

Mr K Hollins

The old Water Mill
Ings Lane,
Little Houghton
South Yorkshire

Planning Application

Flood Risk Assessment

CONTENTS

1. Flood Risk
2. Section Drawing

PREPARED BY :

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Contents

1. Property Location (OS extract)
 2. Property Information
 3. Building Condition
 4. Water Resistance
 5. Source of Flooding
 6. Flood Events
 7. Climate Change
 8. Assets /Local Flood defences
 9. Possible Routes of Water Ingress
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10. Action Taken to Reduce Risk of Water Ingress
 11. Appendix (A) OS extract showing line of section
 12. Appendix (B) Cross section through site with levels

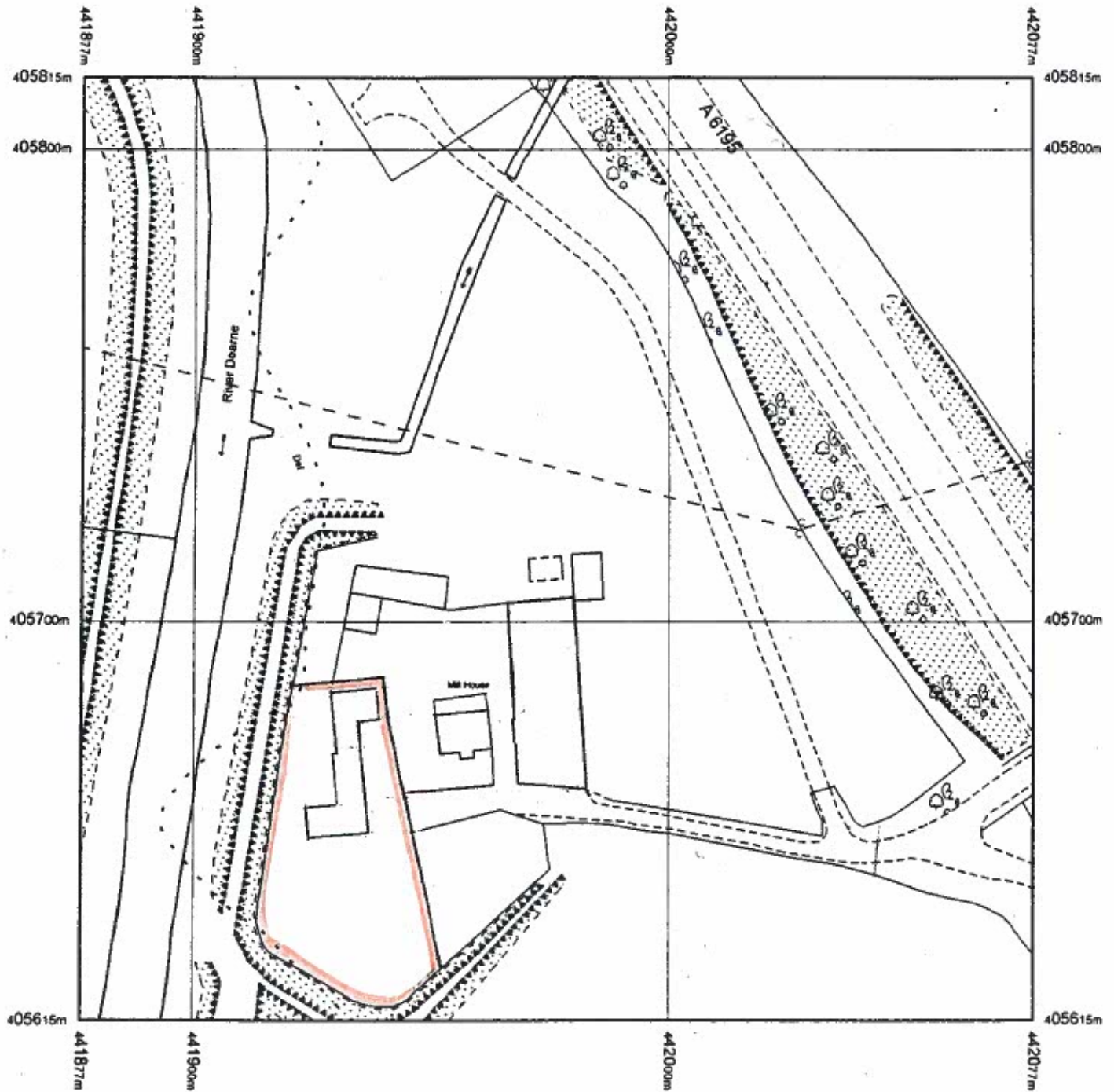
CLIENT
ADDRESS

Mr & Mrs K Hollins
The Old Water Mill, Ings Lane, Little
Houghton, Barnsley, South Yorkshire

