BUDDLE BRIDGE, LYME REGIS, DORSET

(NGR SY 34249 92100)

Results of historic building recording

West Dorset District Council planning reference WD/D/17/000504

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On behalf of:
Dorset county Council

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AC archaeology

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The views and recommendations expressed in this report are those of AC archaeology and are presented in good faith on the basis of professional judgement and on information currently available.

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Summary

Historic building recording was carried out by AC archaeology in January 2015 and July and August 2018 at Buddle Bridge, Lyme Regis, Dorset (NGR SY 34249 92100) prior to and during a scheme of repair works to the Grade I Listed structure. The bridge probably dates to the early 14th century, and comprises a single span over the River Lim. The arch incorporates four ribs, two of which were replaced in 1971. A series of post-medieval repairs, mainly underpinning at the base of the arch, have been identified, and 20th- and 21st-century repairs are documented.

The report places the bridge in its local context, including its construction as a probable replacement for an earlier 12th-century bridge located immediately to the east. Documentary evidence for buildings on the bridge is discussed, as is the archaeological evidence for a chapel at its west end. The scope of the 2018 repairs is also outlined.

1. INTRODUCTION (Figs 1 and 2)

1.1 This report sets out the results of historic building recording carried out by AC archaeology in January 2015 and July and August 2018 at Buddle Bridge, Bridge Street, Lyme Regis, Dorset (NGR SY 34249 92100; Figs 1 and 2). The archaeological investigations were commissioned by Dorset County Council to accompany an application to West Dorset District Council for Listed Building Consent (reference WD/D/17/000504) for 'repairs to two arch ribs and general repairs to arch intrados', and to provide a record of the consented repair scheme, including recording any newly-exposed evidence for its construction. This document is an updated version of the survey report prepared in 2015. The 2015 historical research and historic building recording is set out in the main text of the report, and the results of the 2018 historic building recording is presented in an updated Appendix 1 and a new Appendix 2.

1.2 Buddle Bridge carries the A3052 over the River Lim (or Lym/Buddle), and is situated at the lower end of Lyme Regis just above the foreshore at a height of approximately 5m aOD. The geology of the area is complex. The historic town around the River Lim, including the bridge, is located on an area of Jurassic mudstone of the Charmouth Mudstone Formation overlain by Quaternary head deposits of clay, silt, sand and gravel. In the wider locality of the present settlement, the geology includes sandstone of the Upper Greensand Formation and Jurassic and Triassic limestone and mudstone of the blue lias formation, overlain by various Quaternary deposits.

1.3 The bridge is a Grade I Listed Building (National Heritage List no. 1110811) with the following description:

> BRIDGE STREET 1. 1357 (North-West Side) Buddle Bridge SY 3492 1/16 23.4.52. I 2. One span, segmental pointed. Rubble with ashlar dressings and chamfered ribs. Probably C14. Roadway widened in modern times [1913].

1.4 The works to the bridge involved repairs to the two surviving historic ribs (ribs 1 and 3) under the bridge. Approximately one-third of the stones forming these ribs were repaired or replaced. An additional shelter coat was also applied to the ribs. A fuller description is set out in Appendix 2.

2. HISTORICAL AND ARCHAEOLOGICAL BACKGROUND (Figs 3-7)

Evidence for an earlier bridge

2.1 The present Buddle Bridge is not the earliest bridge to cross the River Lim at this location. An arch of an earlier bridge is present under the road east of Buddle Bridge, and its underside is now accessed from the cellar of No. 2 Bridge Street; it is designated as a Scheduled Monument (National Heritage List no. 1002390). The bridge was discovered in April 1912 and reported to the Dorset Natural History and Antiquarian Field Club who briefly mentioned it in their *Proceedings* for that year (Dicker and Pentin 1912, xxi). A fuller description, reproduced below, was given by R. Thurston Hopkins in his 1922 book *Thomas Hardy's Dorset*. Dicker died in August 1912, so probably visited the bridge soon after its discovery:

> An ancient Pointed arch with dog-tooth moulding has recently been unearthed in the basement of a house abutting on the bridge. The arch is below the level of the roadway, and it no doubt formed part of a bridge of several arches built in the twelfth century. It rises from about two feet below the ground-floor cellar of this house. The arch has been seen by the Rev. C. W. Dicker, of the Dorset Field Club, who sent to the editor of *The Lyme Regis Mirror* the following letter:—
>
> DEAR SIR,—I have just received a copy of last week's *Mirror*, containing an account of the very interesting archway under Bridge Street, which I was kindly invited to inspect. As far as I can judge from the result of my one opportunity of examining it, the evidence points to the assumption that Bridge Street formerly crossed the Buddle upon a bridge of several arches, constructed in the twelfth century, and that the archway in question was probably the third from west to east. The street at this point is (or was) obviously supported upon a masonry substructure, upon which the houses abut. The masonry of the newly found arch is typical of the middle of the twelfth century, at which time the manor was chiefly in the hands of Roger of Caen, Bishop of Sarum and Abbot of Sherborne, a great builder, much of whose work is still to be found in Dorset. The archway clearly was built to support the roadway; and as its alignment is exactly that of the larger archway (apparently of the fourteenth century), under which the river now runs, there seems little room for doubt as to its origin. Yours faithfully,
>
> C. W. H. DICKER,
> *Vice-President and Hon. Editor*
> *Dorset Field Club*.

2.2 A photograph of this bridge, published in C. Wanklyn's *Lyme Regis: A retrospect*, is reproduced as Fig. 3. The Norman moulding can be seen in the ring arch above the voussoirs.

2.3 In 1913 the bridge was widened and buildings on its southern side were removed. Wyatt Wingrave (1922) reported that these comprised a cottage "built on the arch itself [and] two others, a fossil and a fish shop, on its abutments." The change in the townscape caused by this widening can be traced on historic maps and depictions on old paintings. The cottage – Bridge House – on the arch was actually over the river below the bridge, supported on the abutment walls and presumably the bridge itself. An early 20th-century photograph shows it as partially supported on angled beams, with its downriver elevation consisting of a wooden frame with a ?canvas covering containing two split level windows, under a slate roof (Fig. 4a). An 1890s photograph showing the bridge from upriver, partially shows the front of the property. It comprised a two-storey, two-gabled elevation parallel to the road, extending to either side of the bridge. The first floor appears to be over an arcade (Fig. 4b), although this is not evident in oblique views from The Square. The properties either side of the bridge were not fully demolished; their front rooms were removed and the elevations refaced alongside the new wider street frontage.

2.4 During the widening of the bridge Wingrave made observations on the western side of the river and within an adjacent two-storey structure. His report published in 1922 is set out below:

> During the demolition the writer was privileged to discover, on the South-western side, indications of an ecclesiastical building. Through the Surveyor's courtesy these were carefully examined, measurements taken, rough sketches made, and portions of masonry with timber preserved.
>
> On the seaward or South abutment of the Western arch was a chamber whose floor was about the level of the bridge crown, measuring 20 feet by 19½ feet. There were indications of a lower chamber, extending to river level; but the vertical extent was alone indicated by a sill or cornice of worked stone.
>
> In the South wall was an arched recess suggestive of an aumbry, whose opening measured 27 inches vertically and horizontally. The stones were 11 in number, in rough ashlar, but with fairly close joints. The keystone was loose, and broke the true arc. In texture the arch stones were a coarse buff gritstone, similar to those forming the Eastern (unexposed) arch of the bridge. The sill was in one piece of Blue Lias. The recess, whose walls were composed of rough unworked fragments of Lias with wide joints, was 15 inches deep, and afforded no evidence of moulding for shelf, nor perforation for piscina, although there was a small gap behind the sill which suggested a drain.
>
> A sketch was made at the time which shews the arch in situ.
>
> On removing the plaster from the North wall of this chamber a substantial timber (oak) framework was exposed, with no corresponding aperture in the wall, to which it was securely fastened by mortar. It is worked only on one aspect, its wall side being rough. There is no evidence of distemper or colouring; and the wood, although decayed in parts, is sound where carved.
>
> In the South wall, below the probable floor of the main chamber, was a square opening which was found to afford access to the "kitchen midden", full of rabbit, sheep and ox bone fragments. This aperture was partly filled by Dutch bricks, many of which were found in the cottage walls.
>
> The Arched Recess probably served as an aumbry, there being no reliable evidence of a drain. It was probably lined by plaster and wood, and furnished with a shelf and door.
>
> The Oak Framework is difficult to account for. Its situation — if original — excludes the question of its being part of a reredos. Still the chapel may not have been oriented.
>
> With regard to period, the aumbry is strongly suggestive of twelth or early thirteenth century, contemporary with the Eastern and older arch of the bridge. Further, the materials correspond.

2.5 A photograph taken during the demolition of the fossil shop is held by the Lyme Regis museum, and is reproduced as Fig. 5. It shows the two-storey building as being constructed of stone. The aumbry is visible in the south elevation partially blocked up, adjacent to which was a doorway. In the surviving first-floor masonry there is a window above the door. In the east elevation, adjacent to the river, there is a large ground-floor fireplace. There is no evidence for a first-floor fireplace above. The oak framework was salvaged and is on display at the museum (Fig. 6). It comprises a low, narrow two-light opening with moulded heads. These do not terminate into cusps but are have flat bases, as if to accept, now missing, slender mullions. The side timbers are set into horizontal beams. The upper beam has been sawn off and incorporates a single peghole. The longer lower beam incorporates a groove in its upper face, probably to accept vertical laths forming a panel within a screen.

Twentieth- and twenty-first-century alterations to Buddle Bridge

2.6 The bridge was widened on its southern side in 1913, and the impact on the townscape and associated archaeological discoveries have been outlined above. As noted, this involved widening of Bridge Street on its southern side and the removal of the fronts of properties adjacent to the road. The present new parapet – a nineteenth-century style Gothic terracotta wall with pierced cusped opening – was added.

2.7 The north side of Bridge Street east of Buddle Bridge was widened at around the same time. This may also date to 1913, although the discovery of the Norman Bridge in 1912 could indicate that this work took place or started in this year instead. The fronts of the existing shops were removed back to the line of the Pilot Boat Inn on the west side of the bridge. Prior to these works there was no pavement on the north side of the bridge, which had a stone parapet that stepped back on the west side to meet the front of the public house. The latest known depiction of this earlier arrangement is a photograph in the Francis Frith collection dated 1909. This parapet is visible in Fig. 4b, and a view from The Square is reproduced as Fig. 7. The photograph shows coursed masonry (incorporating a drain) above a repair to the voussoirs. The neat nature of the masonry along with the wide joints may indicate that much of this elevation above the ring arches was a 19th-century rebuild. The *Statement of Significance* for the bridge produced by Dorset County Council notes that this *c*. 1913 widening used an *in situ* cast reinforced slab supporting a coursed, dressed, random, blue lias parapet.

2.8 In 1969 the 1913 carriageway on the south side of the bridge was replaced. A photograph showing the downstream elevation of the bridge during these works appeared in the *Lyme Regis News* on 24 October 1969. Shadows on the bridge indicate that the 1913 parapet was left *in situ*. The new carriageway was supported on wide concrete beams.

2.9 In 1971 two ribs (nos 2 and 4) were replaced. These had been historically lost and associated masonry had become weathered. Due to the weight of the replacement stones they could not be manually inserted into place, and the prepared blocks were cut in half (Wallis 1974). Thus these replacements are distinctive when compared to the original ribs. The replacement stone is a yellow Purbeck/Portland stone and a number of the blocks feature large fossils (Purbeck spangle).

