Historic Building Record College Mill Trout Farm Almondbank PERTH & KINROSS HR03

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COLLEGE MILL TROUT FARM HISTORIC BUILDING RECORD ALMONDBANK PERTH & KINROSS

HR03

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ABSTRACT

Alder Archaeology produced a historic building record (site code HR03) of College Mill Trout Farm, Almondbank, for Mr and Mrs Cummins, in advance of conversion to a community and educational use. The recording was undertaken on 25th March 2020. The building was in use as a beetling mill by 1860. It consists of two ranges, E and W, and a system of lades and sluices beside the River Almond. Traces of the mill mechanism survive at the core of the building, together with a history of adaptations and repairs down to the present time.

1 Background

1.1 Introduction

Mr and Mrs Cummins commissioned Alder Archaeology to undertake an archaeological Historic Building Record of College Mill Trout Farm, Almondbank. The proposed development is a 19th-century or earlier mill on the E bank of the River Almond, centred on NGR NO 0660 2610. The work (site code HR03) was undertaken on 25th March 2020. The requirement was to make a basic record of the existing mill buildings and their immediate surroundings. Special attention was to be paid to evidence of their original use as a beetling mill.

The work was designed to satisfy the archaeological condition on development application reference 19/00369/FLL.

1.2 Aims and Objectives

The main aim of this investigation was to record the mill buildings as they currently are, and the evidence for their structural history and changing use, before it is obscured by consolidation, repair and conversion to future use.

1.3 Reporting

The present document has been prepared as the final report on this investigation. Copies will be sent to the client, The National Record of the Historic Environment at Historic Environment Scotland, and the Perth and Kinross Historic Environment Record.

1.4 Acknowledgements

Terms of Reference were prepared by Sophie Nicol of Perth and Kinross Heritage Trust. The work was arranged by Nicholas Goward of Studio EAST Chartered Architects, and funded by the clients Mr and Mrs Cummins.

2 Details of Work

2.1 The Site (Illus 1)

College Mill is located on the E bank of the River Almond, in the village of Almondbank, some 6 km WNW of Perth. The Almond generally flows W-E to join the Tay about 3 km N of Perth, but at Almondbank it turns S and runs NNE – SSW for about 1 km. This determines the alignment of Main Street (on the W bank), College Mill Road, and the mill site itself. For convenience this is treated here as N-S.

The site occupies a strip of flat ground just above river level, bounded to the W by the river, and on its E side by a steep bank leading to College Mill Road, which runs parallel to the river and descends steeply N –S.

Directly to the N of the site is a low-lying area of wooded ground, and then a stone arch bridge which carries the main road over the Almond. The lade which powered the mill and latterly supplied the trout farm is taken from a weir about 50 m N of the bridge, and flows along the E bank of the river, through an area of woodland, through the site and

through the buildings, before eventually returning to the Almond S of the site. The site is bounded to the S by various small industrial and residential premises along the river bank.

Within the site, the mill buildings occupy a central position, aligned E-W. To the N and S are various fish ponds, water channels and sluices dating in their present form to the use of the site in the 20^{th} and 21^{st} centuries as a trout farm. The site is bounded to the N, W and S and in places subdivided by modern concrete flood defence walls, with steel floodgates to control any overflow both from the river and from the lade.

To the E of College Mill Road the ground rises further. Directly opposite the mill building is a small, steeply sloping burial ground with a number of rather modest headstones, generally in a late 18th or early 19th- century style. These are mostly of local sandstone and much eroded, but the earliest partly legible stone commemorates someone who died on 11th January 1813, aged 92.

2.2 Archaeological Potential

The College Mill predates the 1860 Ordnance Survey, and is recorded as a beetling mill (a process in the finishing of linen cloth). The Perth and Kinross Historic Environment Record contained some limited information about the building, and noted for example the curious curved awning above the cart-loading entrance.

2.3 Archaeological Method

The site was visited on 25th March 2020, and digitally photographed outside and internally. The surrounding areas were also photographed in order to record the external fish tanks and water courses, and the location of the mill in its landscape. The photographic record was intentionally structured to allow cross-reference between detail and its wider setting. It is described in detail in Appendix 1 below, together with interpretive notes where relevant. The text which follows gives a general overview. The illustrations are based on plans and elevations, annotated to show features of interest.

2.4 Results of Investigations

01 South Exterior

The area to the S of the mill buildings consisted of large open air fishponds, mostly aligned E-W, and various water tanks, channels and sluices to manage and direct the flow of water through the complex. The area nearest the mill was enclosed with modern concrete flood walls and steel flood gates. To the S of this, there was an open mesh fence along the river bank. The ground rose gently eastward towards College Mill Road. The main channel of the lade flowed N-S along the E boundary of the site, beside the road.

The mill building consists of two ranges, E and W, aligned E-W, mostly of whitewashed sandstone rubble masonry, with ridged roofs slated in uniform courses.

The E range consists of ground, first and attic floors. The E gable end is terraced into the rising ground. On the ground floor there is a large wooden sliding door to the E of centre, with a wooden pedestrian door directly to the E of it. To the W there is a single window with four panes, and to the W of that a bricked-up doorway.

At first floor level there are four almost uniform rectangular windows with modern double glazing. The E and W windows are very slightly taller than the middle pair, and there are timber lintels visible above them. There is a small stone cornice at the wall head, mostly hidden by modern plastic guttering.

The attic floor has three large dormers with ridged mansard roofs and broad rectangular windows with modern double glazing. At the E end of the roof, there is no fourth dormer, but instead a small, two-paned cast-iron framed rooflight of late 19th- or early 20th-century type.

The first and attic floors have their own separate entrance from College Mill Road, located in the E end wall. These floors are in private residential use, and were not examined internally. They are not directly affected by the present development, and have been fully modernised and furnished internally, so would not have revealed anything about the structural history of the building.

