FLOOD WARNING

AND

EVACUATION PLAN

for

THORNEYHOLME HALL

ERECTION OF A DOMESTIC DETACHED OUTBUILDING, WITH ASSOCIATED DECKING, ARTIFICIAL GRASSED AREAS AND LIGHTING

at

THORNEYHOLME HALL

DUNSOP BRIDGE, CLITHEROE, BB7 3BB

MAY 2025

REFORD

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Document Control

This plan is owned, maintained and updated by Thorneyholme Hall. All stakeholders are to inform the above of any changes in circumstances that may materially affect plan content.

The plan is a living document and therefore should be periodically reviewed and updated to provide advice and guidance to staff, occupants and guests in the event of an extreme flood.

The plan shall be reviewed:

- On first occupation;
- Every 3 years thereafter;
- As a result of lessons learnt;
- Following change of ownership or modification of the premises; or
- Following change to the Flood Warning process.

Disclaimer

It is, as far as it can be ascertained, acknowledged that this Flood Warning & Evacuation Plan (FWEP) template is suitable for the purposes set out within the National Planning Policy Framework. This plan is however the sole responsibility of Thorneyholme Hall.

Responsibility cannot be accepted for any omission or error contained in any such plan, or for loss, damage, or inconvenience, which may result from the plans' implementation. Any subsequent approval does not impute any approval of the plans from the Environment Agency or any of the emergency services.

Site location

This flood warning and evacuation plan relates to the erection of a detached domestic outbuilding, with associated decking, artificial grassed areas and lighting at Thorneyholme Hall, Dunsop Bridge, Clitheroe, BB7 3BB.

The site lies within the Thorneyholme Hall estate that contains a large detached residential dwelling located within substantial grounds standing on the banks of the River Hodder close to the centre of the village of Dunsop Bridge. Access to Thorneyholme Hall is obtained over Thorneyholme Bridge and via a private access road off Newton Road.

Proposed development

The proposal is for the erection of a detached outbuilding used in relation to the existing dwelling, with associated decking, artificial grassed areas and lighting.

Access into the site is to remain over Thorneyholme Bridge and via a private access road off Newton Road.

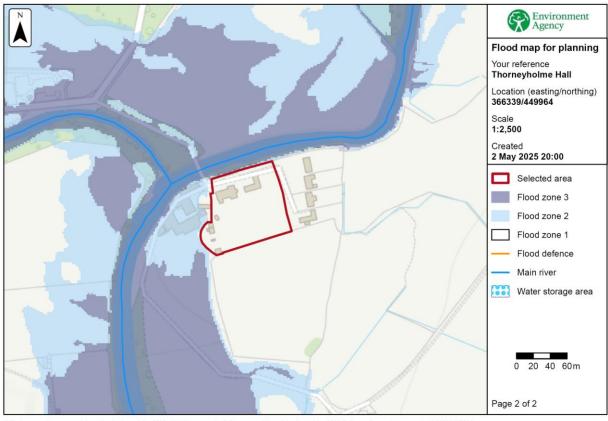
A location plan is attached in Appendix A.

The level and nature of the flood risk to the site

The River Hodder runs along the northern boundary of the estate and the River Dunsop flows into the River Hodder adjacent to the estate's northwest corner.

On the earlier Environment Agency's Flood Map for planning, the site lies within Flood Zone 3 although it was previously determined that the site actually lay within Flood Zone 2. The flood risk to the site is fluvial. There is no tidal flood risk to the site.

The Environment Agency Flood Map for planning has been revised in March 2025 and the site is now shown to lie within Flood Zone 1, the lowest risk. An extract from the revised Environment Agency's Flood Map for planning is below.



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There is no record of historical flooding occurring on the site.

The flood risk assessment produced in support of the planning application by REFORD Consulting Engineers is included within Appendix B.

Vulnerability and flood warning

The building should be signed up to Flood Warnings Direct with the Environment Agency and Weather Warnings from the Meteorological Office.

The Environment Agency issue three levels of flood warning:

- Flood Alert
- Flood Warning
- Severe Flood Warning

The site is in an area benefitting from the Environment Agency's flood alert service, which warn people of the possibility of flooding and encourage them to be alert, stay vigilant and make early / low impact preparations for flooding.

The current residential use is classified as "More Vulnerable" for a dwellinghouse. Table 3 within NPPG indicates Flood Risk Vulnerability and Flood Zone 'compatibility'. Using Zone 1 and the "More Vulnerable" classification for buildings used for dwellings, NPPG considers that a development of this type would be deemed appropriate for development within Flood Zone 1 after the completion of a satisfactory flood risk assessment inclusive of mitigation measures to ensure the development is safe for its planned lifetime.

Methods of communication

Nominated person and site evacuation

The owner or occupier of the dwelling will carry out the role of being responsible for the Flood Evacuation and Management Plan Flood. In the absence of the responsible person, another person, preferably resident, will be appointed. Those accountable will be trained competent persons who have experience of understanding similar responsibilities. They will have an understanding of the flood mechanisms of the site and will ensure that the safety of the residents are not compromised.