2.10 In 2006/7 the northern parapet was rebuilt in blue lias laid onto a new concrete reinforced concrete beam and slab.

3. AIM OF THE WORK

3.1 The aim of the 2015 work was to prepare a record of the bridge prior to repair works commencing.

4. METHODOLOGY (Appendix 1)

4.1 The historic building recording was carried out to level 4 as set out in English Heritage's 2006 document *Understanding Historic Buildings: A guide to good recording practice*. The investigation adhered to the Chartered Institute for Archaeologists' *Standard and Guidance for the archaeological investigation and recording of standing buildings or structures* (revised 2014). An electronic survey of the bridge has been prepared by Dorset County Council, and has been used as a

basis of the current survey. Rib numbers allocated by Dorset County Council have been used within this report. Additional information has been prepared by hand. This was accompanied by a written description of the bridge, and a photographic record (made using a high-quality colour digital camera) showing its general character, and more detailed views of the side elevations, the individual ribs, and the details of architectural interest, as well as area of decay and former repairs. An index of photographs is included as Appendix 1.

4.2 The 2015 survey was undertaken from the river bed without full access to the top of the underside of the bridge. The drawings presented in this report (Figs 8 and 9) have been updated to include the results of the 2018 survey.

4.3 The survey has been backed up by research at Lyme Regis Museum, and information collated has been incorporated within section 2 above.

5. THE BRIDGE (Figs 8-9; plates 1-20)

5.1 The bridge measures 8.2m wide by 5.7m long across the river. It comprises a single main phase of medieval masonry, with post-medieval and modern repairs, underpinning and widening; the original medieval bridge was 4m wide. Modern repairs at road level, outlined in sections 2.6-2.10 are not fully described or discussed further. The river is currently spanned by a single arched bridge (Plates 1 and 2), although as described above there is another, earlier arch on the east side. The significance of this is discussed in section 6 below. Below the arch there are four ribs, rising from the medieval masonry – these are numbered 1-4 from north to south. Ribs 2 and 4 were replaced in 1971. Most of the stonework has been repointed in cement, obscuring historic mortars.

The eastern side of the arch

5.2 The ribs rise from and at the base are integral to the fabric forming the arch. This masonry is constructed of dressed and squared blocks of Salcombe stone (100; Plate 3). Much of the lower section of the arch has been underpinned (Plate 4). However, a slightly projecting row of masonry, just above the current modern concrete invert (and below water level) could be of medieval date (101). The lowest main course of medieval masonry survives at the east end and comprises three chamfered stones forming a projecting string course (102; Plate 5). This probably continues around the south side of the arch, but is obscured by a 20th-century concrete drain base (103). Above this, there is a large stone at the south end of the bridge, which incorporates a run-out stop forming the base of the chamfer that continues on the voussoirs of the arch (Plate 6). Beyond the stone a lower, narrower course been lost, but the upper course survives fully and supports the base of the ribs. At the northern end of the bridge the masonry becomes larger again and continues beyond the north face of the bridge, where it tapers in forming a slightly wider river channel (Plate 7). The chamfer on the voussoirs does not start on the lower course, but five courses higher up the masonry. The upper courses of this masonry have been partially chopped back.

5.3 The arch between the base of the ribs is formed from four lower courses of dressed masonry. Above this, the stonework is coursed rows of roughly dressed local blue lias stone (104-106; Plate 8).

5.4 The area under the ribs has been underpinned. There are two main builds. The lowest masonry, from the level of the string course down, comprises courses of large

blue lias with flint packing (107). Above this level, there is an area of flint, with rare Salcombe stone, bonded in cement (108). Between ribs 2 and 3 the upper course of Salcombe stone and the lowest course of the blue lias above have been replaced with a similar repair of flints set into concrete (109).

5.5 To the north of the bridge there is an area of blue lias forming the foundations and cellar wall of the adjacent property (110). This abuts the medieval masonry. Most of this stonework has been removed when the wall under the parapet was rebuilt in red brick (111). This rebuild is finished in cement render that continues over the masonry to the north. To the south the bridge side of the river is defined by a low blue lias wall (112), topped with concrete (113) added when the road was widened.

The western side of the arch

5.6 The construction of the eastern side of the arch is generally as per the east side described above. Above the invert (and below water level) is a row of good masonry blocks flush with the face of the wall (114; Plate 9). This could be of medieval date. Above this there are two areas of underpinning (115 and 116), and then two courses of medieval Salcombe stone masonry below the base of the ribs (100). On the south side of the bridge the end stone incorporates a run-out stop forming the end of the chamfer that continues on the voussoirs of the arch (Plate 10). The corresponding north side of the bridge has been rebuilt and there is no evidence for architectural detailing at the base of the arch (Plate 11).

5.7 The arch between the ribs is formed from either six or seven lower courses of dressed Salcombe Stone (100) that extends much higher up the arch than on the east side (Plate 12). Above this, the stonework is coursed rows of roughly dressed local blue lias stone (104-106). Within this masonry, high up between ribs 3 and 4, there is a repair in brickwork comprising two courses of red brick (Plate 13). The apex of the span between ribs 2 and 3 has been repaired using flint pebbles.

5.8 The area under the ribs has been underpinned. There are two main builds. The lowest comprises roughly coursed large blocks of blue lias with cobble and flint packing (116). The south end of this has been rebuilt in better quality coursed blue lias, which projects out slightly from the south face of the arch (115; Plate 14). Further repairs were recorded towards the base of the arch. On the south face of the arch the lowest voussoirs (above the basal stone with stop) have been replaced with courses of blue lias blocks and pebble packing (119). There has been no attempt to match the profile of the former voussoirs and the associated chamfer. At the northern end of the bridge the lower courses of medieval masonry beyond rib 1 have been replaced using blue lias, a tufa-type stone, bricks, cobbles and a fragment of Bath stone (120). This appears to be later than the main phase of underpinning but earlier than later repairs to the ribs (described below). More recent repairs, mostly to weathered stone, have been carried out, mainly using concrete.

5.9 To the north of the bridge there is an area of blue limestone forming the foundations and cellar wall of the adjacent property (121). This abuts the medieval masonry. At a high level a shuttered concrete footing has been set into these foundations abutting the face of the bridge (122; Plate 15). The span supporting the parapet replaced in 2006/7 has been set into this concrete, which therefore probably dates this concrete to 1913. Brackets for two rows of former services (now removed) have been set into this elevation; a bracket on the higher row is also attached to the concrete.

The faces of the arches

5.10 The north face of the bridge is supported on a row of voussoirs of differing lengths, with rib 1 extending down below into the vertical masonry at the base of the arch.

Above the voussoirs is an arch ring formed from vertically-set Salcombe stone and blue lias (Plate 16). Most of the voussoirs and stones forming the arch ring on the west side of the arch, and slightly continuing onto the east side, have been replaced (123). The new masonry comprises long, thin blocks of blue lias, finished with a chamfer matching that on the original voussoirs. The stones are dressed with pocket-hammered and bush-hammered work. The style and condition of the finish appears to indicate this work is of 19th-century date. It appears on an 1890s photograph. The masonry of the bridge above the arch is roughly coursed variously-sized blue lias blocks and some flintwork (124), the latter mostly adjacent to the ring arch. The latter may be a more recent repair. The masonry continues to road level where it is obscured by a concrete beam added when the north parapet was rebuilt in 2006/7.

5.11 The design and construction of the south face of the bridge is largely identical to the north face, but with two main differences. Firstly, the river channel is currently wider below the bridge, and the masonry of this elevation is therefore wider, with all of the stonework of the voussoirs and ring arch being originally exposed. The masonry contains a large quantity of flint and this appears to be part of the original construction rather than a later repair. The top of the elevation is obscured by the concrete deck of the 1969 repairs. The base of this deck is at just below the top of central voussoirs.

The ribs

Rib 1

5.12 This is one of the two surviving medieval ribs, and originally comprised 24 stones of which 22 survive (Plates 17 and 18). The following features, damage and repairs have been identified:

1E:1 The base of the rib is very worn and barely extends out from the face of the wall. An iron nail has been inserted into the stone.
1E:11 There is a small area of lamination on the north side of the chamfer.
1E:12 On the north side of the rib, the eastern side of the stone has badly weathered.
1W:1 This stone has been replaced with a flint and concrete repair (125).
1W:2 This stone has been replaced with a flint and concrete repair (125).
1W:3 The front of this stone has collapsed and has been lost. The *in situ* section is cracked.
1W:4 The lower front section, extending around to its north side has collapsed and has been lost. The *in situ* section has a crack on its north face.
1W:5 The north face has weathered badly and cracked.
1W:6 The north face has weathered badly and cracked.
1W:7 The north face has cracked, and the front face has partially laminated and fallen away.
1W:8 The north face has cracked and is weathering at its top (extending into 1W:9)
1W:9 The north face has weathered and a crack extends from this face up onto the front face. This has been patched with concrete.
1W:10 The north face has weathered and a crack extends from this face up onto the front face. This has been patched with concrete.
1W:11 The north face has weathered and a crack extends from this face up onto the front face. This has been patched with concrete.
1W:12 The north face has weathered and a crack extends from this face up onto the front face. This has been patched with concrete.

Rib 2

5.13 This is one of the two replaced ribs, and comprises 39 stones. On its east side two of the original medieval stones survive (2E:1-2), with three surviving on its west side (2W:1-3). The following features have been identified:

2W:2 An iron nail has been inserted into the stone.
2W:4 An iron service bracket has been inserted into the stone (now removed)

Rib 3

5.14 This is one of the two surviving medieval ribs, and comprises 21 stones of which all survive (Plates 19 and 20). The following features, damage and repairs have been identified:

3E:2 Some minor lamination to the north side.
3E:3 A hole on the north face has been filled with concrete.
3E:4 Cement repairs to weathered joints on south face.
3E:5 Lamination and weathering to the north face adjacent to the wall (continues into 3E:6), including a void. Repairs in flint and red sandstone bonded in cement (126)
3E:6 Lamination and weathering to the north face adjacent to the wall. Repairs as 3E:5.
3E:7 Lamination and weathering to the north face adjacent to the wall. Repairs as 3E:5, with additional later cement repairs.
3E:8 As 3E:7 with a crack continuing onto the west face. Repairs as 3E:5. Repair in flint on south face extending into 3E:9.
3E:9 As 3E:8. Repairs as 3E:5. Repair in flint on south face.
3E:10 Small repair on north face (continues into 3E:11)
3E:11 Small repair on north face (127; continues into 3W:10)
3W:1 The base of the rib is very worn and barely extends out from the face of the wall. A hole in the west face has been infilled.
3W:3 There is some lamination to the north face.
3W:4 An iron service bracket has been inserted into the east face (now removed).
3W:5 There is lamination on the north face turning into a crack. Two iron nails have been inserted into the south face.
3W:6 There is a crack and some weathering on the north face
3W:7 The north face has weathered and a crack extends from this face onto the east face.
3W:8 The north and east faces have weathered and have been repaired using white lime mortar with charcoal inclusions (129). A pink mortar is also visible.
3W:9 As 3W:8. On the south face there is a crack, a hole filled with cement, and a flint repair adjacent to the span (130).
3W:10 As 3W:8. There is a different repair (127) adjacent to 3E:11. There is a crack on the south face extending up from 3W:9.

Rib 4

5.15 This is one of the two replaced ribs, and comprises 38 stones. On both sides two of the original medieval stone survive at its base (4E:1-2 and 4W:1-2). The following features and damage have been identified:

4E:1 An original stone, which is very worn and barely extends out from the face of the wall.
4W:1 An original stone, which is very worn and laminated.
4W:2 An original stone, which is very worn and laminated.

6. COMMENTS (Fig. 10)

The date of the bridge and construction techniques used

6.1 The bridge is generally considered to date to the 14th century. The barrel vaulted arch could be indicative of an early date, although bridges with barrel vaults and semi-circular arches supported by ribs are found throughout the medieval period in England. Locally, medieval bridges with ribs are rare, and in Devon only four have been recorded, and all are dated to between the late 13th and early 14th century (Brown 1982). An early 14th-century date (at the latest) may therefore be applicable.