The W range directly abuts and partly overlaps the W gable end of the E range. The S wall of the W range stands just over 1 m S of the E range, in effect extending the shared gable wall about 1 m to the S. It was not obvious, despite careful inspection inside and out, which range came first, though presumably the building would not have been designed with this offset if the two ranges had been constructed together. Similarly, the E range stands just over 1 m taller than the W range, so that a strip of the gable wall overlooks the roof of the W range, but the sequence of construction is not immediately obvious.

The W range consists of a ground floor, with a loft above. The whole building droops markedly to the W, with extensive evidence of cracking and repairs, inside and out. This is not surprising, as the W gable end is very close to the river bank, and must rest on soft river deposits and perhaps made-up ground.

At the E end, there is an open doorway with a single glass window above, through which the mill lade flows, N-S. W of this there is a full-length timber-framed window, consisting of two two-paned casements below, and a single, bottom-hinged pane above. This pattern is repeated on all the windows of the W range. To the W of this is a large loading door with two planked sliding doors suspended from an iron or steel rail. There is a timber lintel above, and over the lintel the rubble masonry has been replaced in brick, perhaps 20^{th} -century, indicating that this doorway is a later insertion. To the W of the loading door is another flanking full-length window, and then two bricked-up doorways or full-length windows, more or less evenly spaced along the W half of the wall.

There is no gutter at the wall head, except for a length of plastic guttering directly over the loading door. There is a two-paned cast-iron framed rooflight in the roof, about one third of the way E from the gable end. The zinc roof ridge droops gently to the W (like the whole building), but then in the final two or three metres sweeps up markedly to the W gable. This sweep has been intentionally formed in brickwork (see below), and continues all the way down to the eaves. It may have been added to correct the westward slope of the roof, and stop rainwater from running off the western edge of the roof and down the face of the gable wall.

02 West Exterior

The W gable end wall leans markedly outwards to the W, and shows extensive evidence of cracking and repair. This wall has not been whitewashed, so it is possible to clearly see the sandstone rubble masonry, with well-defined sandstone quoins at the N and S corners.

At ground floor level there are two blocked openings, either side of the centre, with sandstone quoins and lintels, but no obvious sills. In both openings the quoins are present only above waist height, as if they had both begun as windows. The N opening is blocked with sandstone rubble. The S opening appears to have been opened up to form a doorway, then blocked in two stages, with sandstone rubble at the bottom, and red brick at the top, probably 20th century.

In the S half of the wall, there is a horizontal line of rectangular sockets in the wall around head height, probably the remains of a small lean-to roof. Below this there are traces of white lime mortar, probably original, sheltered from the weather. In the N half of the wall, there is a pattern of small drilled holes, about 10 mm diameter, perhaps traces of injected damp proofing or to secure some surface covering now lost.

At loft level there is a single central rectangular window with inserted brick jambs, a timber lintel perhaps re-used, a fixed timber frame, and a single fixed pane of modern float glass. This is evidently a modern insertion, perhaps late 20th-century. At the top of the gable wall is a band of red brick, perhaps half a metre at the ridge, tapering to zero at the eaves, added to form the upward sweep of the roof. The brick looks older than the jambs in the loft window or the blocking in the ground floor window. It might date to the early 20th century.

03 North Exterior

To the N of the mill building, most of the site is occupied by a line of large circular corrugated steel fish tanks, covered over with a green plastic mesh tunnel. Along the river bank is a modern concrete flood wall. At the N end of the site is a modern steel flood gate leading to a riverside path, a concrete control platform and a modern steel motorised barrage to close off the lade where it enters the site, in case of a flood on the Almond. The lade then flows N-S along the E edge of the site, down to the mill building. To the E of the lade is a steep bank rising to College Mill Road.

At the N wall of the mill, the lade divides. Part flows straight on, through the mill, and out on the S side. Part turns ninety degrees to the W, flows in front of the W range, under a stone arch, then on into a double culvert to be diverted around the mill. This W-flowing channel is enclosed with stone walls and a concrete wall, so that it cannot overflow and flood the complex.

The E range of the mill is partly terraced into the steep bank of College Mill Road. At ground floor level, a doorway and two windows, all boarded up. At first floor level there is a modern steel balcony, with two doors in the middle and two windows, at either end. In the roof there are two modern Velux-type rooflights, a single near the W end and a double towards the E end. The W end of the roof has a visible upward sweep (not as extreme as the W range), to prevent rainwater running off the roof and down the W gable onto the roof of the E range.

As on the S side, the W range abuts and partly overlaps the E range, with the N wall standing more than 1.5 m N of the E range.

The N wall of the W range is unpainted, and of sandstone rubble masonry, with sandstone quoins and lintels, but no well-defined sills. There are five evenly-spaced openings in the N wall. At the E end there is low archway to admit the lade into the mill, with a rectangular open hatchway or window above. Next to this is an entrance door. West of this are three similar glazed windows. The entrance door is reached by a stone arch footbridge over the side branch of the lade. This area is covered over by a modern corrugated iron and timber shelter.

There are four almost evenly spaced cast iron framed rooflights in the roof of the W range.

04 East Exterior

The E gable end of the E range faces directly onto College Mill Road. The ground floor level of the gable wall is entirely terraced into the steep bank, and hidden under the ground. The upper part of the gable wall is of sandstone rubble with sandstone quoins, covered with whitewash. In the centre of the wall is a front door which gives direct access from the pavement to the first floor residential area. Above this is a 20th-century steel stair and balcony which leads to another central door, into the attic floor level.

