NORTH PENNINES ARCHAEOLOGY LTD

Project Designs and Client Reports No. CP133/04

REPORT ON AN ARCHAEOLOGICAL BUILDING RECORDING PROJECT AT THE FORMER BONDED WAREHOUSE BEEZON ROAD KENDAL CUMBRIA

FOR

STAINSBY GRANGE (KENDAL) LTD

NGR SD 5175 9315
Planning Application No. SL/04/0760

F Wooler BA, PIFA
North Pennines Archaeology Ltd
Nenthead Mines Heritage Centre
Nenthead
Alston
Cumbria CA9 3PD
Tel: (01434) 382045
Fax: (01434) 382294
Email: info@nparchaeology.co.uk

24th November 2004

North Pennines Archaeology Ltd is a Trading Subsidiary of North Pennines Heritage Trust, a Registered Charity
Company Registration No. 4847034 VAT Reg. Number 817 2284 31

CONTENTS

Page

LIST OF FIGURES

LIST OF PLATES

INDEX OF PHOTOGRAPHS ON CD-ROM

INDEX OF PHOTOGRAPHS ON CD-ROM

1 INTRODUCTION

1.1 In July 2004, North Pennines Archaeology Limited was commissioned by Stainsby Grange (Kendal) Ltd to undertake a building survey of The Former Bonded Warehouse, Beezon Road, Kendal, Cumbria (NGR SD 5175 9315). The work was carried out prior to the conversion of the building to a retail unit (Planning Application Reference No. SL/04/0760).

1.2 Cumbria County Council Archaeology Service produced a brief for a building recording project, which was to be undertaken prior to the commencement of building work. A 'Level 3' Building Survey was carried out as specified in *Recording Historic Buildings: A Descriptive Specification*[1]

1.3 The Former Bonded Warehouse, Beezon Road, Kendal is regarded as being of archaeological interest as it is shown on the Second Edition Ordnance Survey map of 1900, and is recorded on the County Sites and Monuments Record, Reference 40355.

1.4 The survey was carried out in October 2004 by Fiona Wooler BA (Hons), PIFA, and Joanne Beaty BA (Hons).

2 SITE LOCATION

2.1 The Former Bonded Warehouse is located on the east bank of the River Kent beside Victoria Bridge, 0.25 kilometres east of the railway station and less that 1kilometre north of the centre of Kendal (figure 1).

2.2 The area in which the bonded warehouse is located is largely commercial, being an area that was generally undeveloped until the arrival of the railway in 1846, except for land north of Wildman Street (See figures 3 and 4 for the development of the area).

2.3 The survey is concerned with a large warehouse that stands between the River Kent to the west and Beezon Road to the east (plates 1 and 2).

[1] Recording Historic Buildings: A Descriptive Specification, RCHME, Third Edition, 1996, Swindon

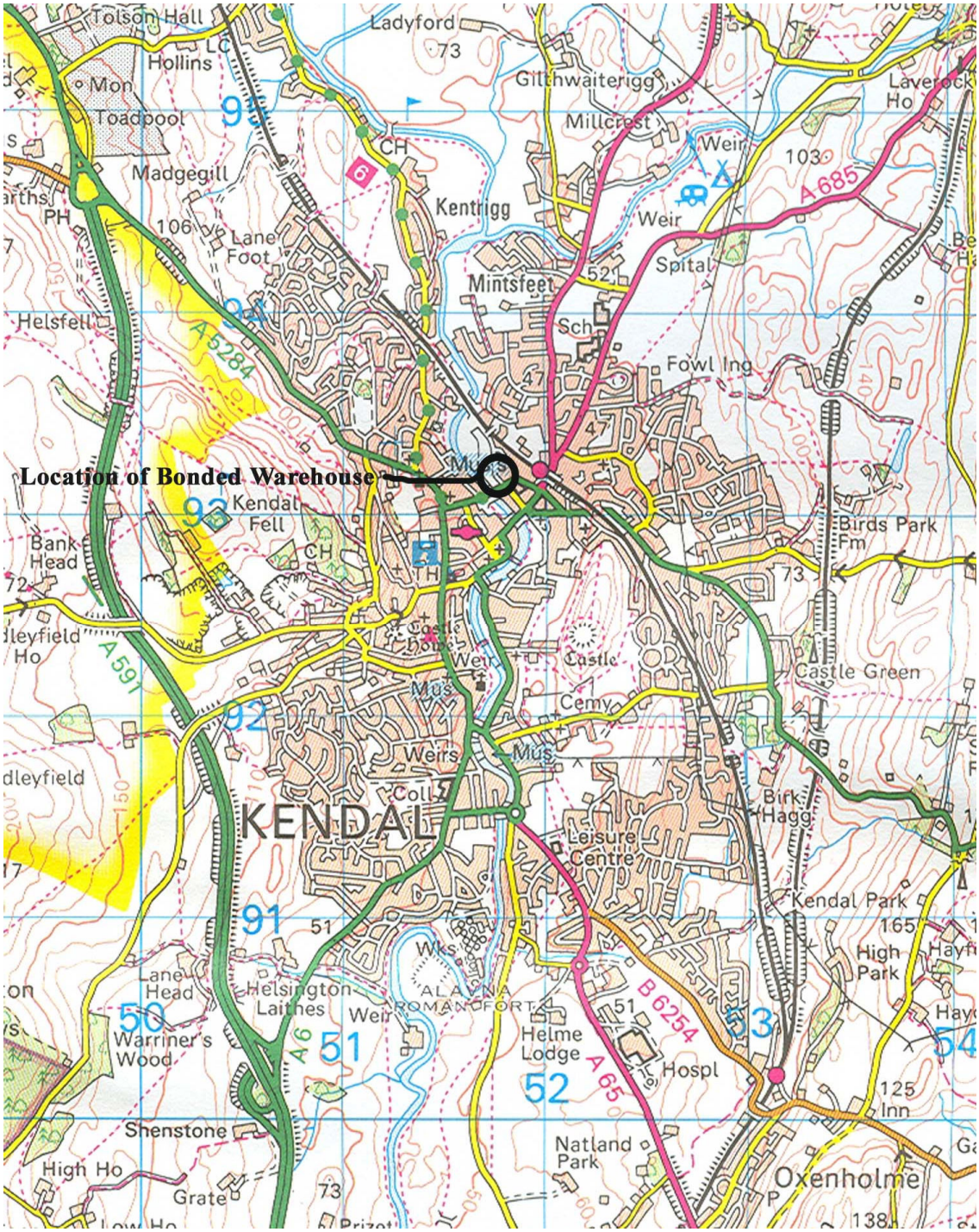

Figure 1 – Site Location
Reproduced from Landranger® 1:50,000 scale by permission of Ordnance Survey ® on behalf of the Controller of her Majesty's Stationery Office. © Crown Copyright (1997). All rights reserved. Licence number WL6488