The dwelling will undertake an annual site evacuation exercise, either as a table top or complete exercise. If a new person becomes the owner in the future, this will be repeated to ensure the plan and evacuation system is tested.

The person responsible, will hold the mobile phone details registered for flood alerts, ensuring that any flood alerts and warnings are received by the Flood Warden. At times when flood alerts are in place, the responsible person will, within reason, be within the building when it is occupied and therefore they will act on receipt of the flood warning.

Occupants onsite

Occupants onsite during times when Flood Alerts, Flood Warnings and Severe Flood Warnings are valid would be so advised in person by the responsible person, or in their absence the

allocated deputy and handed the Evacuation Notice appropriate to the level of warning flood warning in force.

The flood warning status would also be declared via social media.

Overnight the allocated person shall have access to the mobile phone registered for flood alerts, ensuring that any flood alerts and warnings are received. If a flood alert and warning is received, action should be taken to ensure other people living there are moved to a place of safety.

In the event of rapid flooding where occupants are unable to evacuate safely from the building there is likely to be little warning residents should move into a place of safety, which is available at first floor level within the main house where occupants will be safe above predicted flood water levels and may remain until rescued or flooding has subsided or Environment Agency Flood Warnings are no longer active.

When the property is unoccupied

In the event that there are no people within the building, all residents would be informed of valid flood alerts and flood warnings by the allocated person, should one be issued, and advised not to return home.

Evacuation

The decision to evacuate, or take shelter within the main house, will be made by the responsible person or in their absence the Deputy, having due regard to the advice / warnings and instructions of the emergency services.

The decision to evacuate must be made to allow sufficient time to conduct the evacuation before flooding occurs. Flood waters contain hidden dangers and will impede, if not prevent, a safe evacuation.

The site is identified as lying within Flood Zone 1 on the Environment Agency Flood Map for planning that was revised in March 2025, the lowest risk. However, if evacuation of the home is required then the safe exit route is over Thorneyholme Bridge and onto Newton Road to the north, a distance of approx. 300m. It is noted that during an extreme event, Thorneyholme Bridge will be affected by flooding. The safe exit route is shown on the attached site plan within Appendix C.

It should not be assumed that the emergency services will be able to assist with any evacuation; the responsible person, must act efficiently to ensure the safety of others and this should be at the forefront of decision making.

If occupants are unable to evacuate safely from the building, or if during evacuation occupants are confronted by flood waters, then refuge shall be taken within the main house,

which lies within Flood Zone 1, if necessary on the first floor. At this location, occupants will be safe above predicted flood water levels, and may remain until rescued or flooding has subsided or Environment Agency Flood Warnings are no longer active. Take with you any important documents, bottled water, essential medicines and food sufficient to provide support until rescue.

Handouts of the evacuation route and advice should be issued to all when a Flood Alert or Warning has been received.

Familiarisation

The successful implementation of this plan is dependent on all relevant occupants being familiar with its content and to have rehearsed, where possible, the procedures contained within the FWEP.

This plan shall be practised / rehearsed every 6 months.

Flood alert activation procedures

What it means

- Flooding is possible
- Be prepared

When it's used

Two hours to two days in advance of flooding.

Actions

- Be prepared to act on your flood plan.
- Ensure the Flood Kit is prepared, and all items are fully charged / working.
- Evacuation Team will all be informed by the appointed person, or in their absence the Deputy of the flood level and their individual responsibilities should a flood warning be received.
- The site flood watch board will be updated to Flood Alert.
- Ensure flood evacuation kit is in place, mobile phones charged, high visibility jackets.
- Ensure print outs of all handouts are available in case flood warning level is escalated.

Communications

- Face to Face with team within the building
- Mobile phone call to all residents not at the home.
- Inform onsite residents.

Flood warning activation procedures

What it means

Flooding is expected. Immediate action required

When it's used

Half an hour to one day in advance of flooding.

Actions

- Be prepared to act on your flood plan.
- Ensure the Flood Kit is prepared, and all items are fully charged / working.
- Notify all occupants that evacuation may occur, and marshals will aid their exit.
- Delay those not at the home from returning.
- Evacuation team assembles in one for dwellings reception rooms, debriefed on the evacuation plan.

Communications

- Communicate to onsite occupants in person.
- Communicate to offsite residents of the measures in place.

Severe flooding activation procedures

What it means

• Severe flooding. Danger to life.

When it's used

• When flooding poses a significant threat to life.

