, good garden. The inclusion of the granary and kiln in this list suggests that indeed, these two structures were on the eastern side of the site. The post windmill was also included in the sale. This is described as being on brick piers, with two patent sails and two common sails driving two pairs of stones. The whole property comprised 37 acres, 2 rods and 12 perches. It is also stated that the mill was let to Messrs W.H. and Alfred M. Rankin on lease for £275 per year.

6.11 On the 13th December, 1872, William Hugh Rankin, 73 years of age, died suddenly, his death reported briefly in the newspaper obituaries (T/P 204/9). He had been lately succeeded by Hugh Rankin, possibly his son, who, with Alfred Mottram Rankin, set about expanding the business. This was commenced prior to the end of September, as the property was reinsured on September 29th 1872. A note after the valuation states:

- "The Mill is worked by steam it is of 5 floors in height, there are 4 pairs of Stones therein the bridge trees or Spindle beams of which are of iron" (D/F 21/20). The building work continued for seven years, finally being finished by 1879 (D/F 21/22).
- 6.12 The cause of this long construction period was partly due to a terrible fire that broke out in the engine room on 20th July 1878. It started at approximately 1pm, when a child lit some waste, and spread quickly through the buildings. A major catastrophe was averted as a worker in the mill broke into the blazing engine room to attach a rope to the escape valve on the boiler, which was released by the people outside. This prevented the boiler exploding. The blaze was so hot that it scorched the grass on the other side of the river, and set alight the sash windows, blinds and roof of the house. By the time the newspaper reported a full account of the story on the following Tuesday, some parts of the ruins were still burning. The estimated damage was in the region of £10,000, but the "old mill" and house were saved, as well as much of the bagged grain. This account – clipped from an unnamed newspaper (T/P 204/9) – gives the information that the engine room was tiled, and as the worker who broke in smashed some tiles to let himself down into the room, it seems probable that the engine room was either in a single-storeyed structure or that it was close to the roof in a taller building. The latter option seems more likely. It also indicates that the Mill House had sash windows rather than casements, at least those facing the steam mill.
- 6.13 The completion of the steam mill culminated in the purchase of the mill by Alfred and associated lands Mottram Hugh (D/DS 235/7/12). In 1885, the steam mill is described as being of brick and with a slated roof, "it is 5 floors in height there are 5 pairs of Stones therein", which clearly indicates that stone milling was still carried out. This was the case until 1905, when rollers were introduced. By this date also gas and electricity had been laid on to the property, but the mill was still being mainly worked by steam and there were careful regulations specified by the insurance companies as to the use of electricity and gas within the buildings due to the high potential for fire (D/F 21/26).
- 6.14 In 1906 the original structures of the earlier mill appear, for the most part, to have survived. An agreement between various members of the Rankin family, and Samuel Boosey, the Miller's foreman, following the death of Alfred Mottram Rankin, give the property as "tide and water corn mill with buildings, barns, stables, piggeries, kiln, granary yard, gardens and orchards", which had changed little from the descriptions of the mid 19th century. However, the new additions are listed: "also all that steam corn mill with steam engine boilers and machinery with the warehouse yards and outhouses". And also by this date the owners had erected "4 cottages with gardens and appurtenances...upon a portion of the close of land hereinafter described called Mill Field". The property had

- lost a small amount of land, at this date comprising 22 acres, 3 roods and 26 perches (D/DGs B48).
- 6.15 The next step for the owners of the mill was to form a Limited Company, which was carried out on 13th September 1906 (D/DGs B48). The shareholders were: Hugh Rankin of Rochford, Miller; Harold Rankin of Broomhill, Miller; Lionel George Rankin of Rochford, Miller; Emma Nora Rankin, wife of Hugh; William Rankin of Hellingly, Miller; Grace Rankin, wife of Harold; and Stuart Walker Allen of Mill House, Stambridge, Miller's Clerk.
- 6.16 The documentary evidence for the site over the next two decades is scanty, but the mills and the buildings are depicted as viewed from the south - albeit probably in a stylised version - as a line drawing forming the letterhead for A.M. & H. Rankin Ltd (Plate 25; D/DGs E33). On the left is the old tide mill, its mansard roof visible, with projecting hoist housings to left and right. It appears to be weatherboarded above and brick below, with windows in the end wall and gable and in the eastern (right) elevation. There is no sign of the earlier water wheel. A darker building lies to the north and is slightly offset: this has tall chimneys and what appears to be a dormer window and is probably the dwelling house. The large building to the right is the steam mill, in its extended form dating to 1897x1922-23. The earlier, original steam mill building is the taller structure to the rear, with a hoist housing at roof level. structure is of four storeys with a lit attic. The windows are all alike and arranged uniformly, all under segmental-arched heads. The boiler house probably lies close by to the left, served by the tall chimney. The newer structures in the foreground also have windows under segmental-arched heads arranged in a regular pattern. These structures seem to be fully brick built and are of three storeys each. There are two loading doors in the first-floor wall of the left-hand building, as well as a number of doors on the ground floor. The right-hand building seems to have blocked windows to the east in its south wall, but these may have also been loading doors. A long, low building lies to the east: this may be the Coal Depot marked on the earliest O.S. map.
- 6.17 A letter dated 26th February 1926 (D/DGs E33) queried the taxable value of the mill, stating that the only building to be constructed since 1914 were the "new silos", which were built in 1923-24, although various machinery had been repaired since that date. This indicates that the great scheme of building work took place in the earlier part of the period 1897-1922-23, as shown on the O.S. maps. This was a difficult period for the mill, as the whole milling business in this region was suffering a depression; Associated Mills had granted no dividends between 1923 and 1926. Clearly the market rose again, as the mill continued to be in use, and was known as Rankin Mill, commemorating the early millers and owners, into the 20th century.