6.2 The construction techniques used are typical of medieval bridges, although the rarity of ribs in a regional context has been noted above. Whilst these are structural elements, they can also be viewed as an aesthetic and 'correct' form of building. The use of different stone in the medieval bridge is also not uncommon. For example, in Exeter, two stones – one local, one from the Exe Valley – were used in the Larkbeare Bridge (Brown 1981), and a total of five stone types, mostly from east Devon, but also including Caen stone from France, were used in the construction of the medieval Exe Bridge (Brown 2010). The two stones used for Buddle Bridge were the local blue lias, found locally around the town, and Salcombe stone, a sandstone quarried on and behind the cliffs near Salcombe Regis, 19km as the crow flies across sea to the west of Lyme Regis.

The bridge in its local context

6.3 It is clear from the decoration on the arch of the Scheduled, eastern bridge that this structure is earlier than Buddle Bridge, and the two are not contemporary, unlike other medieval bridges where the two styles are used together. The bridge is situated on the main coastal road between Exeter and Charmouth (and onwards towards Bridport). The early topography of the town is not known, and any late Saxon and early medieval settlement is thought to have been to the south of the present town, having been lost to coastal erosion. As Richard Bull, Assistant Curator at Lyme Regis Museum, has pointed out to the author (*in litt.* 28 January 2015), the present location would have been very exposed during medieval times, and suggests that the sea was once further away. Detailed maps of the town are not available until the 19th century, and these appear to depict a late medieval street layout. A map of 1825 (Fig. 10) depicts Broad Street with a market house in the centre of the road; the name Broad Street also hints at this function, with the wide street functioning as both a market and a road. This would appear to indicate that Broad Street, then Bridge Street, and then Butter Market/Church Street formed the main thoroughfare and commercial heart of the town. The former is backed up by the broadness of the original bridge, which is the same as the medieval Exe Bridge, itself considered to be wide for a medieval bridge (Brown 2010), and which was wide enough for two carts to pass.

6.4 Coombe Street forms a topographically distinct feature representing one and half sides of a square area of land southwest of the church. This could be seen to imply an early date; however, the properties on the west side of this road must be constructed over a former course of the River Lim that flowed under the earlier bridge. It is therefore tempting to see the present road alignment as contemporary, with the replacement of the early bridge with the present Buddle Bridge. A context for this replacement is not known. However, Richard Bull notes a flood in 1341 that destroyed (unspecified) land and tenements at Lyme. Given the unstable geology of the area, it is not hard to imagine that a natural event necessitated the replacement of what on the face of the surviving masonry appears to be a structurally sound bridge. No solid geology is visible within the sides of base of the River Lim in its lowest reaches within the town.

6.5 Wingrave's description of the 1913 findings as "On the seaward or South abutment of the Western arch" is interpreted as representing Buddle Bridge, i.e. the western of the then two known bridges. There is no record of a discovery of a third arch west of the present Buddle Bridge, and it seems unlikely any further structural arches are present, although some form of causeway or support for the road may have been required given the unstable nature of the local geology.

Buildings on and adjacent to the bridge

6.6 Urban medieval bridges often supported buildings, including houses, shops and churches (Harrison *et al.* 2010). For example, at its height, Exe Bridge in Exeter had buildings along two-thirds of its 180m length that included two churches, a chantry chapel and almshouses. There is no evidence for medieval buildings on Buddle Bridge; Buddle House is undated, but from the limited architectural evidence is probably of early post-medieval (?17th-century) date. The frontage extended onto the river banks either side, and appears to have formed part of the contemporary adjacent buildings.

6.7 The remains of the medieval building discovered in 1913 southwest of Buddle Bridge had been retained following a later phase of rebuilding. The architectural features probably indicate that the building was originally a chapel at the end of the bridge. Wingrave suggested it was contemporary with the earlier 12th-cenury bridge, in which case, its position marks the western extent of the river during this period. If so, this may imply that the present bridge replaced an earlier second, western span. The cellar may have been a later addition, and the description of 'Dutch' bricks may imply a 17th-century or later date for its infilling.

Later repairs to the bridge

6.8 A series of phases of underpinning and repairs to the side elevations of the arches has been recorded. These are largely undated and are probably post-medieval. By the end of the 19th century the northern parapet had been rebuilt, along with the masonry below, including part of the ring arches. In 1913 Bridge Street was widened and new parapets added. This work involved the removal of parts of buildings either side of the bridge, during which evidence for a chapel was uncovered. In 1968 the 1913 widened road was relaid, and in 1971 two of the missing medieval ribs were replaced. The northern parapet was replaced in 2006/7.

7. ARCHIVE AND OASIS ENTRY

7.1 The paper and digital archive is currently stored at the offices of AC archaeology at 4 Halthaies Workshops, Bradninch, near Exeter, Devon, EX5 4LQ, and will be deposited with the Dorset Country Museum.

7.2 An entry to the Online AccesS to the Index of archaeological investigationS (OASIS) has been created using the unique identifier 329090, and this includes a copy of this report.

8. SOURCES CONSULTED

Brown, S.W., 1981, 'The medieval Larkbeare Bridge, Exeter', *Proceedings of the Devon Archaeological Society* **39**, 155-158

Brown, S.W., 1982, ‘The medieval bridge and St Gabriel’s Chapel, Bishop's Clyst’, *Proceedings of the Devon Archaeological Society* **40**, 163-169

Brown, S.W., 2010, *The Exe Bridge, Exeter* (Exeter City Council, Exeter)

Dicker, C.W.H. and Pentin, H., 1912, ‘Additional editorial notes’, *Proceedings of the Dorset Natural History and Antiquarian Field Club* **XXXIII**, xxi-xxii

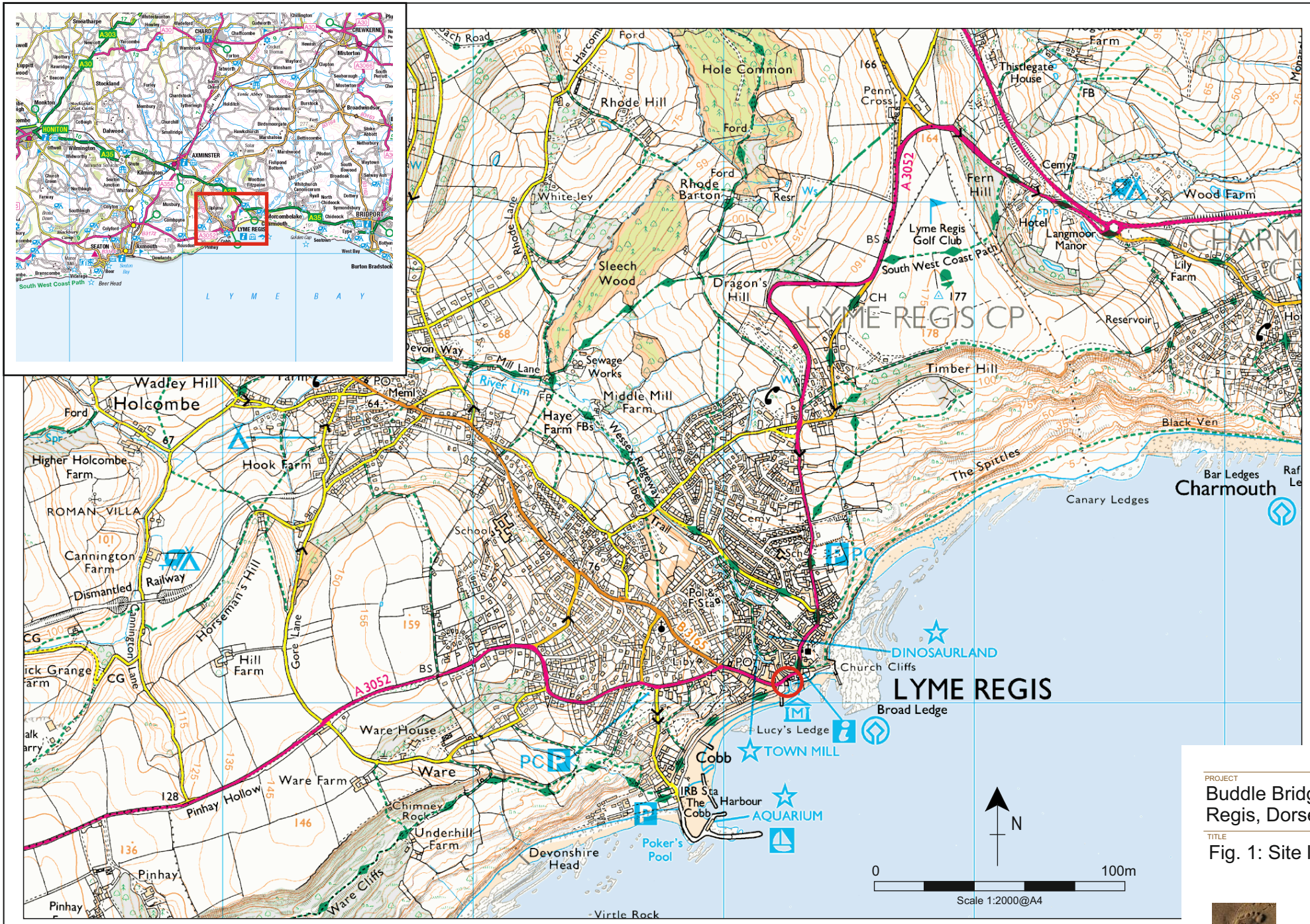
Harrison, D., McKeague, P., Watson, B., 2010, ‘England’s fortified medieval bridges and bridge chapels: a new survey’, *Medieval Settlement Research* **25**, 45-72

Thurston Hopkins, R., 1922, *Thomas Hardy’s Dorset* (D Appleton and Co, New York)

Wallis, A.J., 1974, *Dorset Bridges – a history and guide* (Abbey Press, Sherborne)

Wingrave, W., 1922, ‘Priest's chamber on Lyme Regis Bridge’, *Proceedings of the Dorset Natural History and Antiquarian Field Club* **XXXIII**, 41-43

National Heritage List for England
https://historicengland.org.uk/listing/the-list/