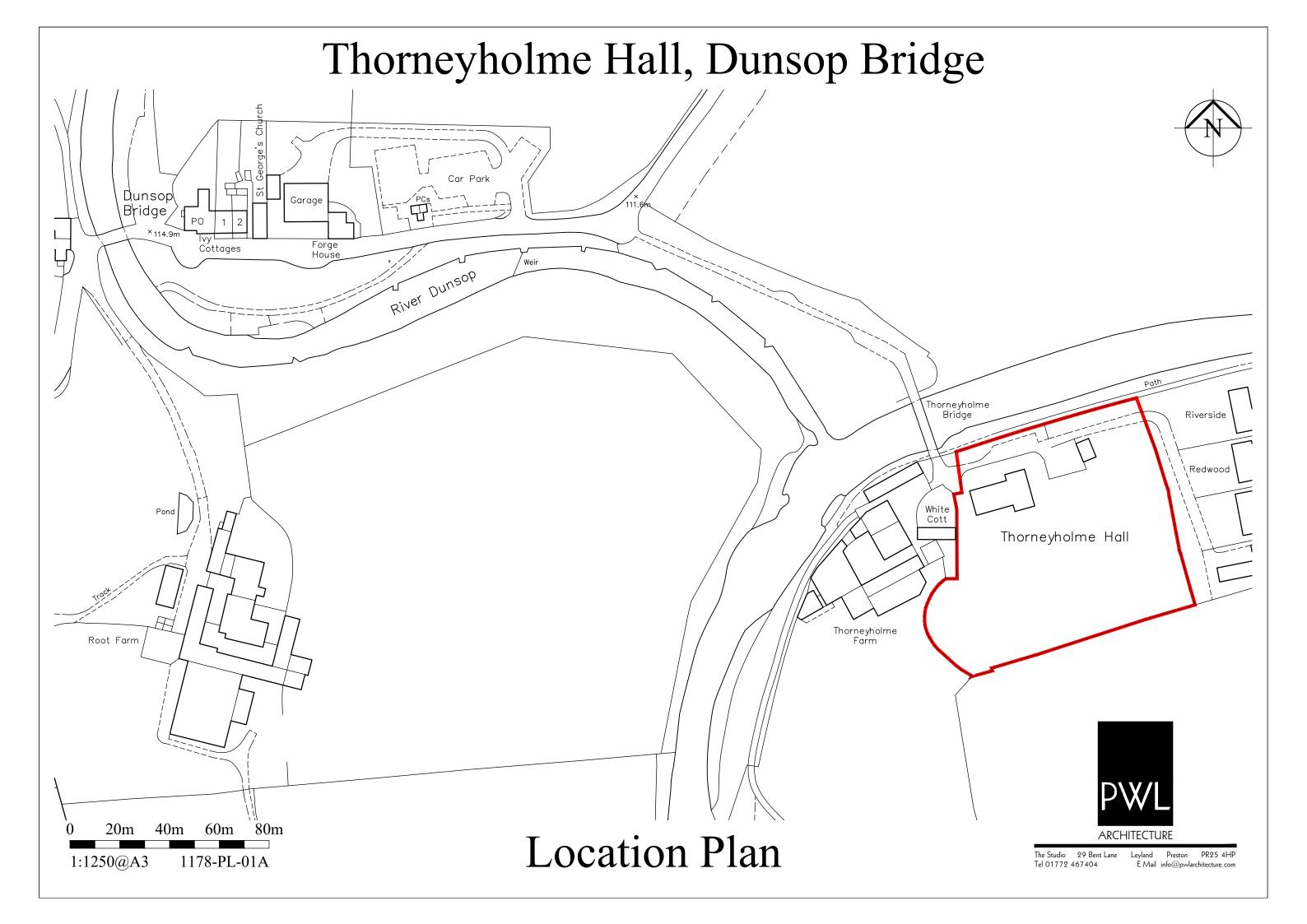
Actions

- Call 999 ONLY if there is an immediate danger to life.
- Co-operate with the emergency services; they have the power to overrule any decisions about evacuation timing and routes away from the site.
- Move people and valuables to safe place.
- Turn off gas, electricity and water supplies if safe to do so.
- Contact all occupants to meet at the dwellings main reception room.
- Radio's, hi-vis vest's, and torches to be distributed.
- Notify all occupants verbally that evacuation will occur in a managed way and that the marshals will aid their exit.
- Issue evacuation handouts including route to follow unless directed otherwise by the emergency services.
- Ensure no residents go back into the dwelling until it is declared safe.
- If not possible to evacuate then move all people to the first floor of the main house.

Communications

- Call 999 on telephone / mobile if persons in danger.
- Communicate to residents in person.
- Communicate to residents that are not at the property of the situation.
- Ensure home let is clear.
- Communicate to emergency planners and or emergency services that the property is evacuated.

APPENDIX A



APPENDIX B

FLOOD RISK ASSESSMENT

for

MR MICHAEL REILLY

PROPOSED CHANGE OF USE FROM PRIVATE DWELLING TO A HOTEL / HOLIDAY LET

at

THORNEYHOLME HALL
DUNSOP BRIDGE, BB7 3BB

DECEMBER 2022

REFORD

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- B Proposed site layout
- C Topographical survey
- D Local topography and flood zones

1. INTRODUCTION

- 1.1 This flood risk assessment has been produced on behalf of Mr Michael Reilly in support of a planning application for the conversion of a private residential unit into a bed and breakfast hotel / holiday let at Thorneyholme Hall, Dunsop Bridge, BB7 3BB.

