**NYMNPA** 

26/11/2019

# **Design and Access Statement**



Refurbishment and Rear Extension

Downhill Cottage, New Road, Robin Hoods Bay, YO22 4SF



bhd partnership

imaginative architecture + engineering design

Address: Airy Hill Manor, Tel:

Whitby, Email:

North Yorkshire, Website: www.bhdpartnership.co.uk

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## 1.0 General

## 1.1 The Statement

This statement is submitted to accompany an application to the North York Moors National Park Planning Authority for a single storey rear extension, replacement ground floors, new windows and pointing.

Drawing D11726-01A and 02A show details of the proposals.

Descriptions of defects are given on a Structural Report from 2010 and recent Report by Louis Stainthorpe. These, along with the Heritage Statement, should be read in conjunction with this Statement.

## 1.2 Description of Existing

The house forms part of a Terrace of properties in the heart of old, the old part of Robin Hoods Bay, less than 100m from the slipway. It was built as part of a pair with 'Beadle Cottage' and the Listing by Historic England has both properties under the same reference. List Reference: 1148660, Grade II.

The property is illustrated on drawings D11726-01A and 02A, submitted as part of these applications.

The ground floor is split into 2 rooms. A former kitchen and an adjacent living room. The living room has a modern (C20) open tread timber stair.

The floors of both ground floor rooms have been stripped out due to serious defects. Descriptions of which are noted on the Structural Engineers Survey from 2010 and the later Snoxell Consultants (Louis Stainthorpe) description.

The front elevation contains 4 windows and the entrance door. The windows have undergone some alteration, in particular W4, which is a relatively modern casement window, presumably altered and replaced to allow the historic subdivision of a first-floor bedroom to create a bathroom.

The kitchen window W1, has been amended at some point, although quite historic. It appears that due to a failure of the stone lintel above, a steel support was inserted below the stone lintel and cut into the coursed stone on either side. Possibly at the same point in time a fixed sash was inserted.

To the rear of the property is a small Yard area. It runs across the full extent of the rear of the property and varies in depth between 1500 and 1800mm.

The floor has at some point, been re-concreted to falls into a drain gully close to the rear door.

The only openings to the rear are the door and a first-floor window, W5.

The Yard is bounded by 2/3 storey high Party Walls to either side and a very high (5m +) stone retaining wall to the rear. Due to its relative low position, the Yard will appear dark and damp for most of the time.

The rear retaining wall has a significant bulge in the centre and a relatively modern brick buttress has been constructed.

Part of the Yard has a modern steel sheet cover. Also apparent are the remnants of haunching, presumably from a previous roof attached to the rear house wall.

## 1.3 <u>Liaison</u>

Our client submitted a Pre-Application Enquiry to the Planning Authority. Ref: NYM/2019/ENQ/15232.

A response was provided from Claire Shields (Planning Policy and Conservation), dated 27<sup>th</sup> March 2019. This has been used by our clients to form the basis of the current applications.

# 2.0 Proposals

# 2.1 <u>Design and Siting</u>

The proposals are as follows: -

- Provide new solid floor to the kitchen
- Provide new timber suspended floor to the lounge and to provide structured integrity
- Replace windows
- Repoint stonework
- Provide rear extension

## 2.2 Requirement

As noted in the Pre-Application response, the property has suffered from a lack of investment, along with construction problems relating to the ground floors which require complete replacement. This became a catalyst for a more full refurbishment of the property.

## 3.0 Context/Policies

3.1 The proposals will be considered with regard to Local Authority Policies: -

Core Policy G: Landscape, Design and Historic Asset

Development Policy 3: Design

Development Policy 4: Conservation Areas Development Policy 5: Listed Buildings

The Policies seek to encourage and direct applicants to carry out sympathetic works to historic assets to maintain or enhance their status.

Most importantly not to erode any existing or inherent qualities the structure provides for its self or its setting.

## 3.2 Context relating to Policies

Because this property is Listed and within a Conservation Area, a separate 'Heritage Statement' has been produced and should be read to obtain full description and context for the proposals.

## 4.0 Access

#### 4.1 External

This remains un-altered from the existing. The property front wall forms the boundary with the Highway; therefore, change is not possible or desirable.

To the rear part of the small Yard will be used to provide a Utility extension.

# 4.2 <u>Internal</u>

As with 4.1, there will be no alteration of the internal layout. The existing sub-divisions within the property are to remain. This is in general accordance with Policies seeking to protect the value of a Heritage asset.

