

**DESIGN STATEMENT**

Alterations and Extension  
Ratchill Farm, Broughton, Scottish Borders  
WT Architecture  
October 2022



## PROJECT

### Applicant and site owner

Jane and Jamie Prady

### Architect and agent

WT Architecture

www.wtarchitecture.com

### Site location

Ratchill Farm, Dreva Road, Broughton, Biggar, ML12 6HH

## SUBMISSION INFORMATION

<i>Ref.</i>	<i>Title</i>	<i>Scale</i>	<i>Format</i>	<i>Revision</i>
221_DES	Design Statement	-	A3 L	A
221_PL_100	Location Plan	1:1250	A3 L	A
221_PL_E101	Site Plan - Existing	1:200	A2 L	A
221_PL_101	Site Plan - Proposed	1:200	A2 L	A
221_PL_E01	Existing Cottage Plans	1:100	A2 L	A
221_PL_DEM	Demolition Plan	1:100	A2 L	A
221_PL_01	Proposed GF Plan	1:100	A2 L	A
221_PL_02	Proposed 1F Plan	1:100	A2 L	A
221_PL_03	Proposed RF Plan	1:100	A2 L	A
221_EL_E01	Existing Cottage Elevations	1:100	A2 L	A
221_EL_01	Proposed Long Elevations	1:100	A1 L	A
221_EL_02	Proposed Short Elevations	1:100	A2 L	A

## INTRODUCTION

These proposals are for the alteration and extension of the existing detached cottage at Ratchill Farm steading.

The focus of this project is to formalise and remove the visual clutter that has accumulated around the historic buildings; and create a new extension that embraces a better engagement with the gardens to the north-west and frames the sheltered courtyards to the north-east.

## WT ARCHITECTURE

WT Architecture are contemporary Scottish Architects working across Scotland and the UK in some of the most beautiful, sensitive and historic places. Our work covers projects large and small across Scotland; from landmark visitor centres and community hubs to beautifully detailed houses, extensions and bothies. Designing for these places means understanding the historic, climatic, seasonal, cultural, social and environmental nature of a site. We have worked successfully in protected landscapes, Listed buildings and in the context of national monuments, and approach every design process with an ambition to produce architecture that is respectful of the landscape and built environment it sits in. We are equally experienced in the climatic demands of working in some of Scotland's wildest and most exposed landscapes and skilled in meeting the challenges of complex inner-city sites.

Everything we work on is created around an ethos of craftsmanship, collaboration and connection to place. Our ambition is to make buildings which are meaningful in the lives of those that inhabit them, responding to and growing from our clients' needs and desires, and which are timeless in their materiality and relationship to the context they sit in.

SITE CONTEXT

Location

The steading sits up on an elevated position close to Ratchill Hill and, more widely, the Broughton Heights. It is located in the Scottish Borders, less than half a mile from Broughton village and accessed off Dreva Road (fig 2).

Site and Building History

The oldest of the surviving buildings - the farm cottage and threshing mill - date from the early 18th century. The farm has experienced significant change over its lifetime, with the construction, demolition and adaptation of various buildings. Most notably the 19th century saw the demolition of a substantial range of buildings bounding the north of the site (at one point the largest structures on the site) and the construction of the now-converted byre (fig 4-6). The site is now cluttered by an accretion of poor-quality modern extensions, adaptations and landscaping interventions, all of which undermine the character of the site (fig 3).



