Mr V Keating

STABLE BLOCK
North side of
Cooper Lane
Hoyland Swaine

Planning Application

Assessment of Building Structure

CONTENTS

1. Report

PREPARED BY :

QUILL ARCHITECTURE

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Quill ARCHITECTURE.	SURVEY / INSPECTION	SHEET No 1 OF 10
	TYPE External/Internal	ORIGIN. S
CLIENT. Mr V Keating	ENQ DATE. 27/09/2013	ENQ No. 1199

ADDRESS. Stable, Cooper Lane, Hoyland Swaine, Barnsley, South Yorkshire.		
TEL No. N/A	APPOINTMENT DATE. 27/09/2013	APPOINTMENT TIME. 10 am

CLIMATE DETAILS AT TIME OF SURVEY	~~INCLEMENT~~	DRY	~~RAINING~~	~~WINDY~~	OTHER. Sunny

HOUSE TYPE	~~TERRACE~~	~~SEMI-DETACHED~~	DETACHED	~~BUNGALOW~~	~~HOUSE~~	OTHER Stable Block

This appraisal has been designed to enable Clients to identify areas of a structure, which fall below the minimum standard of construction required for conversion into a residential dwelling. The following summarises the categories in the whole or part as inspected and listed below.

1. The structure within the boundaries of a property
2. Any external buildings annexed to the property, including sheds, greenhouses, garages, etc
3. The external structure of the property.
4. The internal structure/elements of the property.

The enclosed survey/inspection is not nor does it form in part a comprehensive structural analysis of the properties structure/external or internal elements, its purpose is to highlight any defects or hazard's to the client that appears to fall below the minimum requirement of the current planning /building regulation standards. In addition there may be instances where such elements meet the minimum standard of construction but by their nature contravene either planning or building regulations criteria. If this occurrence arises then the client should notify the appropriate authorities and secure all the necessary approvals required.

The following legend should be read in conjunction with the enclosed survey.

G = Good state of repair.

P = Poor state of repair.

R = Repair/replacement needed to satisfy the current standard.

U = Upgrading required to meet the current standard.

F = Further investigation required.

S = Safety or worthiness certification and further details required to satisfy the current standard.

NA = Not applicable

ACCESS REQUIREMENTS

All access equipment i.e. ladders/steps at the time of survey/inspection are to be supplied by Quill architecture, which have been certification conforming to the current British Standards, and Health and Safety regulations.

All areas undergoing inspection are to have an appropriate level of natural or artificial light to enable the inspection to be carried out.

Access to all areas of the structure, curtilage or out buildings is required on the day of inspection.
The Client is to give notice to any third parties who have a vested interest in the property or land of the pending inspection and appointment time and date.

ADDRESS	INSPECTION/SURVEY TYPE	AREA	SHEET
Cooper Lane, Hoyland Swaine,	EXTERNAL ELEMENTS	General Building	2 OF 10

ELEMENT	ITEM	STATE OF REPAIR	COMMENTS
ROOF STRUCTURE COVERING SLATE/TILES/FELT/OTHER/EXTERNAL/INTERNAL (RE ROOF)			
	RIDGE	G	Tile
BARGE/CEMENT	VERGE	G	Cement pointed
	RAFTERS	G	Pre formed fink type
	PURLINS	N/A	
	HIP RAFTERS	N/A	
	SARKING	G	Standard BS747
	SOFFITS	R,U	180 mm Weather proofed timber
CHIMNEYS			
	POTS	N/A	
	FLAUNCHING	N/A	
	POINTING	N/A	
	COWELS	N/A	
STABILITY	STACK	N/A	
	LEADWORK	N/A	
DRAINAGE SYSTEM MAINS/SEPTIC TANK/ CESSPOOL/ REEDBED/ PUMPING STATION/MH/IC/ OTHER			
	GUTTERS	R,U	Black Upvc
	HOPPERS	N/A	
	SOIL & VPIPES	N/A	
	DOWN PIPES	R,U	Missing
	SINK O/LET	N/A	
	BATH O/LET	N/A	
	SHOWER O/LET	N/A	
	GULLEYS	N/A	
	BELOW GRND	F	
	IC'S & MH	N/A	
WALLS BRICK/STONE/RENDER/OTHER/FR = FRONT/ SI = SIDE/ RE = REAR / EXTERNAL ~~/ INTERNAL~~			
	CRACKS	N/A	Non externally
	PLUMB	G	All appear plumb
	POINTING	G	Flush
	LINTELS	G	In-tact
	HEADS	G	In-tact
	CILLS	N/A	None
	AIR BRICKS	N/A	None
DAMP PROOF COURSES FR = FRONT/ SI = SIDE/ RE = REAR			
	SLATE	N/A	
	ENG BRICK	N/A	
	POLYESTER	G	In-situ
	OTHER	N/A	
ACCESS TO BUILDING FR = FRONT/ SI = SIDE/ RE = REAR			
	STEPS	N/A	Level
	RAMPS	N/A	
	COMBINED	N/A	
	OTHER	N/A	
EXTERNAL DOORS/TIMBER/UPVC/OTHER/SECURITY FR = FRONT SI = SIDE/ RE = REAR			
	FRAMES	G	Timber to be replaced
	HINGES	G	Equestrian T Hinges to be removed
	BOLTS	G	Equestrian type
	HANDLES	G	Equestrian type
	LETTER BOX	N/A	
	LOCKS	G	Pad locks only