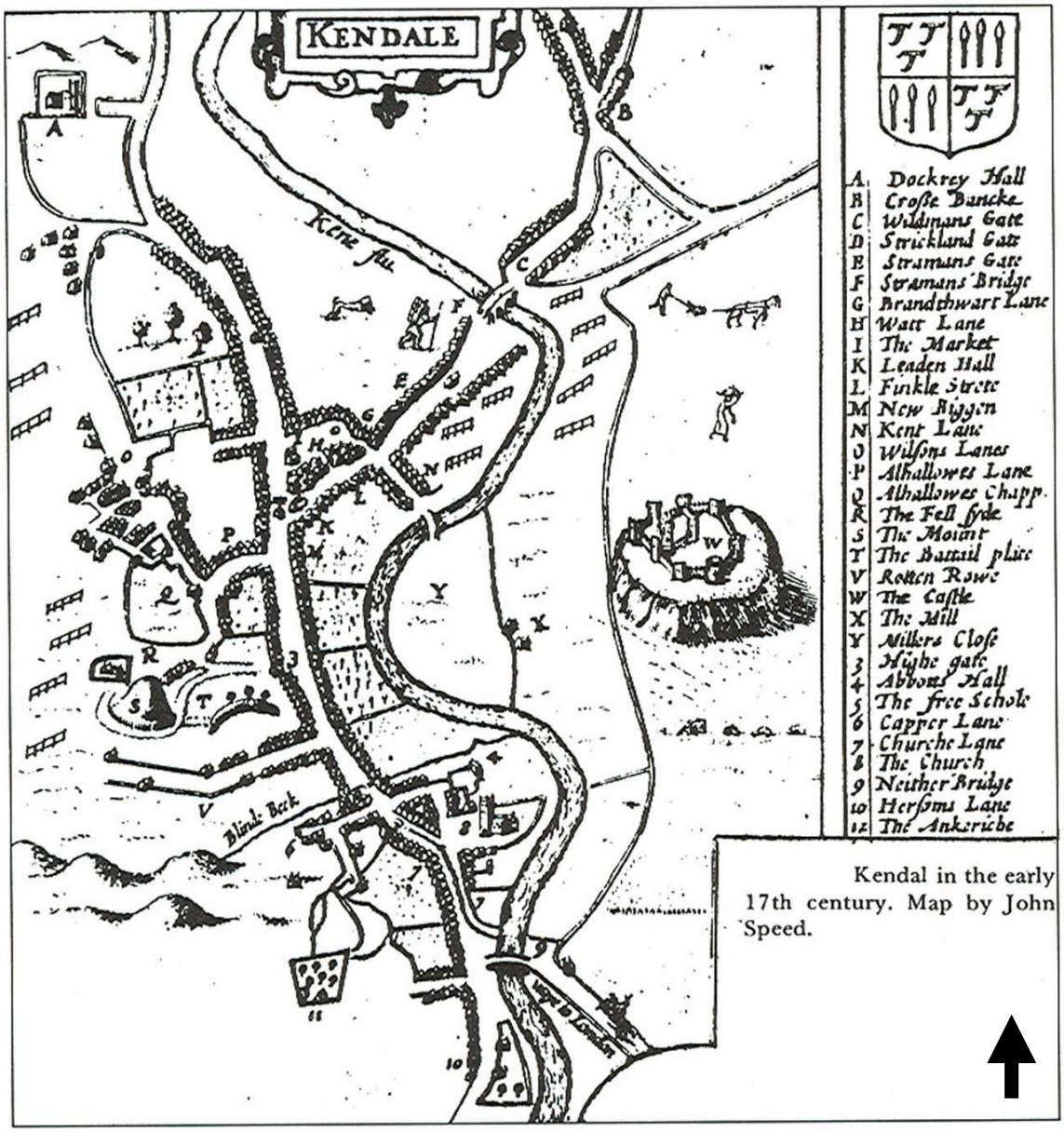

Figure 2 – John Speed's map of 1610

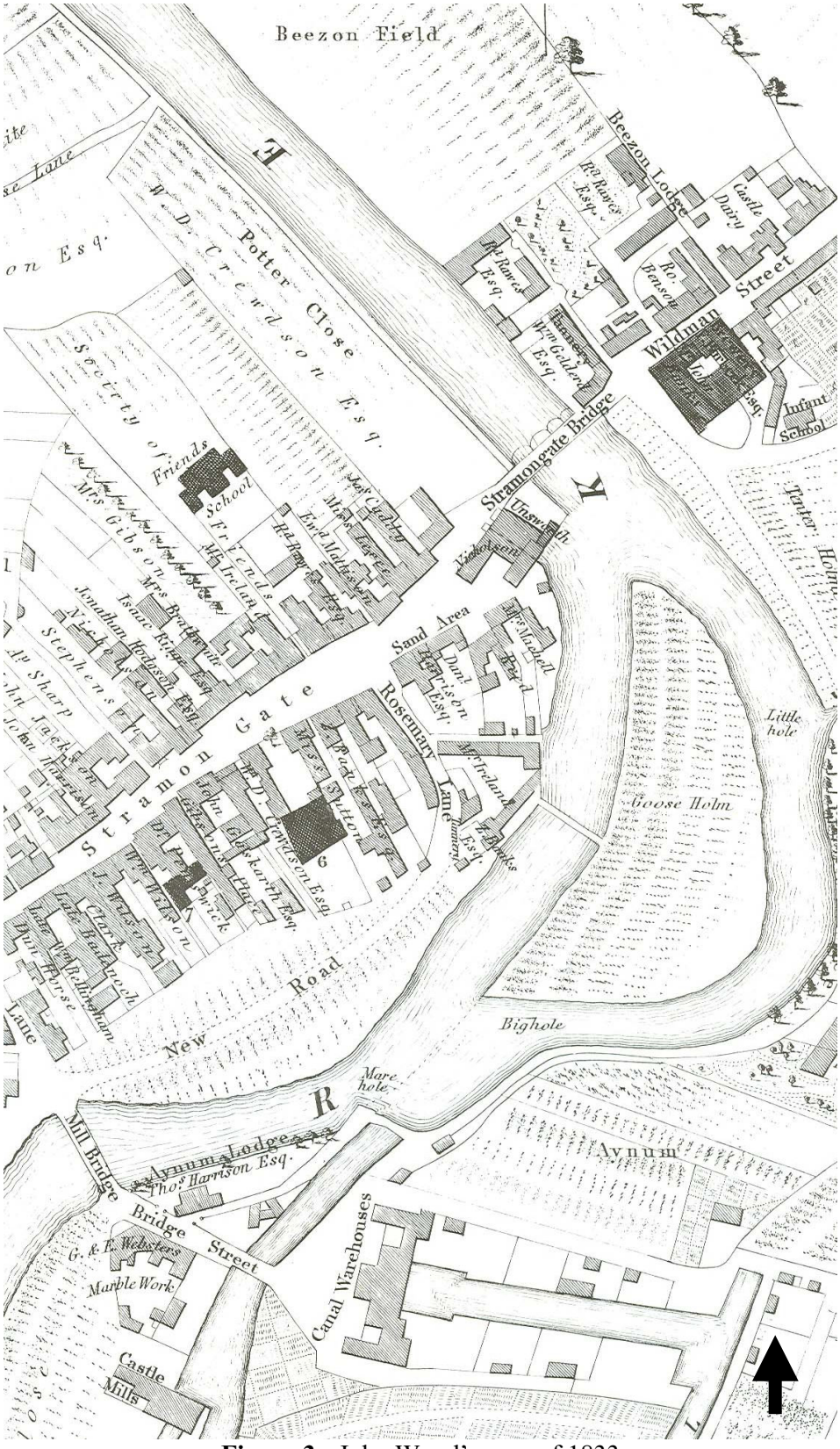

Figure 3 - John Wood's map of 1833

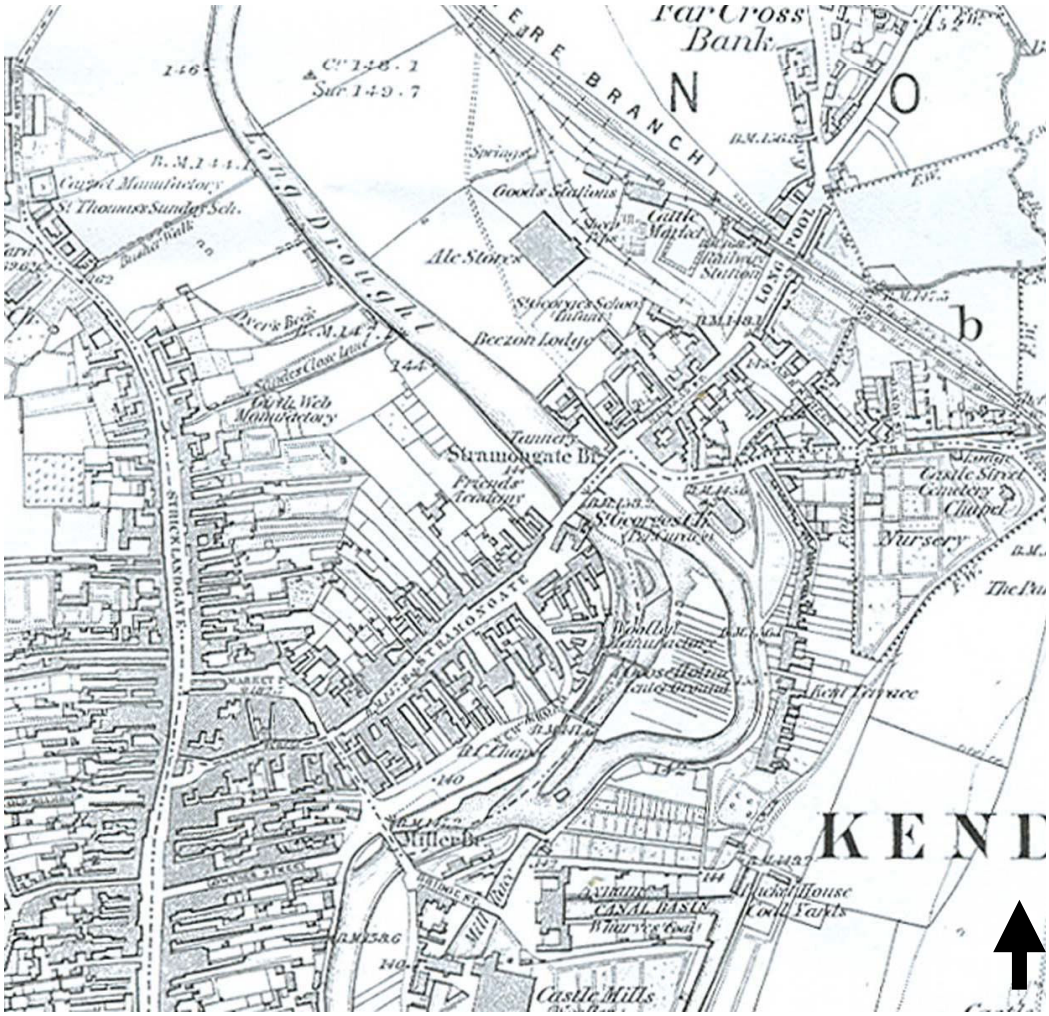

Figure 4 - First Edition Ordnance Survey map of 1867. Scale 6 inch to 1 mile

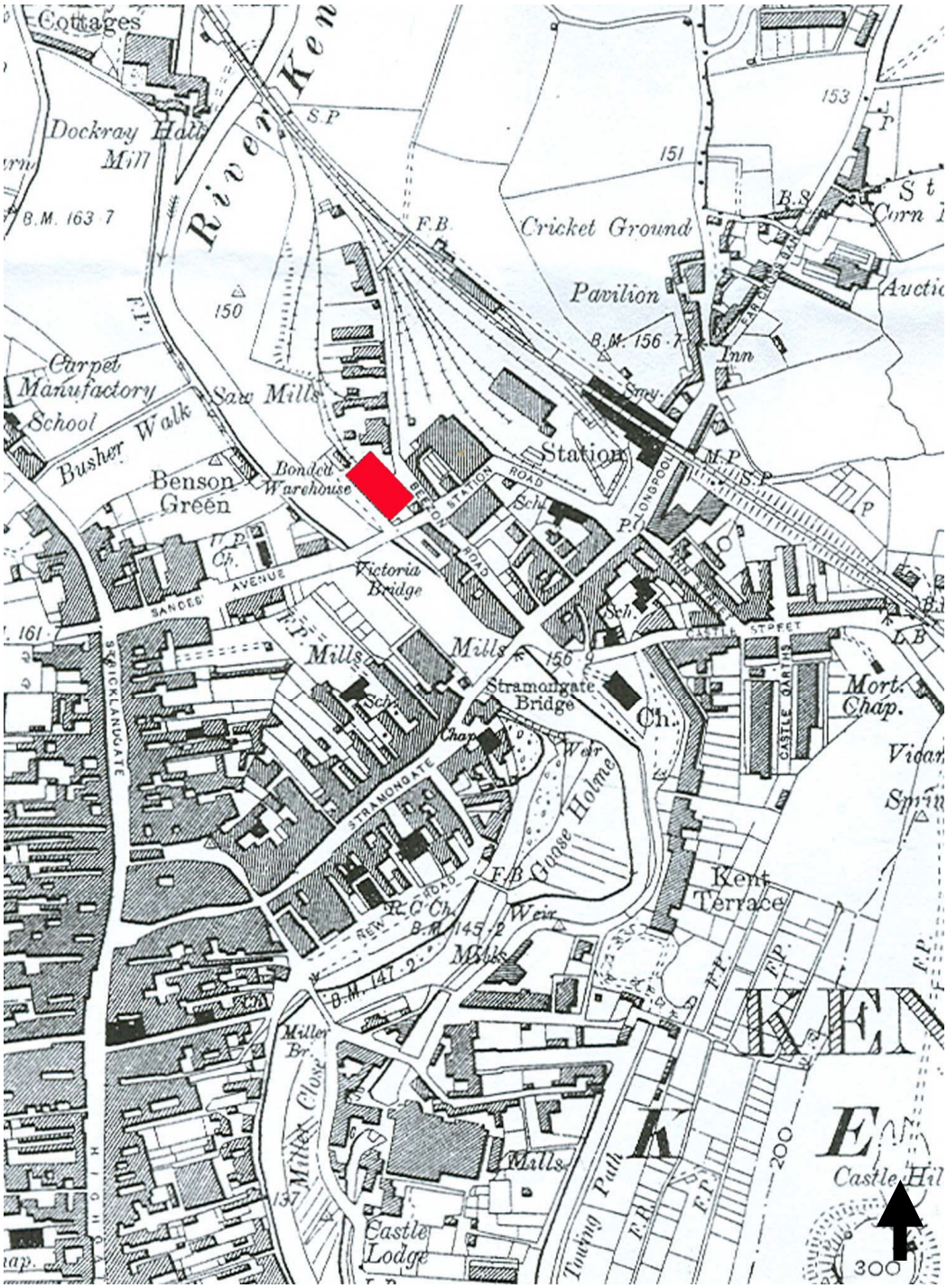

Figure 5 - Second Edition Ordnance Survey map of 1900. Scale: 1:10,560.

Plate 1 – The Former Bonded Warehouse, Beezon Road, Kendal (NE Elevation)

Plate 2 - The Former Bonded Warehouse (SW Elevation facing River Kent)

3. HISTORICAL BACKGROUND

3.1 Kendal, located in South Cumbria, has been a busy market town for centuries. In the 17th century, the town was described by Reverend Thomas Machell as being 'most famous for its industry and the woollen trade'[2], and John Speed's map of 1610 clearly shows tenter frames on the outskirts of the town on which the cloth was stretched[3] (figure 2).

3.2 The layout of the town is distinctive in that it consisted, up until the 19th century, of a main street running north-south from Stricklandgate to Kirkland, and Stramongate crossing the River Kent at the east side of the town, with burgage plots and crofts flanking the main thoroughfares[4].

3.3 The development of the town to the east of the River Kent did not really begin until the early to mid-19th century, stimulated firstly by the Lancaster to Kendal Canal, opened on June 18th 1819[5], which was built to bring coal to Kendal from the Lancashire coalfields and to transport slate and manufactured goods out and secondly, by the arrival of the railways to the town in 1846. The presence of initially the canal, and later the railway, allowed for the construction of warehouses in the town, built at the head of the canal close to Castle Mills. John Wood's map of Kendal of 1833 clearly shows the canal head and warehouses, but also the lack of development on Beezon Fields, where the Bonded Warehouse would eventually be constructed (figure 3).