 A location plan is included within Appendix A.
- 1.2 This Flood Risk Assessment is compliant with the requirements set out in the National Planning Policy Framework (NPPF) and the Planning Practice Guidance (NPPG) in relation to Flood Risk and Coastal Change, and describes the existing site conditions and proposed development. It assesses the potential sources of flooding to the site from tidal, fluvial, groundwater, surface water and other sources, taking a risk based approach in accordance with National Policy.

Site summary

| Site Name | Land at Thorneyholme Hall |
|---------------------------|-------------------------------|
| Location | Dunsop Bridge |
| NGR (approx.) | SD663499 |
| Application site area | 0.8ha |
| Development type | Hotel / holiday let |
| Vulnerability | More Vulnerable |
| EA Indicative Flood Zones | Flood Zone 3 |
| Local Planning Authority | Ribble Valley Borough Council |

2. DESCRIPTION OF THE SITE

Existing site

- 2.1 The proposal relates to existing buildings that lie within the grounds of Thorneyholme Hall, Dunsop Bridge.
- 2.2 The existing site is approx. 0.8ha and access is via the private access to the Hall from the main road running through Dunsop Bridge and crosses the River Hodder via Thorneyholme Bridge.
- 2.3 The River Hodder runs along the northern boundary of the estate. The River Dunsop flows into the River Hodder adjacent to the estate's northwest corner.
- 2.4 Thorneyholme Hall and its grounds are on land that is elevated above the surrounding land.

Proposed development

- 2.5 It is proposed that the development will comprise the conversion of the Hall and the annexe building from a private residential unit into a bed and breakfast hotel / holiday let.
- 2.6 The proposed site layout is included within Appendix B.
- 2.7 It is proposed that access into the developed site will be as existing, from the main road that runs through Dunsop Bridge, crossing the River Hodder via Thorneyholme Bridge.

3. SCOPE OF THE ASSESSMENT

Flood risk planning policy

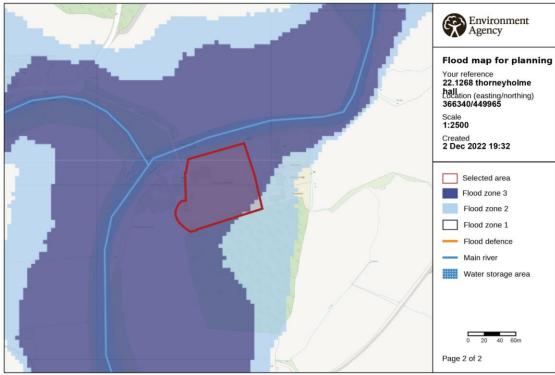
- 3.1 The National Planning Policy Framework (NPPF) sets out the Government's national policies on different aspects of land use planning in England in relation to flood risk.

 Supporting Planning Practice Guidance is also available.
- 3.2 The NPPF sets out the vulnerability to flooding of different land uses. It encourages development to be located away from areas at highest risk (whether existing or future), and states that where development is necessary in such areas, the development should be made safe for its lifetime. It also stresses the importance of preventing increases in flood risk offsite to the wider catchment area.
- 3.3 The NPPF also states that alternative sources of flooding, other than fluvial (river flooding), should also be considered when preparing a Flood Risk Assessment.
- 3.4 As set out in the NPPF, local planning authorities should only consider development in flood risk areas appropriate where informed by a site specific Flood Risk Assessment. This document will identify and assess the risk associated with all forms of flooding to and from the development. Where necessary it will demonstrate how these flood risks will be managed so that the development remains safe throughout its lifetime, taking climate change into account.
- 3.5 This Flood Risk Assessment is written in accordance with the NPPF and the Planning Practice Guidance in relation to Flood Risk and Coastal Change.

Flood zones

- 3.6 The site is identified on the Environment Agency's flood mapping as lying within Flood Zone 3. The flood risk is fluvial flooding from the River Hodder, which is Main River.
- 3.7 Flood Zone 3 is land assessed as having a greater than 1 in 100 annual probability of river flooding (1%).

3.8 An extract from the Environment Agency's Flood Zone Map for Planning is shown below.



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Strategic Flood Risk Assessment

- 3.9 The site is within the area covered by the Ribble Valley Borough Council, Strategic Flood Risk Assessment, Revised Level 1 Assessment, April 2017.
- 3.10 The SFRA makes reference to Dunsop Bridge as follows:
 - It identifies that Dunsop Bridge has no flood defence identified within the National Flood and Coastal Defence Database.
 - Bowland Fell Policy Option P6 Preferred Policy is to take action with others to store
 water or manage run off in locations that provide overall flood risk reduction or
 environmental benefits, locally or elsewhere in the catchment. The policy was
 chosen to deliver benefits to villages such as Dunsop Bridge and further
 downstream.

4. CONSULTATIONS AND DATA ACQUISITIONS

Environment Agency

- 4.1 The site is identified on the Environment Agency's flood mapping as lying within Flood Zone 3. The flood risk is fluvial flooding from the River Hodder, which is Main River. Flood Zone 3 is land assessed as having a greater than 1 in 100 annual probability of river flooding (1%).
- 4.2 The Environment Agency has been consulted with regards the availability of EA Product Data 4 for the site. The information was not previously available.
- 4.3 The site lies within a flood alert area where homes and businesses are warned of the possibility of flooding and are encouraged to be alert, stay vigilant and make early / low impact preparations for flooding.