The doors and balcony are covered over by a D-shaped slate and timber canopy, which occupies the full width of the gable end, and reaches up to within a metre of the apex. The canopy is cantilevered out from the gable wall. Around the base or eaves of the canopy is a curved timber beam, probably laminated, which defines the D-shape of the structure. The ends butt up against the gable wall, and the middle is supported by two horizontal timber struts, one of which butts up against the wall, while the other is now fastened to the steel balcony structure. The D-beam is suspended from above by four wrought iron or steel bars, fastened to the wall near the top of the structure, and to brackets on the beam at the bottom. The feet of the rafters are notched to fit over the internal edge of the D-beam. The tops of the rafters are fastened to a horizontal beam fixed to the wall. Externally the canopy is slated, decorated with diamond and fish-scale patterns.

This feature is obviously the curved awning over the cart loading entrance noted in the Historic Environment Record. The rafters, sarking boards and slates are in excellent condition. It may be that this feature has been carefully restored in modern times, perhaps in the late 20^{th} century.

05 West Range, Ground Floor Interior

Internally the W range has a concrete floor, and bare walls, generally painted white. There is extensive evidence of cracking movement, especially at the W end. The door and window openings are generally splayed all the way down to the floor, and there are usually brick arches above, and in some cases wooden lintels. The evidence of blocking is generally as seen externally. Two additional small bricked up openings are visible near the middle of the W gable wall. Their function is unknown, but might have served as flues or air intakes for a stove or similar device. The loft floor above is entirely exposed. The floorboards run E - W, the joists run N - S. The joists are inserted into the walls, and are also supported on two long E - W beams, supported on

timber posts. All the joists are in two parts of uneven length, overlapping where they rest on the northern of the two beams, and not apparently fastened together. Some of the joists are painted white, and some not. The beams show various notches and mortices of no obvious function. Mrs Jenni Cummins mentioned that her father, the late Mr D M Brien, had extensively repaired this area with re-used salvaged timbers, which is probably the reason for these features.

Near the E end of the E range is a well-worn timber stair, leading to the loft above, and beyond this a very robust internal wall separating the rest of the range from the N-S passage through which the lade flows.

The internal dividing wall, and the exposed W face of the E range gable end wall are of very solid sandstone ashlar construction, quite different from any other part of the building. There is a circular scar on the gable wall strongly suggesting the position of the mill wheel. The lade runs through at floor level, and near its N (upstream) is a notch in the floor on the W side and a matching scar on the E side where vertical wooden rails had supported a sluice gate to control water flow to the wheel chamber. On the W side was a reduction gear and pawl and ratchet still in situ, part of the winding mechanism for raising and lowering the sluice. Lying nearby were wooden rails with an iron rack and pinion, also part of the sluice mechanism.

It is very likely that the mill used an undershot wheel, controlled by the sluice directly to the N. In the dividing wall were a doorway and window to allow easy access and inspection of the wheel without wading in the lade. No trace was found of the drive mechanism, or any cloth finishing machinery.

06 West Range, Loft

The loft above the W range is a single open space. The rafters and sarking boards are exposed. There are collars above head height, jointed onto the E faces of the rafters, and the rafters are jointed together at the ridge. There is no ridge beam. At the W end, the brick heightening of the gable is clearing visible, but there is no sign of alteration in the rafters. Perhaps they were completely replaced. On the W gable wall there are traces of vertical tongue and groove boarding which once covered the wall.

On the underside of the rafters and collars there are traces of a lining, perhaps nailed boards. Along the eaves on either side there are light-coloured vertical posts nailed onto the rafters and resting on sill beams over the floorboards, which would have supported some sort of vertical lining. On the N-facing slope of the roof, the three small cast-iron rooflights have actually been reduced from much larger openings with white-painted wooden surrounds, which have been boarded over. A fourth skylight in the NE corner is similar. In the S-facing slope of the roof, two rooflights have been completely boarded over, and one reduced. The fact that these changes cannot be seen externally suggests the roof may subsequently have been re-slated.

In the NW corner of the loft is a modern stud and plasterboard storage enclosure. In the E party wall, above the collars, there is a joint or perhaps a blocked opening, filled with rubble masonry, with perhaps a timber lintel above. This might suggest a window in the W gable of the E range, blocked when the W range was built up against it.

07 East Range, Ground Floor

The ground floor of the E range is accessed from the W range by a light plank bridge over the lade, and a doorway in the party wall, with a lintel made of iron or steel bars. The ground floor is a single room, with doors, windows and blocked openings as seen from outside. This was the fish-processing room, and still contains a processing machine invented by Mr Brien. The walls are generally finished and painted, so do not reveal very much about the structural history. The overhead floor is in places supported by wooden beams on welded steel columns, with a boarded up opening near the middle. At the E end of the room is small plaster-board enclosure or store room.

3 Discussion

College Mill is a building of considerable interest and complexity, not least because it has undergone so many piecemeal repairs and changes of use, down to the present time. The lade survives extensively all round and within the building. Clear traces of the mill mechanism survive at the core of the building, but nothing was found of the cloth processing machinery connected with its recorded original use.

The E and W ranges are so different from each other that there is obviously a structural sequence involved. The evidence of a blocked opening in the W gable wall of the E range suggests that the E range came first, with the W range built up against it. However, the mill structure at the core of the building is so different from either range that it is at least possible that this came first, with the two ranges being added and altered on either side of it in succession, rather as the various blocked openings seem to have been opened, enlarged and blocked again at different times, as the building was adapted to changing uses.

The D-shaped canopy at the E end of the mill is an important feature, and is in very good condition. It is not under any current threat, and adds significant interest to the street.