fig 3 Aerial view of site



fig 2. Site Context

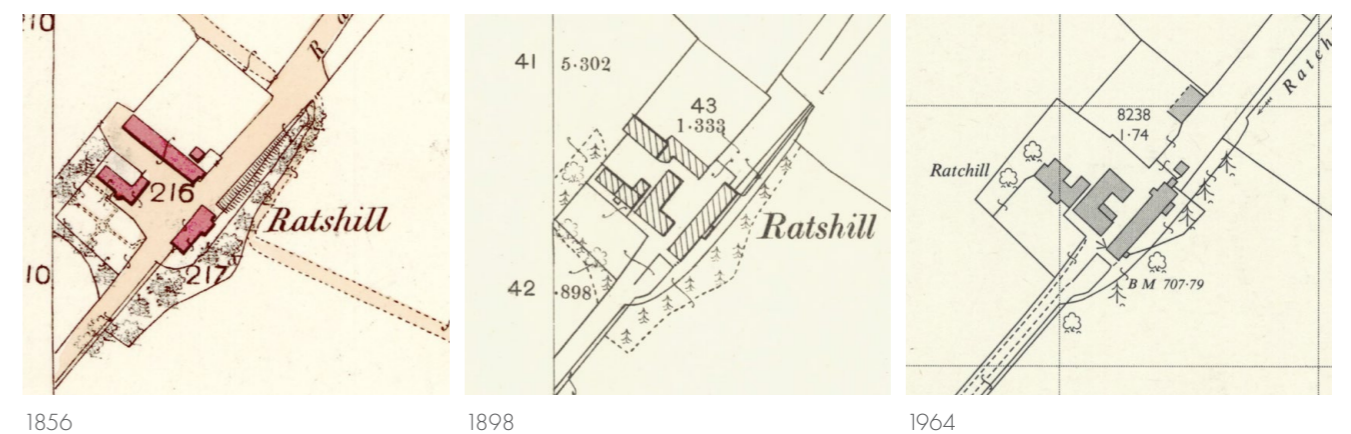


fig 4-6. Historic site plans

**BUILDING CONTEXT**

**Existing buildings**

The steading consists of five main buildings; the cottage, the byre, the mill, the bothy, and the corrugated shed. The whole site has an existing use as a private dwellinghouse with various outbuildings within its curtilage. The cottage and the byre form the parts of the habitable dwelling.

The existing farm buildings are largely rubble stone with slate roofs and have been adapted over time with larger openings for garage spaces and skylight windows. Some areas of the cottage walls to the north have cement render. The conservatories located around the cottage and byre are in a poor state of repair with OSB boarding.



figs. 8-11 Existing access road, Byre with Mill behind, Byre with cottage adjacent, shed



fig 7. Aerial view of site



figs. 12-14 Existing Cottage: conservatory to west, south elevation of cottage, view of cottage from north



figs. 15-19 Existing cottage - view between Byre and Cottage, kitchen wing and flat roof addition, North elevation with wing to be retained and conservatory.

## ARCHITECTURAL DESIGN & ACCESS STATEMENT

### Brief

Our brief was to consolidate the separate buildings of the site into a more coherent, comfortable and practical family home. Consideration was given to connecting the Cottage and Byre, but this option was discounted as it would have resulted in a compromised layout. The applicant also wishes to retain separate use of the Byre as an annex for their guests in future.

An early decision was therefore made to extend the Cottage to make this the primary part of the dwelling. This also allows the applicant to continue living in the Byre whilst work is carried out to the Cottage.

### Spatial organisation and approach

We made an early design decision that any interventions or additions to the should be positioned at the west of the existing cottage aligning with the historic enclosure line of the former farm and provide a spatial book-end to the site.

The existing conservatory and east kitchen wing are to be removed clarifying the simple vernacular form of the cottage. This improves the quality of the courtyard spaces to the north of the site and opens up the south-eastern parts of the cottage to more dual-aspect light and views. The remainder of the cottage interior is left largely unaffected. Other alterations are minor and include the addition of timber cladding to the remaining wing, and an opening to the north west.

A proposed 1.5-storey extension is orientated perpendicular to the primary axis of the cottage and byre and parallel to the threshing mill, offset from the existing west gable. A highly-glazed dining space with a lower green roof links the gable of the cottage with the main massing of the extension, on the footprint of the current conservatory. The organisation of the extension draws out new living spaces into the western meadow, creating a conversational relationship between the contemporary intervention and the existing building. The enclosure created by the extension contribute to a greater sense of place by re-establishing courtyard areas developing a greater sense of connection to the more immediate as well as farther landscape. The nature of the sloping landscape also allows for the addition of a carport within the extension block which is enclosed within the pitched roof at the north end.