# **Heritage Statement**



Refurbishment and Rear Extension

Downhill Cottage, New Road, Robin Hoods Bay, YO22 4SF





Address: Airy Hill Manor, Tel:

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# 1.0 General Introduction

This statement is submitted to accompany an application to the North York Moors National Park Planning Authority for a single storey rear extension, replacement ground floors, new windows and pointing.

Drawing D11726-01A shows details of the proposals.

# 2.0 History and Asset Description

The house forms part of a Terrace of properties in the heart of old, the old part of Robin Hoods Bay, less than 100m from the slipway. It was built as part of a pair with 'Beadle Cottage' and the Listing by Historic England has both properties under the same reference. List Reference: 1148660, Grade II.

The Listing describes the front elevation, which closely matches the current appearance. The door and top right-hand window (W4) are noted as C20.

The Listing description does not describe any internal features.

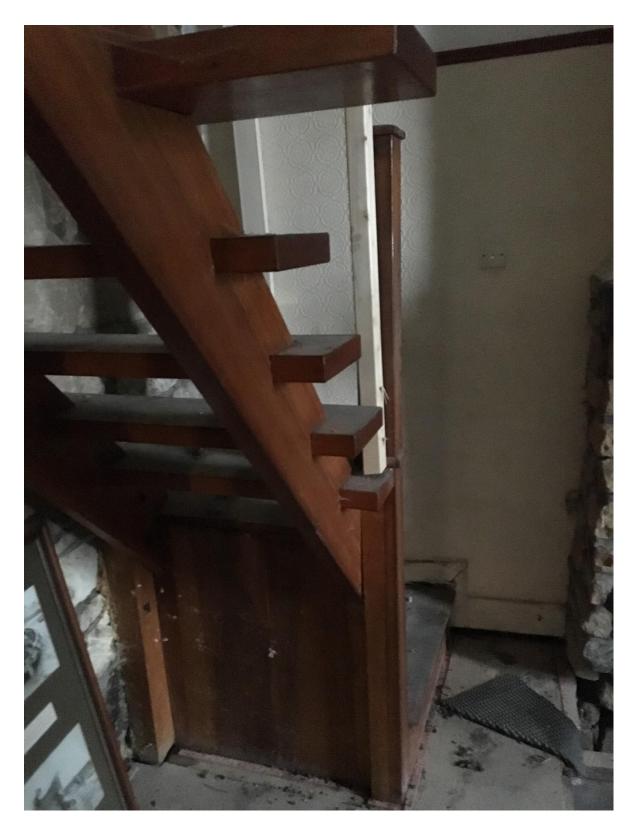
The property is illustrated on drawings D11726-01A and 02A, submitted as part of these applications.

The ground floor is split into 2 rooms. A former kitchen and an adjacent living room. The living room has a modern (C20) open tread timber stair.

The floors of both ground floor rooms have been stripped out due to serious defects. Descriptions of which are noted on the Structural Engineers Survey from 2010 and the later Snoxell Consultants (Louis Stainthorpe) description.



Photograph 1
Kitchen Floor, concrete finish removed, modern inappropriate hardcore exposed



Photograph 2 Open plan stair to lounge



Photograph 3 Lounge floor, void below former timber floor



Photograph 4
Lounge floor, void below former timber floor,
dumped waste from kitchen floor to be removed

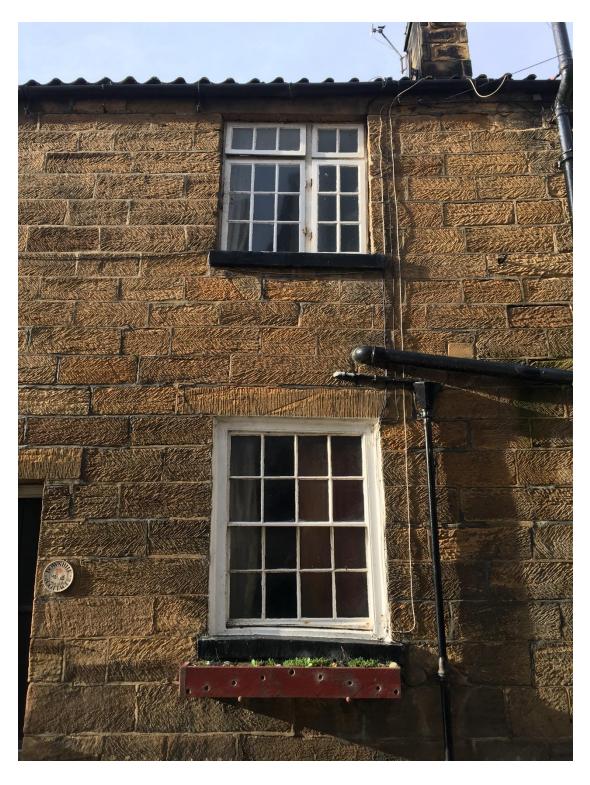
It is apparent that the internal fabric of the building, perhaps with the exception of room separation, adds little to the value of the asset. However, the external, front elevation does provide significant asset value, both to its self and to the wider setting of Robin Hoods Bay, situated as it is within the very historic centre.

