





# N25 YOUGHAL BY-PASS

# EXCAVATION OF ISOLATED FEATURES AND RECORDING OF STANDING BUILDINGS, YOUGHAL BY-PASS, CO. CORK.

Licence: 01E0543

# PREPARED BY DAN NOONAN, JOANNE O'MEADHRA AND LYDIA CAGNEY

# ARCHAEOLOGICAL CONSULTANCY SERVICES LIMITED



Ascon Limited, Civil Engineering and building contractors, Youghal N25 By-pass Project, Ballyvergan, Co. Cork



Unit 21, Boyne Business Park, Greenhills, Drogheda, Co. Louth

# **Cork County Council**



Mr. J. Matson, B.E., County Engineer, Cork County Council, County Hall, Cork.

# PROJECT DETAILS

**Project** Excavation of Isolated Features & Recording of

Standing Buildings on Route

**Road Scheme** N25 Youghal Bypass

Site Name Miscellaneous

Archaeologists Daniel Noonan, Joanne O'Meadhra and Lydia

Cagney

**Client** Ascon Ltd.

Townlands Miscellaneous

Parishes Youghal, County Cork; Templemichael, County

Waterford

Nat. Grid. Refs.MiscellaneousChainageMiscellaneous

**Licence No.** 01E0543

**Report Date** 5th November 2002

# **NON-TECHNICAL SUMMARY**

A total of twenty-eight areas for Archaeological Resolution (AR's) were identified during advance stripping and monitoring of groundworks for the N25 Youghal Bypass scheme. The sites were distributed all along the route and consisted of small archaeological features such as isolated pits and firespots; features that needed further assessment as to their archaeological significance; and structures and standing buildings that were being impacted on by the road construction.

These sites were investigated and resolved under a single licence. Nine isolated and previously-unknown archaeological sites were resolved included pits with burning of unknown function (AR23 & AR24), a possible ritual deposition of pottery (AR19) and a firespot (AR25).

Five separate instances of structures and standing buildings were recorded as part of the archaeological resolution of the scheme. The evidence at AR1 of brick clamps and drying sheds and other associated features in the brickworks field may indicate the remains of the brick production activity that predates the Youghal Brickworks Company on the site. The labourer's cottage (AR3) at Muckridge townland was originally part of the estate buildings of Muckridge House. The timber-built cottage (AR27) in Ballyvergan West townland may originally have been a summertime holiday home that became a permanent residence. The bridge at Knockattigan/Ballymacask (AR31) was an important part of the road features of the Ballymacask Road since the late eighteenth century. The stone bridge complex (AR32) is an interesting utilisation of a riverside cottage with road frontage as a residence and boat facility. The limekiln (AR35) at Rincrew represents a further part of the rural industrial landscape that this structure along with the brickworks AR1 are part of.

The remaining twelve AR's were features of post-medieval agricultural activity and were proven to be of no archaeological significance.

# CONTENTS

1. Introduction		Page 1	
2. Background	to Receiving Environment		
2.1	Topographical Setting of the N25 Youghal Bypass	Page 1	
2.2	Impacts on Known and Potential Archaeology	Page 2	
3. Methodology		Page 4	
4. Findings			
4.1	Section A, Isolated Archaeological Features	Page 5	
4.2	Section B, Structures and Standing Buildings	Page 11	
4.3	Section C, Areas of No Archaeological Interest	Page 29	
5. Conclusions		Page 32	
6. Bibliography		Page 33	
Appendix 1	: Topography of Receiving Environment	Page 34	
Appendix 2: Monuments within 5km radius of Scheme		Page 35	
Appendix 3: Working Site Register		Page 38	
Appendix 4: Archaeological Site Register		Page 39	
Appendix 5: Plates		Page 40	
Appendix 6: Descriptions of Structures at Stone Bridge Complex		Page 53	
Appendix 7: List of Finds from Propogue		Page 57	
Appendix 8: Pottery Report by Jon Stirland		Page 57	
Appendix 9	: Analysis of Soil Samples	Page 63	
List of Figure	5		
Figure	1: Layout of Stone Bridge Cottage complex		
Figure 2	Extract from first-edition Ordnance Survey map (1842)		
Figure 3	3: Topography		
Figure 4	4: Geology		
Figure	Distribution of Monuments within approximately 5km of Youghal Bypass route, as recorded in Archaeological Inventories		
Figure	Location of sites within road scheme		
Figure '	Isolated Archaeological Features		
Figure	AR4 pre excavation, AR19 and AR23, pre & post excavation		
Figure 9	e: AR23 and AR30, pre & post excavation		

Plate 21

AR35 Setting of limekiln

Figure 10: AR 25, pre & post excavation of possible hearth Figure 11: Plan of AR28 showing extents of material Figure 12: Structures and Standing Buildings Figure 13: AR1, Brickworks Features Figure 14: Ground Plan and Elevation of House at Muckridge Figure 15: Ground Plan & Elevation of Red House and Associated Buildings Figure 16: Ground plans of buildings in Stone Bridge Complex Figure 17: Elevations of main buildings at Stone Bridge Complex Figure 18: Elevation & Ground Plan of Limekiln AR35 **List of Plates** Plate 1: AR19, looking southeast Plate 2: AR23, looking southwest Plate 3: AR25, Hearth Plate 4: AR28, spread of burning, looking southwest Plate 5: AR28, Truncated Pit, looking southwest Plate 6: AR30, pre-excavation Plate 7: AR1, Brick Paved Area, looking southwest Plate 8: AR1, Disturbed Area, looking northwest Plate 9: AR3, Labourers Cottage, east elevation Plate 10: AR3, Labourers Cottage, west and south elevations Plate 11: AR27, Timber Built House, looking north Plate 12: AR27, Timber Built House Plate 13: AR31, Western run in to Knockattigan/Ballymacask Bridge, north elevation Plate 14: AR31, Western run in to Knockattigan/Ballymacask Bridge, south elevation Plate 15: AR32, Stone Bridge Complex, Aerial View Plate 16: AR32, Stone Bridge Complex, looking north Plate 17: AR32, Stone Bridge Complex, Slipway, Jetty and Pier, looking southeast Plate 18: AR32, Stone Bridge Cottage, vegetation removed prior to demolition. Plate 19 AR35 Limekiln elevation Plate 20 AR35 Limekiln looking to west

Plate 22 AR35 Detail of drawhole

Plate 23 AR35 Rim of combustion chamber

# 1. INTRODUCTION

Archaeological testing of the route of the N25 Youghal Bypass was carried out in the form an advanced strip prior to construction stripping. Archaeological Consultancy Services Ltd. was contracted by Ascon Ltd., construction contractors, to carry out this work. Daniel Noonan carried out advanced testing under state licence 01E0224. During the course of advanced machine testing and monitoring of construction, a total of thirty-four areas for archaeological resolution (AR) were revealed across the route. Seven of these sites were dealt with under individual licences. The remainder of the AR's consisted of (a) small archaeological features such as isolated pits and firespots; (b) structures and standing buildings that were being impacted on by the road construction; (c) features that needed further assessment as to their archaeological significance.

Following consultation with *Dúchas* The Heritage Service and the National Roads Authority Project Archaeologist, a licence (01E0543) was issued to bring about the resolution of these features. A blanket licence was, therefore, issued to resolve twenty-eight of the AR's, namely:

AR1, AR3, AR4, AR5, AR7, AR8, AR9, AR10, AR11, AR13, AR14, AR15, AR16, AR17, AR18, AR19, AR20, AR21, AR22, AR23, AR24, AR25, AR27, AR28, AR30, AR31, AR32, AR35.

All of these areas were fully investigated and resolved. Eight of the AR's proved to be of archaeological significance. In all, a total of six of the AR's were standing buildings, structures or evidence of demolished structures of post-medieval date. Twelve of the AR's proved to be of no archaeological significance, being the result of post-medieval field clearance.

# 2. BACKGROUND TO RECEIVING ENVIRONMENT

# 2.1 Topographical Setting of the N25 Youghal Bypass

The present landscape into which the road is being set is largely pastoral agricultural land. The underlying soils are generally brown podzolics that provide a fertile basis for agriculture. The general topography of the region consists of elongated east—west valleys that are separated by intervening ridges. This has been determined by the harder-wearing Devonian sandstones and mudstones of the ridges and the more readily-erodable Carboniferous limestones of the valleys (Sleeman and McConnell 1995, 1).

The scheme begins at a point approximately 3km to the west of the main urban centre of Youghal where it leaves the current route of the N25. The current route of the N25 runs east—west along the flat of the valley known geologically as the Cork Syncline (see Appendix 1). For the bypass scheme, the road is going to move away from this valley and cut across the east—west running

ridge of Devonian 'Old Red Sandstone' that is a southern offshoot of the eastern terminal of Watergrasshill anticline. Youghal Harbour truncates this geological feature, with the steeply-inclined cut through the anticline forming what is known as the 'Youghal Plateau', a high ridge that dominated the topographical development of the medieval town.