Location Plan

Date 06/03/2013

Scale 1 : 1250



1 PROPERTY INFORMATION

Address	Old Water Mill, Ings Lane, Little Houghton, South Yorkshire S72 0HR.
Building type	Detached structure. (Unoccupied) Currently under construction
Build Age/date.	Approximately 200 Years.
Build Medium	Coursed square sandstone.
Wall Construction (external)	500mm Thickness to original construction. Both internal and external leaf sandstone with rubble fill to cavity. 500mm Thickness to re-built walls. External leaf stonework. Cavity filled with insulation cavity batts. Internal Leaf Blockwork.
Floor Construction	Concrete throughout.
Constraints	As Below
Heritage Building (listing)	No Listing
Area Designation	Greenbelt (Building restricted to National Planning policy Framework and Local authority planning policies.
Presiding Local Authority	Barnsley Metropolitan Borough Council

2 BUILDING CONDITION

Roof Structure	No External roof covering to any part of roof structure, but modern timber trussed rafters in-situ throughout.
Superstructure	All external walls display high quality pointing and construction to all elevations.
Substructure	Existing superstructure structure built on original foundations (barn unit 1). Conversion (units 2 & 3) new foundations in some areas of the build.

3 WATER RESISTANCES

Superstructure	Good wall thickness to resist water pressure quality pointing to all elevations on existing and re build works.
Substructure	Historic structure built from the original foundation unit 1 may provide a moderate risk of water penetration. Modern re-build to unit 2 & 3 areas will provide good resilience to water penetration.

4 SOURCE OF FLOODING

River	Dearne
Surface water & ponding.	Low risk (raised structure).
Ground Water	Low risk to superstructure.
Contaminants of flood water.	From river Sewerage discharges into a septic tank.

5 FLOOD EVENTS

Flood zone	Flood Zone 2. From EA, data shows an area of land that could flood under extreme conditions with a 1000 : 1 (0.1%) chance of flooding each year from rivers without the presence of defences.
Environment Agency Data	EA flood data has been reviewed. There has been flooding within the wider area ie open fields to the north, west and east, but anecdotal evidence suggests that the original structure has never flooded.
Confidence in assessment of flood risk	flood risk levels validated by the owners and numerous residents.

6 CLIMATE CHANGE

Government Guidance

Planning Policy Framework now supersedes (PPS25) which states that climate change is likely to increase the frequency of flood events.

Flood Warnings

When the building is occupied. Owners to sign up to the current structured flood warning system controlled by the EA.

Flood Assessment Evidence

Available EA flood maps, historic and current have been reviewed. EA flood levels studied. From EA historic information it is suggested that a flood event occurred in 1947. Flood event autumn 2000, max height 27.24 metres AOD. From this date anecdotal flood information from various sources suggests that no flooding of the building has occurred. EA recorded flood event of June 2007 suggests that the structure did not flood.

Safety Measures

Egress from the building is advised upon deployment of flood mitigation measures. Advice from the emergency services should be followed in the event of a flood emergency.

Assembly Point

Assemble point for the occupants of the dwelling in case of a flood event has been identified as the field access road. Topographical survey data and drawn section records a total rise from the finished floor level of the mill to the access road/assembly point east of the site to be approximately 3.961 metres. See CAD/QA/1311. Appendix (A). Line of Section Appendix (B) Section drawing

7 ASSETS/LOCAL FLOOD DEFENCES

Manmade localised earth work banks exist along the right and left hand sides of the river, both are in a good state of repair and regularly maintained by the EA.

Water course condition

The river Dearne undergoes maintenance and is in good condition, No weed growth within mill section.