The front elevation contains 4 windows and the entrance door. The windows have undergone some alteration, in particular W4, which is a relatively modern casement window, presumably altered and replaced to allow the historic subdivision of a first-floor bedroom to create a bathroom.

The kitchen window W1, has been amended at some point, although quite historic. It appears that due to a failure of the stone lintel above, a steel support was inserted below the stone lintel and cut into the coursed stone on either side. Possibly at the same point in time a fixed sash was inserted.



Photograph 5
Part Front Elevation, W1 and W3



Photograph 6
Part Front Elevation, W2 and W4



Photograph 7
Front elevation with Beadle Cottage beyond

To the rear of the property is a small Yard area. It runs across the full extent of the rear of the property and varies in depth between 1500 and 1800mm.

The floor has at some point, been re-concreted to falls into a drain gully close to the rear door.

The only openings to the rear are the door and a first floor window, W5.

The Yard is bounded by 2/3 storey high Party Walls to either side and a very high (5m +) stone retaining wall to the rear. Due to its relative low position, the Yard will appear dark and damp for most of the time.

The rear retaining wall has a significant bulge in the centre and a relatively modern brick buttress has been constructed.

Part of the Yard has a modern steel sheet cover. Also apparent are the remnants of haunching, presumably from a previous roof attached to the rear house wall.



Photograph 8
Rear Yard looking at Party Wall of Beadle Cottage



Photograph 9
Rear Yard looking at Party Wall to the south
Note; covered area and brick buttress

# 3.0 Policies and Influence

The proposals will be considered with regard to Local Authority Policies: -

Core Policy G: Landscape, Design and Historic Asset

Development Policy 3: Design

Development Policy 4: Conservation Areas Development Policy 5: Listed Buildings

The Policies seek to encourage and direct applicants to carry out sympathetic works to historic assets to maintain or enhance their status.

Most importantly not to erode any existing or inherent qualities the structure provides for its self or its setting.

# 4.0 <u>Proposals, Impact and Mitigation</u>

The proposals are as follows: -

- Provide new solid floor to the kitchen
- Provide new timber suspended floor to the lounge and to provide structured integrity
- Replace windows
- Repoint stonework
- Provide rear extension

## Kitchen Floor

The previous, recently removed concrete floor, had been badly constructed and its description is noted in the structural report from 2010.

New works will remove the inappropriate fill previously used. Test holes suggest the original shale bed is approximately 170-200mm below the existing surface. Provide damp proof membrane, Newton type, which allows water to percolate below and prevents a build up of water pressure by not interfering with current water passage or levels.

#### Lounge floor

Prior to installation of the timber floor and floor joists remedial work is required. Removal of temporary debris. This will leave a large void which is deeper than the base of the stone walls which sit on the shale bed.

Line the walls and the base with the Newton membrane to allow existing hydrostatic pressure from any ground water to remain unaltered and therefore not change its affect upon the existing fabric of the building.

Concrete is then to be laid on top of the membrane to a depth of 250mm, to provide a base for a perimeter of concrete block below ground walls. These walls will be taken up to a level that ensures the base of existing stone walls is not left exposed and at risk of collapse. Any of the voids left between the new concrete walls and the existing wall and rough edge below is to be filled with concrete, again to prevent any further movement.

These works are to be supervised by a Structural Engineer.

The new concrete block walls will be used as a dry base for forming the new timber floor off. The existing ventilation is to be retained, the air bricks sit below W2.

The existing and problematic leaking drain below the lounge floor is to be replaced during these works.

These works are required to safeguard the integrity of the existing structure, which has been put into jeopardy by poor construction in the kitchen and long-term ground water issues in the lounge.

## Windows

All 5 windows are to be replaced. The general description is noted on the drawings.