From where it leaves the existing N25 at Ballyvergan West townland, the road cuts into the ridgeline until it levels out to flat ground in the townlands of Clashadunna East and Propoge. It is embanked over the steep sided north—south running valley in Ballymacask townland and into the wider expanse of the valley in the townland of Ballynacarriga. As it rises out of Ballynacarriga, it cuts into the mixed sands, clays, gravels and rock of Muckridge which marks the northern edge of the anticline. The road then falls towards the watershed, filling over the mudflats that form the southern bank of the Touring River. The Tourig Valley is part of what is geologically known as the Ardmore Syncline. After bridging the Tourig, it cuts along the foot of the peninsula of Rincrew, reaching the Watergrasshill Syncline proper.

# 2.2 Impacts on Known and Potential Archaeology

Preliminary investigations in the form of an archaeological submission as part of the route's EIA identified five sites of archaeological interest on the route and concluded that the scheme would impact on two sites, namely that of the Youghal Brickworks (AR 1; RMP CO067:011/01) and the bridge at Knockattigan/Ballymacask (AR 31). As a result, preliminary investigations were carried out in these locations and recommendations made (see Lane 2000a and 2000b respectively). Where relevant, these recommendations were adhered to. An investigation of the Tourig River was also carried out (Boland 2000) which identified several post-medieval maritime features that may be potentially impacted upon.

No visible surface traces of any other archaeological features that would be directly impacted were noted at that stage. The archaeological landscape immediately surrounding the scheme is sparse with only five sites identified within the study area of the EIA. These include the levelled circular enclosure in Ballyvergan West (CO067:053), previously-unrecorded earthworks at Banshy, the bridge at Knockattigan/Ballymacask, the pottery works and country house at Muckridge (CO067:011/01–02) and the brickworks at Muckridge (CO067:012).

In its more general setting within an approximate 5km radius of the route, up to eighty entries (see Appendix 2) have been made in the Archaeological Inventories (Power 1994; Moore 1999) for this area where the counties of Cork and Waterford meet. The monuments range in type and date from probable Bronze Age standing stones and *fulachta fiadh* to Early Christian period ringforts

and earthworks and onto the late medieval town of Youghal with its abbeys and tower houses. Four distinct layers of archaeological landscapes can be recognised:

- 1. The remains of a Bronze Age landscape with monuments that include the standing stone approximately 4.5km to the north-northeast at Shanacoole across the Blackwater estuary (Waterford 257); as well as *fulachta fiadh* including the site of two levelled *fulachta fiadh* 7km to north-northwest at Ballynatray Demesne (Waterford 302), a *fulacht fiadh* at Killea (Waterford 369; 3.5km), and two further levelled *fulachta fiadh* at Cornaveigh (Cork 3957 & 3958; 4.5km). Part of the route of the scheme is intervisible with the hill on which are the remains of a possible Late Bronze Age/Iron Age hilltop enclosure at Rath, some 6km to the northwest (Cork 4251).
- 2. A distinct pattern of Early Christian settlement landscape is evidenced by the proximity to the scheme of ringforts such as Castlemiles (Waterford 586, 3km northwest) and Ballymacask (Cork 4720, 200m west of Ballynacarriga); the levelled circular enclosure in Ballyvergan West (Cork 5434) is also within 200m; the holy wells Knocknacally (Cork 5228, 1km southeast) and Seafield (Cork 5236, 1.7km southeast); and the souterrains at Ballyknock (Waterford 1242, 2.5km north) and Cornaveigh (Cork 5050, 4.6km northwest) are also part of this.
- 3. The transition into the late medieval period brings a layer of landscape dominated by Anglo-Norman and later medieval architecture such as the town of Youghal (Cork 5833, 3km west) or the tower houses such as Templemichael (Waterford 1621, 4km north) and Cornaveigh (Cork 5576, 3.3km northwest).
- 4. A post-medieval landscape dominated by vernacular construction is the most recent layer. Industrial structures such as limekilns (Cork 6126, 5km west), pottery works (Cork 6298, on route at Muckridge), brickworks (Cork 6300, on route at Muckridge) and mills (Cork 6287, tuck mill 3km north at Kilnatoora) appear along with domestic buildings such as single-storey vernacular houses, e.g. Greencloyne (Cork 6232, 1.5km west).

All of these landscapes had the potential to be added to as a result of this scheme.

Townland names represent a useful resource in helping to put archaeological sites into an historical context. With this in mind, Joyce's *Irish Names of Place* (1913) was consulted, providing a preliminary guide to the name origins.

# 3. METHODOLOGY

A programme of advanced testing and monitoring of subsequent topsoil removal and groundworks was carried out to identify the potential for previously unknown archaeological features on the N25 Youghal Bypass scheme. Once an area of archaeological potential was uncovered, it was examined to ascertain whether further investigation was needed. The AR's were cordoned off and advice subsequently sought from *Dúchas*. Once the licence for resolution was granted, a team was put in place to resolve the AR's. The team consisted of two archaeologists, one supervisor, one assistant and worked under the supervision of the director. Resolution began at the southern end of the scheme and worked systematically to northern end.

All features were investigated as to their archaeological importance. Those excavated were recorded using a single-context method with drawn, written and photographic records. The standing buildings were surveyed in detail prior to their demolition with plan and elevation drawings, photographs and written descriptions.

The bridge at Knockattigan/Ballymacask was not removed during construction. The embankment was constructed up to the north and south sides. A survey of the extents of the structure was carried out to augment a previous investigation (Lane 2000b).

# 4. FINDINGS

The findings as related to the site register (Appendix 3) can be divided into three sections. The headings of each site refer to the feature by site number, site type, townland and chainage. This information is then followed by detailed descriptions of the site. Section A contains the results of the excavation of the small isolated archaeological sites that were resolved under this blanket licence. Section B details the recording of six post-medieval industrial, service and vernacular structures that were impacted on during the course of construction. Section C deals with the areas that were further investigated under this licence but which proved to be evidence of modern agricultural activity and of no archaeological significance.

# 4.1 Section A, Isolated Archaeological Features

Site Number: AR 4

Site Type: Pit

Townland: Muckridge

Chainage: 4500

This site was located in the centre of the road take at chainage 4500 in close proximity to the excavation of a semicircular structure (01E0429). The cut, C25, was oval in plan and contained two fills, C26 and C24. The pit measured 1.70 m in width from north to south by 1.30 m in width from east to west by 0.25 m in depth. The break of slope at the top of the cut was gradual with sloping sides in the east and north and vertical sides in the west and south. The break of slope at the base of the cut was gradual leading into a sloping base which sloped downwards in a south to north direction. C26, the secondary fill consisted of moderately-compact mid-brown sandy silt. It contained moderate medium pebbles and stones and occasional charcoal flecking. C24, the primary fill, consisted of loosely-compact whitish-yellow clay containing occasional small pebbles and charcoal flecking.

The pit was found in isolation and yielded a struck flint find situated on the interface between C24 and C26. The function and date of the pit is as yet unknown as the feature did not yield enough evidence to give any definite indications.

Site Number: AR 10

Site Type: Linear feature Townland: Ballynacarriga

Chainage: 4200

This linear became part the site of excavation at Ballynacarriga 2. The linear was excavated and recorded accordingly under licence number 01E0567. An enclosing ditch was truncated by the linear (see report on 01E0567 for more details).

Site Number: AR 11

Site Type: Two possible pits
Townland: Ballynacarriga

Chainage: 4180

These pits became part the site of excavation at Ballynacarriga 2. The two pits were excavated and recorded accordingly under licence number 01E0567 (see report on 01E0567 for more details).

Site Number: AR 19

Site Type: Pit

Townland: Propogue

Chainage: 3070

This was the site of a pit located in the centre of the road take at chainage 3070 and at a distance of 17.5 m west of eastern fence-line. The site was excavated and recorded accordingly. Various numbers were allocated to each context identified.

The cut of the pit, C19, was subcircular in shape. It measured 0.68m north to south by 0.65m east to west by 0.10 m in depth. The break of slope at the top of the cut was sharp with its sides being vertical. The break of slope at the base of the cut was also sharp with the actual base of the feature being flat. There was a large flat stone at the centre of the base. It contained three fills. The tertiary deposit, C16, was a reasonably-compact grey to black sandy silt. It contained frequent flecks of charcoal, frequent small angular stones with occasional larger stones and occasional burnt sandstone. The deposit measured 0.2m north to south by 0.33m east to west. The secondary fill, C17, was loosely-compact light-brown silty sand. It contained occasional charcoal flecking, and moderate amounts of small stones. This deposit contained the partial base of a prehistoric pottery vessel. The deposit measured 0.68m north to south by 0.65m east to west by 0.1m in depth. This deposit was banked up against C18, the primary deposit. C18 was a loosely-compact, mid-brown silty sand. It contained frequent charcoal, occasional burnt sandstone, small subangular stones and one large stone which was flat, subrectangular and located at the centre of the pit. This deposit measured 0.61m north to south by 0.32m east to west.