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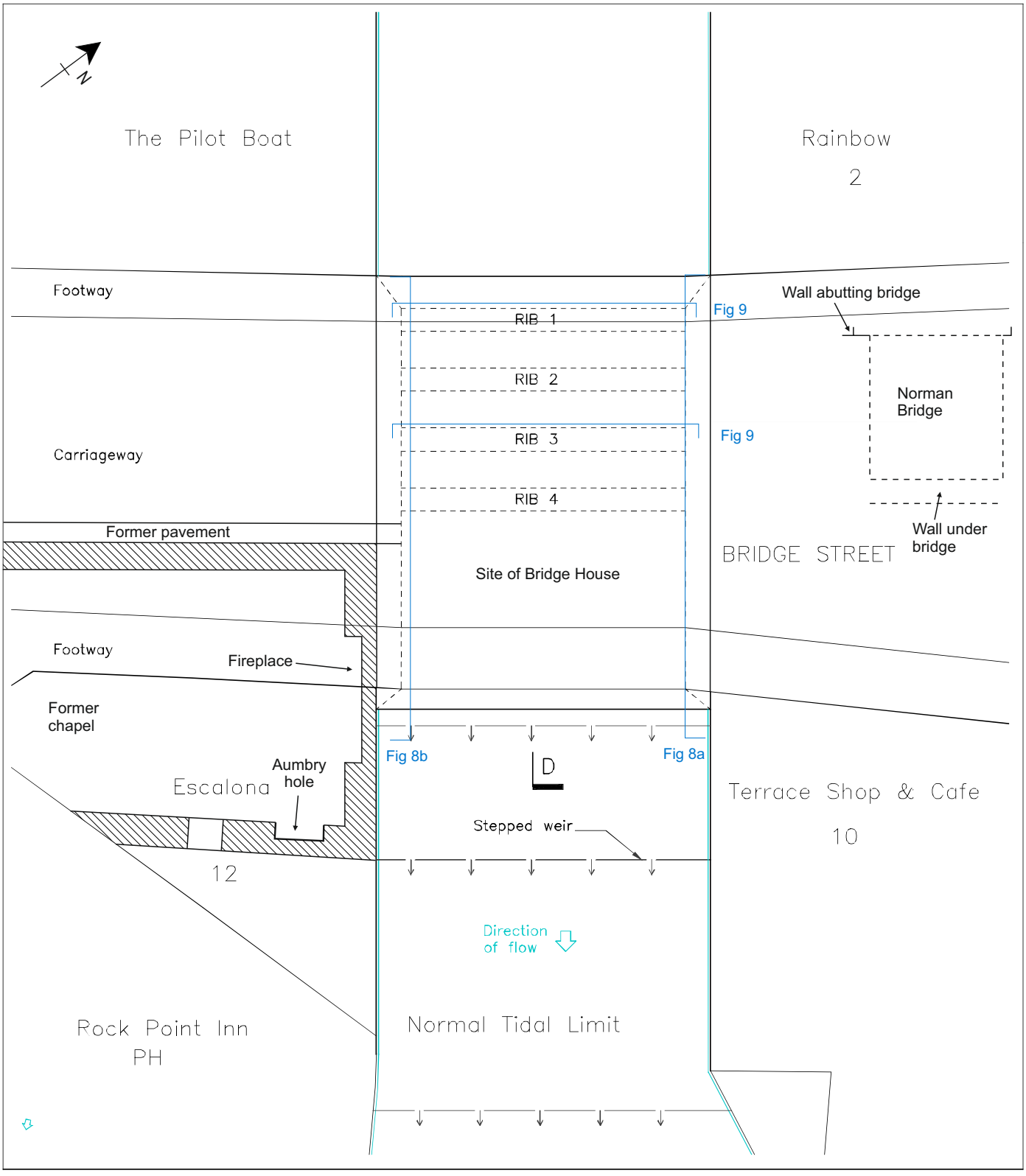
PROJECT
Buddle Bridge, Lyme Regis, Dorset

TITLE
Fig. 1: Site location

AC archaeology



0 5m

Scale 1:100@A4

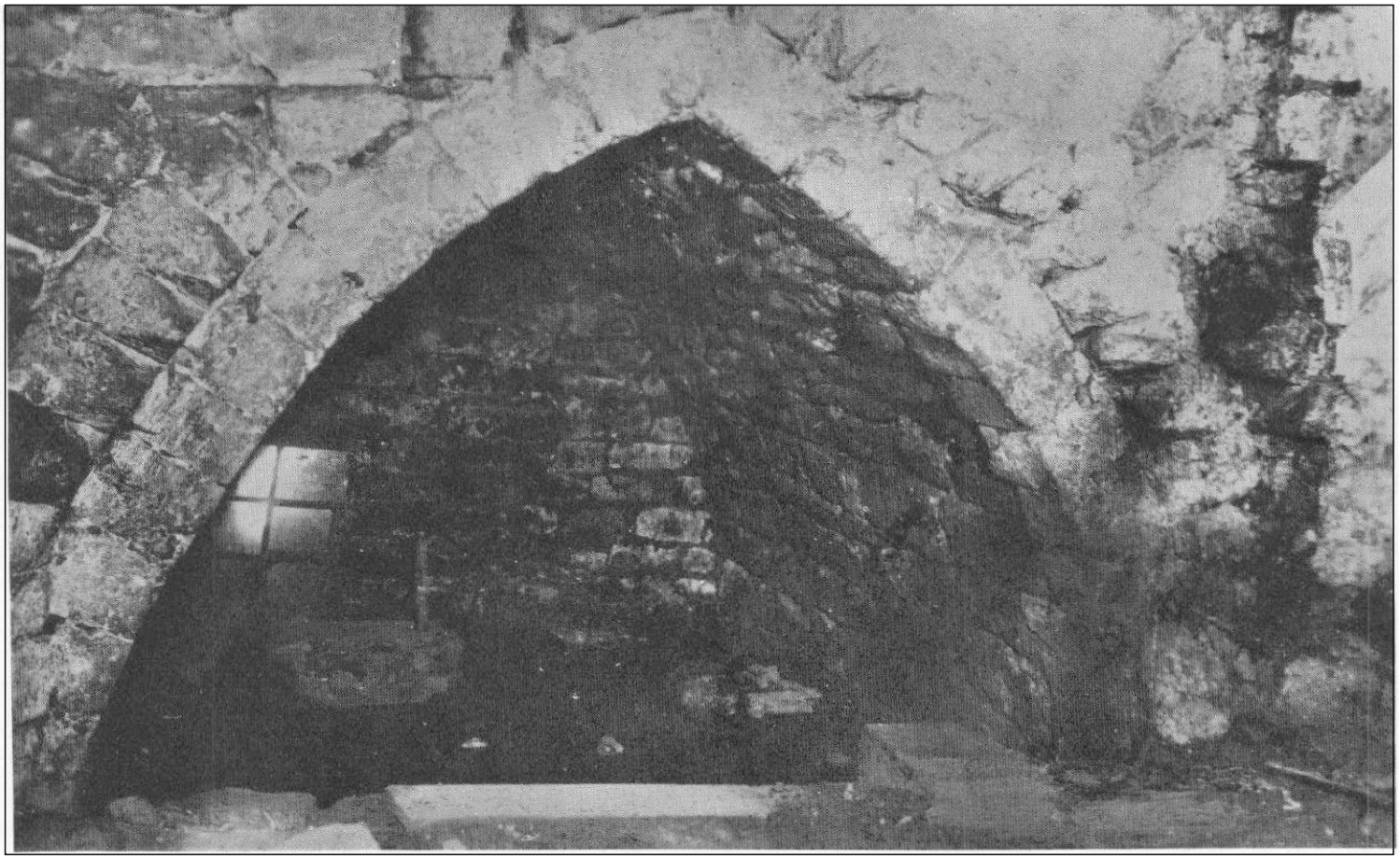
PROJECT

Buddle Bridge, Lyme Regis, Dorset

TITLE

Fig. 2: Plan of the bridge showing approximate position of the earlier bridge and the former chapel

AC archaeology



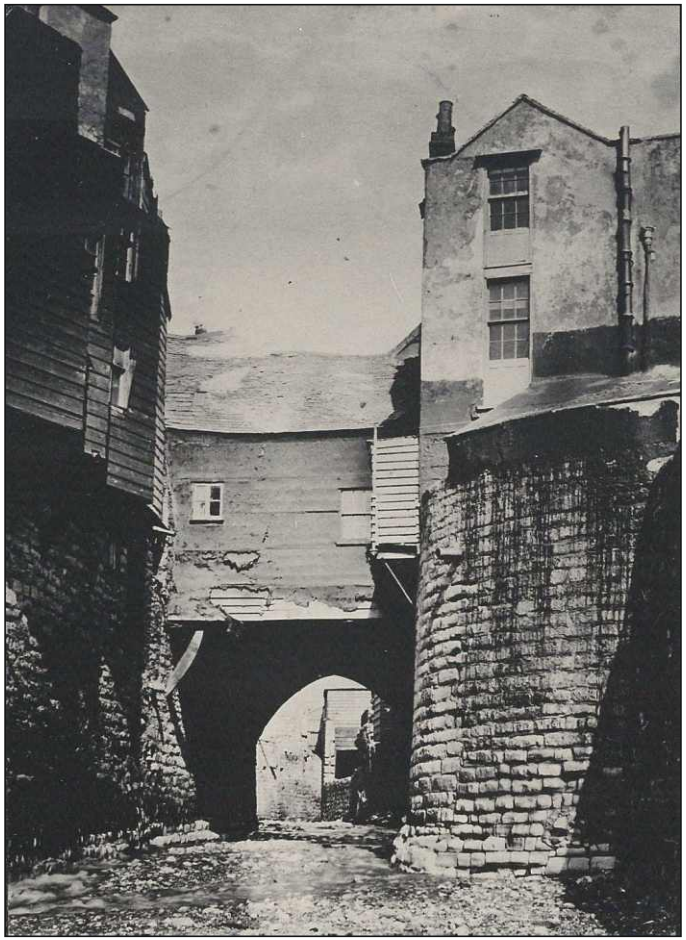
PROJECT

Buddle Bridge, Lyme Regis, Dorset

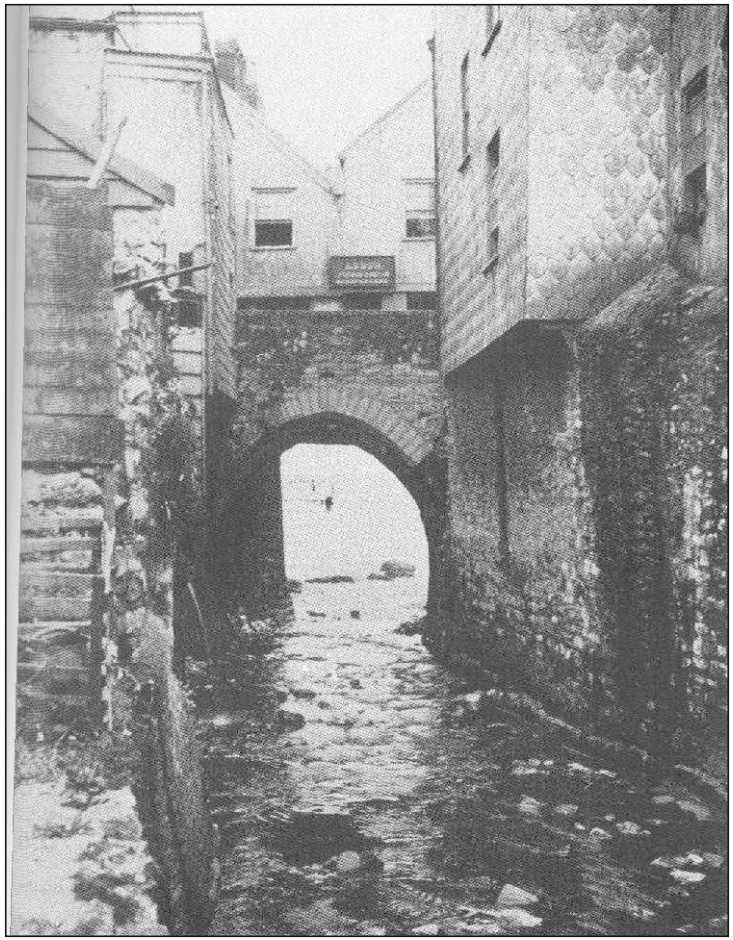
TITLE

Fig. 3: A photograph of the earlier bridge east of Buddle Bridge. The Norman moulding can be seen in the arch of stones above the voussoirs. Photo courtesy of Lyme Regis Museum.

AC archaeology



a)



b)

PROJECT

Buddle Bridge, Lyme Regis, Dorset

TITLE

Fig. 4: Historic photographs of Bridge House. (a) view upstream showing the rear of the property, and (b) view downstream partially showing the front elevation, also showing the repair to the ring arch on the north face of the bridge. Photos courtesy Lyme Regis museum.

AC archaeology

PROJECT

Buddle Bridge, Lyme Regis, Dorset

TITLE

Fig. 5: Photograph taken from the square in 1913 during the widening of the bridge showing the aumbry hole in the stone wall to the right.