3.4 The large bonded warehouse, that is the subject of this survey, was constructed on Beezon Fields between 1875 and 1876, and was designed by local architect Malcolm Shaw. It was built for The Westmorland Bonded and Free Warehouse Co Ltd to house tobacco until it was withdrawn for processing. The tobacco and snuff industry in Kendal dates as far back as the early 17th century, when the supposed medicinal benefits of tobacco had become widely circulated and believed in[6]. The use of tobacco was seen to have prevented a high death toll in the town when the plague struck in 1623, and henceforth the demand for snuff and tobacco increased.

3.5 Kendal's geographical position was favourable because of its proximity to ports such as Whitehaven, where tobacco could be imported from the British Colonies of Virginia and Maryland. The town also benefited from its position on the direct route from Glasgow, which had become a major manufacturing and processing centre for

[2] Weaver, J, 1992, Page 75
[3] Rollinson, W, 1996, Page 73
[4] *Ibid,* Page 74
[5] Mannix & Co, 1851, Page 297
[6] Dunderdale, J, 2003, Page 13

tobacco and snuff[7]. Presumably, because of the towns already established trade links for cloth and leather goods for example, it was able to facilitate the new commodities. A snuff mill is recorded in Kendal in 1740 and the snuff industry stills exists in the town today in the guise of The Samuel Gawith Company.

3.6 Bonded warehouses were used to securely house imported goods, on which duty had not been paid (duty-free). The payment of duties (tax) on goods can be a considerable cost for companies, and because duty was paid in advance (before goods were allowed into the country), these companies could have a large amount of capital tied up in the goods. To reduce this cost, bonded warehouses allowed the importing of goods on which duty had not been paid, but the warehouse owners were required to give a 'bond' to the authorities, these promised that goods would not be released from the warehouse until duty had been paid[8].

3.7 The Bonded Warehouse at Kendal was constructed on hitherto undeveloped agricultural land, right beside the River Kent. Its proximity to the Lancaster and Carlisle Railway (Windermere branch) (figure 5) meant that a siding from the railway brought goods on trucks literally into the warehouse, which reduced the need for loading and unloading goods. Originally, within the central section of the warehouse, there was a double line of rails and two turntables to allow for the easy unloading of tobacco[9]. These features, along with the railway siding, no longer exist although the 'platforms' either side of where the tracks were located, still exist in the warehouse interior.

3.8 Offices for the 'Bonded and Free Warehouse Co, Beezon Fields' appear to have been constructed after March 1877 (Architect Stephen Shaw) as a plan of that date for the 'proposed offices' is stored at Kendal Record Office[10]. These offices stand on the corner of Beezon Road and Sandes Avenue (see photograph on CD-Rom).

3.9 There are other examples of bonded warehouses recorded on the County Sites and Monuments Record, these are listed below. A bonded warehouse did exist in Carlisle, and was certainly in existence in 1865 when the First Edition Ordnance Survey map of that date was published. This warehouse was again associated with the railway, in this instance the North British Railway (Carlisle and Silloth Section), and was located off Caldewgate, where Port Road Industrial Estate is today. This warehouse no longer exists.

[7] *Ibid,* Page 14
[8] Whitehead, G, 1993, Page 107
[9] Dunderdale, J.W, 2003*,* Page 87
[10] WDB 25 A/882/37 - KRO

SMR No.	Description
6251	Maryport Town Bonded Warehouse Present on 1866 OS map, Built in 1842 (T.Bulmer & Co 1901). Situated on Lower Church Street. Of three bays.
16276	Devonshire Dock Bonded Warehouse, Barrow-in-Furness. Present on Second Edition OS map of 1895. No longer exists.

3.10 It appears that the warehouse was still being used for the storage of bonded goods as late as the 1970's. A notice on the wall of one of the vaults in the western range, produced by the Commissioners of Custom and Excise, warns of the building's status as a Duty-Free Warehouse, and dates to July 1973 (figure 10).

3.11 The warehouse has most recently been used as retail units and storage area.

4. AIMS AND METHODOLOGY

4.1 The Building Survey

4.1.1 The survey consisted of three basic elements:

- a written account, which includes information derived from documentary research;
- a measured survey with accompanying drawings;
- a photographic record.

4.2 The Written Account

4.2.1 The written account is included in this document together with a selection of photographs, plans and appendix of documentary information.

4.3 The Photographic Record

4.3.1 The photographic archive consists of the following:

- a series of 35mm black and white prints, which included general views of the exterior of the building, elevations and part elevations, along with specific external details (e.g. doorways);
- a series of 35mm colour prints showing general views of the exterior of the building and its setting;
- a series of 35mm transparencies showing general views of the building and its setting;
- a series of digital views of the exterior of the building, the interior of the building and specific internal details (e.g. roof structure) supplied on CD-Rom.

4.4 Project Archive

4.4.1 The full archive of the desk-based assessment and Level 3 building survey has been produced to a professional standard in accordance with the current English Heritage guidelines set out in the *Management of Archaeological Projects* (MAP 2nd Edition 1991). The archive will be deposited within the County Record Office and a copy of the report given to the County Sites and Monuments Record, where viewing will be available on request.

5. PREVIOUS WORK

5.1 No previous archaeological work had been carried out on the site.

6. RESULTS

6.1 The Former Bonded Warehouse, Beezon Road, Kendal, is of single phase construction, measuring *c.*64 metres in length, *c.*34.6 metres in width and *c.*6.8 metres to eaves height, and of two storeys (figure 6). It is built of uncoursed, roughly squared limestone masonry, with a string course of slate just above ground floor window height, and another just below the eaves (plate 3). These would have been used to level up the masonry.

Plate 3 – SW facing elevation – Red arrows indicate the layers of slate

6.2 All of the windows and doorways are surrounded with well dressed limestone masonry jambs and voussoirs, the sills of the windows and the lintels of the ground floor double doorways are, however, of red sandstone. All of the windows, except for two later insertions on the SE elevation, have exterior iron bars. The double doors at both ground and first floor level, as well as the internal large doors, are all substantially made and no doubt reflect the value of the commodities that the warehouse was built to contain. The corners of the building are quoined with dressed limestone blocks.

6.3 Although, externally, the building is of single-phase construction, internally the warehouse is longitudinally into three sections. This is reflected by the roof structure as each of the three 'ranges' has its own hipped roof (plate 4). The western range has a roof of Welsh slate, while the central and eastern roof structures are of corrugated sheeting,

with skylights inserted to provide light for the middle range. Since the building has become unoccupied, and therefore not maintained, the valleys between the roofs have become blocked, causing water to penetrate into the structure and down the walls of the end elevations, in particular the NW elevation, which can be seen on plate 4.

Plate 4 – NW Elevation showing roof structure

6.4 The South-West facing Elevation (Figure 6)

6.4.1 This elevation faces the River Kent. It consists of five double doorways at ground level, with corresponding double doors above, used to hoist goods in and out of the warehouse. These doorways are recessed into apertures that have well-dressed limestone alternating long and short blocks making up the jambs, giving a decorative effect. Between the upper and lower doorways there are large red well-dressed (with tool marks visible) sandstone lintels with a cast iron lintel above that, these have the stamp of 'J LEES CARLISLE' (plate 5). One upper doorway still retains its iron hoist projecting out from the wall, along with its iron 'safety gate' (Plate 5 – BW No.10). Each of the upper doorways used for loading and unloading of goods, is protected by a gabled dormer roof projecting from the main roof structure. The dormers are all constructed of machine-sawn timber, with carved wooden supports.