4 Bibliography

Nicol, S 2020 Terms of Reference for Historic Building Recording, College Mill Trout Farm. Perth and Kinross Heritage Trust, Perth.XSFG

5 Photographic Register

No	Description	View
	01 South Exterior	
001 - 2	Empty fishpond in foreground. Mill buildings behind trees. River Almond far L behind flood wall. Concrete tanks under corrugated iron roof to L. College Mill Road on R	N
003 - 4	W range of Mill. Lade emerging S at E end. Sluices in foreground.	N
005 - 6	Bank of River Almond. Concrete flood walls with imitation masonry face. Green steel flood gate. Concrete tanks under corrugated iron roof. W range of mill beyond. Almond bridge in distance.	N

007 - 9	Concrete tanks under corrugated iron roof. Sluices and channels. Mill buildings beyond.	N
010	Bank of River Almond. Concrete flood walls with imitation masonry face. Green steel flood gate. W range of mill. Almond bridge in distance.	
011	S and W elevations of mill building. Tanks in foreground.	
012	Concrete tanks with aeration jets and corrugated roof.	S
013 - 14	E range of mill. Ground floor, fish processing room, first floor and attic residential. S elevation, whitewashed rubble masonry. Blocked doorway, ground floor left, behind upturned pallet. Sliding loading door to R, with rail above. First floor, four rectangular windows with modern double glazing. Attic, three dormers with modern double glazing and one cast-iron framed rooflight.	
015	Junction of E and W ranges.	NW
016 - 18	Detail of wooden lintel over first floor window, E end. Cornice at wall head behind plastic gutter.	NE
019	Similar at W end of E range. Junction with W range. Blocked ground floor doorway behind pallet.	NW
020	Junction with W range. Blocked ground floor doorway behind pallet.	NW
021	Junction with W range. Blocked ground floor doorway. Detail of brick blocking under whitewash (pallet removed).	NW
022	Detail, junction with W range. Sequence not obvious.	NW
023	Detail, junction with W range. Sequence not obvious.	W
024 - 5	General, junction of W and E ranges. Lade emerging from W range. E end of W range eaves swept up to direct rainwater away from E range. No gutter on W range eaves.	NNW
026 - 7	W range, S elevation. Ground floor, large loading door with wooden lintel and rail above double sliding door. Brickwork above. Rest of wall is whitewashed rubble masonry, with dressed lintels and quoins. Full-length windows either side of loading door, four panes below, single pane above. At far right, open doorway for lade to pass through building. Glass pane above. To W of loading door, two bricked-up openings with stone lintels above. Partly hidden by vegetation and netting.	N
	Slated roof with uniform courses, single cast-iron framed rooflight. W end of roof and ridge swept up over W gable end. No gutter at eaves, except directly over loading door.	
028	W range, and junction with E range. W gable of E range also whitewashed rubble.	NE
029	W range, detail of central loading door and flanking windows.	N
030	W range, detail of central loading door, with iron sliding rail, wooden lintel, brickwork above, and plastic gutter at eaves.	N
031 - 4	W range, E part of S elevation. Two bricked-up windows behind netting. Upsweep of roof at W end. Cracking. Quoins at junction with W gable end. W gable leans markedly W. Possible mark of lean-to structure against S wall.	N
035	Detail of tell-tale on crack between wall and brick blocking.	N

036 - 7	Detail of brick-blocked doorway.	N
038	Detail of brick-blocked doorway.	NNW
039	Detail, W gable end of E range.	NE
	02 West Exterior	
040 - 1	West gable end of W range, from SW corner.	NE
042	W gable end. Detail of SW corner. Sandstone rubble masonry with sandstone quoins and lintels. Occasional large sandstone blocks, perhaps re-used quoins. Frequent cracks, repaired with recent cement mortar. Original lime mortar also visible, especially where protected from weather by lean-to roof. Wall head raised with red brick, to create upsweep of roof edge and ridge. Small rectangular indentations, about halfway up wall, traces of lean-to roof. Blocked opening at ground floor, S of centre.	Е
043	W gable end. Detail of middle of wall. Blocked opening at ground floor. Lower part blocked with sandstone rubble, recently cement pointed. Upper part blocked with red brick. Sandstone lintel. Sandstone quoins in upper part only, missing in lower part. Suggests window converted to door, then blocked in two stages. Lintel cracked and slopes markedly down to S. Glazed central window at first floor/loft level.	ENE
044	Detail of S blocked opening.	Е
045 - 7	Detail, middle of wall. Central loft window above. Second blocked opening at ground floor to N of centre.	Е
048 - 9	Detail of first floor / loft window. No sill, quoins or stone lintel. Jambs roughly formed in brick, roughly mortared. Wooden lintel, resting on brick jambs. Lighter timber fixed to front of lintel, function unknown. Fixed modern glass pane, Pilkington float glass or similar. All suggests later 20 th -century insertion in wall. Wall head raised in red brick (earlier 20 th century?) to create upsweep of roof edge and ridge.	Е
050	Detail, N blocked opening at ground floor. Sandstone quoins and lintel (cracked). No sill. Blocked with coursed sandstone rubble, lime mortared. Stops at waist height. Window only, never converted to doorway, unlike S opening.	Е
051 - 3	Detail, NW corner, with sandstone quoins. Lower part of wall marked with frequent round holes, about 20 mm diameter. Purpose unknown. Injected damp proofing? Modern sandstone flood wall abuts corner, with modern galvanised steel gate post.	Е
054	River bank with concrete flood wall, Almond bridge beyond. Modern galvanised steel gate. Detached section of concrete flood wall abuts modern sandstone wall linking to NW corner of mill. Detached concrete flood wall etc serve to prevent overflow from hidden water channel on other side.	N
	Green plastic mesh tunnel covers fish ponds.	
	03 North Exterior	
055	River bank with concrete flood wall. Almond bridge beyond (with red van crossing). Modern galvanised steel gate. Green plastic mesh tunnel over fish ponds.	N
056	N end of site. Concrete flood wall, green steel flood gate, lifting flood gate to close incoming lade against flood from N. Control tower with switch to close lifting gate.	N