- 6.18 Allied Mills bought Rankin Mill, as it was known, in the early 1960s. This was an attempt to break the Weston family's reliance on the big milling groups such as Spillers, Joseph Ranks and Hovis. At this time the Weston baking operation (now ABF) was the largest in Europe and traded under the name Sunblest. Allied Bakeries are now the third biggest baking concern in the UK after British Bakeries (Hovis) and Warburtons, although they now only own three mills. In the earlier period of its ownership by Allied Mills, Rankin Mill would have been considered a large plant. In the 1980s it milled 400 tonnes of wheat in 24 hours. Running seven days a week, it would produce approximately 2100 tonnes of white flour per week (J. Scatchard, pers. comm.).
- 6.19 In the first part of the 1970s the mill was remodelled by Thomas Robinsons of Rochdale. As a result the capacity of the mill was increased to 16.7 tph (tonnes per hour) and the rollermills were lowered from the first floor their traditional location to the ground floor. Before this date the mill equipment was made by ER & F Turners of Ipswich. In 1990 a further remodelling of the mill moved the rollerfloor back to first-floor level, which allowed the mill to operate unmanned at night (J. Scatchard and A. Cave, pers. comm.). This would have resulted in a great deal of disturbance to the fabric of the mill building.

#### 7.0 DISCUSSION

- 7.1 A mill on this site dates back to the late 18th century, with large-scale development occurring in 1810-1811 and throughout the late 19th and 20th centuries. The development of the site from the late 19th century is shown on Figure 11.
- 7.2 The earliest building on the site is Building 24, which was the 1811 mill house, originally located at the northern end of the tidal mill building of that date, which has since been demolished. The mill house has been extended after the demolition of the tidal mill by an addition to the south, but it does not appear to have become part of the industrial buildings, rather has become an ancillary structure for the mill workers.
- 7.3 Buildings 12 and 15 formed part of the late-19th-century steam mill, which was extended by the addition of Building 11 and 13 shortly after the turn of the century. These have been significantly altered externally by the 20th-century additions and removals, and are likely to have been internally altered by the expanding mechanisation of the mill industry, especially during the second half of the 20th century.

Use-flow through the site (Fig. 12)

7.4 Although the buildings were not viewed internally, an approximate idea of how the site functioned as a whole can be gained, augmented by an

understanding of the modern functions of the buildings (J. Scatchard, pers. comm.). Lorries carrying grain would enter the main gate and be weighed at the eastern weighbridge, which would have been controlled from Building 1 (Security and Dispatch). The grain would then be taken to Intake Pit 1 or Intake Pit 2, where the grain would be deposited into a below-ground pit. From Intake Pit 1, the elevator to the west of Building 6 would lift the grain into storage facilities in Buildings 6 and 7. From Intake Pit 2 the elevator would lift the grain to the top of the grain silos – Building 8 - where it would be piped into the relevant silo. A second elevator conveyed grain into further storage in Building 9. Storage for other grains was found in Buildings 11 and 13. The grain was sorted and processed in Building 12 and from thence transported by pipe and conveyor belt into Building 15, which housed the mill on the first floor. The milled flour was then moved via pipework through Building 17 and into Building 18, where it was stored and bagged into the relevant sacks. Buildings 19-22 were warehouses which would have housed the bagged flour and other items, such as the empty sacks, before they were loaded into trucks, first from the end of Building 1, but later probably from another warehouse. Some milled grain would have been loaded directly into trucks from the open-ended section against the east wall of Building 18. When the trucks and lorries were loaded, they would have left via the main gate, pausing at the western weighbridge prior to departure.

- 7.5 The site therefore had a clockwise use-flow; entered and exited at the north, the grain deposited towards the eastern side and the flour being bagged and loaded at the western side of the site. Some rearrangement of the buildings must have taken place once the wharf was no longer used as the main route of transportation of goods, as the site in its present form faces north, away from the river. However, some doors in the structures and the positioning of the hoist to the south of Building 11 indicate that the wharf was still a functioning part of the site in the late 20th century.
- 7.6 There were workshops in Buildings 3, 4 and 5 and offices in Building 2. Facilities for the workers were housed in Building 24. The power for the site was brought through Building 10 and the electricity sub-station positioned in Buildings 14, 16 and the space to the west of Building 16.

#### Further research

7.7 At the time of the survey and consultation of historic documents there are at least two and possibly more oral histories by former Rankin Mills workers held by Essex Record Office, within which are likely to be accounts of how the mill worked, the conditions within the mill, and eyewitness accounts of the mill in use. These oral histories were not available to access: the archive is locked until 2017; but they may augment the physical account of the site. There are also former Rankin Mill workers employed in other flour mills in Essex, who may be able to

give information about the latter form and function of the buildings on the site.

#### 8.0 REFERENCES

#### **Internet Sources**

English Heritage, The National Heritage List for England http://list.english-

heritage.org.uk/resultsingle.aspx?uid=1377675&searchtype=mapsearch

Date accessed: 18/10/2011

Armstrong, About Armstrong

http://www.armstrongpumps.com/about\_armstrong.asp?groupid=3

Date accessed: 21/11/2011

## Maps

D/DCw P13 1796 Maps of Rochford Hall Estate D/P 395/27/1 1838 Little Stambridge Tithe map

25" Ordnance Survey Maps

1st Edition 1874 2nd Edition 1897 3rd Edition 1922-23 4th Edition 1938

1:2500 Ordnance Survey Maps

1955 1969-74

## **Primary sources**

#### Essex Record Office

Document reference	Date	Description
D/CT 325	1838	Little Stambridge Tithe apportionment
SALE/A1001	1867	Sale deeds of the Rochford Estate
D/DCw P64	1811	Plans of the mill
D/DCw T47/15	1776	Lease

D/DS 253/7/5 D/DS 253/7/6	1810	Estimate for building work
D/DS 253/7/6 D/DS 253/7/7	1809 1809	Lease Lease
D/DS 253/7/8	1815	Lease
D/DS 253/7/10	1858	Recommendations for lease
D/F 21/8	1838-	Insurance instruction books for the
D/F 21/16	1905	Maldon Insurance Agency
D/F 21/17		
D/F 21/20		
D/F 21/22		
D/F 21/26		
T/P 204/9	1872-	Newspaper cuttings
	1878	
D/DGs B48	1906	Sale agreement
D/DGs E33	1906	Deeds recognizing formation of
		Limited Company

#### 9.0 **ACKNOWLEDGEMENTS**

Archaeology South-East would like to thank CgMs Consulting for commissioning this work. Thanks must also go to the staff at Essex Record Office for their help in locating historic documents and to Philip Bunn and George Marriage of Marriage's Mill and especially to Alan Cave and John Scatchard of Wright's Flour for their help in understanding the later phases of the site's history, form and function.