AC archaeology

PROJECT

Buddle Bridge, Lyme Regis, Dorset

TITLE

Fig. 6: The oak framework now on display in Lyme Regis museum. 1m scale.

AC archaeology

PROJECT

Buddle Bridge, Lyme Regis, Dorset

TITLE

Fig. 7: A painting of The Square and Bridge Street prior to 1913 showing the parapet on the north side of the Bridge. Photograph curtesy of Lyme Regis Museum.

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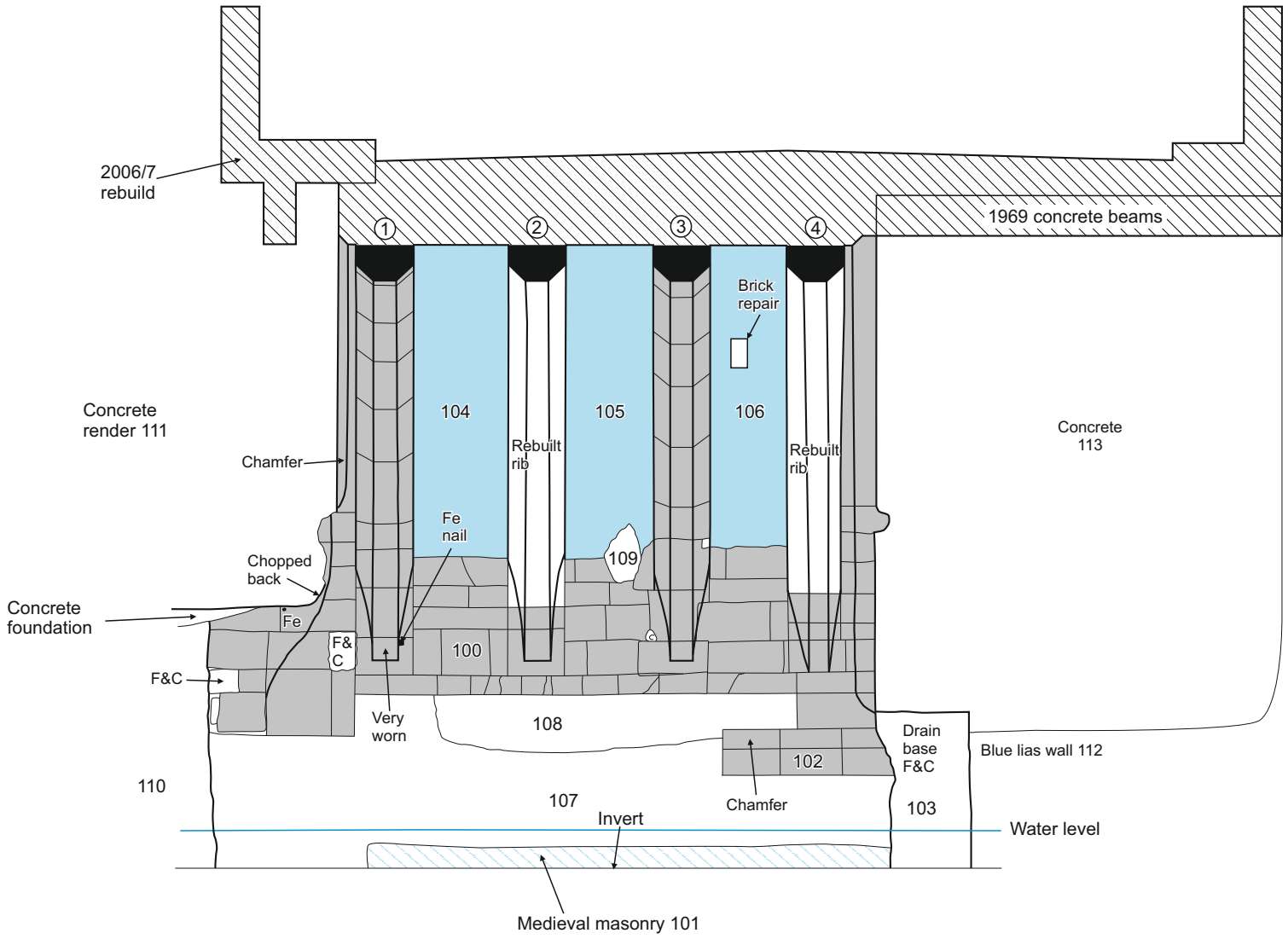
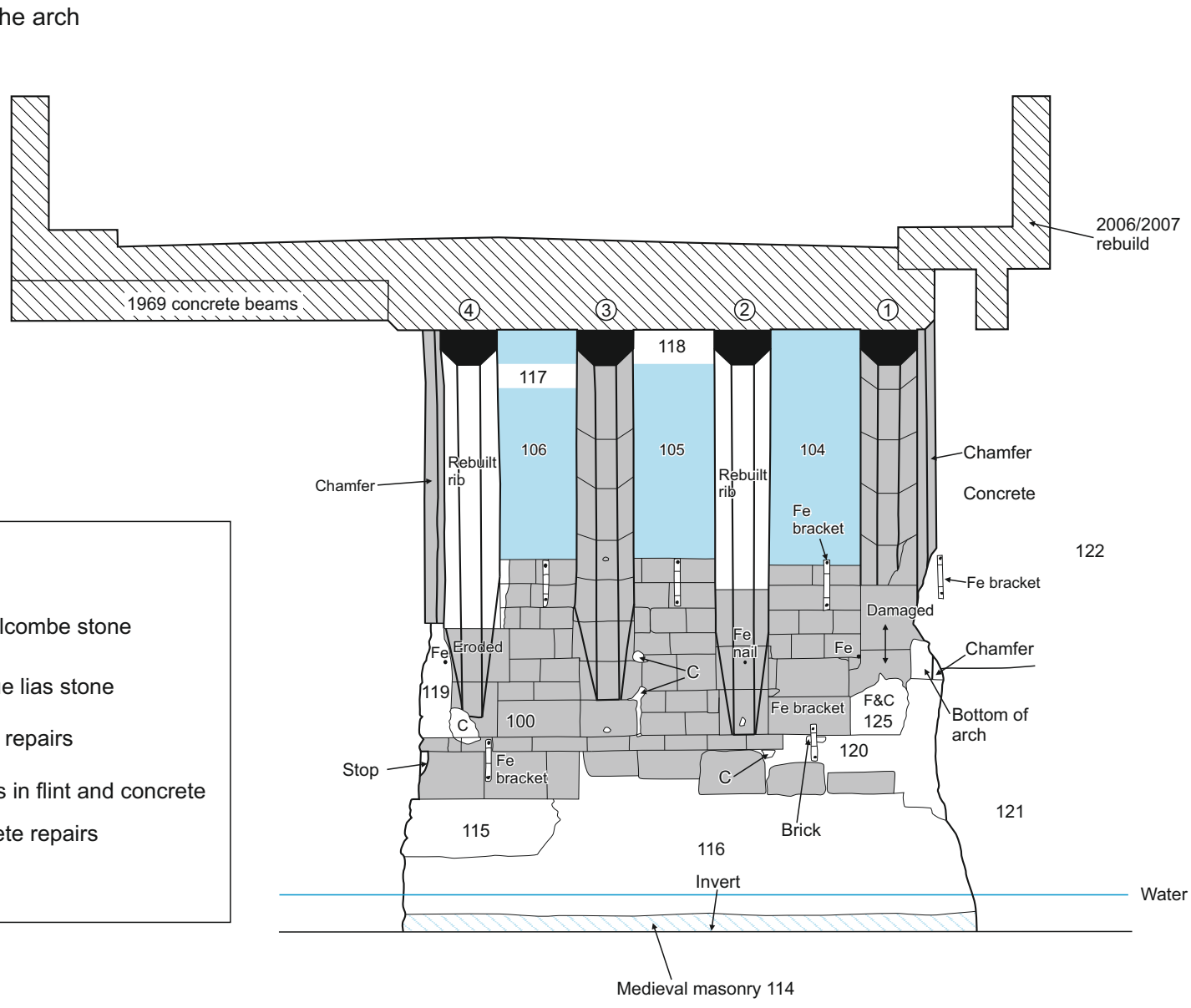
a) East elevation of the arch



b) West elevation of the arch



KEY

- Medieval Salcombe stone
- Medieval blue lias stone
- 20th century repairs
- F&C Minor repairs in flint and concrete
- C Minor concrete repairs
- ① Rib number

0 3m

Scale 1:50@A3

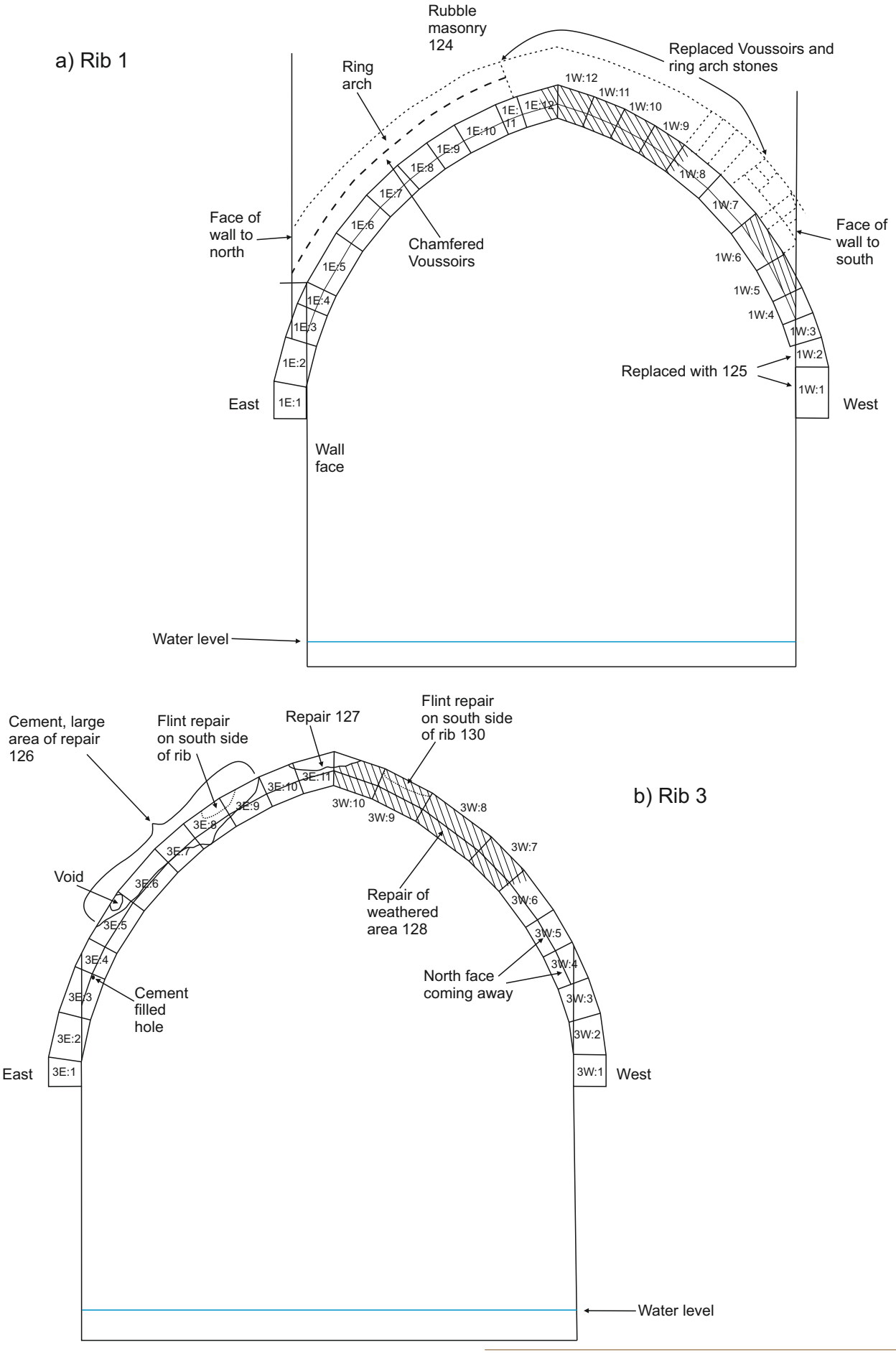
AC archaeology

PROJECT

Buddle Bridge, Lyme Regis, Dorset

TITLE

Fig. 8: Side elevations of the arch



PROJECT

Buddle Bridge, Lyme Regis, Dorset

TITLE

Fig. 9: The north elevations of ribs 1 and 3

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PROJECT

Buddle Bridge, Lyme Regis, Dorset

TITLE

Fig. 10: An anonymous town plan of 1825 showing the market house. Photograph courtesy of Lyme Regis Museum.