Weirs & Outfalls

Outfall 60metres north of the site maintained by the EA
Weir 270metres south of the site maintained by EA

8 POSSIBLE ROUTES OF WATER INGRESS

GROUND SOURCE	RISK
Permeable sub bases to solid floors	YES (Unit 1,2 & 3) moderate risk of ingress
Permeable foundations	YES (Unit 1,2 & 3) moderate risk of ingress

SUBSTRUCTURE UP TO GL	RISK
Services entry points	YES
Cracks in substructure	YES
Inferior finishing (pointing)	YES

SUPERSTRUCTURE ABOVE GL	RISK
Services entry points	YES
Cracks in substructure	YES
Inferior finishing (pointing)	YES
Air Bricks	YES
Doors	YES
Windows	YES
Internal fitments wc's, whb, sinks, showers, white goods drainage.	YES

SUPERSTRUCTURE INTERNAL	RISK
Furnishings	YES
Furniture	YES
Fixtures	YES
Fittings	YES
White Goods	YES
Internal fabric	YES
Internal meters and services	YES

SUPERSTRUCTURE ABOVE GL	RISK
Personal effects	YES
Furnishings	YES
Furniture	YES
Fixtures	YES
Fittings	YES
White Goods	YES
Internal fabric	YES
Internal meters and services	YES
INTERNAL ELEMENTS	
Floor finishes	YES
Floors (suspended)	YES

9 ACTION TAKEN TO REDUCE THE RISK OF WATER INGRESS

SUBSTRUCTURE UP TO GL	ACTION
Services entry points	Services entry points to be sealed and made water tight construction.
Cracks in substructure	Existing structure to be checked for substructure cracking and effect repair
Inferior finishing (pointing)	Re point as required.
SUPERSTRUCTURE ABOVE GL	ACTION
Services entry points	Services entry points to be

	sealed and made water tight construction.
Cracks in substructure	Identify and seal
Inferior finishing (pointing)	Identify and re point with appropriate water repellent mortar.
Air Bricks	N/A building has solid ground floor.
Doors	The choice of external door materials will be agreed with the LA due to constraints
Windows	The choice of external window materials will be agreed with the LA due to constraints
Internal fitments wc's, whb, sinks, showers, white goods drainage.	All external drainage to be fitted with non-return valves.