The evidence would suggest that this isolated shallow pit could have been as a ritual deposition site. The pit can be provisionally dated to prehistory based on the presence of part of a prehistoric base sherds found within it.

Site Number: AR 23

Site Type: Two pits, a deposit of material

Townland: Ballyvergan West

Chainage: 2120

This was the site of two pits, cut **C4** and cut **C6**, and a deposit of material **C7** located in the centre of the road take at chainage 2120.

The cut, **C4**, was subcircular in plan and contained three fills: C8, C9 and C10. It had no discernible corners and measured 1.3m north to south by 1m east to west by 0.31m in depth. The break of slope at the top of the cut was gradual with the sides being vertical. The break of slope at the base was gradual leading into a rounded oxidised base.

C8 was the tertiary fill of this pit. It consisted of moderately compact dark-brown sandy silt that contained moderate amounts of charcoal and small subangular stones. The deposit measured 1.2m north to south by 1m east to west by 0.02m in depth. C9 was the secondary fill and consisted of loosely-compact dark-red/brown, silty clay. It contained moderate subangular stones, occasional sandstone and moderate clay stone and quartz. The deposit measured 1.3m north to south by 0.98m east to west by 0.03m in depth. C10 formed the primary deposit of the feature and appeared to be a charcoal-rich lens of material. It consisted of moderately compact dark-brown charcoal-rich silt. It contained occasional small angular stones and measured 1.2m north to south by 0.95m east to west. An occasional amount of burnt bone was present.

The cut, **C6**, was subcircular in shape and contained the fill C5. It had no discernible corners and measured 0.67m north to south by 0.62m east to west. The cut had a sharp break of slope at the top in the southwest, south and southeast with a gradual break of slope in the north and northwest. The sides were vertical in the southeast, south and southwest and gradually-sloped in the north and northwest. The west and east sides had a sharp break of slope at the base with the north and south sides having a gradual break of slope. The base itself was irregular and showed evidence of having been subjected to some process of oxidisation. It also contained subangular stones.

C5 was the fill of this feature. It consisted of compact light-brown sandy silt. It contained frequent charcoal and occasional stones. The deposit measured 0.67m north to south by 0.62m east to west.

C7 consisted of moderately compact greyish/mid-brown, sandy silt. It contained moderate charcoal and frequent small stones and occasional larger stones. The deposit measured 0.60m north to south by 0.40m east to west. It showed signs of oxidisation.

Both pits C4 and C6 had oxidised bases, indicating *in situ* burning or exposure to constant temperatures. Two hypothesises can be suggested: (a) that the pits are simply open air hearths or cooking pits and the deposit is an ashy rake-out; (b) the larger of the pits is a possible corn dryer and the smaller pit the heat source with the deposit being rake-out.

Site Number: AR 24

Site Type: Pit

Townland: Ballyvergan West

Chainage: 2105

This was the site of a pit located in the centre of the road take at chainage 2105. The cut of the pit, C3, was circular in shape and contained two fills, C1 and C2. There were no discernible corners. The pit measured 0.45m in length by 0.41m in width by 0.21m in depth. The break of slope at the top of the cut was steep with vertical sides leading into a gradual break of slope at the base. The secondary fill, C1, consisted of loosely-compact blackish silty clay. It contained occasional small irregularly-shaped fire-cracked stones and flecks of charcoal. The deposit measured 0.41m in length by 0.38m in width by 0.09m in depth. This fill lay on top of C2 which was the primary fill. C2 consisted of loosely-compact dark black silty clay. It contained occasional pebbles and charcoal flecking. It measured 0.45m in length by 0.40m in depth by 0.2m in depth.

As this feature yielded no finds of any kind, dating of the feature will have to be done based on the charcoal samples extracted from it. The presence of fire-shattered stone may indicate some industrial purpose, excepting the lack of finds to support this.

Site Number: AR 25

Site Type: Hearth

Townland: Ballyvergan West

Chainage: 1530

This was the site of a hearth feature located at the centre of the road take at chainage 1530. The cut, C22, was suboval in shape and contained three fills, C1, C2 and C3. It had no discernible corners and measured 1.2m north to south by 0.96m east to west by 0.18m in depth. There was a gradual top break of slope in the north, west and south with a sharp break of slope in the west.

The sides sloped gently on the north, west and south and were uneven on the east. The break of slope at the base of the cut was sharp in the east, gradual in the north and east and imperceptible in the south. The base itself was smooth and even. The cut was aligned north—south.

The tertiary fill, C1, consisted of moderately-compact dark-brown silty sand. It contained moderate charcoal flecks and frequent small angular stones. It measured 0.85m north to south by 0.8m east to west by 0.05m in depth. C2, the secondary fill, consisted of loosely-compact blackish sandy silt. It contained frequent charcoal and stones. It measured 0.80m north to south by 0.77m east to west by 0.07m in depth. There was scorched clay below and banked up against the southern and western sides. The primary fill, C3, consisted of fairly-compact light-beige sandy silt. It contained occasional charcoal and occasional medium angular stones and measured 0.25m north to south by 0.3m east to west by 0.13m in depth. This formed a small ashen deposit which was banked up against the southern side of the hearth.

This feature could be interpreted as an isolated firespot or hearth. There were no finds associated with this feature.

Site Number: AR 28

Site Type: Machine-truncated Burnt Deposit

Townland: Clashadunna East

Chainage: 480

Archaeological resolution of this location was carried out in immediate response to the excavation of a trench without prior notice to the resident archaeologist. This area had been uncovered during advanced testing of the Old Killeagh Road realignment and cordoned off. However, due to resource and time constraints its resolution was not prioritised. The temporary cordon deteriorated and the site was accidentally truncated during the course of ESB pipe laying, an action which the resident archaeologist was retrospectively made aware of. Assessment of the remaining archaeology was duly recorded as a rescue operation under the existing blanket licence number 01E543. A separate excavation licence application had been prepared for AR28 but was not active at the time.

The area most affected by the damage was visible at C23 (a), a 0.35m deep by 1.1m wide pit which was partially truncated by the machine. The remainder, however, was visible in section. The area itself consisted of a burnt spread which was revealed during topsoil stripping/testing. Initially, the spread covered an area of  $2 \times 2.3m$  but further investigation revealed that the full extent of the spread measured 1.4m. A small test trench was then cut through this and continued for 1.3m north of the contractor's trench.

There were two discernible cuts into the subsoil. One of these, C23 (a), being a pit measuring 1.10m in a north to south direction by 0.35m to 0.40m in depth. Its east to west dimensions, however, could not be ascertained as partial truncation by a machine had occurred prior to excavation. It contained loose grey-black clayey silt with frequent charcoal and burnt sandstone inclusions. This was located north of the contractor's trench and was visible in its south-facing section.

C23 (b) was the northern extent of the test trench through the burnt spread, the main concentration of which radiated southwards from the southern extent of the cut of the culvert C23(c). It contained a dark-brown sandy-silt deposit rich in charcoal and burnt sandstone. The extent of this part of the spread could not be fully established due to truncation.

C23 (c) was the continuation of the test trench through the southern extent of the burnt spread and contained the main concentration of burning in the area. A shallow cut was visible in the west-facing section of the test trench. This was filled with material similar to that in C23 (b) and had approximate dimensions of 0.40m north to south by 1.30m east to west.

Investigation of the remaining archaeological deposits at AR28 suggests that this was not a *fulacht fiadh* as originally suspected but rather an area containing a small circular concentration of burning with an associated silty charcoal spread surrounding it. The extent of damage to the archaeological deposits by the contractors' trench was limited to the partial truncation of C23 (a), (b), and (c) as described above. No finds were retrieved from the site.

Site Number: AR 30

Site Type: Pit

Townland: Clashadunna East

Chainage: 230

This was the site of an isolated pit located in the northern edge of the road take at chainage 230 of the Old Killeagh Road realignment. The cut, **C21**, was suboval in shape and contained one fill, **C20**. It contained no discernible corners and measured 0.6m north to south by 0.42m east to west by 0.09m in depth. The pit had a sharp break of slope at the stop of the east and southeast sides, a gradual break of slope at the top of the north and west sides, and an imperceptible break of slope on the northeast sides. The sides themselves were gradually sloping and uneven leading into a gradual break of slope at the base. The base was uneven and undulating. The fill, **C20**, measuring 0.5m north to south by 0.42m east to west by 0.09m in depth, consisted of moderately-compact brown/black fine sandy silt. It contained frequent charcoal and charcoal lumps (which were more prevalent nearer the base), frequent burnt stone and broken angular chippings.

This isolated feature can be interpreted as an isolated roasting pit for some unknown industrial function. It yielded no finds and, therefore, dating will have to be done based on charcoal samples.