#### 10.0 **OASIS FORM**

#### OASIS ID: archaeol6-114567

#### **Project details**

Project name Stambridge Mills, Stambridge, Essex

the project

Short description of Archaeology South East completed an EH Level 2 historic building record of the Stambridge Mills site prior to demolition. The mill was closed in 2001 and at the time of the survey was derelict. The site has been a mill since the late 18th century but the buildings, layout and operation has changed and developed for over 200 years, with large-scale development occurring in 1810-1811 and throughout the late 19th and 20th centuries. The earliest building on the site is the 1811 mill house, originally located at the northern end of the tidal mill building of that date, which has since been demolished. The mill house has been extended after the demolition of the tidal mill by an addition to the south, but it does not appear to have become part of the industrial buildings, rather has become an ancillary structure for

the mill workers. Two of the extant buildings formed part of the late-19th-century steam mill, which was extended by the addition of two other extant buildings after the turn of the century. These have been significantly altered internally and externally by 20th-century additions and removals resulting from the expanding mechanisation of the mill industry, especially during the second half of the 20th century. The remainder of the buildings date from the 20th century, largely the latter part of the century when the milling process was industrialised under the ownership of Allied Mills.

Project dates Start: 31-10-2011 End: 24-11-2011

Previous/future

work

No / No

Any associated project reference

codes

SGSM11 - Sitecode

Type of project Building Recording

Site status None

Monument type CORN MILL Post Medieval

Monument type CORN MILL Modern

Significant Finds NONE None

Methods & techniques

'Photographic Survey', 'Survey/Recording Of Fabric/Structure'

Prompt Direction from Local Planning Authority - PPS

**Project location** 

Country England

Site location ESSEX ROCHFORD STAMBRIDGE Stambridge Mills, Mill Lane,

Stambridge, Rochford, Essex SS4 2AE

Postcode SS4 2AE

Study area 1.00 Hectares

Site coordinates TQ 8871 9033 51.5796507311 0.723915085726 51 34 46 N 000 43

26 E Point

**Project creators** 

Name of Organisation Archaeology South-East

Project brief originator

**Essex County Council** 

Project design originator

**CgMs Consulting** 

Project

Ron Humphrey

director/manager

Project supervisor

Jane Briscoe

Type of

sponsor/funding

body

Archaeological Consultant

Name of

sponsor/funding

body

CgMs

**Project archives** 

Physical Archive

Exists?

No

Digital Archive

recipient

Southend Museum

Digital Media available

'Images raster / digital photography','Text'

Paper Archive

recipient

Southend Museum

Paper Media available

'Correspondence', 'Photograph', 'Report'

**Project** bibliography 1

Grey literature (unpublished document/manuscript)