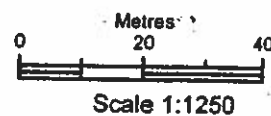
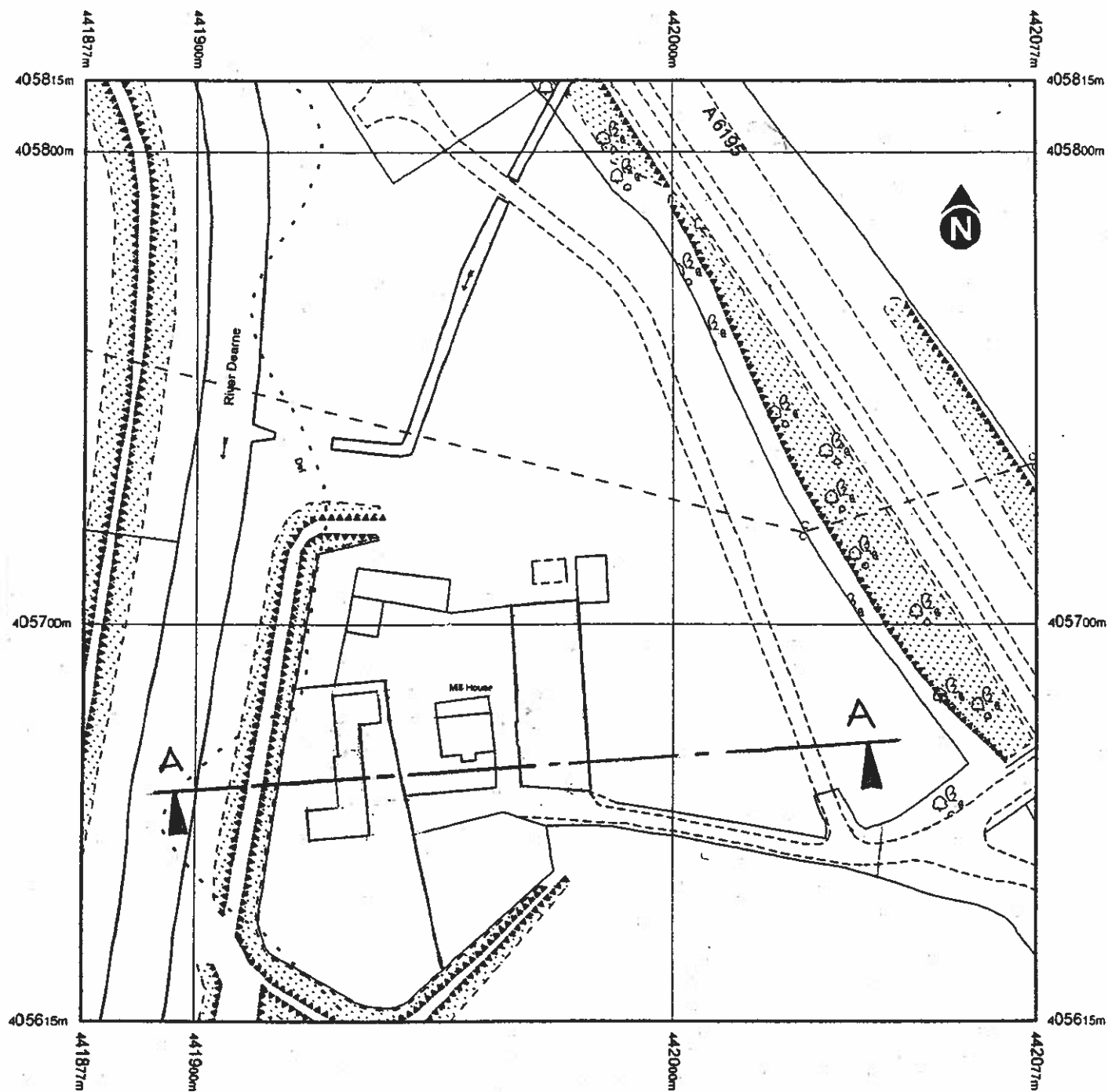
SUPERSTRUCTURE INTERNAL	ACTION
Furnishings	YES
Furniture	YES
Fixtures	YES
Fittings	YES
White Goods	YES
Internal fabric	YES
Internal meters and services	YES
INTERNAL ELEMENTS	
Floor finishes	YES
Floors (suspended)	YES
Skirting Boards	YES
Architraves	YES
Doors & Frames	YES
Window frames	YES
Wall finishes (plaster, paper & paint)	YES
Electrical circuitry (alarms etc.)	YES

RECOVERY	ACTION
Estimated recovery timescale	12 to 18 months

INTERNAL SUPERSTRUCTURE ABOVE GL	ACTION
Personal effects & vulnerable items	To be removed to a first floor location.
Furnishings (soft)	To be removed to a first floor location or raised off the floor using water resilient materials.
Furniture	Raised off the floor using water resilient materials.
Fixtures, Kitchen units, cabinets etc.	Raised off the floor using water resilient materials.
Fittings	Water resilient composition
White Goods	Raised off the floor using water resilient materials.
Internal fabric	Water resilient composition
Internal meters and services	Locate at high level
INTERNAL ELEMENTS	
Floor finishes	Water resilient composition
Floors (suspended)	N/A
Skirting Boards	Water resilient composition
Architraves	Water resilient composition
Doors & Frames	Water resilient composition if agreed with LA
Window frames	Water resilient composition if agreed with LA
Wall finishes (plaster, paper & paint)	Plaster boarding to be used horizontally.
Electrical circuitry (alarms etc.)	Circuits to be to part p electrical safety building regulations

10 Appendix (A)

OS extract showing line of section through site.



Supplied by: **Blackwell M and D C**
Serial number: 01553900
Centre coordinates: 441977.13 405715.25

Further information can be found on the
OS Sitemap Information leaflet or the
Ordnance Survey web site:
www.ordnancesurvey.co.uk

11 Appendix (B)

Cross section through site. CAD/QA/1305