6.4.2 Between the double doorways there are windows at both ground and first floor level. One of the large first floor loading doorways at the southern end of the elevation has more recently been converted to a window, with uncoursed roughly dressed limestone masonry used to fill in the aperture. Below this towards the end of the elevation, at ground level, there is a standard doorway, into which access could not be gained as a suitable key was not available. It is possible that this entrance once gave access to an office (figure 6).

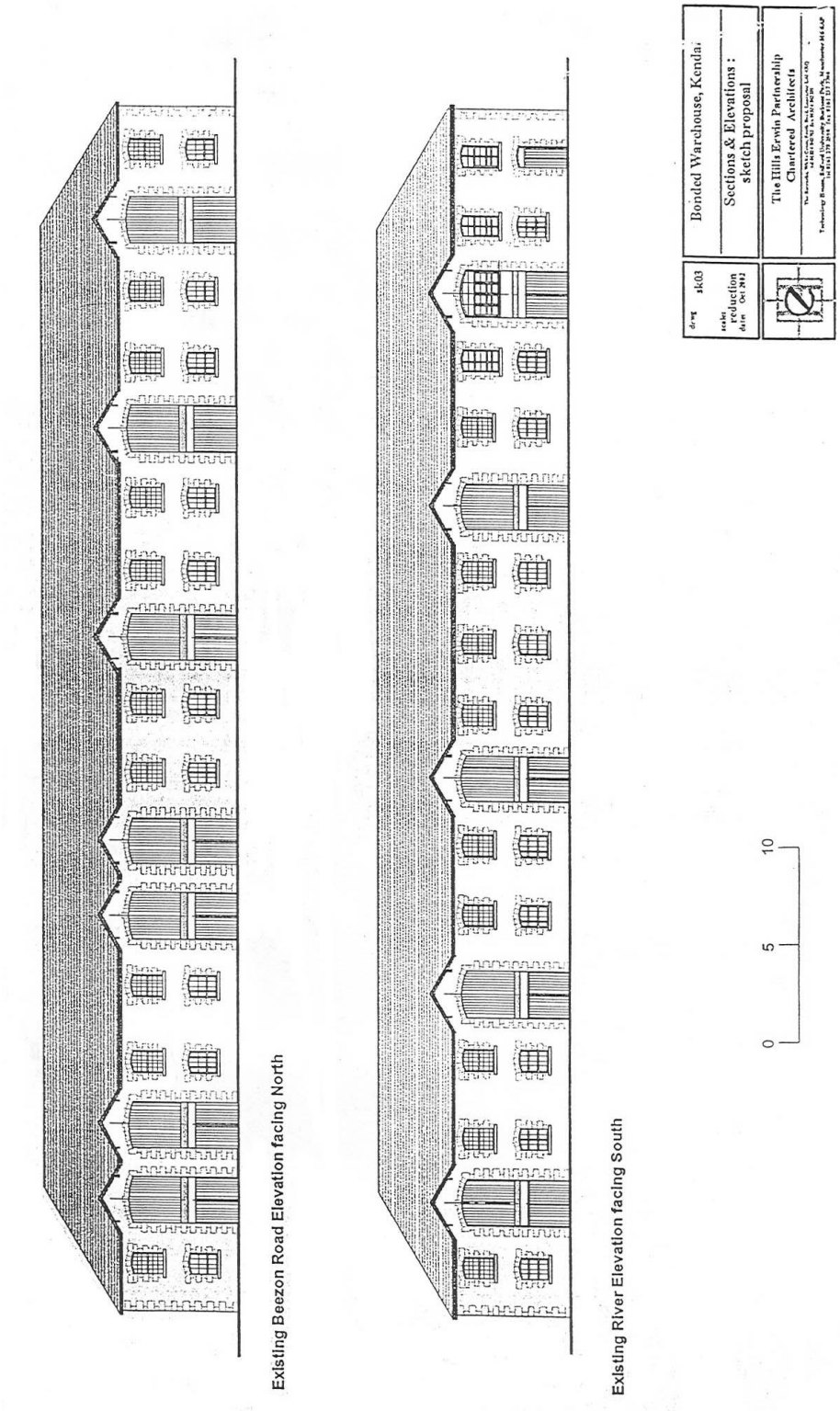

Figure 6 – Existing NE and SW facing elevations

Plate 5 – SW Elevation, View of doorways with sandstone and cast iron lintels and hoist still *in-situ*

6.5 **The South-East Elevation (Figure 7)**

6.5.1 The SE elevation of the warehouse faces Sandes Avenue, but is largely obscured by the office building, which hindered the photographing of this part of the building (Plate 6).

6.5.2 The ground level at this part of the building is noticeably different looking eastwards, and is considerably lower than that on the SW facing elevation, by *c.*1.60 metres (Plate 6). The SW facing elevation does, however, not appear to have been originally any lower as the doorways are level with the current road surface. It is therefore possible that prior to the warehouse being constructed an area of ground closest to the river was raised to prevent the warerooms at ground level from being at risk of flooding when the river levels rose.

6.5.3 On this elevation there are windows at ground and first floor level, a later rectangular window with a concrete lintel appears to have been inserted in place of one of the original arch-headed windows at first floor level with a second smaller window, also with a concrete lintel,

beside it (figure 7). Centrally placed on the elevation is a large aperture that has more recently been blocked in with bricks and converted to two garages at ground level and a window at first floor level, close to the eaves. It is difficult to assess what arrangement existed in this aperture originally. On the opposite elevation (NW) there is a large door, however, the ground at this side of the warehouse appears to have been made higher fairly recently, so this does not represent the original arrangement either.

6.5.4 Either side of large central section on this elevation, are two tall doorways at first floor level, one of which is blocked up, the other boarded over. These originally would have been accessed via stairs, however, only one set remains *in-situ* (figure 7). The other stairway has been removed, although the scarring of the steps is clearly visible.

Plate 6 – SE facing Elevation

6.5.5 On this elevation, close to the central section, is a chimney. This would appear to relate to a fireplace or fireplaces in the western range closest to the river. Unfortunately, because access could not be gained into this range at ground level, and there being no access to the same range at first floor level, it was not possible to observe if the fireplaces still existed. It is possible, however, to suggest that the chimney relates to a fireplace that existed in an office, accessed through the doorway.