Publication type

Stambridge Mills, Stambridge, Essex: Historic Building Record Title

Author(s)/Editor(s) Jane Briscoe

Date 2011

Issuer or publisher Archaeology South-East

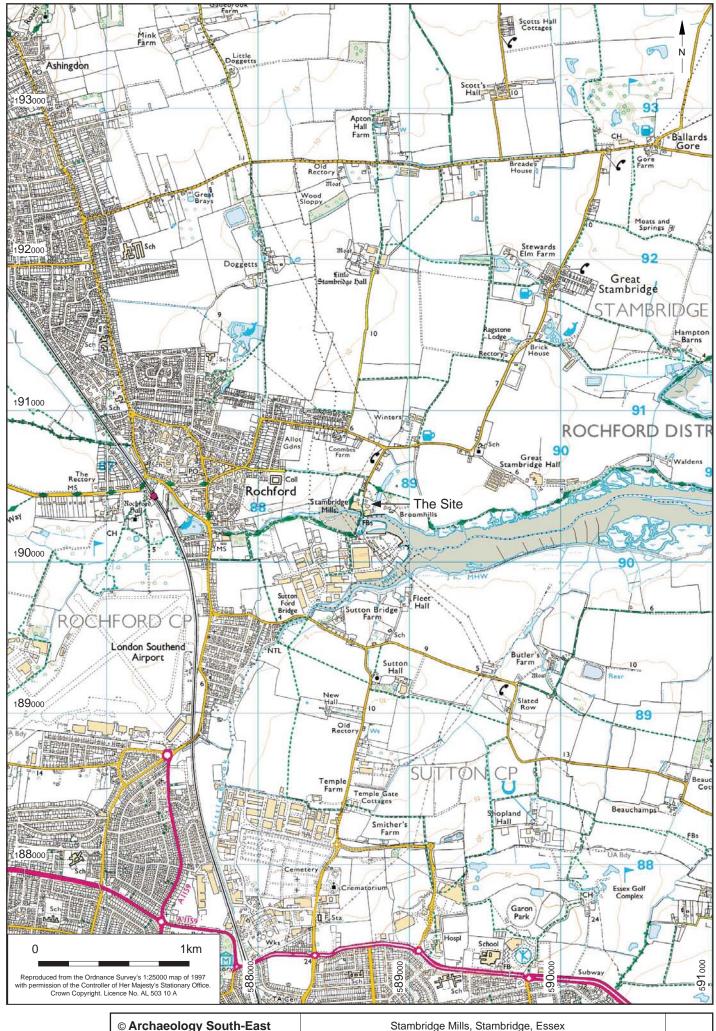
Place of issue or publication

Archaeology South-East

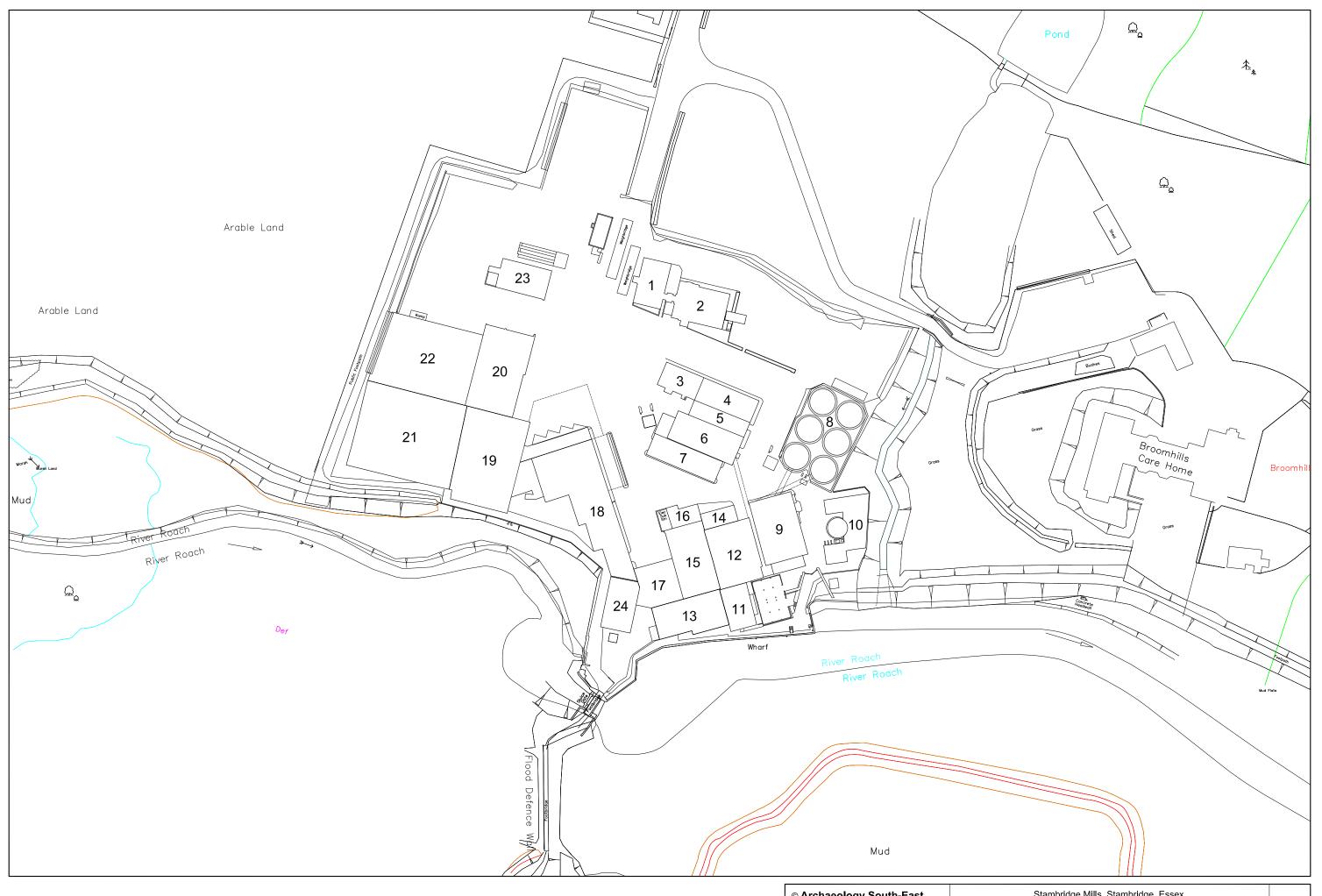
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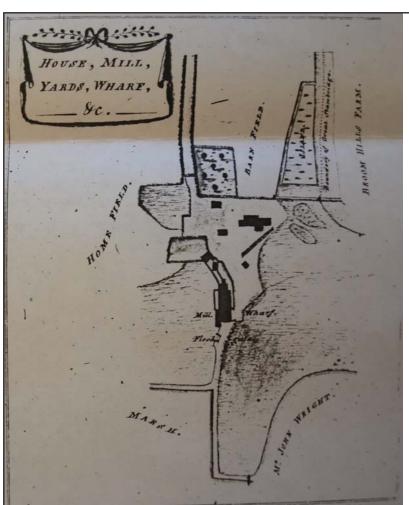
Entered on 24 November 2011



© Archaeology South			Fig. 1
Project Ref: 5220 Nov	2011	Cita location	
Report Ref: 2011262 Drav	wn by: JFB	Site location	



© Archaeology South-East		Stambridge Mills, Stambridge, Essex	Fig. 2
Project Ref: 5220	Nov 2011	Site plan showing locations of structures	rig. z
Report Ref: 2011262	Drawn by: JFB	(Based upon plans provided by CgMs)	



Right: Plan of site in 1796 (D/DCw P13)

Below: 1838 Tithe map (Little Stambridge) (D/P 395/27/1)

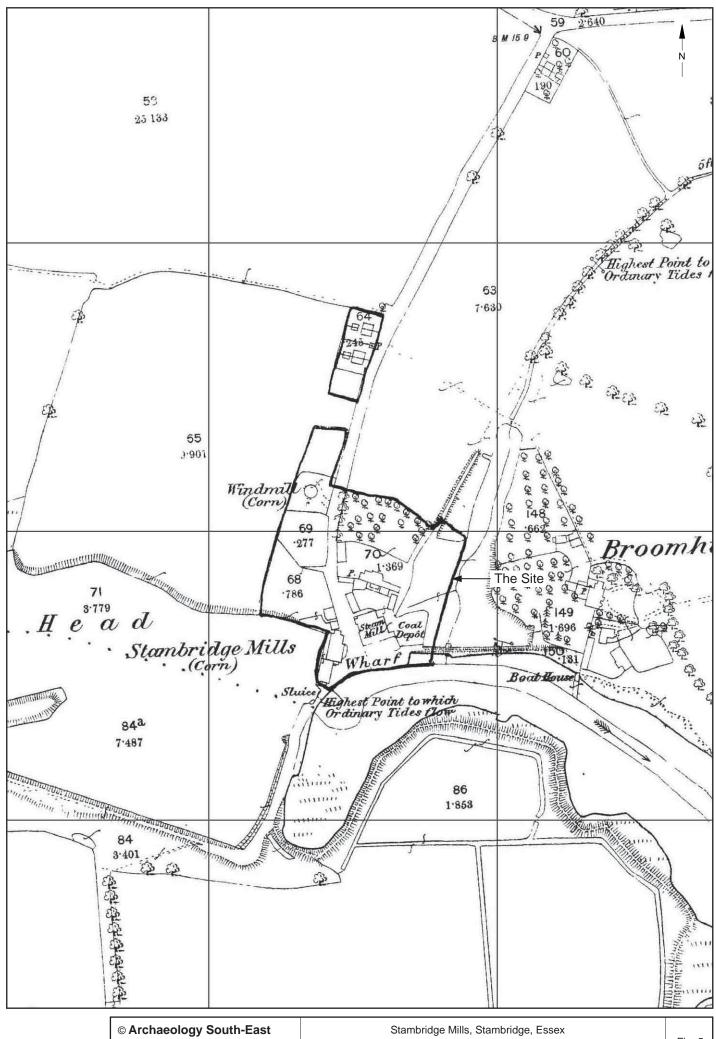


© Archaeology South-East		Stambridge Mills, Stambridge, Essex	Fig. 3	
Project Ref: 5220	Nov 2011	Llistoria mana	rig. 3	ı
Report Ref: 2011262	Drawn by: JFB	Historic maps		ı