Historic flooding

4.4 There is no record of historical flooding occurring on the site.

United Utilities

4.5 United Utilities has confirmed there are no public sewers within the vicinity of the site.

Topographical Survey

4.6 A topographical survey has been carried out for this site and is shown within Appendix C.

Site Investigation

4.7 The Soilscapes Viewer has identified that the geology encountered will be naturally wet, loamy and clayey floodplain soils with naturally high groundwater. The soils will therefore not be conducive to infiltration.

5. SOURCES OF FLOOD RISK

Potential Sources of Flood Risk

5.1 Potential sources of flood risk to the site are identified below. The significance of these sources is investigated further into Section 6.

Fluvial flooding

- 5.2 The River Hodder runs along the northern boundary of the estate. The River Dunsop flows into the River Hodder adjacent to the estate's northwest corner.
- 5.3 The access to the site bridges the River Hodder with the Thorneyholme Bridge. The bridge allows a clear span of the river.
- The site is identified on the Environment Agency's flood mapping as lying within Flood Zone 3. The flood risk is fluvial flooding from the River Hodder, which is Main River.
- 5.5 However, Thorneyholme Hall and its grounds are on land that is elevated above the surrounding land, which lifts it out of the Flood Zone 3 area. The site therefore lies within Flood Zone 2, which is land assessed as having between a 1 in 100 and 1 in 1000 annual probability of river flooding (1% 0.1%).
- 5.6 The site lies within a flood alert area where homes and businesses are warned of the possibility of flooding and are encouraged to be alert, stay vigilant and make early / low impact preparations for flooding.

Tidal flooding

5.7 The site is a significant distance from the nearest tidal estuary and is, therefore, not at risk of flooding from the sea. The site is not identified as being at risk of flooding from the sea by any Environment Agency Flood Zone maps or within the SFRA for the area.

Groundwater

- 5.8 Groundwater flooding tends to occur after much longer periods of sustained high rainfall. The areas that are at risk tend to be those low-lying areas where the water table is shallow. Flooding tends to occur in areas that are underlain by major aquifers, although groundwater flooding is also noted in localised floodplain sands and gravels. The main causes of groundwater flooding are:
 - Natural groundwater rising due to tidal influence, or exceptionally wet periods leading to rapid recharge;
 - Groundwater rebound due to cessation of abstraction and mine dewatering;
 - Existence of confined aquifers and springs.
- 5.9 There are no recorded incidents of flooding associated with groundwater levels within the site.
 - Canals, reservoirs and other artificial sources
- 5.10 There are no canals or other artificial sources within the vicinity of the site.
- 5.11 The Environment Agency's risk of flooding from reservoirs mapping identifies risk of flooding from the Stocks Reservoir, which is owned by United Utilities.

Sewers

- 5.12 Flooding from a drainage system occurs when flow entering a system exceeds its discharge capacity, the system becomes blocked or, in the case of surface water sewers, it cannot discharge due to high water level in the receiving watercourse. Sewer flooding is often caused by surface water discharging into the combined sewerage system, sewer capacity is exceeded in large rainfall events causing backing up of flood waters within properties or discharging through manholes.
- 5.13 Surface water (including the risk of sewers and culverted watercourses surcharging) poses the highest risk of more frequent flooding. Surface water drainage from new developments is critical in reducing the risk of localised flooding.

- 5.14 Where possible the preference for dealing with surface water runoff from the developed site is for it to infiltrate back into the ground or alternatively to a watercourse. Only if it is not possible for either of these options is surface water from the development to be allowed into the public sewers.
- 5.15 United Utilities has confirmed there are no public sewers within the vicinity of the site.

 Pluvial runoff
- 5.16 The Environment Agency Risk of Flooding from Surface Water map indicates the site is at a very low risk of surface water flooding, i.e. this means that each year, this area has a chance of flooding of less than 1 in 1000 (<0.1%).
- 5.17 It should be noted that surface water flooding can be difficult to predict, much more so than river or sea flooding as it is hard to forecast exactly where or how much rain will fall in any storm. In addition, local features can greatly affect the chance and severity of flooding.

Development drainage

- 5.18 Surface water (including the risk of sewers and culverted watercourses surcharging) poses the highest risk of more frequent flooding. Surface water drainage from new developments is critical in reducing the risk of localised flooding.
- 5.19 If surface water runoff is not managed appropriately, there may be an increased risk presented elsewhere from development drainage, and the aim should be to implement appropriate sustainable drainage systems (SuDS) to treat and contain flows and mimic the existing conditions.
- 5.20 Where possible the preference for dealing with surface water runoff from the developed site is for it to infiltrate back into the ground or alternatively to a watercourse. Only if it is not possible for either of these options is surface water from the development to be allowed into public sewers.
- 5.21 The proposal is for the conversion of existing buildings within the site. As such the area of impermeable surfaces on site will not be increased.