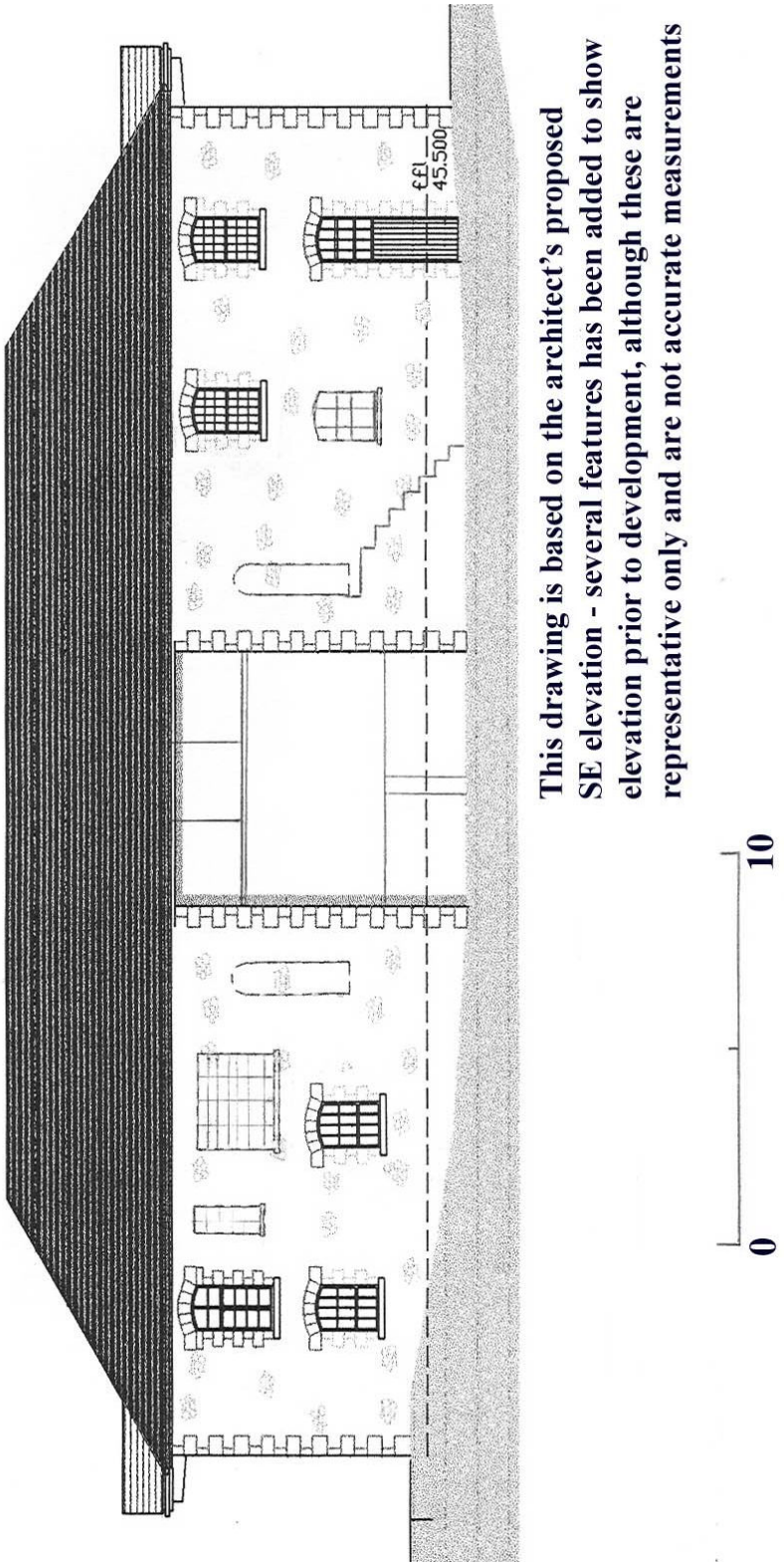

Figure 7 – SE Elevation, as this drawing is based on the proposed elevation, the roof structure is not the same as the original warehouse

6.6 **The North-East Elevation (figure 6 and plates 7 & 8)**

6.6.1 The NE elevation differs from the opposing SW elevation in that it has more loading doors, seven in total, of which four are in two pairs. This may reflect the fact that the warehouse, although bonded, was originally constructed also to house free goods as many of the town's shopkeepers and traders lacked warehouse space[11]. It would appear, certainly from the internal arrangement that the eastern side of the warehouse was therefore for goods on which duty was not required to be paid. The presence of more loading doors along this elevation could suggest that the security of the goods stored inside was less paramount than that in the western range of the warehouse.

Plate 7 – NE Elevation looking south

Plate 8 – NE Elevation looking north

[11] Dunderdale, J.W, 2003, Page 87

6.6.2 Set into the jambs surrounding the upper doorways are metal bars, one either side of each doorway. These were presumably used for tying up ropes or fastening chains connected with the hoists.

6.6.3 The only other feature of note along this elevation is the presence of a limestone gate post butting up against the wall beside the central double doorway (plate 9). This suggests that there was one time an area of enclosed land beside the warehouse

Plate 9 – NE Elevation, gate post

6.7 **The North-West Elevation**

6.7.1 Unfortunately, access to photograph the NW elevation was not possible as keys provided did either not fit any of the locked gates or the locks had been tampered with preventing keys to be inserted. A recent fire in a timber building beside this elevation appears to have been started deliberately (police tape was in place across one gate), and may account for the lock having been tampered with.

6.7.2 There were no architect's plans for this elevation as the proposed development involves the addition of an extension to this end of the warehouse.

6.7.3 From what could be observed of this elevation, it was possible to see that the ground level has been raised since the warehouse was constructed, as the access ramp up to the large doorway obscures two of the ground floor windows (plate 10). There was evidence that originally this elevation was the same as the SE elevation. Either side of the large central doorway was the remains of door jambs that appeared to be arched at the top. These appeared very similar to the surrounds of the two doorways at first floor level on the SE elevation. It is possible to suggest that the large door aperture has been widened by effectively removing the two doorways. It is, however, also possible that this large doorway was originally larger than that on the opposing elevation, and that the 'arched' effect is actually corbels, this would appear to be the case when viewed internally.

Plate 10 – NW Elevation from the east

6.8 Interior of Warehouse – Ground Floor

6.8.1 The lower storey of the Bonded Warehouse, in the western and eastern ranges, consists of vaults, or cellars, although none are below ground level, presumably to reduce the risk of flooding. In total there are sixteen 'warerooms', all accessed through the large doorways on the NE and SW elevations. The vaults vary in width, although they all measure *c.*10 metres deep internally. Although the floors of the vaults were of concrete at the time of survey, the original floor surface of rectangular cobbles was observed in the entrance way to BW No.11 (as marked on exterior of door, western range).

6.8.2 The vaulted ceilings of the warerooms are constructed of brick (jack-arches), with cast iron Doric-style pillars supporting cast iron girders. This would have meant that the vaults were relatively fireproof. At the rear of each room is an arched alcove or 'drop' from which goods from the first floor were dropped to the lower storey (plate 11).

Plate 11 – The alcove or 'drop' at rear of warerooms

6.8.3 Some of the vaults had large doorways between them, allowing access between rooms internally. The size of these doorways, at *c.*2.40 metres wide, suggests that carts or trolleys were used to move goods around inside. In many cases these doorways had been blocked up, presumably due to the splitting up of the vaults into retail units.

6.8.4 To represent the layout of these vaults, BW No.9, which is located in the western range, was measured to provide a plan and cross-section of the room and the alcove or 'drop' (figures 8 and 8a)