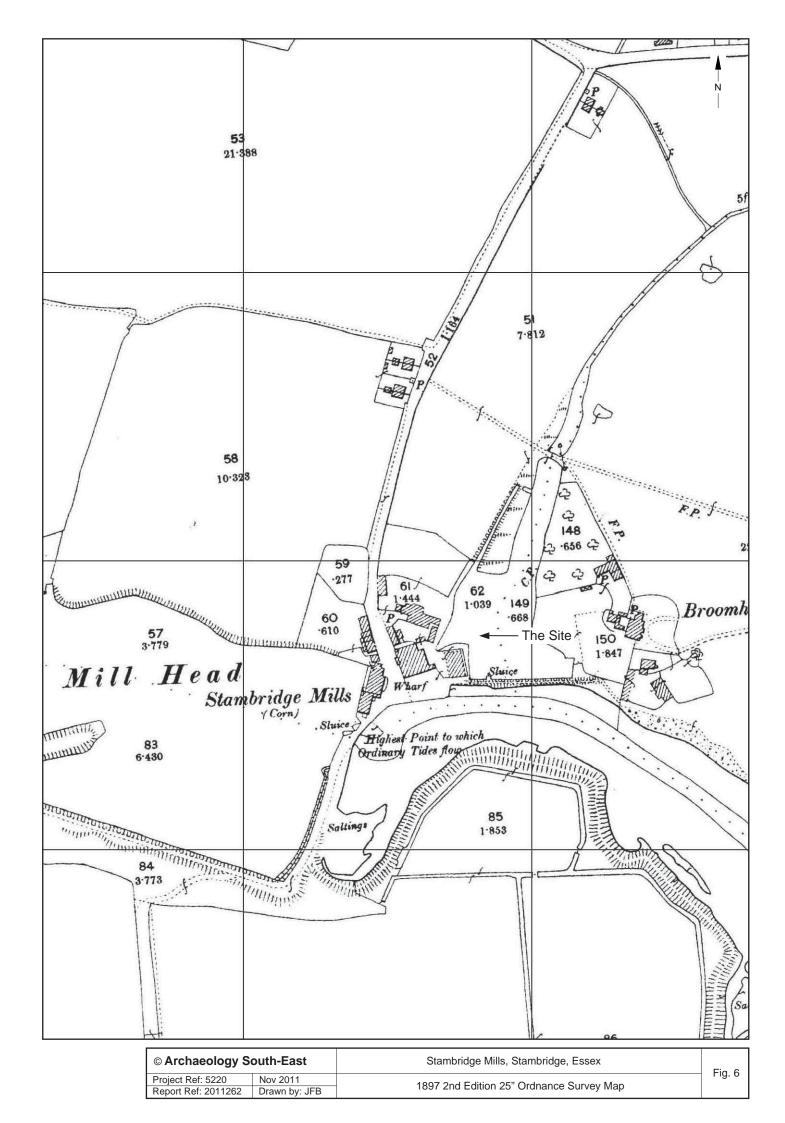


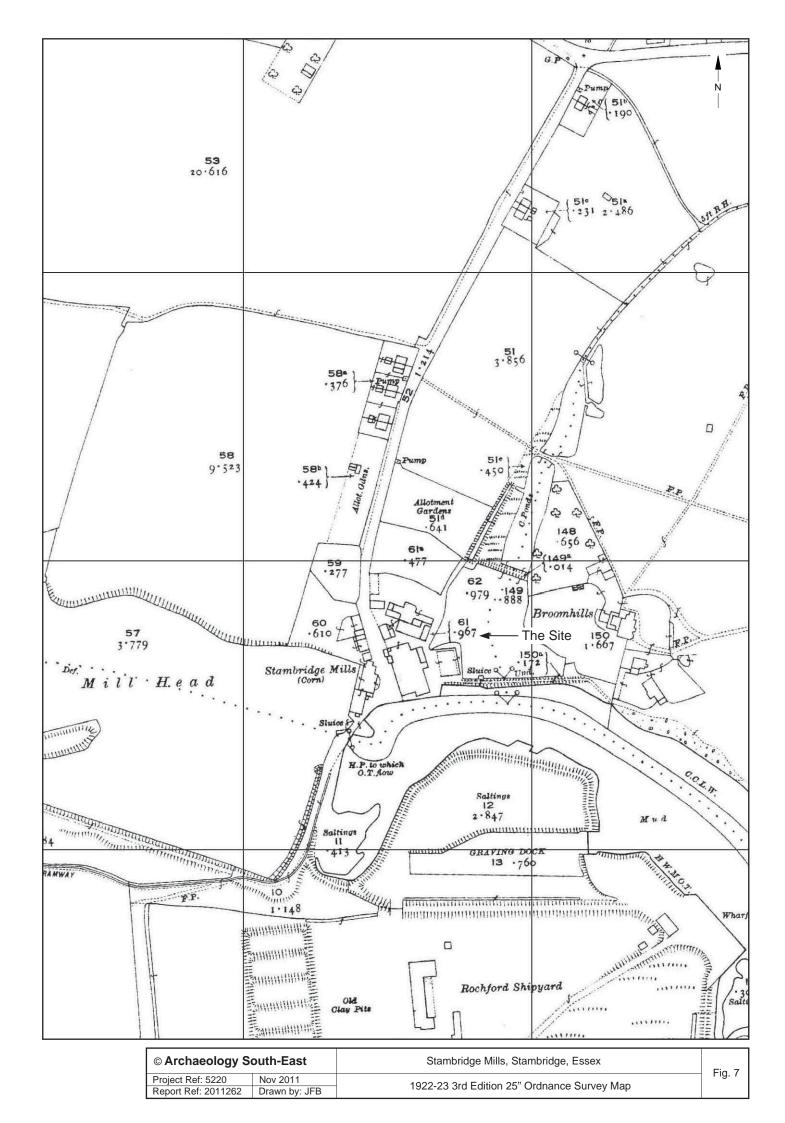
© Archaeology South-East		Stambridge Mills, Stambridge, Essex	
Project Ref: 5220	Nov 2011	Plan of site in 1967 from sole particulars of Poobford Estate (SALE/A1001)	
Report Ref: 2011262	Drawn by: JFB	Plan of site in 1867 from sale particulars of Rochford Estate (SALE/A1001)	