ADDRESS	INSPECTION/SURVEY TYPE	AREA	SHEET
Cooper Lane, Hoyland Swaine.	EXTERNAL ENVIRONMENT	Paddock	3 OF 10

ELEMENT	ITEM	STATE OF REPAIR	COMMENTS

BOUNDARY TREATMENTS FR = FRONT / RE = REAR / SI = SIDE

	WALLS	F	Remnants of walls within hedgerow facing Cooper Lane
	FENCES	F	Timber/wire. Curtilage formed by mature trees and woodland
	GATES	G	Farm type gates in-situ in bye of Cooper Lane
	OTHER	N/A	

GARDEN FR = FRONT / RE = REAR / SI = SIDE

	LAWN GRASSED	N/A	
	PAVED/BLOCK SLABS	N/A	
	CONCRETE	N/A	
	TARMAC	G	To access drive
	OVERGROWN	N/A	
	MAINTAINED	N/A	
	OTHER	G	Paddock

HAZZARDS (GARDEN) FR = FRONT / RE = REAR / SI = SIDE

	DIFFERENCE OF LEVELS	N/A	Paddock slopes to South to Cooper Lane, west & north to boundaries.
	OBSTRUCTION		Various farm type machinery + storage of hay around external envelope of Building.
	SURFACE FINISH		Tarmac to collection areas, grass to paddock.
	OTHERS		

HAZZARDS (STRUCTURES) EXTERNAL / INTERNAL

	GARAGES	N/A	
	SHEDS	N/A	
	GREENHOUSES	N/A	
	BUNKERS	N/A	
	OTHERS	N/A	

ADDRESS	INSPECTION/SURVEY TYPE	ROOM	SHEET
Cooper Lane, Hoyland Swaine	GENERAL INTERNAL	ALL	4 OF 10

ELEMENT	ITEM	STATE OF REPAIR	COMMENTS

MOISTURE/DAMP PENETRATION TO WALLS

	FLOODING	G	None @ the time of survey
	RISING	G	None @ the time of survey
	CONDENSATION	N/A	
	PENETRATING	G	None @ the time of survey
	SERVICE LEAKS	N/A	
	MOULD	N/A	
	OTHER	N/A	

MOISTURE/DAMP PENETRATION TO FLOORS

	FLOODING	G	None @ the time of survey
	PENETRATING	G	None @ the time of survey
	SERVICE LEAKS	N/A	
	MOULD	N/A	
	DRY ROT	N/A	
	WET ROT	N/A	
	OTHER	N/A	

DOORS INTERNAL/EXTERNAL/FIRE/LEDGED & BRACED/OTHER

	HANDLES	G	Equestrian type
	HINGES	G	Equestrian type
	LETTER BOX	N/A	
	SECURITY LOCKS	G	Pad locks
	GENERAL FITTING	N/A	
	GLAZING	G	Standard

WINDOWS (SINGLE GLAZED DOUBLE GLAZED TRIPLE GLAZED UPVC/WOOD/METAL/OTHER)