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Plate 1: General view of the bridge from the south

Plate 2: View of the bridge from the north (scale 1m)

Plate 3: East side squared blocks between ribs 2 and 3

Plate 4: Lowest courses on the east side of the bridge

Plate 5: Three chamfered stones forming a projecting string course on the east side of the bridge

Plate 6: The run-out stop forming the base of chamfer on the south end of the bridge on the east side

Plate 7: The northern end of the bridge, view from the northwest (scale 1m)

Plate 8: Roughly dressed blue lias stone between ribs 2 and 3 on the east side of the bridge

Plate 9: Lowest courses on the west side of the bridge

Plate 10: Eroded chamfer stop on the south end of the bridge on the east side

Plate 11: Repairs at the base of Rib 1 on the west side of the bridge

Plate 12: Dressed masonry between ribs 2 and 3 on the west side of the bridge

Plate 13: Repairs between ribs 3 and 4 on the west side of the bridge

Plate 14: The southern end of the east side of the bridge, view from the southeast

Plate 15: The northern end of the west side of the bridge, view from the north

Plate 16:The northern end of the east side of the bridge, view from the north

Plate 17: The southern face of the west side of Rib 1

Plate 18: The southern face of the east side of Rib 1

Plate 19: The northern face of the west side of Rib 3

Plate 20: The northern face of the east side of Rib 3

Appendix 1

Index of digital photographs

Index of digital photographs
ACD1039 Buddle Bridge, Lyme Regis, Dorset

Archive No	Description	Scale	View from	Photo by	Date
	Pre-survey visit images				
1	The bridge viewed from the south	-	S	AJP	01/12/2014
2	The bridge viewed from the southeast	-	SE	AJP	01/12/2014
3	The bridge viewed from the south	-	S	AJP	01/12/2014
4	The riverbed beneath the bridge	-	SW	AJP	01/12/2014
5	Rib 1, west side	-	E	AJP	01/12/2014
6	Rib 1, east side	-	NW	AJP	01/12/2014
7	Ribs 2, 3 & 4, east side	-	NW	AJP	01/12/2014
8	The bridge viewed from the south	-	S	AJP	01/12/2014
9	The bridge viewed from modern bridge to the south	-	S	AJP	01/12/2014
	Survey images				
10	The bridge viewed from the north	1m	N	AJP	21/01/2015
11	The bridge viewed from the north	1m	N	AJP	21/01/2015
12	The bridge viewed from the north	1m	N	AJP	21/01/2015
13	The bridge viewed from the north	1m	N	AJP	21/01/2015
14	The bridge viewed from the south	1m	S	AJP	21/01/2015
15	The bridge viewed from the south	1m	S	AJP	21/01/2015
16	The bridge viewed from the south	1m	S	AJP	21/01/2015
17	The bridge viewed from the southeast	1m	SE	AJP	21/01/2015
18	The bridge viewed from the southwest	1m	SW	AJP	21/01/2015
19	The bridge viewed from the northwest	1m	NW	AJP	21/01/2015
20	The bridge viewed from the northeast	-	NE	AJP	21/01/2015
21	Northeast side of bridge arch	-	N	AJP	21/01/2015
22	Northwest side of bridge arch	-	N	AJP	21/01/2015
23	North side of Rib 1 on east side showing modern work	-	W	AJP	21/01/2015
24	Ribs 1 & 2 on east side	-	W	AJP	21/01/2015
25	Ribs 2 & 3 on east side	-	W	AJP	21/01/2015
26	Ribs 3 & 4 on east side	-	W	AJP	21/01/2015
27	Chamfer on south side of bridge arch, east side	-	W	AJP	21/01/2015
28	Chamfered course on south side of bridge arch, east side	-	W	AJP	21/01/2015
29	Lowest courses, east side	-	W	AJP	21/01/2015
30	Ribs 1 & 2 on west side	-	E	AJP	21/01/2015
31	Ribs 2 & 3 on west side	-	E	AJP	21/01/2015
32	Ribs 3 & 4 on west side	-	E	AJP	21/01/2015
33	Arch base on the south side of bridge, west side	-	SE	AJP	21/01/2015
34	Eroded chamfer stop on south side of bridge arch, west side (indicated by pointing hand)	-	E	AJP	21/01/2015
35	Lowest courses, west side	-	E	AJP	21/01/2015
36	North side of Rib 1 on west side showing repairs	-	E	AJP	21/01/2015
37	Course beneath the water level on the east side	-	NW	AJP	21/01/2015
38	Course beneath the water level on the east side	-	SW	AJP	21/01/2015
39	Iron bracket on west side	-	SE	AJP	21/01/2015
40	West side between ribs 1 & 2	-	E	AJP	21/01/2015
41	West side between ribs 2 & 3	-	E	AJP	21/01/2015
42	West side between ribs 3 & 4	-	E	AJP	21/01/2015
43	East side between ribs 1 & 2	-	W	AJP	21/01/2015
44	East side between ribs 2 & 3	-	W	AJP	21/01/2015
45	East side between ribs 3 & 4	-	W	AJP	21/01/2015

Index of digital photographs
ACD1039 Buddle Bridge, Lyme Regis, Dorset

46	Eastern half of south side of Rib 1	-	SW	AJP	21/01/2015
47	Western half of south side of Rib 1	-	SE	AJP	21/01/2015
48	Western half of north side of Rib 3	-	NE	AJP	21/01/2015
49	Eastern half of north side of Rib 3	-	NW	AJP	21/01/2015
50	Detail of eastern half of north side of Rib 3 showing void and repair	-	N	AJP	21/01/2015
51	Detail of eastern half of north side of Rib 3 showing repair	-	N	AJP	21/01/2015
52	Detail of western half of north side of Rib 3 showing repair	-	NE	AJP	21/01/2015
53	Eastern half of south side of Rib 3	-	SW	AJP	21/01/2015
54	Western half of south side of Rib 3	-	SE	AJP	21/01/2015
55	Detail of eastern half of south side of Rib 3 showing repair	-	SW	AJP	21/01/2015
56	Detail of western half of south side of Rib 3 showing repair	-	SE	AJP	21/01/2015
57	South side of the bridge eastern side detail	-	SW	AJP	21/01/2015
58	Underside of bridge repairs to central span between Ribs 2 & 3	-	-	AJP	21/01/2015
59	Underside of bridge repairs to central span between Ribs 3 & 4	-	-	AJP	21/01/2015
60	General view of bridge looking north	-	S	AJP	21/01/2015
	Watching brief images				
61	Rib 3, repairs to east side	-	NW	AJP	03/07/2018
62	Rib 3, repairs to east side, also showing damaged lias of arch	-	NW	AJP	03/07/2018
63	Rib 3, repairs to east side	-	N	AJP	03/07/2018
64	Rib 3, repairs to east side	-	E	AJP	03/07/2018
65	Rib 3, repairs to west side	-	NE	AJP	03/07/2018
66	Rib 3, repairs to west side	-	NE	AJP	03/07/2018
67	Rib 3, repairs to west side	-	NE	AJP	03/07/2018
68	Rib 3, repairs to west side	-	N	AJP	03/07/2018
69	Rib 3, repairs to west side	-	E	AJP	03/07/2018
70	Rib 3, repairs to west side	-	N	AJP	03/07/2018
71	Rib 1, crack of south face	-	SW	AJP	03/07/2018
72	Rib 1, general view	-	E	AJP	03/07/2018
73	Rib 1, general view	-	NE	AJP	03/07/2018
74	Rib 1, general view	-	N	AJP	03/07/2018
75	Rib 1, general view	-	E	AJP	03/07/2018
76	Rib 3, packing in repair	-	N	AJP	03/07/2018
77	Cut stones for use in repairs	-	-	AJP	03/07/2018
78	Rib 1, west side, lower void following removal of damaged stones	0.30m	E	AJP	17/07/2018
79	Rib 1, west side, lower void following removal of damaged stones	0.30m	NE	AJP	17/07/2018
80	Rib 1, west side, lower void following removal of damaged stones	0.30m	SE	AJP	17/07/2018
81	Rib 1, west end of outer arch	0.30m	NE	AJP	17/07/2018
82	Rib 1, west side, lower void following removal of damaged stones	-	NE	AJP	17/07/2018
83	Rib 1, view following removal of damaged stones	-	N	AJP	17/07/2018
84	Rib 1, view following removal of damaged stones	-	NE	AJP	17/07/2018
85	Rib 1, completed works, west side	-	E	AJP	17/07/2018
86	Rib 1, completed works, east side	-	W	AJP	17/07/2018
87	Repairs to east side of arch north of rib 3	-	W	AJP	17/07/2018
88	Rib 1, completed works, east side	-	E	AJP	17/07/2018

Index of digital photographs
ACD1039 Buddle Bridge, Lyme Regis, Dorset

89	Rib 1, completed works	-	NW	AJP	20/08/2018
90	Rib 1, completed works	-	N	AJP	20/08/2018
91	Rib 1, completed works	-	NE	AJP	20/08/2018
92	Rib 1, completed works	-	NE	AJP	20/08/2018
93	Rib 1, completed works	-	SW	AJP	20/08/2018
94	Rib 1 following addition of protective coat	-	W	AJP	20/08/2018
95	Rib 1 following addition of protective coat	-	S	AJP	20/08/2018
96	Rib 1 following addition of protective coat	-	E	AJP	20/08/2018
97	Rib 2, west side following addition of protective coat	-	NE	AJP	20/08/2018
98	Rib 3, west side following addition of protective coat	-	NE	AJP	20/08/2018
99	Rib 3 following addition of protective coat	-	E	AJP	20/08/2018
100	Rib 3 following addition of protective coat	-	SW	AJP	20/08/2018
101	Rib 3 following addition of protective coat	-	S	AJP	20/08/2018
102	Rib 4, west side following addition of protective coat	-	NE	AJP	20/08/2018
103	Rib 4, east side following addition of protective coat	-	SW	AJP	20/08/2018
104	General view of bridge following completion of works	-	SE	AJP	20/08/2018
105	General view of bridge following completion of works	-	NW	AJP	20/08/2018

Appendix 2

The 2018 historic building recording

Appendix 2
The 2018 historic building recording

1. INTRODUCTION

1.1 Recording visits were made on 3 July 2018, 17 July 2018 and 20 August 2018 during and following the completion of the repair programme. The aim of the investigation was to document the works, and to enhance the archaeological record prepared in 2015. To this extent visits were programmed to record the phases of repairs to the ribs (as outlined in Section 2 below) and following completion of all works.

1.2 The recording comprised a photographic record documenting both the phases of repairs and specific observations and architectural details. This was made using a digital camera. A selection of photographs is presented below, and a list of photographs taken is included in an updated index within Appendix 1. The existing drawings were updated and Figs 8 and 9 of the main report have been amended to reflect the new observations. Additionally, a drawn record of the stones or parts of stones replaced was prepared, and these are presented in Appendix Figs 1 and 2 below. These records were accompanied by a written description of the repairs and observations made during the visits.