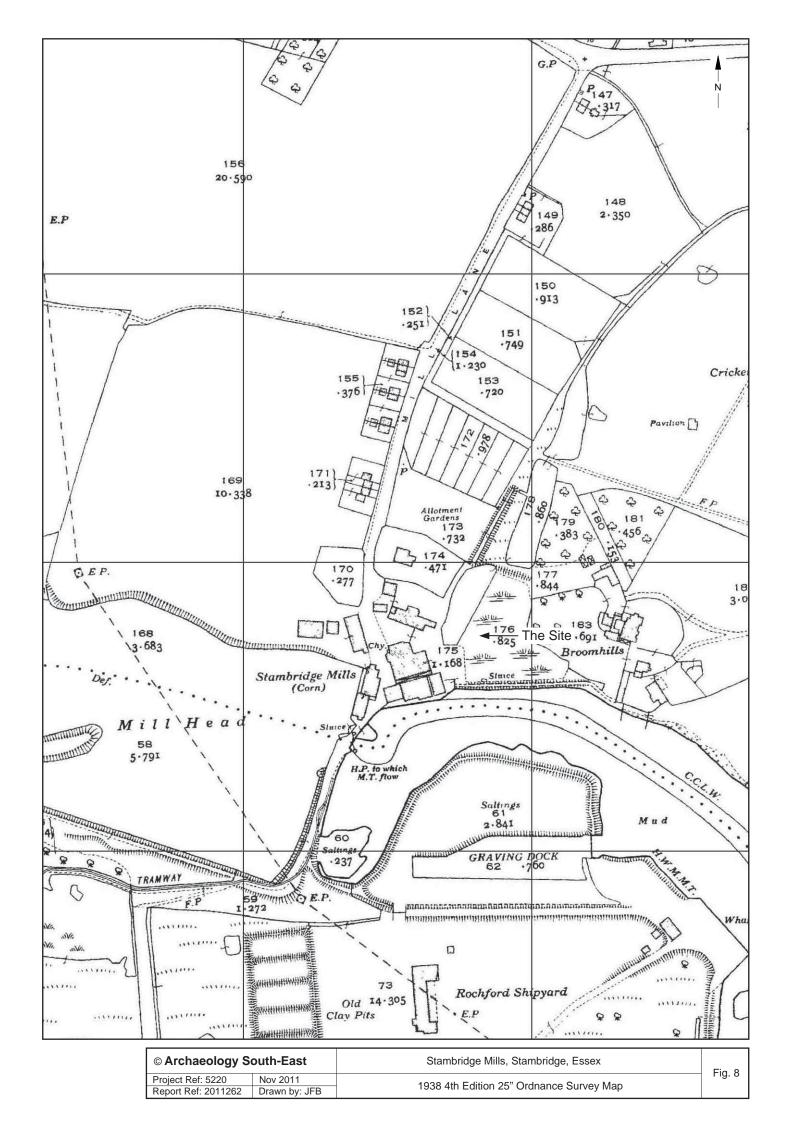
Fig. 4

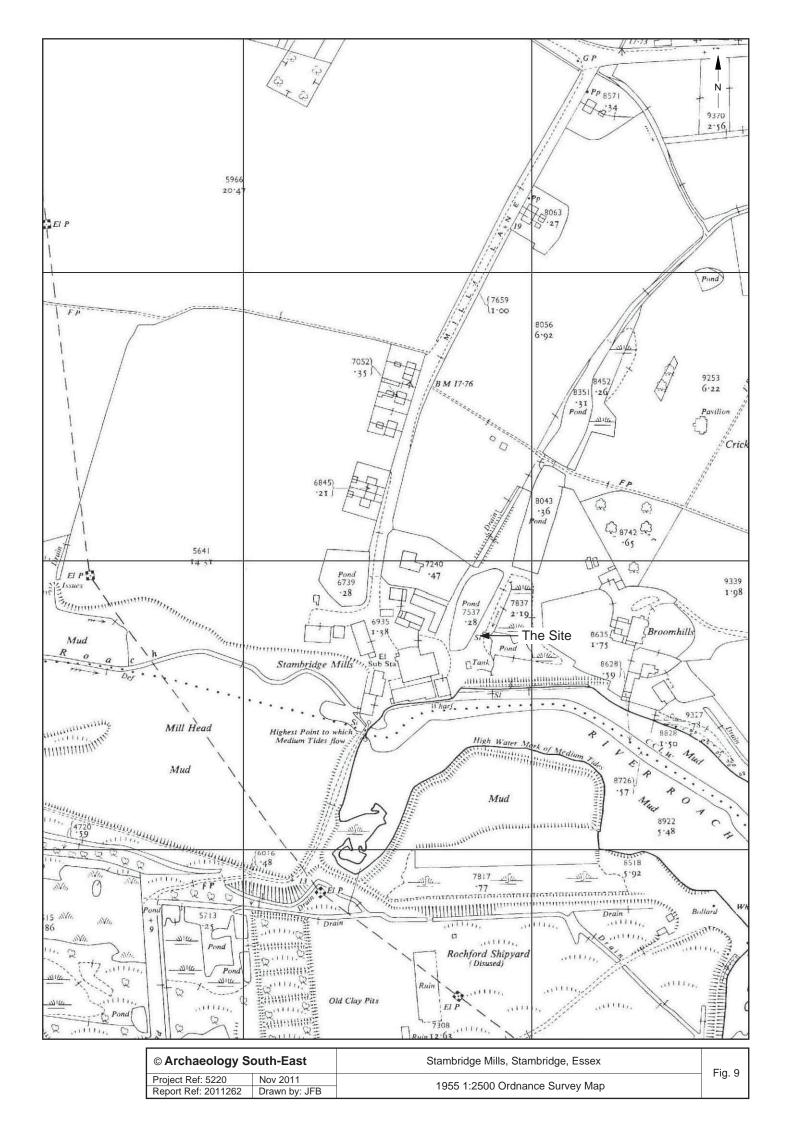


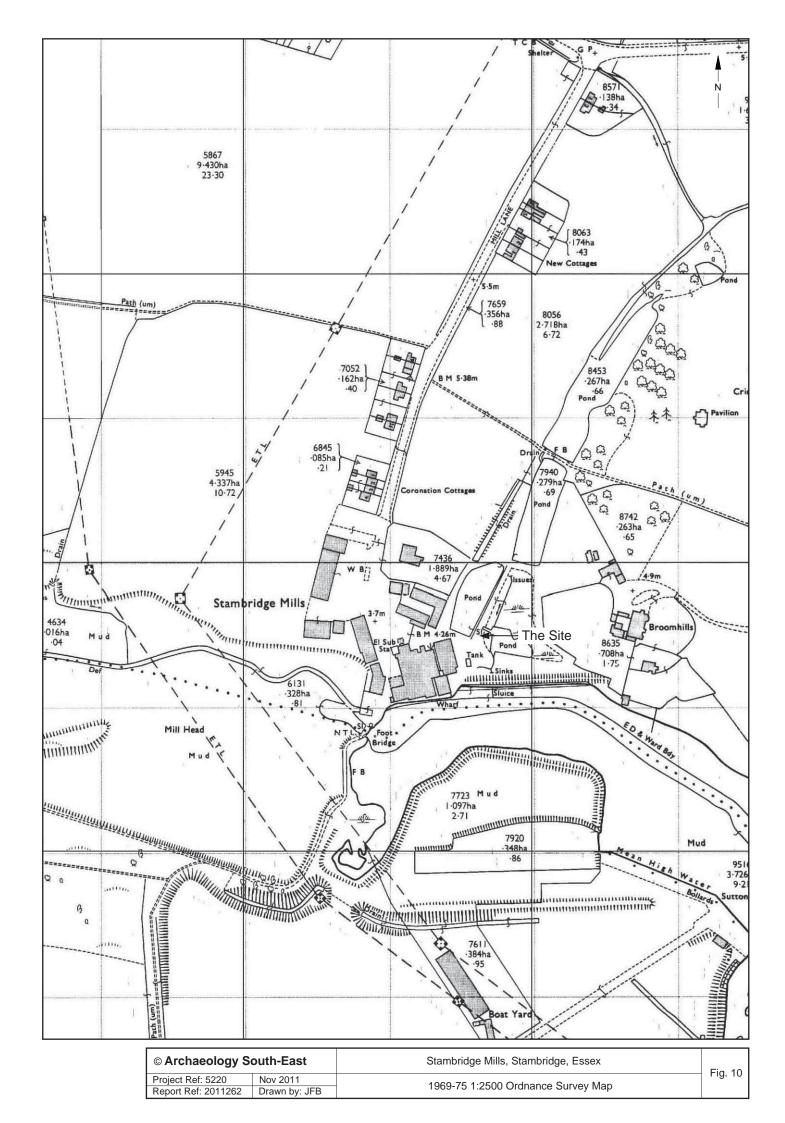
© Archaeology South-East		Stambridge Mills, Stambridge, Essex	Fig. 5
Project Ref: 5220	Nov 2011	1974 1at Edition 25" Ordnance Curvey Man	1 ig. 5
Report Ref: 2011262	Drawn by: JFB	1874 1st Edition 25" Ordnance Survey Map	













© Archaeology S	outh-East	Stambridge Mills, Stambridge, Essex	Fig. 11	l
Project Ref: 5220	Nov 2011	Block plan showing sequence of development		ı
Report Ref: 2011262	Drawn by: JFB	Block plan showing sequence of development		ı



© Archaeology S	outh-East	Stambridge Mills, Stambridge, Essex	Fig. 1
Project Ref. 5220	Nov 2011	Site plan showing use-flow through the site and functions of structures	1 19. 1
Report Ref: 2011262	Drawn by: JFB	(Based upon plans provided by CgMs)	



Plate 1
Building 1 from the south-west



Plate 2
Building 2 from the south-west



Plate 3

The remaining section of Building 3 from the west, with the demolition rubble to the left and the silos (Building 8) in the background. Intake Pit 1 is on the right with a yellow door



Plate 4

Building 4 in the foreground, showing the tall Building 6 behind, from the north-east



Plate 5
Interior of Building 4 facing west

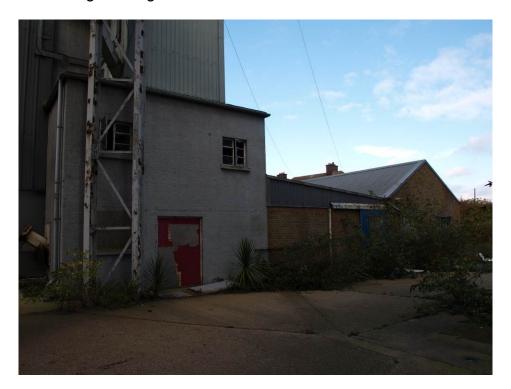