6. FLOOD RISK ASSESSMENT

6.1 This section of the Flood Risk Assessment looks at the flood risk to the site before any mitigation measures are put into place and hence identifies where mitigation will be required. Section 7 continues to explain the mitigation measures proposed and the residual risk following implementation of any proposed mitigation.

Risk of Flooding to Proposed Development

Fluvial Flood Risk

- 6.2 The River Hodder runs along the northern boundary of the estate. The River Dunsop flows into the River Hodder adjacent to the estate's northwest corner.
- As already stated Thorneyholme Hall and its grounds are on land that is elevated above the surrounding land. A site visit has been undertaken to carry out a review of the existing site levels local to the site to demonstrate that the site does not lie within Flood Zone 3. The description below should be read in conjunction with the figure and photographs within Appendix D.
- 6.4 The Environment Agency mapping identifies the boundary of the Flood Zone 3 area entering Thorneyholme Hall and its grounds at its north east corner and crossing the site towards its south west corner. This is not possible. The existing ground level within Thorneyholme Hall and its grounds are at the same level as the ground level at the site's north east corner i.e. the Flood Zone 2 level. This level is maintained across the site. In addition there is a brick wall along the site's northern boundary to the Thorneyholme Bridge crossing the River Hodder and along the site's eastern boundary that protects the site from a 1 in 100 year event and prevents flood water entering the grounds.
- 6.5 Immediately after crossing the bridge over the River Hodder, an access drops from the site level into Thorneyholme Farm, which is at a lower level to Thorneyholme Hall and its grounds. The ground level within Thorneyholme Hall and its grounds, which includes the development site, is maintained along the western boundary of the site between the Hall and the Farm by a one metre high stone retaining wall. This height

difference is maintained to the south of the site as a raised embankment until it meets with the Flood Zone 2 boundary approx. 250 metres to the south of the site, and thus provides flood protection to the site's western and southern boundaries from a 1 in 100 year event.

- 6.6 This whole area, as identified on the figure included within Appendix D, lies outside of the Flood Zone 3 area. Flood water from a 1 in 100 year event would remain in the river channel past the site and is prevented from entering the site by the retaining wall and earth embankment to the west and south. The site would be unaffected by the 1 in 100 year event. The site therefore lies within Flood Zone 2, which is land assessed as having between a 1 in 100 and 1 in 1000 annual probability of river flooding (1% 0.1%) and as such, the risk of fluvial flooding to the proposed development is medium.
- 6.7 The site lies within a flood alert area where homes and businesses are warned of the possibility of flooding and are encouraged to be alert, stay vigilant and make early / low impact preparations for flooding.

Canals, reservoirs and other artificial sources

- There are no canals, other artificial sources or reservoirs local to the development site.

 The Environment Agency's risk of flooding from reservoirs mapping identifies risk of flooding from the Stocks Reservoir, which is owned by United Utilities.
- 6.9 Flooding from reservoirs is extremely unlikely to happen. As such the risk of flooding is low.

Groundwater

6.10 The site is not underlain by a major aquifer. There are no recorded incidents of flooding associated with groundwater levels within the site and due to the nature of the underlying strata the flood risk from groundwater is low.

Sewer Flooding and Pluvial Runoff

6.11 There are no public sewers within the vicinity of the site. There is no record of any sewer flooding. The risk from sewer flooding is therefore low.

6.12 There is no record of any flooding on the site after heavy rainfall. In addition, as Thorneyholme Hall and its grounds are on land that is elevated above the surrounding land the risk from pluvial runoff is low.

Effect of the Development on the Wider Catchment

Development Drainage

6.13 The proposal is for the conversion of existing buildings within the site. As such the area of impermeable surfaces on site will not be increased. There is, therefore, no change to the surface water runoff regime of the site and no adverse effect on flood risk elsewhere in the wider catchment.

7. PREDICTED IMPACTS AND MITIGATION

7.1 This section of the FRA sets out the mitigation measures recommended to reduce the risk of flooding to the proposed development and outlines any residual impacts.

Site arrangements

Upstream and downstream effects

7.2 As there is no new development there is no material effect on the floodplain due to the proposed conversions and no additional risk to upstream or downstream properties.

Finished floor levels and future proofing against flooding

- 7.3 If possible during the conversion of the buildings, flood proofing measures are to be implemented to ensure future occupants are not at an unacceptable level of flood risk.
- 7.4 There are a number of measures which are able to be incorporated into the conversion of the buildings. They are:
 - Forming the ground bearing slab in solid concrete.
 - Incorporating a non-return valve on the drainage system.
 - Connecting incoming services at a high level on the face of the building.
 - The application of storm dry additives to mortar and masonry cream to limit penetrating water to external masonry.
 - Closed cell insulation to walls and floors.
 - Flood protection door barriers.
 - High level sockets.

Safe access and egress

7.5 Access to the site is from the main road that runs through Dunsop Bridge, crossing the River Hodder via Thorneyholme Bridge.

7.6 The site lies within a flood alert area where homes and businesses are warned of the possibility of flooding and are encouraged to be alert, stay vigilant and make early / low impact preparations for flooding. It is advised that a flood evacuation plan should be produced.