# 4.2 Section B, Structures and Standing Buildings

Site Number: AR 1

Site Type: Brickworks Feature

Townland: Muckridge

Chainage: 5150

Monitoring of topsoil removal in the field marked as 'Old Brick Field' on the OS maps revealed an area of brick features in a fill area at chainage 5150 of the main line of the road. The area had extents of 21.8m north—south by 23m east—west and was located to the southeast of Brick Works Quay (see Boland 2000). Features within this area included a brick floor area, possibly to be interpreted as the remains of drying sheds or a drying plateau, an area of heavy disturbance to the immediate south of the brick floor area, and brick-lined covered drains that were located within the area of heavy disturbance. Advanced testing of the area using test pits (see report on 01E024) showed that most of the area known as the 'brick field' was littered with wasters and seconds dumps from brick manufacture in the vicinity. This was to dispose of waste brick and reclaim part of the mudflats as useable land.

#### Brick Paved Area

An area of brick paving (6.8m north–south by 23m east–west) was exposed. The brick was carefully laid and divided into sections by six linear features each approximately 2.5m apart and orientated in a northeast to southwest direction. Each linear measured approximately 0.2m in width and was a mortar mix of lime, brick dust and pebbles. The length of the linears was harder to discern as they appeared to continue to the north into the area of heavy disturbance.

The bricks were laid down, stretcher on the flat, in rough columns with a small gap of approximately 2cm every three columns. A rough lean-mix style mortar and brick dust matrix bonded the bricks. After every ninth column of bricks, there was a dividing linear feature. The northern edge of paved area was marked by a row of bricks set lengthways at a right angle, header to stretcher. The bricks used for this paving were a mix of sizes and conditions though the average brick had dimensions of 200 x 100 x 600mm. The fabric was generally the same though colour varied with degrees of firing. All the bricks appear to be nineteenth-century in date. Some bricks

with the stamp of the Youghal Brickworks Company were noted near the paved area though their provenance is doubtful.

#### Disturbed Area

A low squared ridge (1m north to south, 23m east to west) of poorly bonded masonry ran between the paved area and the disturbed area and may have been the wide foundation course to an east—west running wall. A heavily-disturbed area (15m north—south by 23m east—west) lay to the south of the brick floor area. Occasional patches of laid brick were interspersed across an area of brick dust and occasional brick features of no discernable pattern. It was not possible to readily distinguish between oxidisation as a result of firing and the compact brick dust. Here, there was no evidence of a brick floor. There were deposits of loose brick and roof tile within the area but there was no discernible pattern to their distribution. This area may originally have been paved as the linear features appear to continue through it.

### Brick Built Drain

A brick built drain measuring 0.5m north—south by 22.5m east—west runs across the south of the site in a southeast to northwest direction. The walls are of well-fired mid-nineteenth-century local brick. The drain was roofed by now broken curving earthenware tiles. The drain ran outside the southern edge of the disturbed area and on into the estuary to the northwest, terminating in a sluice gate into the river.

#### Interpretation

The town of Youghal was producing bricks from the seventeenth-century onwards though it appears that brick was not a new commodity to Youghal with the murage charter of 1358 rating brick as a taxable interest (Thomas 1992, 45). It is most likely that the taxable bricks referred to in the murage charters for Youghal are actually bricks that were imported into the town as ballast for the trading ships which docked in Youghal and that were subsequently sold to local people. The clay material beneath the mudflats between the Blackwater and Tourig Rivers to the north of the town provided the raw material for a thriving brick and pottery trade in the eighteenth and nineteenth centuries (Boland 2000). Several potteries and brick factories were established in the area to exploit this resource, including the complex known as the Youghal Brickworks (RMP CO067:012) and the pottery works at Heathfield Towers (RMP CO067:007/02) to the south.

During the period between 1808 and 1815, production of brick became large-scale with the introduction of government brickworks into the town (Breslin 1991). These brickworks provided the building material necessary to build the Martello towers and barracks that can still be seen dotted around the southern coast today. In 1895, the Youghal Brick Company was set up and became a successful large-scale brickworks which operated until its closure in 1929 (St. Ledger 1995, 32). In his pre-development assessment of the potential impact of the bypass scheme on the area bounding the Tourig River, Boland (2000) tentatively identified from map evidence the location of an area estimated to be 20 x 20m that may be the site of a brickworks established by the British Army in the early nineteenth century. The land on which it is sited was marked as an 'Ordnance Field' on the first-edition OS map.

In order to interpret the findings at AR1, a list of the stages involved in the making of bricks is useful. There are five recognisable steps (Pava and Bolton 2000, 187–98) involved in the making of bricks: (a) pumping of clay pits and depositing of the clay on specially-prepared piece of ground; (b) tempering of brick with material such as ash, cinders, organic materials such as straw; (c) moulding by hand or machine; (d) drying involving an initial laying out of the brick prior to firing when the clay dries and the brick shrinks, allowing the brick to be safely handled and fired without failure; (e) firing in either an open air clamp or a kiln.

The features uncovered at AR1 suggest that it relates to the latter stages of drying and firing. The brick paved area is possibly where the moulded bricks were placed to dry out before undergoing the firing process. The lack of any burnt material makes it is less conceivable that this area may have been the floor of a firing kiln. The fact also that the floor area was roughly rectangular in layout would also be more indicative of a drying station or plateau rather than a kiln floor. There are various methods involved in the drying-out process of historical brick (Pava and Bolton 2000, 191), all of which involve the circulation of air around the brick whilst under a protective covering. The 'hack' drying method was one where long rows of green bricks were stacked to a height of about 1m and allowed to dry out for a period of time before the final firing stage. This method could be carried out in the open air with the hack being covered temporarily with material such as straw or kept in sheds. The permanent nature of the construction of the brick paved area and the regular linear concrete features would suggest a shed structure for protecting the bricks during the drying process.

The low foundation ridge dividing the paved and disturbed areas may be a structural wall associated with the drying sheds. It is agreed (Rynne 1999; Pava and Bolton 2000) that hack-drying and clamp-firing are the two processes most likely to occur together. It is possible that the disturbed area was the site of clamp kilns. Clamp kilns were usually constructed in the open air and had no permanent kiln structure. Archaeologically, they leave a small mound of brick debris

as an archaeological trace (Pava and Bolton 2000, 179). In the area concerned, there were numerous deposits of broken bricks, though it yielded no finds or much archaeological evidence to determine its function. Clamp-firing was known of in Youghal (Wilkinson 1845, cited in Pava and Bolton 2000, 178). According to Rynne (1999, 34), the clamp site would have been chosen very carefully in order to facilitate access to water transport and was always well drained. This area was located along the Tourig River close to the site of Brickworks Quay and contained a well-constructed linear, possibly a drain, running right across the area and out into the estuary.

Whilst the area could be interpreted as an area of clamp kilns, the presence of the linear features running through the disturbed area and the inability to identify *in situ* burning from clamps, it is suggested that the disturbed area was part of the drying sheds. The brick-built drain could be interpreted as a purpose-built drain to facilitate the brick-making process. However, there is an alternative interpretation that could account for the presence of such a well-built feature. Often associated with brickworks are underground channels which carry the steam and smoke away from the main kiln areas and out under the drying plateaus (Anthony Breslin, *pers comm*). Without conclusive evidence, however, it is difficult to ascertain which interpretation, if either, is correct.

In conclusion, the evidence for probable drying sheds and other associated features in the brickworks field at AR1 suggest that these features may be the remains of the brick production activity that predates the operations of the Youghal Brickworks Company on the site. It is uncertain as to whether it is the brickworks run by the British Army during the early nineteenth century or the remains of another brick production operation predating the Youghal Brickworks. All of these features have been preserved *in situ* beneath the road embankment.

Site Number: AR 3

Site Type: Farm Labourer's Cottage

Townland: Muckridge

Chainage: 4600

A modernised single-storey vernacular house was located in the middle of the road take on the crest of the hill in Muckridge townland. As this part of the route is part of a major cut, the building was recorded prior to demolition. Until recently, the building was used as accommodation for farm labourers. The house is a three-bay single-storey stone-built structure with modern additions to the north and south. The external elevations are plastered finished and the roof is A-pitched with gables to north and south topped with corrugated iron. The chimneypiece is positioned off centre of the long axis in the northernmost bay of the house. The

long axis of the house was orientated in a north–south direction. The house and additions had external dimensions of 15.3 x 5.3m and stood to a maximum gable height at the apex of the gable of 3.85m.. The modern entrance was via a door (height 2m, width 0.85m) located in the gable of the southern extension. This leads to a door of similar dimensions set in the original south gable that may have been the original entrance.

The extension to the north was a flat-roofed garage built on the remains of a former outhouse. The extension had internal dimensions of 2.5m north to south, 5.1m east to west and stood to a maximum height of 1.8m. A date of 1970 was inscribed in part of the internal cement rendering. The southern extension had internal dimensions of 2.5m north to south, 4.5m east to west. It was roofed over by the corrugated roof with the south wall gabled to match that of the original house. Detailed drawings of this building are contained in an appendix at the end of this document.