Plate 6
The east ends of Buildings 4, 5 and 6 (right to left) from the south-east



Plate 7
Interior of Building 5 from the east



Plate 8
Buildings 6 and 7 from the south-east



Plate 9

Building 7 from the south-west. Its scale can be ascertained from the comparative size of the pedestrian door at the bottom right.



Plate 10
Building 8 from the north-west



Plate 11
Building 9 from the north-east



Plate 12
Building 10 from the north-west



Plate 13
Interior of the northern lean-to of Building 10 from the west

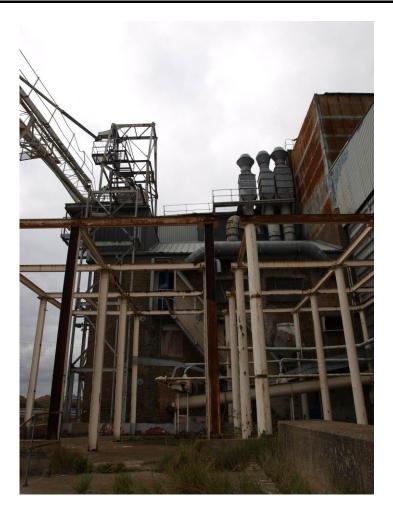


Plate 14
Building 11 from the east



Plate 15
Interior of the ground floor of Building 11 from the east



Plate 16

Buildings 14 and 16 forming lean-tos against Buildings12 and 15 (left and right respectively)



Plate 17

Building 15 with Building 16 (lean-to) in the foreground, from the north-west. Building 17 lies to the right



Plate 18
South-eastern part of Building 18 (18b) from the north-east



Plate 19

Second-floor interior of Building 18b showing base of large hoppers and access stair



Plate 20

Buildings 19 to 22 from the north-east. Building 20 is demolished in the foreground, Building 22 to the right, Building 19 shows the gable on the left and Building 21 lies in the background between Buildings 19 and 22.