	STANDARD		
	ESCAPE	N/A	
	OPENABLE	N/A	
	CLOSEABLE	N/A	
	SECURITY LOCKS	G	Pad locks
	OVERALL CONDITION	G	Standard for equestrian buildings
TO PART N	GLAZING	N/A	
	BAY	N/A	

TRAVEL BETWEEN FLOORS ACCESS STAIRS/RAMPS/OTHER

	STONE	N/A	
	TIMBER	N/A	
	BRICK	N/A	
	OTHER	N/A	
	HANDRAIL	N/A	
	BALUSTRADE	N/A	
	LANDING	N/A	
	OVERALL CONDITION	N/A	

VENTILATION OF ROOM

TO PART F TRICKLE	AIR BRICK	N/A	
	MECHANICAL	N/A	
TO PART F PURGE	WINDOW	N/A	
TO PART F B/REGS	OVERALL CONDITION	N/A	
	GENERAL FITTING		Applicable for equestrian facility

ADDRESS	INSPECTION / SURVEY TYPE	ROOM	SHEET
Cooper Lane, Hoyland Swaine	GENERAL INTERNAL ELEMENTS.	ALL	5 OF 10

ELEMENT	ITEM	STATE OF REPAIR	COMMENTS
STRUCTURE OF FLOOR			
	BRICK	N/A	
	STONE	N/A	
	TIMBER	N/A	
	FLAGSTONES	N/A	
	CONCRETE	G	Throughout
	OTHER	N/A	
	LEVEL/EVEN	G	Throughout
STRUCTURE OF CEILING			
	BRICK	N/A	
	STONE	N/A	
	TIMBER	N/A	
POLYSTYRENE TO BE REMOVED IN ALL CASES	TILES/ROLL	N/A	
	LEVEL/EVEN	G	Throughout
	COVERING	N/A	None
ARTEX BEFORE 1980	FINISH	N/A	
FOUND IN FIRE PROOFING/LAGGING/ TILING/ARTEX SURFACE FINISHES INSULATION ETC TO BE REMOVED IN ALL CASES	ASBESTOS		None found @ time of survey
MINERAL MANUFACTORED FIBRES	MMF	N/A	None found @ time of survey
	OVERALL CONDITION	N/A	See main survey
ELECTRICAL			
	PENDANT LIGHT	N/A	
LIVING ROOM	SOCKETS	N/A	
BEDROOM SINGLE BEDROOM DOUBLE	SOCKETS	N/A	
HALLS	SOCKETS	N/A	
LANDINGS	SOCKETS	N/A	
KITCHENS	SOCKET	N/A	
	SOCKET	N/A	
	SOCKET	N/A	
FUSE BOX CONSUMER UNIT	SINGLE SPLIT ISOLATION SW	N/A	
DATE OF ANY ALTERATION	VERIFICATION REQUIRED	N/A	
DATE OF ANY MAJOR RE-WIRE	VERIFICATION REQUIREDFUSE B	N/A	TO PART P BUILDING REGULATIONS
DATE OF LAST INSPECTION	VERIFICATION REQUIRED	N/A	TO PART P BUILDING REGULATIONS

2.0 Introduction

2.1 Quill Architecture have been instructed to undertake an assessment of the detached stable block, which stands in the north west corner of an existing paddock to the north side of Cooper Lane, Hoyland Swaine, Barnsley, South Yorkshire. As highlighted on site plan CAD/QA/1301

2.2 The proposal is to convert the existing stable to form a residential dwelling for my client. A structural assessment is required to determine whether the stable is suitable for conversion and what structural repairs or other works are likely to be required. Proposal drawings for the scheme have been prepared and evaluated in conjunction with a site appraisal for the project.

2.3 Only a visual inspection has been carried out. No hidden details were exposed during the Assessment, hence any concealed defects and the consequences therefore are excluded. In addition the professional indemnity insurers require us to state that "we have not inspected woodwork or other parts of the structure which are covered, unexposed or inaccessible and we are therefore, unable to report that any such parts of the structure are free from defect."

2.4 This report is provided for the private and confidential use of the building's owner, their professional advisors and any Statutory Authorities who have an interest. It should not be reproduced or relied upon by third parties without written consent of Quill Architecture Ltd.