2. THE REPAIR PROGRAMME

2.1 The sequence below outlines the physical repair programme to the ribs. Associated access and safety arrangements are not outlined but can be found in the project's design and assess statement.

1. Damaged elements of the individual voussoirs of ribs 1 and 3 were removed. On both ribs these were on the north faces only. On rib 3 only sections of voussoirs were removed (Appendix Plates 1 and 2), whereas on rib 1 the lower stones were also removed/replaced (Appendix Plate 3).
2. The damaged stones were cut flush to create flat surfaces for the replacement stones, and any voids were filled with mortar and stone glue (Appendix Plate 4).
3. Pre-prepared replacement voussoirs were cut and dressed to match the shape of the removed stones.
4. The replacement voussoirs were fitted and fixed with stone glue and then pinned and glued (Appendix Plate 5). Once the glue had dried the pins were cut off flush to the surfaces of the stones (Appendix Plate 6). Where necessary slate bonded in lime mortar was used as a packing between stones (Appendix Plate 7).
5. Joints between and around the replacement voussoirs were pointed with lime mortar.
6. A shelter coat was added to the faces of repaired ribs, along with the surviving historic elements of ribs 2 and 4 (Plates 8-16).

3. OBSERVATIONS DURING THE REPAIR PROGRAMME

3.1 As part of the works to rib 1 the lower two voussoirs on the west side (1W:3 and 1W:4) along with the repair 125 below were removed and replaced with new voussoirs. Stones 1W:3 and 1W:4 were heavily eroded (see Plate 11 in the main report), whilst masonry 125 replaced the removed lower springing stone/s (1W:1 and 1W:2).

3.2 These voussoirs and masonry 125 measured on average 0.15m deep, and they were not keyed into the rubble lias masonry (104) of the arch behind (see Appendix Plate 2 that shows the flush front of the lias 104). Behind stones 1W:3 and 1W:4 the lias masonry was very slightly curved following the line of the arch above.

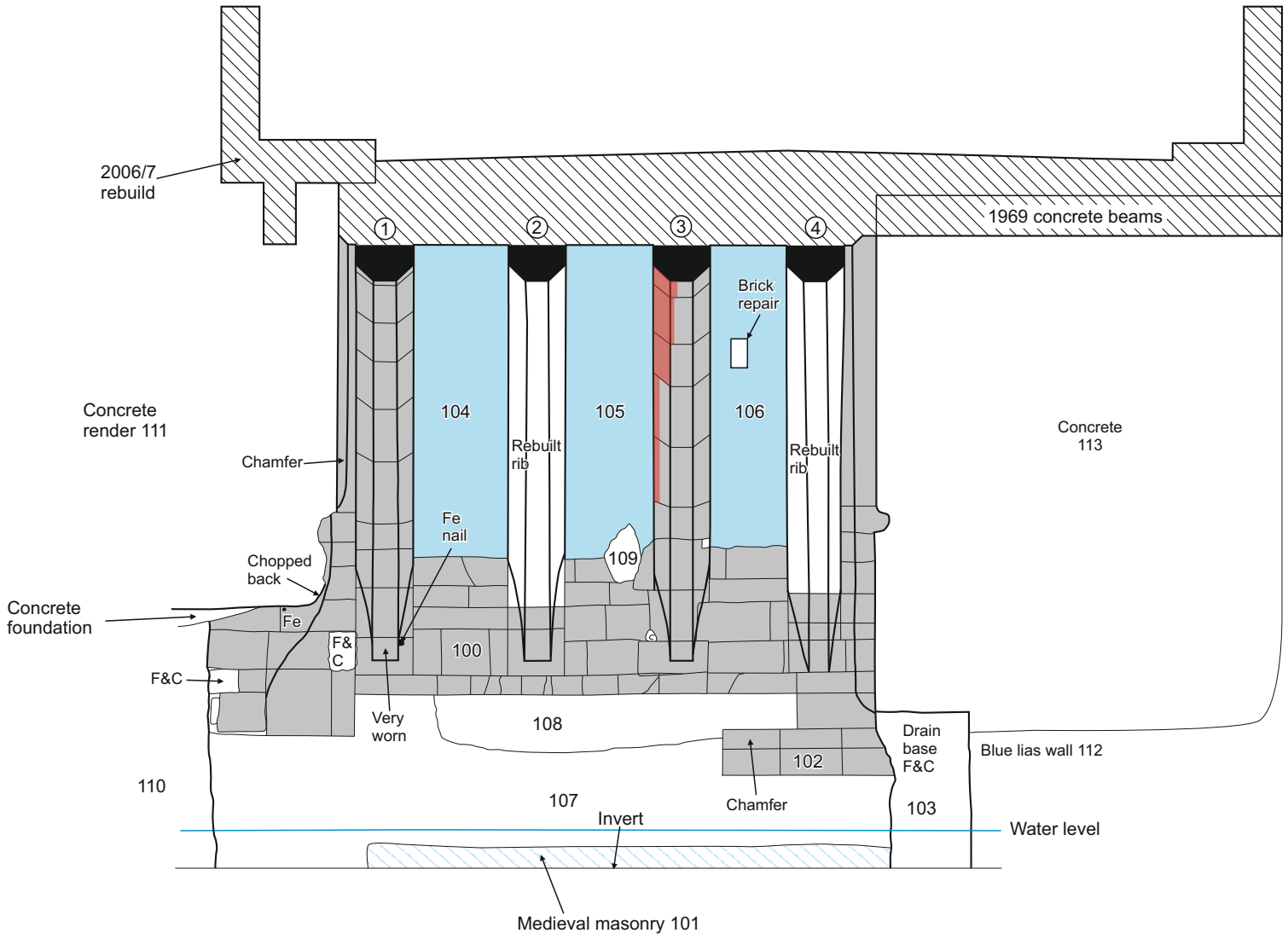
3.3 The rib was physically separate from the vertical medieval masonry (100) below the arch, and removal of stones 1W:3 and 1W:4 revealed that the adjacent end of this masonry was laid with long and short 'quoins' with the deeper stones extending into the lias behind (Appendix Plate 17).

3.4 Removal of stones 1W:3 and 1W:4 also revealed that they were not keyed into the ring arch behind that projects outwards from the line of rib 1. This can also be seen in relation to *in situ* voussoirs 1W:5 and 1W:6 above (Appendix Plate 18). The lower (original) stones of this ring arch form quoins to the corner of the bridge and extend back beyond the adjacent exterior modern concrete, as well as interior lias arch that abuts these stones (Appendix Plate 19).

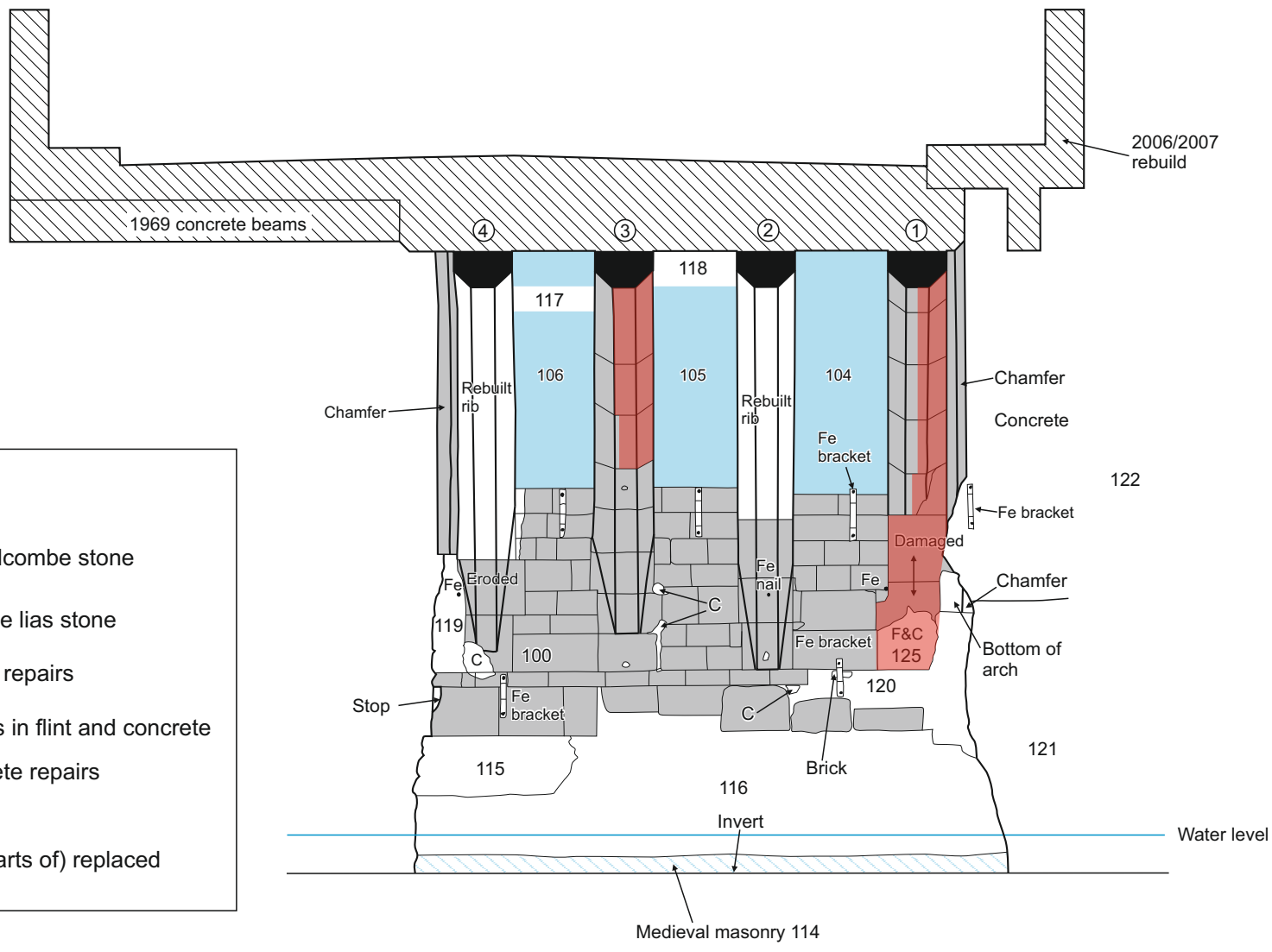
3.5 These observations confirm two elements of the construction of the medieval bridge. Firstly, that the masonry forming the sides of the bridge – the lower dressed stone walls, dressed ring arches and the lias arches – are contemporary. There are different structural relationships between these elements (and the ribs – see below) and, as might be expected, the bridge was built in stages. In general, the dressed stone masonry forms a revetment to the land/causeway behind and to the lower sections of lias arches. Other than from the lower springing stones, the ribs are not keyed in to either the vertical dressed stone walls or the lias arches above. They must however have been constructed at the same time as the rest of the bridge using wooden formers, with the lias arches added afterwards (again using formers above the level of the vertical walls).