Plate 21
Building 23 from the south-east



Plate 22

Buildings 21, 19, 18 and 24 (left to right respectively) from the west. The top of Building 13 can be seen above Building 24.



Plate 23
Interior of ground-floor of Building 24 from the north-west



Plate 24

South-western end of Building 24 from the south. Building 18 can be seen in the background.

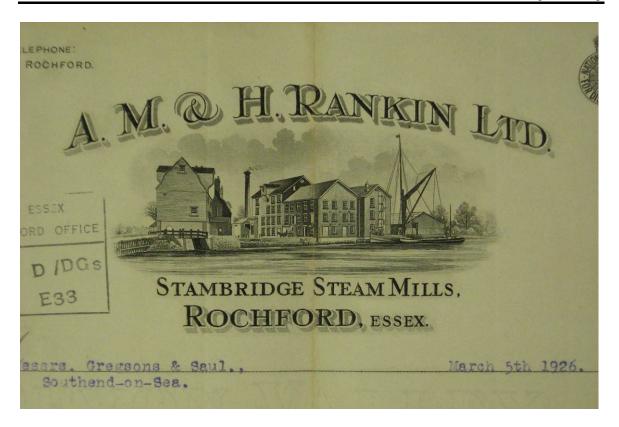


Plate 25

The letter head of A.M. & H. Rankin Ltd showing the mill from the south-west. The tidal mill lies to the left with the mill-house beyond, and the steam mill to the right (Buildings 13 and 11 fronting the wharf with Building 15 behind)





Plates 26 and 27

A photo of the mill c.1955 (© Francis Frith) from the south-west and the same view of the mill as at present, showing the changes which have taken place in the second half of the 20th century

APPENDIX 1: INVENTORY OF GOING GEARS, GOODS AND CHATTELS OF LITTLE STAMBRIDGE TIDE MILL FROM THE TRUSTEES OF THE LATE JAMES DAVID VALUED TO MR. JOHN KEMP 29TH SEPTEMBER 1809

# Stage

Sack tackle shaft with gudgeon hoops and keeps Sprogger Wheel Round rope Sack rope and chain Snap cords and Iron Sheath all complete 20 feet of Elm Slab One Sack Cart broom and Old Shutter 5 feet of [?] board

#### Floor Chamber

71 feet of three inch leather Strop 26 feet of 6 inch d<sup>o</sup> Bunch of Riggers 2 feet 3 inches high by 15 in: thick Iron Gudgeon and two brasses to do double frame 4 feet Long by 26 in: wide Screw lifting riggers Poppets all as fixed complete; two standing flour Mills hoppers Shoes and Riggers complete 2n<sup>o</sup> 14 Cloths and 3 old D<sup>o</sup> Block hoe and Shovel Sack Jack and Chain 3 feet 6 in Scale beam – 2 Scale beam 5 – 56<sup>lb</sup> one 28<sup>lb</sup> Iron Weights 4<sup>lb</sup> brass d<sup>o</sup> One from Cap One Sack cart 4 wooden shovels 4 hair brooms One hand Shovel Brush and Strike One Peck measure and one Quarter of do wire sieves and Scraper One old Rigger 5 feet of deal ?board 14 feet Shooting Spout

## Catch Mill floor

Old Catch Mill complete as fixed 37 feet of 37 inch leather Strap horizontal Shaft 13 feet long Gudgeons hoops brasses and coupling Bolts nut hoops and bolts bunch of riggers 2 feet high by 12 inches thick bunch of riggers 2 feet 10 inches high by 10 ins: thick 7 iron bolts to do poppets and brasses as fixed Complete pumper with 3 wires Iron Cranks Riggers coupling bolts poppets brasses as fixed complete 50 feet of [?] rope one rigger and two chains four flour cloths number 9 N° 11 N° 12 and N° 14 4 oze bag and hooks One sack cart and one pair of heads

#### Hirst

2 strait slaves One Oak and One mahogany two bill thrifts fly wheel 4 feet high bolts and coggs Oak upright Shaft Gudgeons hoops Step and coupling brasses top bridge tree 9 feet long 9 by 9 spur wheel bolts Coggs Wallow Md bolts hoops and cogs complete 2 eleven feet deals 2 wheat screens 2 spouts as fixed complete one sack bag and barley hoppers complete
One pair 4 feet 4 inch french Stones Iron box Spindle
Ring and Damsels [?] ladder Hopper Shoe and
Iron grate bridge tree and brass bray and lighter ?ferew
and Iron bridging box On pair of 4 feet 4 inch
french Stone as above for

\_\_\_\_\_complete 3 stone Nuts and Coggs and bolts
Stone [?] rope and Iron clamps for turning Stones
Over two setts of Stone bearers 2 saddles 2 Stone
Wedges One notch block and 3 levers 3 hammers
and one Cogg Chissell 3 Iron Crows broom and wire Sieve
one triangle 2 levels and rubbing burr Sundry
lot of Coggs Riggers + wire rat trap and hand
Shovel

# Lower Floor

26 mill bags 4 feet 2 inch scalebeam with scales and ropes 4 – 56<sup>lb</sup> and 5 6<sup>lb</sup> of difference weights Iron – 3<sup>lb</sup> of brass weights and 5 2<sup>lb</sup> of lead d<sup>o</sup> Small scale beam tin Scale and wood do – 2 meal troughs and an Old Scuttle tool hutch and flour hutch – 5 Cupboards as fixed 3 Sack jacks Sundry lots of tools and box Sack barrow broom and brush – 3 oze bags + lines – Lantern Stool and 4 Candlesticks basket + Strike

## Water House

Grindstone Irons and trough as fixed Crow bar Sundry lot of Old Iron – Pile to Kettle brand and two ladles 14 feet of inch elm board One oak Gate bar – 34lb of pitch rope 72 flour sack 4 barley meal Sacks 46 corn sacks 5 [?] bags

Valued at £214.16.0 by William Cureton

D Wood

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