W1; the fixed window is to be replaced with 2 vertical sliding sash windows. This we suggest will be closer to the original version and match the other ground level windows in the row.

W2; the horizontal sliding sash window will be replaced by a horizontal sliding sash window as Beadle Cottage.

W3; The vertical sliding sash window will be replaced by a vertical sliding sash window of the same proportions.

W4; The side hung casements will be replaced by a pair of vertical sliding sash windows. This will allow the internal partition wall which splits the window to be formed by a simple timber between the 2 sashes.

The windows will all be timber painted construction and glazing is to be slimline double-glazed units. Separate panes for each subdivision.

## **External Stonework**

Although there is some variation, generally the stonework is pointed using a slightly raised, weathered style. This style of cement based pointing is not appropriate for the location or the coursed sandstone, often leading to premature erosion of the stone face.

It is proposed to rake out using hand tools and repointing with a lime based mortar with a mix of 1:2:9 (cement lime sand). This should be finished slightly recessed with a brushed or 'bagged off' technique.

It is noted that recent works to Beadle Cottage have included similar pointing to that which is proposed.

## **Rear Extension**

A simple monopitched roof extension is proposed to provide storage and utility space, this will consist mainly of a clay pantiled roof. The small amount of exposed walling will be finished with concrete natural stone. This will also provide significant structural support to the rear retaining wall.

# 5.0 <u>Summary</u>

It is felt that the careful approach to design of these alterations has resulted in a sensitive solution to the design brief.

All parties involved have been fully aware of the special nature of Listed Buildings and their importance within the general setting.

The details proposed can be carried out and completed without eroding this important asset. Indeed, the works are in large part critically required to retain in a sustainable manner this historic asset.



23 Fairfax Street Otley LS21 1JX

**DOWN HILL COTTAGE** 

**NEW ROAD** 

**ROBIN HOODS BAY** 

WHITBY

**NORTH YORKSHIRE** 

**NYMNPA** 

18/11/2019

STABILITY INSPECTION

REPORT

JONES KINGSWELL PARTNERSHIP LTD STRUCTURA LENGINEERING CONSULTANT 23 FAIRFAX STREET, OTLEY LS21 1JX

12<sup>th</sup> July 2010 Reassigned 27<sup>th</sup> September 2010

# **BRIEF**

Prospective purchasers have initially instructed the Jones Kingswell Partnership Limited to carry out an inspection of Downhill Cottage, Robin Hoods Bay.

A valuation and Report has been prepared for the NatWest in which a report is called for to comment on stability of the solid ground floor in the kitchen, the walls and the rear retaining wall. This report deals with those issues.

The inspection has been carried out on Saturday 10<sup>th</sup> July 2010.

Subsequently, following failure of the original undertaking to purchase, a request has been made by Dome View (Yorkshire) Ltd for the report to be made available to them.

## DESCRIPTION

The property is a grade II listed middle terrace dwelling dating from the early seventeenth century. Construction is traditional with solid stone walls, suspended floors in timber a solid ground floor to the east bay and a pitched pan tile covered roof.

The plot comprises the building with a frontage onto the highway and a yard to the rear. The ground to the rear of the yard that was formerly an access passage behind the terrace, now closed off at each end, rises abruptly to the full height of the building and is faced in a local stone wall.

The site is underlain by rocks of the Lower Lias in the Jurassic Series of strata.

# **OBSERVATIONS**

The whole of the kitchen floor has been affected by a heave effect. The quarry tile covering has been split in the process. The amount of heave was severe. There were no associated effects in the surrounding walls.

The front wall to the street has been affected by settlement locally under the living room window. The coursing of the stones had been disrupted but the wall has remained perpendicular. Internally there was no visible cracking. The window opening was out of square and the frame within it had been adjusted at some time in the past.

There were no other instances of noticeable distortion in the house walls.

The oolitic limestone used in the building has also been used in the wall to the rear of the yard, which would at one time have been a thoroughfare. The wall is some ten metres high and is a facing to a shale cliff face that was probably formed when the plot was developed almost four hundred years ago. The ground at the top is a level terrace with over grown vegetation but no signs of slippage tension cracks. The profile of the wall is very irregular with very marked distortions but nevertheless with continuity of coursing and bond of the evenly sized stones.