3.0 OBSERVATIONS (External)

3.1 The stable is a single storey height rectangular configuration. The appearance of the building is as drawing CAD/QA/1302 which accompanies this report as a planning application and should be referred to as necessary in conjunction with this assessment.

3.2 To all the external elevations stonework flush jointing has been carried out to a high standard with no signs of weathering or erosion at low or high levels. In addition the in-situ stone work which forms the external faces of the structure displays structural integrity with no issues relating to spalling or attrition of the stonework faces.

3.3 To the south elevation facing Cooper Lane there are four main openings 3No equestrian type single stable door openings provide access to the loose boxes while the fourth has a double opening with door fitted providing access to the food storage and tack room area. Each door has a 300mm thick stone lintel over. There are a further 3No openings to this elevation each provided with a timber framed glazed window with stone lintels fitted over. To the eaves wood stained timber fascia boarding and timber soffits have been formed which is in need of some repair to the closers of each end. The existing external roof covering is blue/grey slate with stone water tabling to the verges. No missing slate or cracking to the roof or external walls is evident.

3.4 To the north elevation facing the rear boundary of the site there are 3No openings each 1200mm in width as the south elevation fitted with equestrian type stable doors each with a 300mm thick stone lintel over all in a good state of repair. In addition to this elevation 4No individual openings exist, all fitted with timber framed windows with glazing. It has been noted that the fascia and soffit have suffered the same deterioration as that of the south elevation. The existing roof covering is as the south elevation with no major problems.

3.5 The west gable is set approximately 11 metres from the side boundary of the site. To this elevation no openings are evident. It is constructed 19th century coursed square sandstone. At eaves level stone corbels exist terminating the water tabling to the roof. All of the jointing mortar is in-tact and displays no signs of erosion or spalling to the stonework.

3.6 The east gable is set facing the existing grassed paddock. To this elevation again no openings are evident. It is constructed 19th century coursed square sandstone as the west elevation. At eaves level stone corbels exist terminating the water tabling to the roof. All of the jointing mortar is in-tact and displays no signs of erosion or spalling of the stonework.

3.7 To all elevations the building has benefitted by the installation of a polyester damp proof course which has been installed approximately 200mm above the finished adjacent ground level. The dpc is consistent through the external leaf and suffered no deterioration, no damp is evident.

3.8 The water tabling to each gable is in a good state of repair, with its lead cover flashing intact and fitted into the parapet and over the roof covering. Some minimal localised re fixing is required.

4.0 OBSERVATIONS (Internal)

4.1 Internally the building is divided into seven rooms consisting of 6No loose boxes with a combined tack/feed room situated internal of the east gable.

4.2 The tack and feed room internally is constructed using 100mm concrete blockwork to the inside of the exterior walls with a dividing wall of like blockwork terminating at ceiling level separating it from the loose boxes to the north and south of the main spine wall. 1No pair of double opening doors has been positioned to the south elevation while to the north a single window opening exists through the external wall. There are no signs of damp to the external or internal walls. The internal finish is in an excellent state of repair including the jointing mortar. In addition there is no ceiling in this part thus exposing the modern roof truss configuration which, looks in a good state of repair. Over the trusses underfelting has been installed and remains in- tact. The floor finish is concrete. There are no other features to record within the room.

4.3 Loose box 6 is directly adjacent to the tack/feed room on the south side of the building. Internally it is finished in 100mm thick concrete block work as the tack room. Within the loose box a 1200mm wide stable door with frame is fitted through the south external wall. Adjacent to the door is a timber framed glazed window which provides natural light, all the glazing is complete and undamaged within this compartment. The finished floor displays a concrete surface and on inspection no damp or cracking is evident. Additionally as with the tack room no ceiling has been installed leaving the trusses open which again appear to be in a good state of repair.

4.4 The remaining loose boxes 4 & 5 on the south side each replicate loose box 6 in size, condition and overall standard of finish.

4.5 Loose boxes 1, 2 & 3 on the north side again replicate the loose boxes 4, 5 & 6 to the south and built to the same high standard of construction.

4.6 The main internal 100mm thick central spine wall which runs from the west gable and intersects with the cross wall of the tack/feed room. After inspection a full height vertical crack is apparent this crack begins at approximately 2000mm inward of the west gables internal wall at ground level passes through the spine wall and extends to its full height terminating at ceiling level.