057	Detail, lifting flood gate and control tower. Sprocket chains on gate quadrants connect to motor drive to raise gate.	N
058 - 9	N of flood gate, incoming lade and ladeside path. River bank behind trees to L.	
060 - 1	View from flood gate. L, steep bank to College Mill Road. Lade descending to College Mill. Ahead, grass ladeside path to mill. Roof of mill W range with distinctive upsweep at W end. Corrugated iron roof over mill entrance. R, green plastic mesh tunnel covering fish ponds.	S
062	W range roof. Slated, with distinctive upsweep at W end. Four cast-iron framed rooflights. No gutter at eaves. E range of mill abutting, seen over green mesh tunnel. Flood wall to R, steps to E N of mill.	S
063	As 061	S
064 - 5	Left, steep bank to College Mill Road. N elevation of E range. Whitewashed sandstone rubble. Ground floor one door, one window, fish processing room. First floor, residential, with three doors and one window onto modern steel and timber balcony. Attic floor, three Velux windows. W range, with intake of lade, and corrugated roof over entrance area.	S
066 - 7	Detail, lade enters W range under arch. Mesh filters in water. Window above. Corrugated iron entrance area. W gable end of E range overlooks roof of W range.	S
068	Detail of entrance area. Footbridge over water channel along N wall, with modern galvanised steel handrails. N wall is sandstone rubble with sandstone quoins and lintels. Three visible windows, with four panes below, single pane above.	SSW
069	N elevation of E range, with steep bank to College Mill Road.	SSE
070	Detail, W gable end of E range overlooks roof of W range. Timber lintel over window in N wall.	SSE
071	As 068.	WSW
072 - 3	As 062	S
074	NW corner of E range. Three visible windows in N wall, entrance door in shadow. Water channel along N wall, enclosed by galvanised steel rail, stone wall, and modern concrete flood wall.	SSE
075	Detail, entrance door in shadow.	SE
076	Three windows in N wall, overlooking water channel surrounded by galvanised steel rail.	ESE
077	Three windows in N wall, overlooking water channel surrounded by galvanised steel rail.	S
078	Detail, window overlooking water channel. No stone sill. Just mortar on rubble.	S
079	Detail, window overlooking water channel. No stone sill. Just mortar on rubble.	S
080 - 1	Detail, concrete flood wall at NW corner of mill. Mortise cut in quoin, function unknown.	SE
082	Water channel along N wall of mill. Stone arch footbridge leading to entrance.	Е
083	Water channel along N wall of mill. Twin culverts under concrete flood wall.	W

084	Detail, circular fish ponds inside green mesh tunnel.	N
085	Entrance door into W range. Two-leaf wooden plank door. Stone lintel above. 20 th -century timber and corrugated iron roof overhead. Heating or cooking apparatus to L of doorway.	S
086	Lade passes into W range. Mesh screens in water.	S
	04 East Exterior	
087 - 8	College Mill Road. Entrance to first floor, with covered loading bay. D-shape, with decorative slate work. Diamond and fish scale patterns. Modern steel stair to attic floor. Sandstone rubble masonry exposed above loading bay.	NW
089-92	E end of first floor, with loading bay. Curved wooden eaves. Steel brackets for gutter, missing.	W
093	Inside loading bay. Modern steel stair and balcony, access to attic.	W
094 - 6	Inside loading bay. Detail of sawn softwood rafters and sarking boards, and steel tie-rod and bracket, curved wooden eaves beam. Appears modern restoration.	N
097	Detail, bottom of steel tie rod attaches to bracket on curved eaves beam. Fixed with square nuts. Mid 20 th -century?	NE
098	Detail of tie rod end and bracket.	-
099	Top of tie rod, obscured by martens' nest.	-
100	Bottom of tie rod, with bracket and nuts and bolts. To left, join in eaves beam, shows laminated construction. Rafter feet notched, engage top of beam.	S
101	Interior of loading bay. Horizontal struts brace eaves beam against wall and steel balcony.	N
102 - 3	E end and loading bay, from burial ground opposite.	W
104 - 6	Interior of burial ground, overlooking E end of mill. Stones generally of late 18 th – early 19 th -century pattern.	W
107 - 8	Detail of stone. Died 11th January 1813, Aged 92. Seems earliest legible stone.	-
109	E end and loading bay, from burial ground opposite.	W
110	E end and loading bay, from burial ground opposite. View of dormers.	WNW
	05 West Range Ground Floor Interior	
112	Loading door into W range ground floor. Timber lintel with wrought iron or steel door rail. Wrought iron or steel door suspension mechanism, cast-iron wheels, with ingenious rolling bearing. Wooden planked doors.	N
113	Interior, view along S wall. Wooden floor joists above. Concrete floor.	W
114	View out of loading door. Timber lintel, brickwork above. Left jamb with sandstone quoins. Right jamb in 20 th -century brickwork.	S
115	Detail of sawn timber floor joists inserted into S wall. Window to W of door.	SW

116	Detail of window in S wall. Brick arch above, splayed jambs with sandstone quoins. Top pane hinged at bottom to open inward. Lower panes hinged either side to open inward as double casement. Below sill, reveal closed with thin brick skin. Could have functioned as doorway.	S
117	Blocked opening. Closed with brick. Wooden lintel sagging. Brickwork above, detached. Splayed jambs with sandstone quoins. Reaches down to floor.	SW
118 - 9	Detail of blocked opening with failing lintel above. Base partly closed with sandstone, quoins stop at waist height. May originally have been window not door?	S
120 - 1	Blocked opening nearest W gable end. Timber lintel made of several beams. Notches suggest re-used wood. Brick blocking down to floor. Thinner at top. Sandstone quoins where visible. W jamb leans to W, as does gable. Floor above slopes down to W.	S
122	Detail, card on work bench. Tayside Trout D. M. Brien, College Mill Trout Farm Previous use of building.	-
123	W gable wall, sandstone rubble.	W
124	W gable wall, sandstone rubble. Large blocked opening. Coursed rubble at bottom, then brick and rubble above. Timber lintel, then more rubble above. Red brick arch at top. All painted. Extensive cracking. Longitudinal E – W floor beam inserted above.	WNW
125	As above. Small blocked openings farther N, and second E – W floor beam overhead. Second blocked window or doorway farther N.	NW
126	Detail of first overhead floor beam supporting N – S floor joists. Joists divided and overlap above beam, irregular lengths. Some painted, some not. Re-used timbers.	NW
127	As 124.	WNW
128	As 124	WSW
129	Two small rectangular openings, bricked up, unpainted. Stove pipes or similar? Larger irregular opening at floor level behind plywood and corrugated iron sheeting. Bricked up and painted over. Second overhead floor beam supports floor joists above. Extensive cracking in wall.	WNW
130	Detail of small rectangular openings. Near centre line of gable end. Not seen externally.	WNW
131	Second (N) blocked doorway. Blocked with rubble masonry. Brick arch above. Lower part obscured by plywood.	NW
132	As 129.	WNW
133	As 131.	NW
134	As 129	SW
135	W gable wall at NW corner. Sandstone rubble.	W
136	General view to SE corner. Northern E – W beam supported on three timber posts.	ESE
137	General view to E wall. Four openings in N wall.	Е
138	Northern E – W beam supported on timber posts.	ENE