## CONCLUSIONS

## 1 Ground Floor Hogging

The cause of the heave in the kitchen floor is almost certainly sulphate attack of the hardcore filling on the concrete slab in the presence of damp. The hogging is caused by the concrete slab expanding against the containment of the perimeter walls. In more recent less robust construction the walls can be affected by the force involved. In this case there were no signs of the walls, which are of considerable thickness being forced outwards.

This type of defect is unlikely to be accepted by insurers unless it can be proved to be the result of a specific incidence of escape of water. It is understood that a claim has been made in the past by the present owners but this was rejected because it was not an insured risk.

The defect has the status of a maintenance rather than a stability issue. The remedial treatment involves removal of the contaminated fill material under the slab and either reinstatement on a damp proof membrane or replacement by a suspended floor. C30 concrete is required with a light mesh in the top with 25mm cover to stop cracking. Listed Building Consent is required for any works to be carried out that affect the fabric.

# **CONCLUSIONS (CONTINUED)**

# 2 Front Wall Distortion

The most likely cause of the drop in the front wall under the living room window was a defective gully to the combined rain water and waste water gully below pavement level. The distortion is most probably of very long standing. There are no signs of present movement taking place. It is likely that the problem occurred many years ago judging by the age of the window frame fitted into the distorted opening.

In a building of this age distortions can be expected, due to disturbances that have taken place from time to time. Had the fault been due to naturally unstable ground then collapse would have occurred long ago. The listed building status has the consequence that faults that could normally be corrected are required, where structurally possible, to be dealt with in a way that primarily preserves the historic fabric. It is significant that there are no signs of recent instability, despite the preserved distortions.

## 3 Rear Boundary Wall

The rear wall is outside the ownership of the property: it is therefore not even a party fence wall as defined by The Party Wall Act.

Stability of the wall is a matter of safety for the owners of the houses in the terrace. The function of the wall is to give protection against spalling and not to retain the rock face. Structurally this is not a retaining wall. The lower lias strata comprises very thin layers of soft shale that are horizontally bedded and can stand with a near vertical face in a stable condition provided weathering does not take place. Over the centuries that the wall has been in place, spalling will have occurred and a build-up of material behind the facings is most probably the cause of the distortions, the re-pointing previously carried out and the open joints.

Maintenance is clearly the responsibility of the owners of the wall who have received rent for its facility in the past. It is not the responsibility of the owners of downhill Cottage.

A B Jones BEng(Hons) CEng MICE MIStructE Chartered Engineer

#### Floor Inspection

The inspection to review the floor was straight forward enough with the builder Jamie onsite. The floor had already been removed therefore putting a reliance on the builders feedback about the concrete. Jamie highlighted that the concrete was of inconsistent depth in many parts with little to no subbase, been primarily sat directly on the Scarr.

It is therefore concluded that the floor failure is a combination of different things. This includes an uneven sub base, the concrete being of varying thicknesses together with poor workmanship when the floor was laid having no membrane. As there is no membrane in position the concrete would have been subject to not only dampness but also salts from the Scarr. Salts attack the integrity of concrete and make it weaker. It is unclear as to whether there has been any major influx of water but in a traditional property of this type there will always be a degree of both rising and penetrating dampness, especially given the retaining wall arrangements to the rear and the fact that there is a drain known to become easily blocked.

Given that the building is Grade II Listed and the works necessary to put it back together are significant, statutory permissions are necessary both in terms of not only planning/Listed consents but also Building Control Approval. Full review not undertaken onsite as various other works were ongoing, particularly within the lounge floor that includes modifying drainage. This reinforces the requirement that further professional advice is necessary.

The current approach from the North York Moors National Park is very strict particularly in Robin Hoods Bay and I understand this has been highlighted by your Builder Jamie with other projects in the village being stopped or delayed as a result.

It is therefore recommended that you contact an Architect or designer to assist going forward. One company in town who regularly deals with such projects is BHD Partnership ether with Tim or Neil. They can assist in guiding you through what permissions are necessary and how to achieve them. Quite often with such buildings many of the works do not require permission but simply consultation with the North York Moors National Park Conservation Team to get agreements on specifications and use of traditional detailing/materials.

Attached herewith is our fee invoice for your kind attention based on one hour's time. We have also forwarded a copy of this letter directly to Andy Kingham.

I trust your find the above and attached in order however if you have any queries or if I can be of any further assistance, please do not hesitate to contact me.

Yours Sincerely

NYMNPA

18/11/2019

Louis Stainthorpe - Chartered Building Surveyor BSc (Hons), MRICS, RICS Registered Valuer, MCABE (Director)

CC- Andy Kingham