The building was internally divided into four bays, the southernmost of which was a modern extension. Moving from north the south, Room A was a bedroom lit by windows in the east and west walls and was bounded on the south by a wall containing an island-stack chimneybreast and rebuilt brick fireplace. To the west of the fireplace was a door giving access to Room B, the living area. Room B was separated from Room C by a modern stud partition. Room C housed a kitchen in the west and a bathroom in the east. A centrally-placed door in the south wall gave access to Room D, the modern extension. Room D was dominated by the large aluminium windows in the east and west walls.

The structure was built of rubble sandstone and limestone that varied in size from 0.4 x 0.35m to 0.2 x 0.05m. It was bonded with an off-white lime mortar with small aggregate inclusions of 4–6mm size. This building is part of the post-medieval tradition of small single-storey residential houses for labourers working on the estates of landlords that became commonplace in rural Ireland in the eighteenth and nineteenth centuries. These buildings were influenced the lobby entrance/central hearth style of the more traditional vernacular architecture of rural areas (Aalen *et al* 1997, 161–63). They were stone-built cottages with straight gables and slated roofs. The building at Muckridge was altered as recently as 1970 though the form of the original layout and extents of the structure can be deduced. The original structure may have only been two bays with the bedroom, Room A, remaining intact and Rooms B and C being the one large main room of the house. The northernmost window in Room B in the west elevation may be the location for an earlier doorway entrance. The use of corrugate iron in the building's refurbishment could be an economic expediency on the part of the landlord or merely a replacement of original thatch roofing. The building may have been part of the estate buildings associated with the Muckridge House estate.

Site Number: AR 27

Site Type: Timber-built Cottage

Townland: Ballyvergan West

Chainage: 700

This building was a single-storey timber-built structure, rectangular in plan with a protruding porch in the south-facing front and an extension to the rear. It was located at the western end of the bypass scheme where the new road was to tie in with the existing N25 route. It was in an area of fill and was, therefore, recorded prior to demolition.

One-storey high, the house was painted post-box red. It had a black border skirting around the base of the house and the front façade had one window and a set of French doors located either side of the protruding porch painted white. The front façade of the house faced southwest. The main entrance door was modern in style and faced north. The house was built on a cement and gravel platform (0.06m of which was visible) which in turn was surrounded by a 1m wide concrete pathway which extended around the perimeter of the house.

The house itself was built of horizontal timber planks 0.13m wide which in turn were cladded with the same in vertical fashion. The general plan of the house consisted of the original rectangular-shaped house with a pitched roof and the lean-to extension (2.8m wide) at the rear which extended the full length of the original house. The pitch roof was felt and tar while the sloping extension roof was made from corrugated metal. The two concrete plastered chimneystacks serviced the main sitting room and the kitchen.

The asbestos-cladded porch protruded from the front façade by approx 1.00m and on either side a corrugated section of sheet metal extended for the same along the length of the house forming a covered open porch extension. Four timber-squared posts with Y-shaped terminals supported this where they meet the metal roof. A 0.15m decorative V-shaped wooden fringe extended along the eave of the metal roof and was painted white.

The pair of windows on the front façade was timber-framed, divided into six panes 0.3 x 0.35m in size. The French doors were similarly divided into six panes measuring 0.49 x 0.36m in size with equivalent-sized wooden panels at the base of the doors.

# Room 1: Front of house

The southeastern room of the house was 3.25m east to west by 6m north to south. The internal walls consisted of wooden panelling with one wooden crossbeam extending on the western wall

aligned at a right angle to two wooden beams extending from the floor to the ceiling. The ceiling was built of wooden beams. One window and a set of French doors faced onto the front garden.

# Room 2: Central living room (between Rooms 1 and 3).

Directly accessed from the main entrance porch, this room measured 6m north—south by 5.3m east—west and contained a brick-built fireplace and chimneybreast on its west wall. Three doorways led off this room: doorways to Rooms 1 and 3 situated on the left and right were perpendicular to the front elevation wall. A doorway at the northwest of the north wall provided access to the rear of the house. The rather low ceiling was timber clad and painted white. There was a window insert on the front of house's south elevation wall.

# Room 3: Front of house (left of Room 2)

This room measured 3.25m east to west by 2.95m north to south. A set of French doors open out from the front of house elevation. There were no windows

#### Room 4:

Directly adjacent to the north of Room 3 with identical dimensions, the entrance was through a doorway on the eastern wall of the room with a window on the western elevation.

#### *Room 5:*

Accessed from the north doorway leading off Room 2, this narrow corridor, which extended for 3.25m westwards, terminated with the toilet over which there was a small window insert.

# Room 6:

Located directly adjacent to the north of Room 5, this room measured 1.9m north to south by 2.75m east to west. It appears to have been the bathroom/shower room due to the presence of plumbing/pipes in the southwest corner. A blocked doorway was present in the north wall with the door missing. There were no window opes.

# Room 7:

This room measured 1.9m north to south by 1.4m east to west. The room was shelved all round. A small window was situated on the north wall.

### Room 8:

This room functioned as the kitchen and formed part of the lean-to extension at the back of the house. The outside facing of the roof comprised of sloping corrugated metal sheeting with the internal ceiling panelled with horizontal timbers 0.11m wide. The doorway built into the west wall was 0.6m thick comprising of solid timber panelled with timber planking. The second chimneybreast was situated against the south wall and most likely serviced a stove at one time; the recess into the chimneybreast was 0.5m deep. Six wooden storage presses were mounted on the wall adjacent to the chimneybreast. A timber-panelled back door with a small window frame (0.37 x 0.52m) opened out to the rear of the house and had a latch and bolt.

# Room 9:

This room was adjacent to the east of the kitchen and formed part of the rear extension. It was void of any interior decoration and was more shed-like in appearance.

# Adjacent Shed

To the right of the house (looking at the front façade), there was a pitched-roof timber-built shed which stood at approximately at the same height as the house itself. Constructed of timber planks 0.14m wide and painted a grey-blue, there were two stone bollards *in situ* at either side of the large double-door entrance. The circular bollards stood 0.34m in height and were 0.2m in diameter. Access into the shed was restricted and it could not be established with certainty if the floor was either constructed of large stone flags or cement-plastered and scored by a linear pattern to suggest imitation stone flags. Part of the wooden interior of the shed appeared to have been panelled with asbestos sheets.

### Wendy House

This was a small corrugated pitched-roof sheet-metal structure with a small window and door painted lime green. The internal floor was concrete and the walls and roof were cladded with timber planks 0.25m wide.

# Interpretation

This timber-built house and its associated structures are recorded first on the third-edition OS map of 1932. It would appear to be a simple DIY construction, perhaps of a beach-hut type and used on an occasional basis. It was structurally similar to the timber-built structures in the

'MacCurtinstown' area of Youghal (a local name for the area to the east of the N25 between Dysert and Ballyclamasy) that were occupied as holiday homes during the summer season.

Site Number: AR31 Site Type: Bridge

Townland: Knockattigan/Ballymacask

Chainage: 3960

This bridge crosses the steep valley and stream that forms the boundary between Knockattigan and Ballymacask townlands. The new bypass route will truncate this road at the location of the bridge. An earlier survey of the single-span bridge was carried out at pre-development stage (Lane 2000b). At the time of this work, the final route had not been selected and the impacts were not determinable. It was recommended that further survey be undertaken if necessary. It subsequently developed that the route and construction methodology will see the creation of embankments on either side of the bridge, leading to it being eventually covered up. Therefore, further investigation of the bridge was carried out concentrating on the westward approach to the bridge as this was the area to be buried.

## Description

The bridge is a single span semicircular stilted structure with stone-faced approaches that rise from the east and west into the arch, giving the structure an overall length of approximately 105m and an average width between the parapet of 7m. The structure is topped with a parapet wall and structure stands to an overall height of 7m. The western arm is approximately 60m long west to east and the bridge proper is 6.5m. The remainder is made up of the lead into it from the east. The extended survey concentrated on the western lead into the bridge and was intended as a supplement to the original survey (Lane 2000b). Topographical drawings of the westward arm of the approach are contained in an appendix at the end of this document.

The north elevation is heavily overgrown with ivy, leaving only partially uncovered areas. This elevation was constructed incorporating a batter at the base of the retaining wall. The batter begins 1.70m from the archway and is present on both the east and west run-ins. The south elevation is also heavily overgrown with ivy, leaving only partially uncovered areas. This elevation appears to have no batter and is vertical in nature. In profile, the western approach thickens as it goes away from the bridge as a strengthening measure.