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139	Detail of first (W) post supporting E – W beam. Notch and mortise in beam indicate reused timber.	N
140	Detail of second (middle) post supporting E – W beam. Mortise in beam indicates re-used timber.	
141	Detail of third (E) post supporting E – W beam. Mortise in beam indicates re-used timber.	ENE
142	Detail of third (E) post supporting E – W beam. Mortise in beam indicates re-used timber.	NE
143	General view to NW corner. Northern E – W beam supported on three timber posts.	WNW
144	General view to SE corner. Southern E – W beam supported on two timber posts. Second (E) hidden behind wire mesh rolls. Floor joists divided, uneven lengths, overlap above beam. Some painted, some not. Re-used timbers.	SE
145	Detail, W post supporting E – W beam. Joists overlap above. No obvious fastenings between joists. How is horizontal tension transmitted? Friction?	ESE
146	As 145.	ESE
147	As 145. E post also visible.	NE
148	View to SE corner. Lade exits S through doorway. Window adjacent. Brick arches above. Far right, edge of loading door in S wall.	SE
149	Detail of window adjacent to lade doorway. Brick arch above.	SE
150	As 148.	SE
151	Detail of E wall, with plank bridge over lade to E range, fish processing room. Wall mostly sandstone rubble. S jamb of doorway brick.	Е
152	Detail, lintel of doorway into fish processing room made of rusty steel bars. Old railway rail?	Е
153 - 5	Detail of E wall N of doorway. Partly of tooled ashlar. Circular mark of mill wheel. Brick and cement repairs. Lade flowing at floor level. E – W roof timber overhead, propped on blocks in oversize slot. Suggest replaced timber.	NE
156	Lade enters under stone arch. Window above. Door or hatch to L.	N
157 - 9	Detail of dividing wall on W side of lade. Thick solid construction, mostly ashlar, to support machinery. Door and window probably to view and control wheel. Slot in floor close to galvanised steel dustbins may suggest position of sluice to control intake to undershot wheel.	WNW
160	As 156.	N
161	E face of dividing wall on W side lade. Some brick repairs. Window and doorway into wheel chamber. Wooden stair to loft overhead.	Е
162	Detail of window into wheel chamber.	ESE
163	General view of dividing wall. Directly to left, vertical wooden post has pawl and ratchet wheel on square driving shank near base, fallen gear wheel nearby to left, and wooden beams with iron rack teeth lying loose on floor in foreground. Rack and pinion	ESE

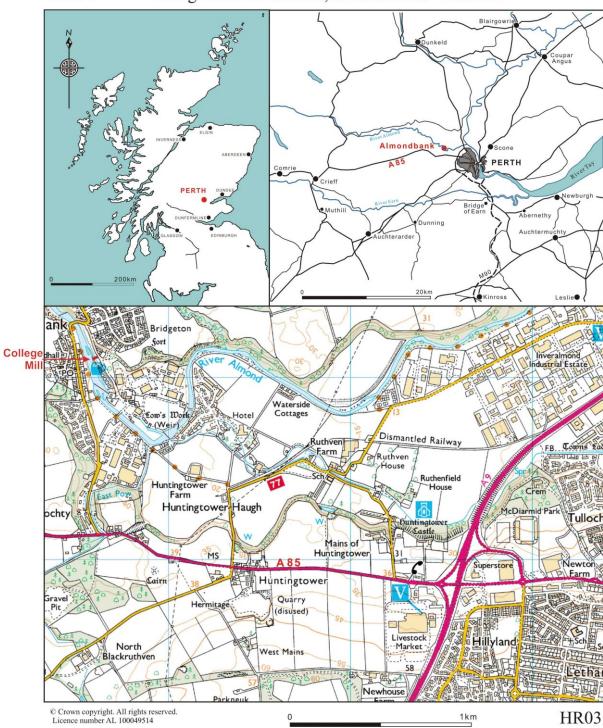
	mechanism for raising and lowering sluice gate, now dismantled. Could have fitted in slot noted at $157-9$ above and $165-6$ below.	
164	Detail of pawl and ratchet wheel, reduction gear, and rack and pinion mechanism.	Е
165 - 6	Detail of sluice mechanism. Square driving shank extending to E. Marks on opposite wall for other side of sluice mechanism. Details of reduction gear, gear wheels on floor, and slot in lade bank for sluice gate.	ESE
167 - 8	Detail of marks on opposite wall.	Е
169	External view of lade entering W range. Undershot seems only practical configuration.	SSE
170	View of stairs on concrete plinth leading to loft. Well-worn treads.	N
	06 West Range Loft	
171	Detail, roof collar with W gable beyond. Wall head raised in brick.	W
171a	Adjusted to show hidden detail.	W
172 - 4	Modern window in E gable end. Modern brick jamb. Remains of lining boards over rubble masonry of gable wall.	W
175	View to SW corner. Remains of lining boards over rubble masonry of gable wall. Collars meet rafters.	SW
176	Detail of lining around former rooflight near SW corner, now boarded over. Sarking boards different width inside rooflight opening. Shows main sarking boards already present when rooflight functioning. Rooflight later boarded over with short boards.	S
	Light colour of posts lap jointed onto rafters suggests wall lining added later. Feet of posts nailed to horizontal plank on top of floorboards. Nail holes on underside of rafters and collars suggest boarded ceiling, later removed.	
177	General view of rafters and sarking boards in SW corner. W gable wall to R.	S
178	General view of rafters and collars. Light coloured posts lap jointed to rafters. One functioning rooflight in S slope of roof. E party wall to E range.	ESE
179	W gable wall, N of central window. Detail of tongue and groove lining boards.	NW
180	General view to W gable wall and N slope of roof. Collars lap-jointed and nailed onto E face of rafters. Wooden floorboards. Double rooflight in NW corner now reduced to single.	W
181	Detail of double rooflight near NW corner, now reduced to single in cast-iron frame. Rafter boxed with white-painted lining boards where it passes through rooflight area. Shows rafter already in place when double rooflight functioned. Boards across double rooflight do not match general sarking boards, confirm later addition. W gable wall to left, with remains of lining boards. Light coloured vertical posts lap jointed to rafters, show addition of wall lining. Feet of posts nailed to horizontal plank on top of floorboards.	N
182	General view to E Party wall. Rafter crossing rooflight. Underside of rafter cut back above rooflight, perhaps to allow space for white-painted lining boards. Second (middle) reduced rooflight, above yellow plastic tub. Third (E) near NE corner.	ENE