### Landscaping

The form of the extension naturally creates small external terraces on different orientations, taking advantage of the changing sun through the day.

### Access Statement

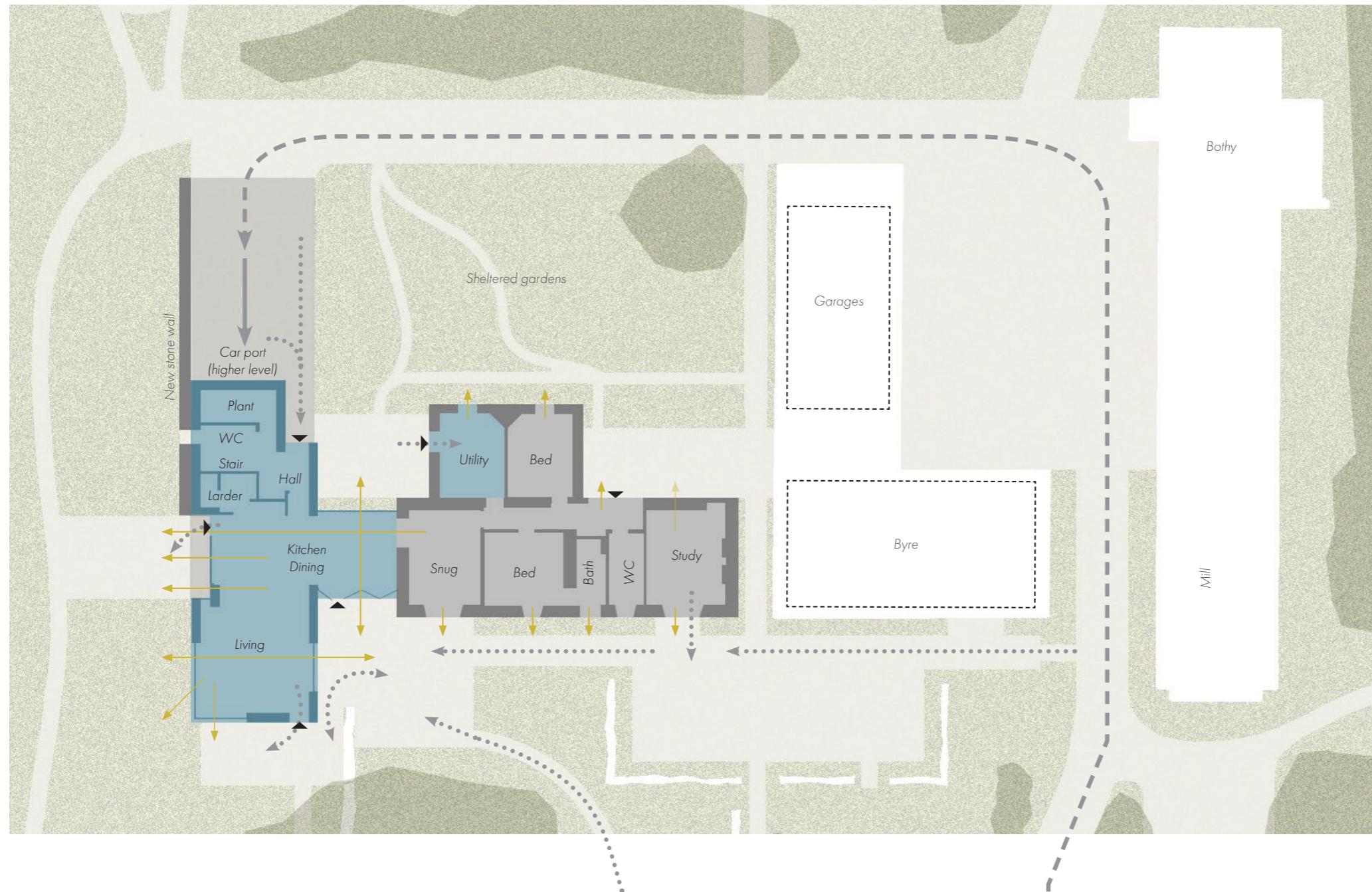
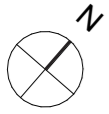
Ratchill Farm is accessed via a private driveway from the unclassified road between Broughton and the B712. The driveway loops anti-clockwise north around the steading buildings. Existing vehicle and pedestrian paths are used for this proposal with no change to car parking.