3.6 No evidence for any bridge or other masonry earlier than the current early 14th-century bridge was exposed or observed.

a) East elevation of the arch



b) West elevation of the arch



KEY

- Medieval Salcombe stone
- Medieval blue lias stone
- 20th century repairs
- F&C — Minor repairs in flint and concrete
- C — Minor concrete repairs
- ① — Rib number
- Stones (or parts of) replaced

0 3m

Scale 1:50@A3

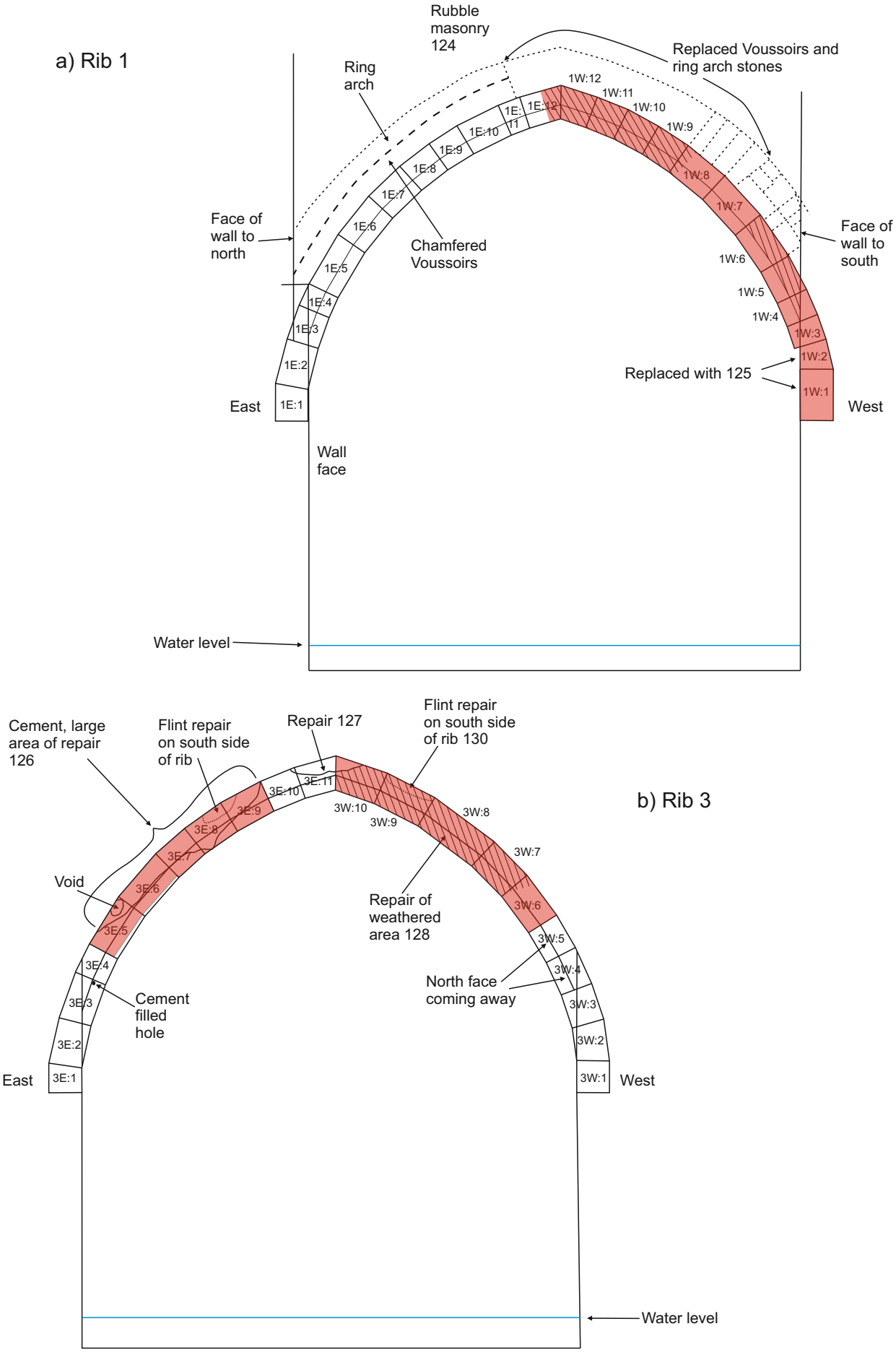
AC archaeology

PROJECT

Buddle Bridge, Lyme Regis, Dorset

TITLE

Appendix Fig. 1: Side elevations of the arch showing locations of replaced stones



PROJECT

Buddle Bridge, Lyme Regis, Dorset

TITLE

Appendix Fig. 2: The north elevations of ribs 1 and 3 showing locations of replaced stones

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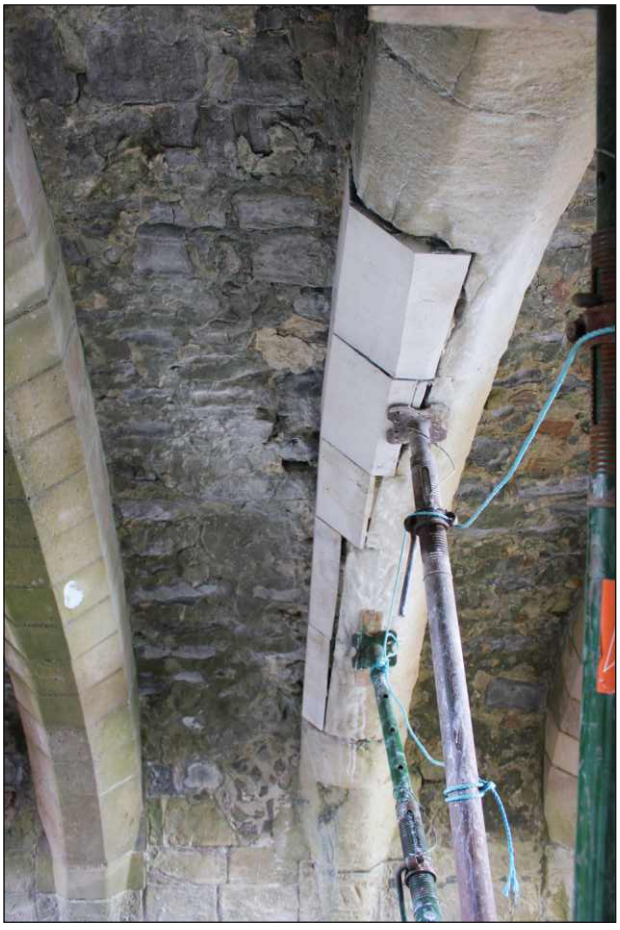
Appendix Plate 1: Rib 1 following removal of damaged elements of voussoirs, viewed from the north

Appendix Plate 2: Rib 1 following removal of damaged lower voussoirs, viewed from the northeast. (0.30m scale)

Appendix Plate 3: Rib 3 following removal of some of the damaged voussoirs, viewed from the northwest

Appendix Plate 4: Rib 3 showing voids in masonry filled with mortar, viewed from the north

Appendix Plate 5: Rib 3 showing replacement voussoirs with pins, viewed from the north

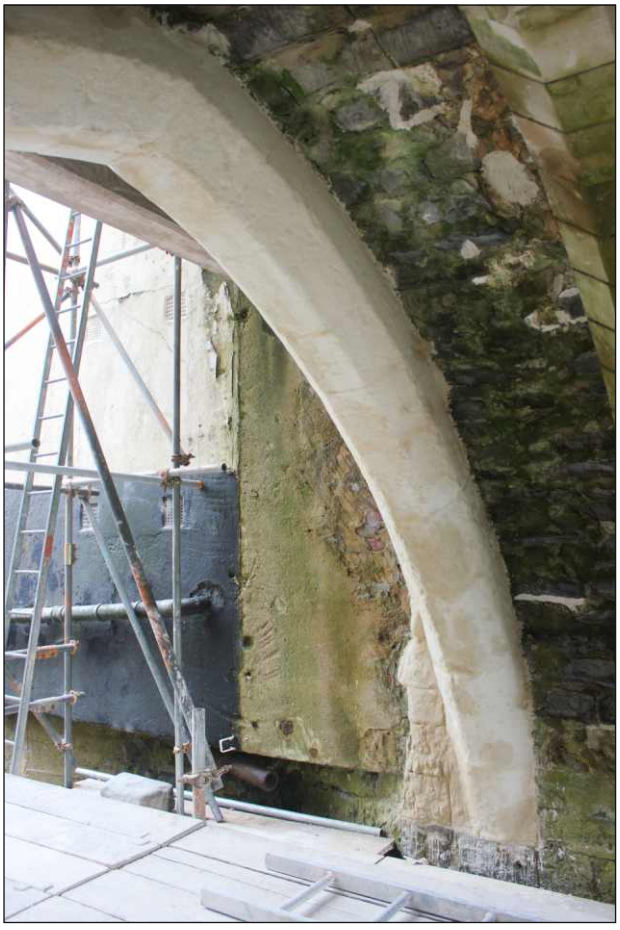


Appendix Plate 6: Rib 3 showing replacement voussoirs following the cutting flush of the pins, viewed from the southwest

Appendix Plate 7: Rib 3 showing packing between stones, viewed from the northwest

Appendix Plate 8: Rib 1, east side of north face following completion of repairs, viewed from the northwest

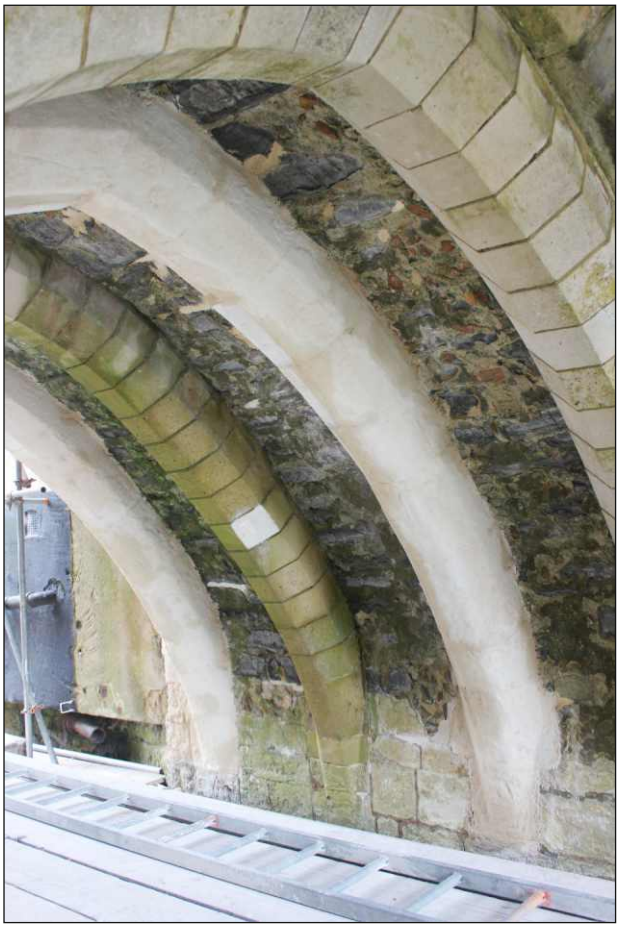
Appendix Plate 9: Rib 1, west side of north face following completion of repairs, viewed from the north



Appendix Plate 10: Rib 1, east side of south face following completion of repairs, viewed from the south

Appendix Plate 11: Rib 1, west side of south face following completion of repairs, viewed from the east

Appendix Plate 12: Rib 2, west side following application of shelter coat, viewed from the northeast



Appendix Plate 13: Rib 3, east side of south face following completion of repairs, viewed from the south

Appendix Plate 14: Rib 3, west side of south face following completion of repairs, viewed from the south

Appendix Plate 15: Rib 4, east side following application of shelter coat, viewed from the southwest

Appendix Plate 16: Rib 4, west side following application of shelter coat, viewed from the northeast

Appendix Plate 17: Rib 1 following removal of stones 1W:3 and 1W:4 and repair 125 showing masonry 100, viewed from the north. (0.30m scale)

Appendix Plate 18: Rib 1 showing stones 1W:5 and 1W:6 with the projecting ring arch to the right (behind the 0.30m scale), viewed from the north

Appendix Plate 19: Rib 1 following removal of stones 1W:3 and 1W:4 and repair 125 showing the inside of the ring arch and abutting lias masonry 104, viewed from the east. (0.3m scale)

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