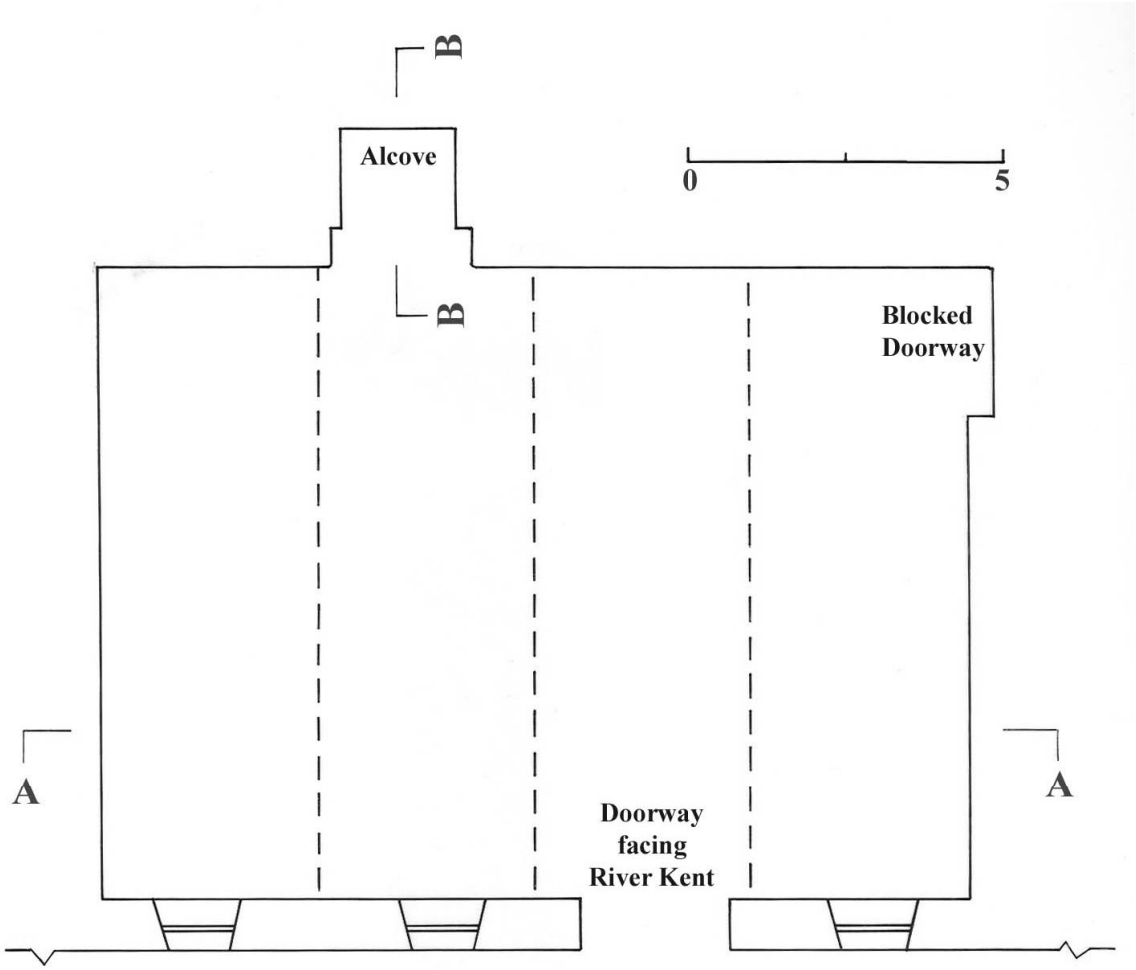

Figure 8 – Plan and cross-section through BW No.9

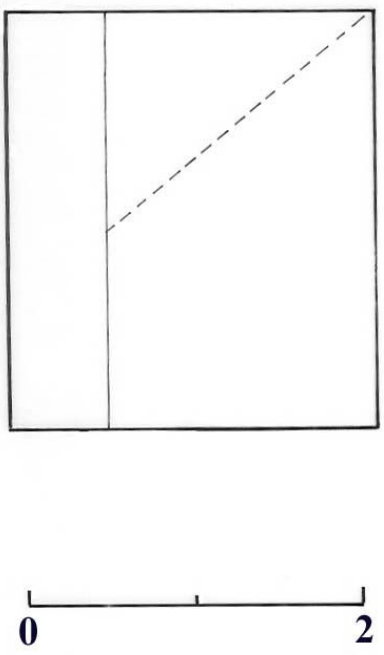

Figure 8a – Section through `B-B`, Alcove at rear of BW No.9

6.8.5 The alcoves at the rear of the vaults have well-dressed masonry blocks making up the jambs and voussoirs of the arched head (plate 11). They measure *c.*2.20 metres wide at the front, *c.*2.20 metres deep and *c.*2.50 metres high at the back. Originally a wooden trap door would have been used to drop goods from the first floor to the ground floor. The scarring for the extent to which these doors dropped from above is still visible, and is represented in Figure 8a. The goods would have easily slid down the opened trap door to below. Iron fittings for the ropes or chains for the trap door are still *in-situ* either side of the alcove.

6.8.6 In one of the vaults in the western range, part of the floor had been removed, which exposed a stone flagstone on which one of the cast iron pillars stood. This single piece of stone measured 0.93 by 0.93 metres and was 0.10 metres thick. The pillars themselves stand on a smaller, cast iron base, that measures 40.5cm^2 (16”). The diameter of the pillars is *c.*20cm. There were no makers stamps observed on the pillars or girders, as was seen on the external cast iron lintels.

6.9 **Interior of Warehouse – First Floor (figure 9)**

6.9.1 The first floor of the Bonded Warehouse was only accessible, at the time of survey, via modern stairs that had been inserted to the rear of one of the vaults in the eastern range. There was no access available at all to the first floor of the western range, so it must be presumed that there is a staircase from the room at ground level, for which access was also not possible. The modern staircase gives access to the first floor of the eastern range of the warehouse, which is floor boarded. Timber raking still *in-situ* in this side of the building is presumably an indication this had once been a storage area, although this possibly bears no relation to its original function.

6.9.2 In the eastern range, the original shutters for the windows are still in place, complete with iron fittings (plate 12), as are the large solid timber sliding doors to the loading bays seen from the exterior (plate 13). Large stones project from the wall, in some cases over 2 metres beyond the door apertures. These appear to correspond to the end of the metal track that carries the wheels for the sliding doors, and therefore it would seem that the function of these large stones is to stop the door from coming off its rails (plate 14). Large stones at the other side of each door, which also project from the wall, house iron loops to which the padlocks for the doors would be fastened when closed (also visible on plate 14).

Plate 12 – Wooden shutter, first floor Eastern Range

Plate 13 – View of large doors, interior of Eastern Range

Plate 14 – View of large sliding door in wall between the central and western ranges, showing the sliding mechanism and the large stone to the left, which prevents the door from sliding off its rail

Figure 9 – First floor plan of Bonded Warehouse

6.9.3 The eastern range had been divided, at its southern end, by four stone gable walls, with central doorways in each. (figure 9).

6.9.4 The roof of the eastern range is constructed of machine-sawn timber making up the tie beams and struts, with iron tie rods acting as king-posts (plate 15). The use of wrought iron in roof construction generally began in the early 18th century, when wrought-iron bolts would be used to stiffen mortice and tenon joints[12]. Carpenter's or assembly marks were observed on some of the trusses, although they did not appear to run in order lengthways along the range.

Plate 15 – Roof structure of Eastern Range as seen from a modern floor inserted in the rafters

[12] Morris, R.K, 2000, 77

6.10 **The Central Section – Interior (Figure 9 and plate 16)**

Plate 16 – Central section of warehouse at first floor level, view looking towards the SE elevation

6.10.1 The central section of the warehouse was accessed through the large doorways from the eastern range (visible on the left hand side of plate 16). This range of the warehouse was where, originally, the rail trucks were brought into the building. According to Dunderdale, there was originally a double line of rails and two turntables within the section[13], although they no longer exist. The two 'platforms' do, however, still exist and can been clearly seen on plate 16. The present concrete floor surface in the central channel is most likely a later addition, as it is at the same level as the later ramp built up to the NW facing elevation. It is possible that the original floor surface of the central channel was much lower to allow the rail trucks to be brought into the building from the siding, and for the top of the trucks be level with the platforms.

6.10.2 There was no evidence within the floor of the platforms for the trapdoors that would have been used to move goods from the first floor to the ground floor vaults. The only part of this range where there may have been any indication of these doors was in the vertical sides of the platforms, where bricked-up apertures were observed (plate 16). These were, however, only visible on the eastern side of the range (as can be seen in plate 16) and were not noted on the western side.

[13] Dunderdale, J.W, 2003, Page 87

6.10.3 On the western side of the central range, all the large doorways have been bricked-up; therefore there was no access to the first floor of the western range (plate 17). Only one of the original doorways still retained its sliding door (BW No.10), although behind it was also bricked up (plate 17).

Plate 17 – Blocked-up doorway of western range, as seen from the central section

Plate 18 – BW No.10 door (western range) still *in-situ,* although blocked-up behind, as seen from the central section

6.10.4 The roof structure in the central section of the warehouse was more complicated than that of the eastern range. Although it was the same arrangement of tie beams, principal rafters, struts and iron rods, there were also central longitudinal 'binders' that connected each tie beam (plate 19). Supporting the roof trusses on the western side were timbers, which were themselves supported by 'I' section, what appear to be, RSJ's (rolled steel joists), stamped with the name 'Lancashire Steel MFG Co Ltd, England (plate 19). On the eastern side of the

range, as well as the 'I' section RSJ's, there were iron pillars that again supported timbers beneath the roof trusses. These pillars, of which there are only two, one midway along the range, and the other at the southern end, have upwards projecting joints with holes for bolts. There were no corresponding pillars on the other side of the range, and no obvious connection with the roof structure, so the function of these pillars was unclear, they may, however, have been connected with the rail tracks and turntables.