The retaining wall is constructed of roughly-hewn sandstone and occasional limestone blocks of various sizes built to courses. In some areas, it appears that there are deliberate courses of tabular stones inserted between the roughly-hewn rubble stone courses. It is conceivable that these stones acted as a levelling and strengthening mechanism for the various courses. On the south elevation, the construction appears to be slightly different in that the wall is constructed not of roughly-hewn rubble stone but of tabular stones ranging in size, the average of which is 0.4 x 0.15m. It is assumed that the masonry present is a retaining wall to an in-filled embankment that forms the run-in to the bridge and it is likely that there are some form of tie-ins across the profile of the embankment. The majority of the joints between the courses on both elevations of the bridge are large and open. This is possibly due to weathering or the leaching out of the mortar over time. In the areas around the archway, it is evident that the spaces between the courses were repointed in at some stage, possibly contemporary with the consolidation work carried out on the archway. The original mortar can still be seen in various locations along the retaining wall. It is a greyish-white lime-based mortar containing approximately 20% small pebble (0.002 x 0.004m) aggregate.

# Parapet Wall

A parapet wall runs the entire length of the structure on both sides, standing to an average height of 1.50m above the level of the existing road and measures 0.5m thick. The wall is constructed in the same fashion as the retaining wall beneath and does not appear to have undergone any modification or repair. The parapet is capped with soldier course of stones measuring on average  $0.25 \times 0.12$ m.

### Archway

The intrados of the bridge is constructed of corbelled rubble-stone voussoirs and appears to have been consolidated or refurbished in the recent past. This is evident in the way the original stonework has been sprayed over with concrete. At the base of the interior walls of the archway, there is a concrete irregular shelf on either side.

The arch itself is a semicircular stilted-arch (for typology see O'Keeffe and Simington 1991, 340), which has a span of 3m and a height of 5.05m. There is no evidence of a keystone. The arch on both the north and the south elevations is constructed of thirty-one roughly-hewn or roughly squared-off voussoirs each measuring approximately 0.4 x 0.2m and arranged in a vertical manner. There are no signs of there ever having been purpose-built springing stones but it is possible to ascertain that the arch begins at a height of 3m above the existing ground level on both sides (at time of survey).

# Interpretation

The Knockattigan/Ballymacask Bridge is of the stone-built single-arch type. In County Cork, the general features of an eighteenth-century bridge are a semicircular arch with rough voussoirs and pointed breakwaters whilst early to mid-nineteenth-century bridges were more ornate with segmental arches, ashlar voussoirs and blunted breakwaters (Power 2000, 605). The Road Act of 1727 ordnanced that all bridges on turnpike and mail coach roads to be a minimum of 12 feet wide (O'Keeffe and Simington 1991, 34). As a result of this, the width of roads crossing over stone bridges in Ireland measure on average 18ft by the 1770s. Prior to this date, Irish stone bridges were narrower in size. The bridge in this survey measures 7.02m (23ft 24in) wide, excluding the width of the parapet walls. This, coupled with typology outlined above, would suggest that the Knockattigan to Ballymacask Bridge was constructed post-1770s. It is present on the first-edition Ordnance Survey map of 1842.

Site Number: AR 32

Site Type: Stone Bridge Cottage Complex

Townland: Rincrew

Chainage: 5960

The Stone Bridge Cottage complex is located at the northern end of the bypass scheme where the route will tie in with the existing N25 in the townland of Rincrew, County Waterford. At the time of survey, the final design for this tie-in was not available. Therefore, it was decided to record this complex in advance of any decision to demolish it. The complex consists of three standing buildings and three pieces of waterfront furniture. The structures are contained in a roughly triangular-shaped property that is bounded by the existing N25 to the north and west with the southern boundary formed by the bank of the Tourig River.

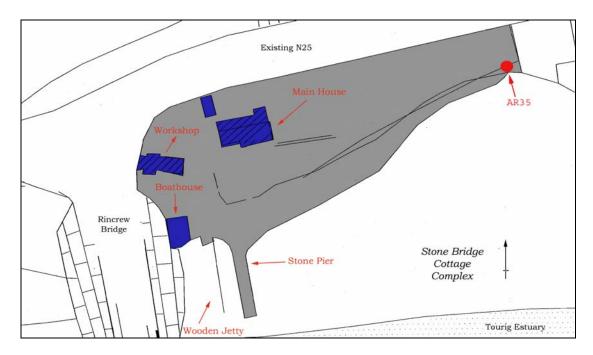


Figure 1, Layout of Stone Bridge Cottage complex

# Main House (Cottage)

Stone Bridge Cottage is a much-altered stone-built vernacular building. The original plan of this cottage was based on the direct entrance plan. This was a vernacular style of building that was in use from the late eighteenth/early nineteenth century and which continued in usage up until the early twentieth century (Aalen *et al* 1997, 149). Stone Bridge Cottage appears to have been built based upon the late nineteenth to early twentieth century model of the plan. The cottage has two bays in plan with fireplaces in both the gable walls. It is possible that at some stage during its history, Stone Bridge Cottage had three bays. This could be indicated by the presence of stone-built wall remains at the eastern end of the house.

# Southern Elevation (excluding additions)

The southern elevation contains the main entranceway into the cottage. This elevation contains six windows, three at first-floor level and three at groundfloor level. Each window varies in size with only the two windows in the western end of the elevation being similar in size and shape. The stone-built wall is approximately 0.62m in average width. The wall finish consists of whitewashed pebble dashing. Slight battering of this wall was evident just to the east of the doorway.

# *Northern Elevation (excluding additions)*

The northern elevation contains one doorway which is possibly the original back doorway. This elevation contains two windows, both of which are located on the first floor of the building in the eastern end of the elevation. Both windows are rectangular in shape. This wall is stone-built and 0.7m in maximum width. The wall finish consists of whitewashed pebble dashing.

# Eastern Elevation (excluding additions)

The lower half of the eastern elevation as it stands is actually located within the house itself due to the addition of the L-shaped extension built onto this end of the house. The first-floor level wall, however, is external and contains no doorways or windows. This wall is stone built and is 0.4m in average width. The wall finish consists of whitewashed pebble dashing. This wall was originally the external eastern gable wall and contained one chimneystack with two chimney pots.

# Western Elevation (excluding additions)

The stone-built western elevation contains no doorways or windows. The ground floor wall measured approximately 1m in maximum depth whilst the first-floor wall was approximately 0.4m in maximum width. The wall finish consisted of whitewashed pebble dashing. This formed one of the gable walls of the house and contained one chimneystack with no visible chimney pots. In the northern end of this wall, beginning at a height of 1.50m above ground level, the wall is battered.

# Additions

A later phase of construction can be identified in the L-shaped addition that was built onto the house. The part of the addition that abuts the southern elevation of the house functions as a porch area whilst the area incorporated into the eastern gable of the house functions as a kitchen/dining area. A possible third phase of building can be seen in the three outhouses abutting the northern elevation of the cottage.

# Southern Elevation

Roughly 5.85m from the western end of this elevation, a porch was added onto the front of the building. It runs along the length of the wall and down along the eastern elevation. The porch contains one door which is in line with the original now internal main front door. The porch is a glazed wall in this elevation. This wall is constructed of brick and mortar and measured

approximately 0.4m in average width. The wall finish consisted of whitewashed pebble dashing.

#### Eastern Elevation

This wall contained no doorways. It contained four windows, all varying in size and shape, the largest of which measured 1.62m north to south by 1.00m east to west. This wall is constructed using three different construction methods. The southern end of the wall is constructed of brick and mortar whilst an area around the northern end was constructed of stone and mortar with the northernmost ends being constructed entirely of concrete cement block.

### Northern Elevation

This wall has had three different additions attached to it. The first abuts the eastern end of the wall and appears to be a boiler house constructed entirely out of concrete cement blocks. It contains one door and no windows. The second addition is an extension to the living space of the main cottage. It functions as a utility area and its walls are constructed of concrete cement block. It contains three windows of varying size and shape and one doorway. The third building attached to the north elevation of the house is an outhouse which is constructed of concrete cement blocks. This building contains six small windows just below its roof level and has a doorway in its western wall which is almost flush with the western wall of the house itself.

# Outhouse

This addition measured externally 2.95m (L) east—west by 1.55m (W) north—south and was located in the west end of the north wall of the house. It contained six windows, all measuring 0.18m (H) by 0.60m (W) and all located in the top of the north wall below roof level. There was one timber door located in the west wall. The walls were constructed of unplastered concrete block and were 0.12m in depth. The roof was made of corrugated iron.

# Roof

The main part of Stone Bridge Cottage has a pitched slanted roof. The slope of the roof is more gradual towards the southern elevation (see western gable wall plan). The main roofing material used was black tile. The porch area of the L-shaped addition has a sloping roof with the slope running from north to south and guttering all around the base of the roof. The part of the addition

along the eastern elevation shares the same sloping roof as the porch but with a higher pitch to it at this end. The boiler house attached to the northern elevation of the house has a flat tarred roof. The building addition to the living area on the northern side of the house also has a flat tarred roof. The outhouse abutting the northern wall of the house has a sloping corrugated iron roof.