183	General view to E party wall. Modern stud and plasterboard enclosure in NE corner.	Е
184	General view of reduced rooflight near NW corner.	N
185	Second (middle) reduced rooflight.	N
186	Third (E) reduced rooflight. Middle rafter boxed with white-painted lining boards. On right, rafter covered with white lining boards, then unpainted board added to support sarking boards when boarded up. On left rafter, same function performed by small square batten.	N
187	General view to W gable end.	W
188	Collars, rafters and sarking boards.	NE
189	Rafters and sarking boards at ridge. No ridge beam. One rafter replaced?	-
190	E party wall with collars and rafters.	Е
191 - 2	Detail, E party wall above collars. Faced sandstone rubble. Apparent blocked opening or vertical joint, obstructed by rafters. May suggest E range earlier. Timber lintel near ridge?	Е
193	As 191.	NE
194	Modern stud and plasterboard partition. Connects to E range.	N
195	General view, from NE to SW corner.	WSW
	07 East Range Ground Floor	
196	View across plank bridge over lade, into E range.	Е
197	Interior of E range ground floor. (Fish processing room).	Е
198	Interior. Plasterboard ceiling, beams supported on welded steel columns, White painted masonry walls. Fish processing machine.	NE
199	Detail, view back into W range. Sliding door.	W
200	Detail, fish processing machine name plate.	W
201	W party wall. N – S beam supported on welded steel column.	W
202	As 201.	SW
203	Window and doorway in S wall. N – S beam supported on welded steel column.	S
204	Windows and doorway in S wall.	SE
205	View to NE corner.	NE
206	Hatches in N wall.	N
207	Hatch or alteration in floor above.	W
208	Hatches in N wall.	NW
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209	Window in SW corner. Fish processing machine in foreground.	SSW
210	Detail of hatch and N – S beam in NW corner.	NW
212	Detail of hatch in middle of N wall. Splayed opening and sill. Boarded up.	N
213	Detail of hatch or doorway in N wall, towards NE corner. Not splayed. Boarded up.	N
214	Doorways in S wall, and SW corner. Welded steel columns support E – W beam overhead.	SE
215	Detail of steel column supporting N – S beam overhead.	S
216	General view of window and doors in S wall.	SE
217	General view of E end wall and E – W beam overhead.	Е
218	Detail of SE corner and plasterboard enclosure.	Е
	08 Internal Lade	
219	Detail of dismantled sluice mechanism beside lade.	S
220	Detail of dismantled sluice mechanism beside lade.	NE
221	Lade emerging from W range.	N
	09 Almond Bridge	
222	College Mill Road. Mill roofs ahead. River Almond on R.	S
223	Detail, street names.	SW
224 - 5	View down College Mill Road to mill (on R).	S
226 - 7	View from bridge, down River Almond to mill (on L).	S
228	View N fr0m bridge to weir and take-off of lade.	N
229	Detail of bridge from N end of College Mill Road.	NW
230	Mill roofs from College Mill Road.	S

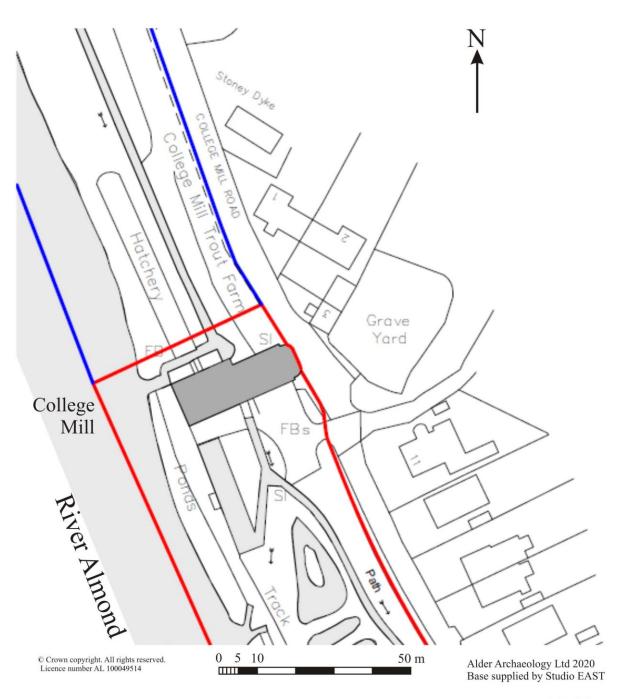
Appendix 1 Discovery & Excavation in Scotland Entry