The existing building, does not comply with modern standards and legislation for accessibility. The demolition of the kitchen wing will create a low threshold entrances to the north east. The new primary entrance of the extension will also provide an low threshold entrance route into the building including the extension. The proposed alterations to the cottage provides for creation of a compliant accessible shower room facility on the low threshold level of the building in the existing cottage.



fig 20. Site aerial overlay sketch (not to scale)

Sketch layout (not to scale)



**Design principles:**

The heart of the house is a new open plan kitchen/ dining area, centred on the gable of the cottage. This spaces acts as a physical and visual pivot point for the whole extension, with routes to all other parts of the house and views out in multiple directions.

A new living space projects south along the line of the historic boundary wall, dropping down a few steps to match the natural slope of the site. Bringing the gable of the extension forwards of the Cottage south elevation mirrors the position of the Mill and creates a obvious visual destination when arriving at the property.

The remaining northern wing of the extension contains a rear hall, wc and plant room, which can be accessed directly via a separate external door. A stair leads up to the master suite on the first floor.

fig. 21 Sketch layout

PROPOSAL



fig. 22 View of proposal from south east showing courtyard entrance to link building attached to west gable of the existing cottage.



fig. 23 View of proposal from north east. Visible centre-right is the covered carport and entrance and centre-left, the new dining hallway in the glass link.

PROPOSED MATERIAL PALETTE

Form and materiality

The existing site inspires a material palette of corrugated metal, rubble stone wall, and timber boarding.

The cottage rubble stone walls and slate roof will be repaired where required. The remaining wing is to be clad timber boarding on the north elevation. Existing white painted windows to the south are to be retained and repaired where required. Generally all new opening windows and doors are to be timber/aluminium composites with black frames. The proposed link building will be glazed with a sedum/grass roof.

The extension is expressed as a simple, contemporary vernacular form with a pitched roof massing echoing the existing buildings on site. The form is split along a datum which reflects the bottom of the pitch of the cottage. Below this level is timber clad with large glazed openings separated by timber mullions to reflect the vertical linear quality of the upper section. The upper portion is in the corrugated vernacular of farm sheds inspired by the existing shed to the north of the site. This corrugated steel runs the length of the extension on all elevations and is punctuated by skylights and a large dormer window.



figs. 24-27 Material palette of existing site buildings



figs. 28-36 Materiality examples.



## ECOLOGY AND PROTECTED SPECIES

### **Sustainability**

The new additions are proposed to be constructed of sustainable materials and is to be highly insulated, naturally ventilated and with maximum daylighting to minimise its environmental impact. Consideration will be given to opportunities for upgrading the levels of insulation in the areas of the existing house affected by the works, through the addition of natural, breathable insulation where appropriate, and the installation of low energy lighting. Timber, slate and stone from down takings is to be re-used within the garden grounds for landscaping, and used for roof and masonry repairs.

### **Trees**

No trees will be affected by the proposed works.

### **Ecology**

The scale, position, construction and condition of the existing roof is considered to have a low risk of hosting roosting bats or nesting birds.

### **Flooding and land contamination**

The site is on an elevated position with no history of flooding. As a previously-occupied dwelling the house and site are not expected to present any contaminated land issues.

### **Services**

Ratchill Farm is serviced with existing mains water and power. Drainage is connected into an existing registered septic tank. The alterations and extension are proposed to connect into the existing services with no change to current use.