## Internal Arrangements

Internally at ground floor level, the building was divided into eight separate areas consisting of three main rooms and four smaller spaces. Detailed descriptions of these rooms are contained in Appendix 6. The three main rooms occupy the footprint of the original construction and consist of (from west to east) the parlour, main lobby and the kitchen. The four smaller rooms are all additions to the original structure and consist of two utility rooms, a small bedroom and a toilet. Access to the upper storey is via a stairs against the north wall in the main lobby area with a landing at top. The upper storey is divided into three rooms comprising (from west to east) a bedroom, bathroom and bedroom.

# Other Buildings

Two other buildings form part of the Stone Bridge Cottage complex—the workshop/retail area and the boathouse:

# Workshop/Retail

The workshop/retail area is modern single-storey building located to the west of the main house. It is rectangular in shape, built with concrete blocks, and glazed on the east side in a shopfront manner with dimension of 11.5m east to west by 4.5m north to south externally. It is flat roofed, falling to the west and stands to a maximum height of 2.45m. Internally, it is arranged into three rooms, all lit by a window in the south elevation.

# **Boathouse**

The boathouse is a single-storey rectangular structure with external dimensions of 9.5m east to west by 4m north to south standing to a height of 2.4m. It is constructed of concrete blocks and topped with a flat roof of corrugate sheeting, falling east to west. Internally, it is divided into two rooms, both 9m north to south. Room 1 is 3.5m east to west and Room 2 is 3m east to west. Both rooms have glazed opes and Room 2 has a double door in the south wall for boat access.

# Waterfront Furniture

Apart from the boathouse, three further pieces of waterfront architecture form the complex:

# Timber Jetty

A wooden jetty orientated north—south is located to the south of the main house along the bank of the River Tourig. It was constructed by placing ten wooden beams into the riverbed and joining them by pairs of beams arranged in a crisscross fashion. A hundred or so wooden planks were then placed perpendicular to the upright beams to form the platform.

#### Stone-built Pier

A stone pier orientated north—south is located to the south of the main house where it enters the River Tourig. It lies to the east of the wooden jetty and extends from the riverbank to a distance of approximately 21.00m and is 5.00m wide. Iron hoops are cemented into the surface at approximately 3.00m intervals. The east side of the pier was constructed of brick and had concrete-surface flooring. The west side was constructed of stone which possibly formed part of a riverbank revetment.

# Concrete Slipway

A small concrete slipway is positioned to the west of the timber jetty and is inclined from north to south into the tidal river estuary.

# Interpretation

Stone Bridge Cottage appears to be a much-altered stone-built vernacular building that has been latterly used as a riverside cottage with road frontage as a residence and boat facility. It is evident that Stone Bridge Cottage underwent additions over time. These renovations are evident in the presence of a modern porch addition to the southern elevation of the building. The addition is built in an 'L' shape beginning along the southern elevation and finishing along the eastern gable in the form of a split-level room. Along the northern elevation of the house there have been three additions made, all appearing to be contemporary in construction date. None of the building additions to the house were ever integrated into the main house wall which indicates that they are indeed of a different construction phase to the building of the original house.

Stone Bridge Cottage as it stands today is a two-storey building. However, on comparing the plans of the ground floor with the plans for the first floor, it becomes immediately apparent that

the ground floor walls are much thicker and of different construction to those of the first floor. This could indicate that the building was originally a one-storey cottage which was later built onto and extended upwards. This original cottage was two-roomed, gabled at both ends, with chimneypieces in both.

The form and dimensions of the groundfloor plan are similar to those of the cottage at Muckridge (AR3). Both of these buildings are in the vernacular style of the late eighteenth/early nineteenth century which continued in use up until the early twentieth century (Aalen *et al* 1997, 149). The boathouse and workshop/retail building are of twentieth-century design and show the reuse of the building when it operated as the base for the Youghal Harbourmaster.

Site Number: AR 35

Site Type: Limekiln

Townland: Rincrew

Chainage: 6100

During the clearing of very heavy vegetation to the east of the Stone Bridge Cottage complex, a previously-unknown limekiln was uncovered. This feature was not identified by any of the predevelopment investigations. There was a structure marked for this location on the first-edition Ordnance Survey map with a possible exit from the road. However, no record of it exists on any of the later editions. The limekiln was cut into the face of a steep bank that was present in this part of the northern side of the River Tourig. Its location took advantage of the high ground to the north and west that allowed access to the chargehole from above and access to the road. Indeed, there is a clear break in the road at the vicinity of the kiln on the first-edition OS. The land immediately to east falls away dramatically from the limekiln whilst on the south it is flat and on the river edge for waterborne access.

The elevation of the limekiln structure was roughly square, built of random mortar-bonded rubble sandstone with very rough quoins. The upper eastern part of the kiln has been heavily damaged and undermined by tree-root action. The upper portion of the elevation acts as a parapet retaining the chargehole area for the combustion chamber at the top. The elevation was 5.8m in height (including 1.08m of parapet wall) and 5.6m in width. A large drawhole was located in the bottom centre of the elevation and a projecting ledge of 1.3m in height was present on both sides of the drawhole. A well-built stone arch of twenty-five voussoirs formed the drawhole and was 2.7m in width and 2m in height at maximum. The intrados of the drawhole progressively reduced in size as it lowered towards the drawhole with a second arch of fifteen voussoirs spanning three large rectangular sandstone slabs that formed the base of the combustion chamber. The ingoings of the

drawhole were deep. A small stakehole was located between the two arches of the drawhole. There was a distinct change in the masonry at a height of 2.6m with the lower fabric having tighter joints and more deliberate construction. Above this height, the joints are not as tight and appear to have been repointed. This may be a rebuilding of the upper parts of the kiln, though it is more likely to have been as a result of the expansion and contraction of the structure during the lime burning process.

The chargehole on top was contained with in a roughly square area defined by a poorly preserved wall (0.37m wide) at ground level, the condition of which may have been as a result of the firing action of the kiln. The area had an overall dimension of 6.4m east to west by 6.3m north to south. The centrally-located rim of the chargehole/combustion chamber was indicated by a large circular area defined by a ring of burning 3.15m in diameter. The oxidised ring was 0.7m thick. There was no remaining charge in kiln.

To the south of the kiln, a line of small wooden posts with a diameter of approximately 20cm extends out into the river mud. This may have been some form of mooring posts for waterborne craft bringing raw materials and removing finished product.

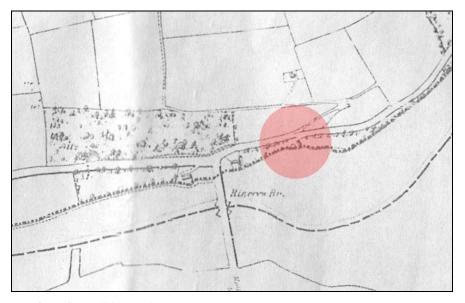


Figure 2, Extract from first-edition Ordnance Survey map, 1842

Limekilns have been used to produce lime for mortar production in Ireland since at least the end of the first millennium AD. The construction of the round towers of the tenth–thirteenth centuries required lime. The *Annals of the Four Masters* recorded a limekiln measuring 21.4m square in plan for the year 1163 (O'Keeffe and Simington 1991, 65). Lime was also an important material for agricultural fertiliser. Most of the rural limekilns seen today were part of the rural industrial

landscape of the eighteenth and nineteenth centuries when they were used to produce lime for agricultural use (Power 1992, 312). Some 242 rural limekilns have been identified in countryside locations in County Cork during the course of survey (Sleeman 1998, 13) from thousands that were recorded on the Ordnance Survey first-edition six-inch map for County Cork in 1842.

The kiln at Rincrew was probably used to produce lime for agricultural purposes though it may also have been used to provide material for the construction of the stone bridge over the Tourig River which is less than 200m to the west. The substantial land reclamation that took place on the southern side of the Tourig may also have used lime produced here for the construction of retaining banks. However, it is most likely given the scale of the limekiln at Rincrew that it was generally used for the production of agricultural lime. The limekiln and the brick-making activity that took place on the southern bank of the Tourig were all part of the rural industrial landscape into which the road scheme is being placed.

# 4.3 Section C, Areas of No Archaeological Interest

Site Number: AR 5

Site Type: Isolated Pit
Townland: Muckridge

Chainage: 4510

Pocket of topsoil sitting in a hollow. Different colour due to higher clay content. No finds and no archaeological inclusions.

Site Number: AR 7

Site Type: Possible pit
Townland: Muckridge

Chainage: 4575

Evidence for modern field activity. Pocket of topsoil. No significant sign of a cut. Containing some fire-cracked stone and sherds of locally-produced nineteenth-century unglazed red earthenware throughout the single fill of the shallow feature.

Site Number: AR 8

Site Type: Number of Pits

Townland: Muckridge

Chainage: 4365

Evidence for modern field activity. Single fill, shallow pit-like feature and linear containing white glazed mug handle.