LOCAL AUTHORITY:	Perth & Kinross
PROJECT TITLE/SITE NAME:	College Mill, Almondbank
PROJECT CODE:	HR03
PARISH:	Redgorton
NAME OF CONTRIBUTOR:	David Bowler
NAME OF ORGANISATION:	Alder Archaeology Ltd
TYPE(S) OF PROJECT:	Historic Building Recording
NMRS NO(S):	-
SITE/MONUMENT TYPE(S):	Mill
SIGNIFICANT FINDS:	-
NGR (2 letters, 8 or 10 figures)	NO 00660 2610
START DATE (this season)	25 th March 2020
END DATE (this season)	25 th March 2020
PREVIOUS WORK (incl. DES ref.)	-
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	Alder Archaeology produced a historic building record (site code HR03) of College Mill Trout Farm, Almondbank, for Mr and Mrs Cummins, in advance of conversion to a community and educational use. The recording was undertaken on 25th March 2020. The building was in use as a beetling mill by 1860. It consists of two ranges, E and W, and a system of lades and sluices beside the River Almond. Traces of the mill mechanism survive at the core of the building, together with a history of adaptations and repairs down to the present time.
PROPOSED FUTURE WORK:	none
CAPTION(S) FOR ILLUSTRS:	-
SPONSOR OR FUNDING BODY:	Developer
ADDRESS OF MAIN CONTRIBUTOR:	Alder Archaeology Ltd, 55 South Methven Street, Perth PH1 5NX
EMAIL ADDRESS:	director@alderarchaeology.co.uk
ARCHIVE (intended/deposited) LOCATION	HES (intended)



Illus 1 College Mill Trout Farm, Almondbank. Location

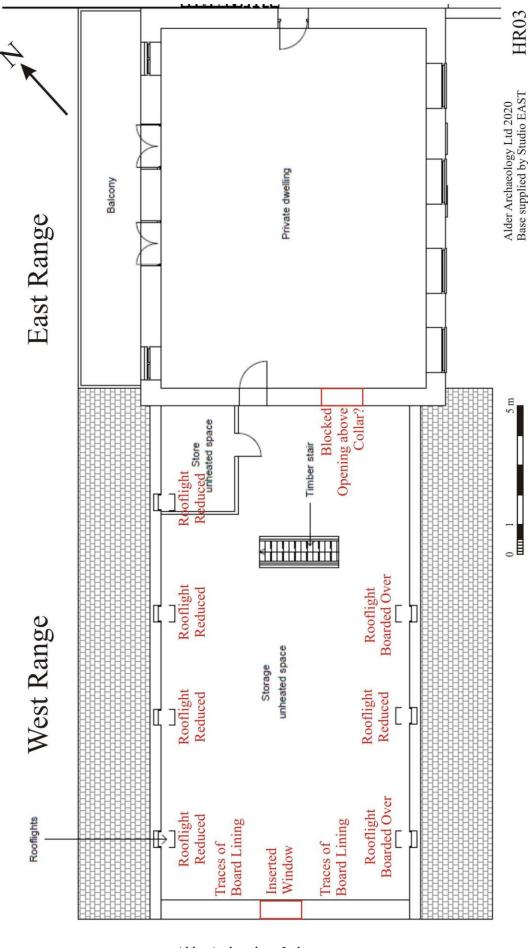
Illus 2 College Mill Trout Farm, Almondbank. Layout



HR03

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Illus 4



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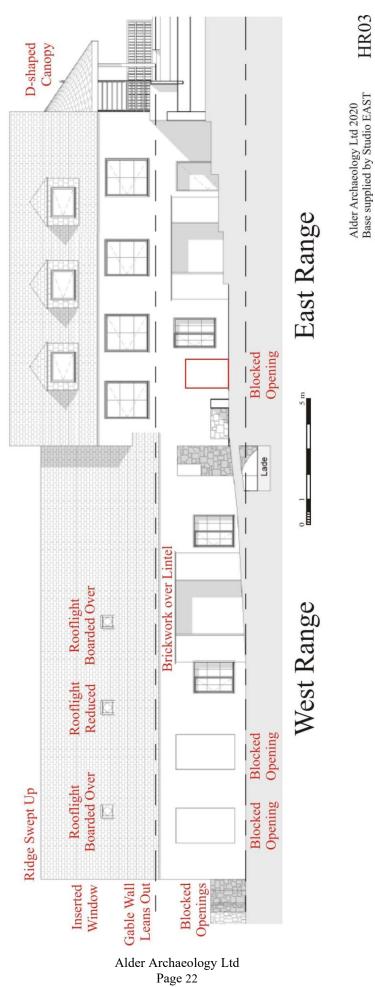




Illustration 6: General view, NE



Illustration 7: W gable. Blocked openings, inserted window and raised roof line



Illustration 8: Lade flowing S into W Range



Illustration 9: W Range, N and W elevations.



Illustration 10: Canopy at E end of E range.



Illustration 11: Detail of canopy



Illustration 12: W gable of W Range. Blocked openings, and floor timbers above



Illustration 13: Internal mill lade, N. Wheel mark on wall



Illustration 14: Sluice mechanism in W Range



Illustration 15: Sluice mechanism in W Range



Illustration 16: W Range Loft. Inserted window in W gable



Illustration 17: Reduced roof light in NW corner. Traces of lining boards on W gable wall.



Illustration 18: W Range Loft. Blocked opening in E wall?



Illustration 19: E Range, ground floor