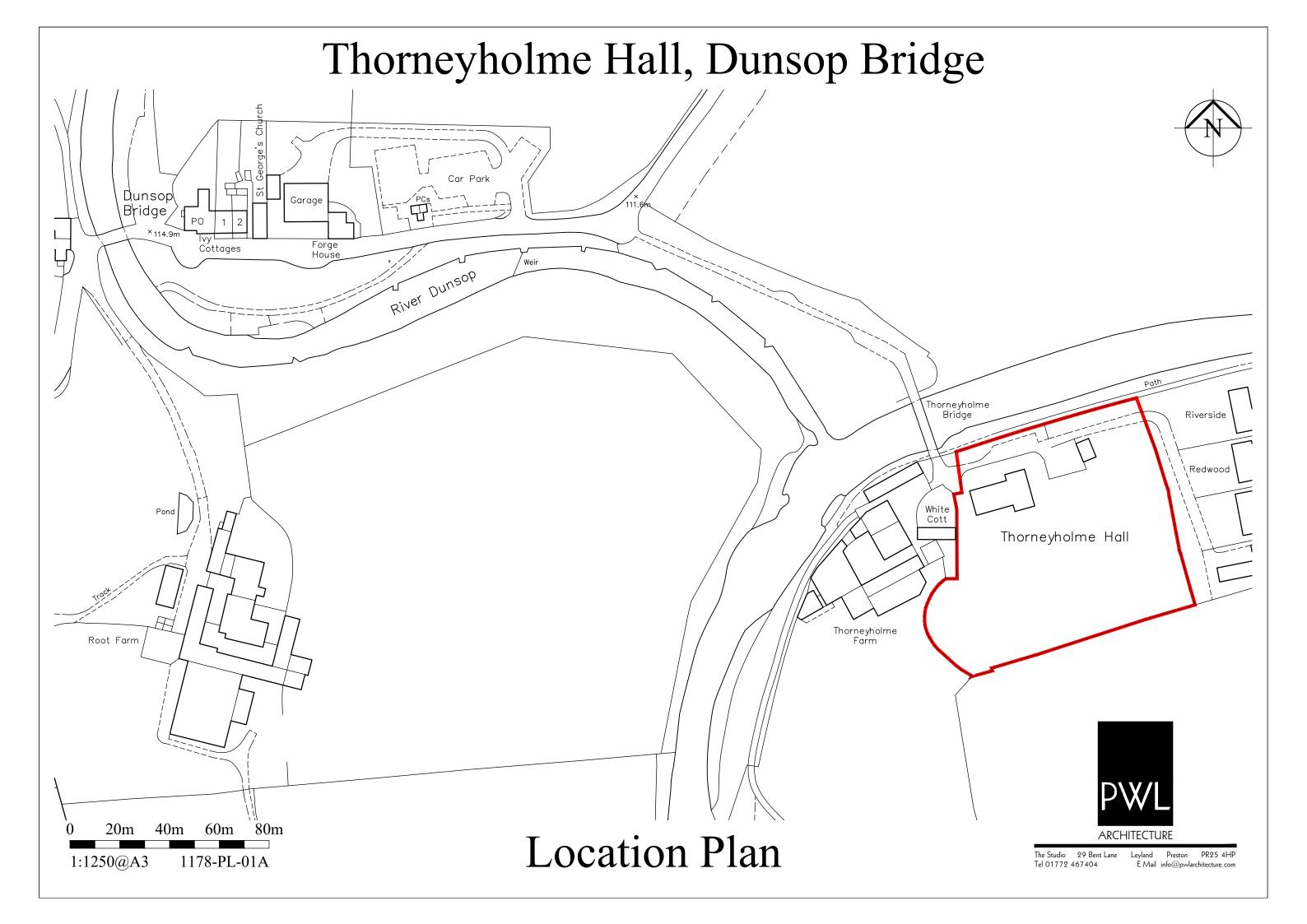
8. SEQUENTIAL TEST

- 8.1 A requirement of NPPF is that all plans should apply a sequential, risk-based approach to the location of development, taking into account the current and future impacts of climate change so as to avoid, where possible, flood risk to people and property. The aim of the sequential test is to steer new development to areas with the lowest risk of flooding.
- 8.2 Strategic Flood Risk Assessments (SFRA) refine information on the probability of flooding, taking other sources of flooding and the impacts of climate change into account. They provide the basis for applying the Sequential Test, on the basis of the flood zones in NPPG Table 1.
- 8.3 The flood zones are the starting point for this sequential approach. As already stated, the Environment Agency's flood mapping identifies the site as lying within Flood Zone 3.
- 8.4 However it has been demonstrated above that the site lies within Flood Zone 2, which is land assessed as having between a 1 in 100 and 1 in 1000 annual probability of river flooding (1% 0.1%).
- 8.5 The proposal is for the conversion of existing buildings within the site. As such a Sequential Test is not required.
- 8.6 The current development proposals are classified as "More Vulnerable". Table 3 within PPG indicates Flood Risk Vulnerability and Flood Zone 'compatibility'. Using Zone 2 and the "More Vulnerable" classification for a hotel / holiday let use, PPG considers that a development of this type would be deemed appropriate for development within Flood Zone 2.
- 8.7 Subject to the suitable assessment of flood risk, PPG considers that a development of this type would be deemed appropriate for this location.