5.0 ASSESSMENT (External)

5.1 Generally the external stone fabric of the stable is in exceptional condition. Which is non-typical to agricultural building of this type? There is however some general but minor signs of weathering to the timber fascia and soffit boarding but this can be expected and will need some attention as part of the conversion process. In addition the existing timber framed window of the feed/tack room on the north elevation has been fitted short of the sill level within the opening formed through the external wall. However this is not detrimental as a new window is proposed for this opening and subsequent new windows will be installed within the other existing and preformed openings in the building as general drawings CAD/QA/1304. Although there are rainwater gutters fitted at the eaves the rain water down pipes are missing. This again will be a matter to be addressed during the buildings conversion. No damp was found above the dpc of the outer leaf stonework suggesting that the buildings integral dpc is providing an effective barrier. There are no signs of any serious cracking, settlement or any other distress to the external envelope.

5.2 The roof construction is finished in slate and in good order throughout. However, it is unlikely to be retained as the truss formation lends no scope for modification due to its configuration and sizing of the existing internal timbers. It is proposed that within the roof space various rooms are to be formed as architectural drawing CAD/QA/1305 this will require new timber floor joists, trusses jack rafters etc, and the installation of steel support beams, to comply with the current building regulations. The existing roof pitch is also to be retained as this provides adequate head room for practical functional habitable rooms to be constructed. In addition it is proposed that the new roof structure will incorporate velux style roof windows 5 in number to the south elevation facing Cooper Lane and 7No to the north which will provide natural light and ventilation of the rooms required by the statutory building regulations.

5.3 As recorded both gable walls to the west and east elevations of the building are in an excellent state of repair and will lend itself to modification. To each gable it is proposed during the conversion process to form window openings within the roof space of bedroom 1 & 2. This can easily be achieved by installing a steel supporting lintel to carry the internal blockwork loading and external stone lintel and stone work above, but this matter will be addressed as part of the formal building regulation application.

6.0 ASSESSMENT (Internal)

6.1 From the proposed plan layouts shown on drawing CAD/QA/1305 various existing walls are to be removed or upgraded to allow structural stability and improvement of the floor layouts to be achieved. The in-situ concrete raft foundation will accept all the new wall positions.

6.2 The existing concrete floor slab will remain in position throughout the building, but incorporate a new 1200 g dpm which will act as a basic radon barrier as well as a damp proof membrane this is to be laid over the existing floor, turned up the internal walls and tucked into the mortar joint of the internal dpc. In addition floor insulation to the recommended thickness will be added with calculation giving its thermal performance and achieving a minimum "U" value of 0.22 W/m^2K registered with the local authority. The finished floor covering will be a traditional timber floor.

6.3 The existing internal walls of the external envelope are in a good state of repair and will accept modification by means of insulating to the current building regulations standard using a dry lining method with insulated plasterboard and plaster skim to finish the walls to achieve a minimum "U" value of 0.28 W/m^2K.

6.4 It is understood from the client who installed the structural raft foundation that it is of adequate thickness to take the additional loading of the new floors of the ground and first floor levels. It is recommended that a trial hole be undertaken to satisfy this.

6.5 The existing drainage systems to the building have not been investigated. However there is a number of toilets, bathrooms and the like shown on the proposed plans which will require suitable foul sewerage disposal. It is not known and seems unlikely that there is any suitable drains within the confines of the site or nearby for that purpose and that is something which will need to be investigated as part of the design and conversion scheme. Similarly the rainwater will need to be disposed of adequately again if a suitable drainage system has not been installed, the rain water will need to deliver into soakaways these should be at least 5m away from any structure including the conversion. Percolation testing may be required to confirm the adequacy of the ground to accept soakaways, under pt H of the current building regulations.

6.6 The conversion at the design stage will need SAP calculations to be provided to the local authority to demonstrate compliance with the current building regulations.

6.6 To conclude, the masonry fabric of the building is in excellent structural order with no major external or internal cracking, combine this with a new damp proof membrane installed throughout the building together with appropriate floor and wall insulation installed to the current building regulation standards it is considered suitable for the proposed conversion.

Inspection carried out and report prepared by :- Alan Davies

.....(for and on behalf of Quill Architecture)