Plate 19 – Roof structure of central range – note the central timber 'binders' joining all the tie beams below the base of the iron rods, and the vertical girders on the left and pillars on the right-hand side platform

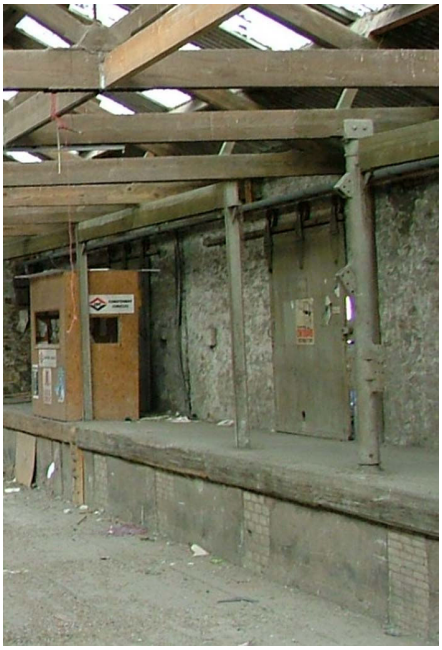

Plate 20 – One of the iron pillars, eastern side of the central range. Note the upwards projecting joints with bolt holes

6.10.5 At the southern end of the central range, the two doorways in the SE facing elevation could be seen, one of which is now blocked-up. When these doorways were in use they were accessed by the two staircases on the exterior of the SE elevation, and each gave access to one of the platforms (plate 21).

Plate 21 – The western (blocked) of the two doorways in the SE elevation, originally accessed via external stairs into the central section of the warehouse

6.10.6 At the northern end of the central range, there is a large door which measures the same width as the central channel (*c.*6.40 metres) (plate 22). The original door aperture appears to have been slightly wider (*c.*8.60 metres) by the use of corbels at each side. These corbels may have been the arched features observed from the exterior, although as already mentioned in 6.7.3, the external elevation could not be fully assessed due to lack of access.

Plate 22 – Doorway at northern end of the central range

6.10.7 The ground floor of the central section could only be accessed via a ramp at the rear of one of the vaults in the eastern section. This part of the building is not at the same level as the ground floor vaults, at *c.*1.40 metres lower. This part of the building is totally unlit, with no natural light able to filter in. It has more recently been used as garages at the southern end, and as a storage area for files. Because of the lack of suitable light and the presence of furniture and shelving it was not possible to observe any features of note.

7. CONCLUSIONS

7.1 Warehouses of the Victorian and Edwardian periods were often architectural showpieces, and many still stand close to the transport system, whether canal, river, railway or sea, that brought in the goods that were intended to be stored in them. Bonded warehouses allowed for the storage of goods on which duty had not been paid, thus meaning that merchants did not have to sell goods quickly into a market that he could not gauge[14].

7.2 Because many of these warehouses, and in particular textile mills, were used to store the raw and finished products of the textile industry, they needed to provide some degree of protection against fire. Mills and subsequently warehouses therefore needed to be constructed with materials other than timber that reduced the risk of fire damaging stock, or worse, burning down the building. The utilisation of iron and brick vaults in mills began in the late 18th century, for example the first wholly iron-framed building of Ditherington Flax Mill at Shrewsbury, built in 1796-7. This form of construction, of using fireproof materials for the internal structure, while using traditional materials for the load bearing external walls, was used extensively throughout the 19th century[15].

7.3 The Bonded Warehouse at Kendal is a good example of a building constructed with two fundamental concerns in mind. Firstly, the risk of fire and secondly, the pilferage of the goods held inside. The risk of fire was reduced by the use of cast iron pillars and girders, and brick jack-arches in the vaults, the need for a wholly iron-framed structure would not have been necessary for a warehouse as the risk of fire was not as high as for a textile mill. The second concern, of the pilferage of goods, is shown by the heavy doors, iron-grilles over the windows at ground and first floor, and the large internal sliding doors with padlocks. At some point, the western range of the building was blocked off from the rest by bricking in the doorways. This may be due to the more recent use of that side of the building for duty-free goods, as the notice described in 3.10 (a copy of which is included in the figure 10) was found in one of the ground floor vaults on the western side. It is, however, difficult to understand how the building operated originally if both bonded and free goods were being stored in the warehouse if Government regulations required that a massive stone wall separated each, with no internal communications[16]. There was no evidence of a wall dividing sections that had no form of doorway.

[14] Stratton, M and Trinder, B, 1997, Page 91
[15] Morris, R K, 2000, Page 78
[16] Dunderdale, J.W, 2003, Page 87

7.4 The Second Edition Ordnance Survey map of 1900 (figure 5) clearly shows the railway coming up the central part of the NW facing elevation. There is no evidence to suggest that the railway siding did not actually enter the building, because of the platforms either side of the central channel. It does, however, appear that the original level has been raised and therefore there was no evidence for the railway tracks or turntables.

7.5 Despite being constructed for a purely utilitarian function, the Bonded Warehouse on Beezon Road has some degree of architectural detail. The gabled dormer canopies over the first floor loading bays, the window and door surrounds, the quoining, the use of red sandstone for the loading door lintels and the window sills, as well as the Doric-style cast iron pillars in the vaults, are typical of Victorian warehouse architecture.

8. BIBLIOGRAPHY

Primary Sources

John Speed's Map of Kendal – 1610

Hodskinson and Donald Map - 1774

John Wood's Plan of Kendal – 1833

First Edition Ordnance Survey Map of 1867

Second Edition Ordnance Survey Map of 1900

Secondary Sources

Bingham, R, 1995, *Kendal – A Social History,* Milnthorpe, Cicerone Press

Dunderdale, J.W., 2003, *Kendal Brown – The History of Kendal's Tobacco and Snuff Industry,* Kendal, Helm Press

Mannix & Co, 1851, *History, Topography and Directory of Westmorland with Lonsdale*

Morris, R.K, 2000, *The Archaeology of Buildings,* Stroud, Tempus

Rollinson, W, 1996, *A History of Cumberland and Westmorland,* Chichester, Phillimore & Co

Stratton, M and Trinder, B, 1997, *Industrial England,* London, English Heritage/ Batsford

Weaver, J, 1992, *Cumbria to Northumberland,* London, HMSO/English Heritage

Whitehead, G, 1993, *Commerce,* 12th Edition, Oxford, Butterworth-Heinemann Limited

RCHME, 1996, *Recording Historic Buildings: A Descriptive Specification*, Third Edition, Swindon

9. APPENDIX

KRO – Kendal Record Office

WDB 25 A/882/37 – KRO
Plan for the offices
'Offices for the Bonded and Free Warehouse Co, Beezon Fields, Kendal'
Architect – Stephen Shaw, Kendal, March 1877

CRO/WDB 14 – W L Links – KRO
'Notes on the origins of the tobacco and snuff industry in Kendal'
[Not much use for this report]

WDB/25/67 – KRO
New warehouse – Sandes Avenue 1889
[not related to Bonded Warehouse]

Kelly's Directory of Cumberland and Westmorland 1938

Westmorland Bonded and Free Warehouse Co Ltd – Sandes Avenue

Transactions of Cumberland and Westmorland Antiquarian and Archaeological Society – First, Second and Third Series (CWAAS)

No mention of the Bonded Warehouse, Beezon Road

Figure 10 – Notice found in one of the vaults of the Western Range