9. **CONCLUSIONS**

- 9.1 This flood risk assessment has been produced on behalf of Mr Michael Reilly in support of a planning application for the conversion of a private residential unit into a bed and breakfast hotel / holiday let at Thorneyholme Hall, Dunsop Bridge, BB7 3BB.
- 9.2 The risk of fluvial flooding to the proposed development is medium.
- 9.3 The risk of flooding from canals, reservoirs and other artificial sources is low.
- 9.4 The flood risk from groundwater is low.
- 9.5 The risk from sewer flooding and pluvial runoff is low.
- 9.6 The proposal is for the conversion of existing buildings within the site. As such the area of impermeable surfaces on site will not be increased. There is, therefore, no change to the surface water runoff regime of the site and no adverse effect on flood risk elsewhere in the wider catchment.

APPENDIX A



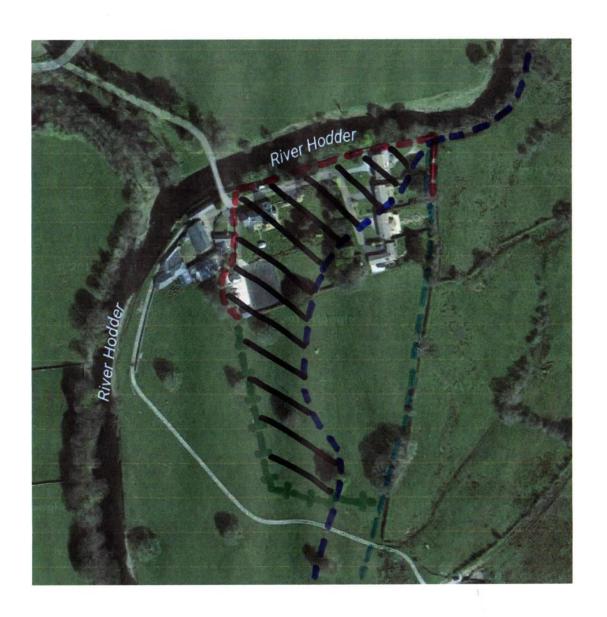
APPENDIX B

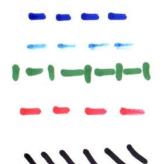


APPENDIX C



APPENDIX D





EA FLOOD ZONE 3 LINE
EA FLOOD ZONE 2 LINE
LINE OF RAISED EMBANKMENT
WALL

AREA TAKEN OUT FROM FLOOD ZONE 3 – NOW FLOOD ZONE 2



 ${\bf Photograph~1-Outside~northeast~corner~of~the~site~looking~south~along~boundary}$



Photograph 2 – Outside northeast corner of the site looking east



Photograph 3 – Outside northeast boundary of the site looking east along wall on northern boundary



Photograph 4 – Wall at Thorneyholme Bridge over River Hodder at northwest corner of the site

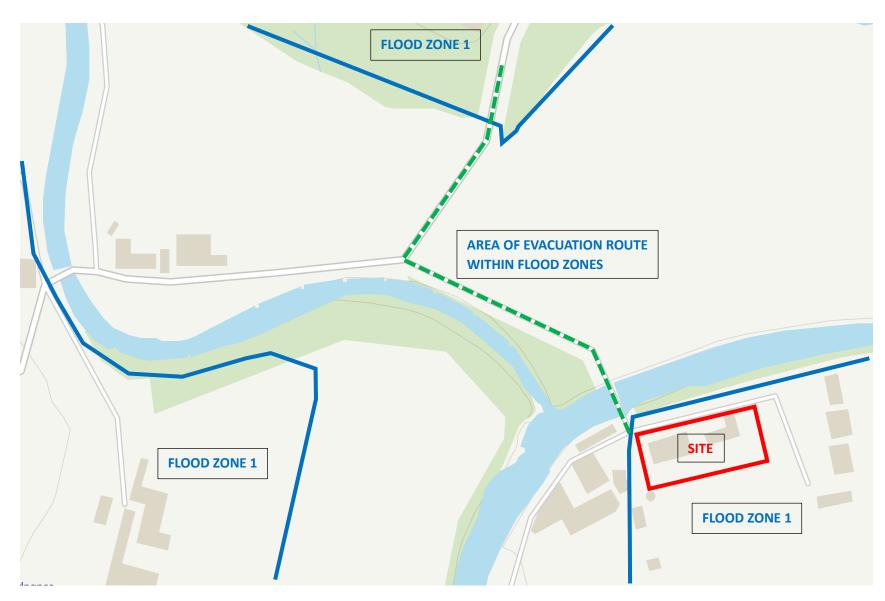


Photograph 5 – Western boundary retaining wall at development site



Photograph 6 – Raised embankment continuing boundary protection to the south

APPENDIX C



EVACUATION ROUTE