Site Number: AR 9

Site Type: Number of Pits

Townland: Muckridge

Chainage: 4310

Evidence for modern field activity. Locally-produced nineteenth-century unglazed red earthenware throughout the fill of the shallow features.

Site Number: AR 13

Site Type: Linear Feature Townland: Ballynacarriga

Chainage: 4090

Modern field drain.

Site Number: AR 14

Site Type: Possible Pit

Townland: Clashadunna West

Chainage: 3470

Hollow filled with topsoil. No finds or archaeological inclusions. The topsoil cover in this area was thin with land falling to north into steep valley with heavy pinkish-brown boulder clay onto bedrock becoming evident.

Site Number: AR 15

Site Type: Possible Pit

Townland: Clashadunna West

Chainage: 3451

Hollow filled with topsoil. No finds or archaeological inclusions. The topsoil cover in this area was thin with land falling to north into steep valley with heavy pinkish-brown boulder clay onto bedrock becoming evident.

Site Number: AR 16

Site Type: Possible Firespot
Townland: Clashadunna West

Chainage: 3450

Area of scorched subsoil. No other archaeological features. Topsoil cover thin. Probable episode of field clearance.

Site Number: AR 17

Site Type: Area of Burning
Townland: Clashadunna West

Chainage: 3320

Area of slightly scorched subsoil. No other archaeological features. Topsoil cover thin. Probable episode of field clearance.

Site Number: AR 18

Site Type: Possible Pit

Townland: Propoge Chainage: 3090

Hollow filled with topsoil. No finds or archaeological inclusions.

Site Number: AR 20

Site Type: Area of Burning
Townland: Clashadunna East

Chainage: 2550

Area of slightly-scorched subsoil. No other archaeological features. Topsoil cover thin. Probable episode of field clearance.

Site Number: AR 21

Site Type: Possible Pit

Townland: Clashadunna East

Chainage: 2510

Burnt tree roots/bowl.

#### 5. CONCLUSIONS

Nine isolated and previously-unknown archaeological sites were resolved under this blanket licence. These included pits with burning of unknown function, a possible ritual deposition of pottery and a firespot.

Six separate instances of structures and standing buildings were recorded as part of the archaeological resolution of the scheme. The findings at AR1 of evidence for brick clamps and drying sheds and other associated features in the brickworks field may indicate the remains of brick production activity predating the Youghal Brickworks Company on the site. The Labourer's Cottage (AR3) at Muckridge townland was originally part of the estate buildings of Muckridge House. The timber-built cottage (AR27) in Ballyvergan West townland may originally have been a summertime holiday home that became a permanent residence. The bridge at Knockattigan/Ballymacask (AR31) was an important part of the features of the Ballymacask Road since the late eighteenth century. The Stone Bridge Cottage complex (AR32) is an interesting utilisation of a riverside cottage with road frontage as a residence and boat facility. The limekiln (AR35) at Rincrew represents a further part of the rural industrial landscape that this structure, along with the brickworks AR1, was part of.

The remaining twelve AR's were features of post-medieval agricultural activity and were proven to be of no archaeological significance.

#### 6. BIBLIOGRAPHY

- Aalen, F.H.A., Whelan, K. and Stout, M. (eds) (1997) *Atlas Of The Irish Rural Landscape*. Cork University Press. Cork.
- Boland, D. (2000) *Geophysical Survey: Proposed River Crossing Tourig River, Youghal, County Cork.* Unpublished report commissioned by R.P.S. Consultants Ltd., Management for Archaeology Underwater Ltd.
- Breslin, A.R. (1991) 'The Youghal Brick Co. Ltd' in *The Context Of Brickmaking in Ireland*. Unpublished MA Thesis, University College Cork.
- Lane, S. (2000a) *Archaeological Testing Youghal By-Pass, Co. Cork.* Unpublished report commissioned by R.P.S. Consultants Ltd. Sheila Lane Consultant Archaeologist.
- Lane, S. (2000b) *Youghal Bypass Bridge at Knockattigan and Ballymacask*. Unpublished report commissioned by R.P.S. Consultants Ltd. Sheila Lane & Associates.
- Moore, M. (1999) Archaeological Inventory of County Waterford. The Stationery Office. Dublin.
- O'Keefe, P. and Simington, T. (1991). *Irish Stone Bridges: History and Heritage*. Irish Academic Press. Blackrock, Cork.
- Pava, S. and Bolton, J. (2000) Stone, Brick And Mortar: Historical Use, Decay And Conservation of Building Materials in Ireland. Wordwell. Wicklow.
- Power, D. (1994) *Archaeological Inventory of County Cork: Volume 2, East and South Cork.* The Stationery Office. Dublin.
- Rynne, C. (1999). *Industrial Archaeology of Cork and its Environs. Dúchas* The Heritage Service. Dublin.
- St. Ledger, A. (1994) Youghal Historic Walled Port: The Story Of Youghal. Youghal Urban District Council. Youghal.
- Sleeman, A.G. and McConnell, B. (1995) *The Geology of East Cork-Waterford*. Geological Survey of Ireland. Dublin.
- Sleeman, M. (1998) 'Cork's Rural Industrial Heritage: A Field Archaeologist's Approach' in F. Hammond (ed.) Taking Stock of Ireland's Industrial Heritage. Industrial Heritage Society of Ireland. Dublin.
- Thomas, A. (1992) The Walled Towns of Ireland: Volume I. Irish Academic Press. Dublin.

# Shevereigh A Galtymore Min Galte e Mountains Clogheen 500 ft Bay Lough Knocknealton Man Countsingsin A Seein Voyoles Mountains Watergrasshill Watergrasshill Watergrasshill Royole Watergrasshill Royole Watergrasshill Royole Watergrasshill Royole Watergrasshill Royole Royole Royole Bayyoyle Head Ardmore Head Bay O 5 10 kilometres Cork

#### APPENDIX 1: TOPOGRAPHY OF RECEIVING ENVIRONMENT

Figure 3. Topography (from Sleeman and McConnell 1995, 1).

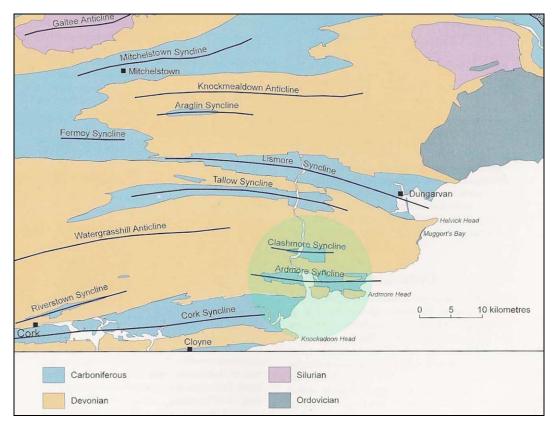
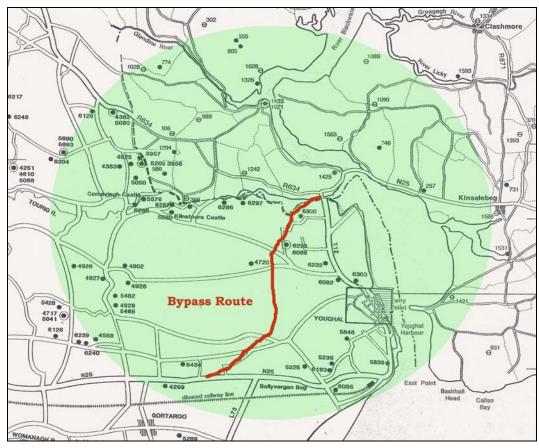


Figure 4. Geology (from Sleeman and McConnell 1995, 6).



# APPENDIX 2: MONUMENTS WITHIN 5 KM RADIUS OF SCHEME

Figure 5. Distribution of Monuments that within approximately 5 km of Youghal Bypass route, as recorded in *Archaeological Inventories* (after Power 1994; Moore 1999).

# **County Waterford (Moore 1999)**

Inventory No.	Townland	Site Type	Provisional Period
106	Garryduff	Mound, possible motte	Late Medieval?
257	Shanacoole	Standing stone	Bronze Age
	Ballynatray		
302	Demesne	Two destroyed fulachta fiadh	Bronze Age
369	Killea	Fulacht fiadh	Bronze Age
	Ballynatray		
555	Demesne	Ringfort	Early Christian Period
586	Castlemiles	Ringfort	Early Christian Period
731	Pilltown	Ringfort	Early Christian Period
746	Tinnabinna	nnabinna Ringfort Earl	
774	Ballycondon	Enclosure	Early Christian Period
	Ballynatray		
805	805 Demesne		Modern folly?
931	Monatray Middle	Enclosure	Early Christian Period
989	Ballydasoon	Enclosure	Early Christian Period
1028	Ballyrussel	Earthwork	Early Christian Period
1089	D'Loughtane	Circular enclosure	Early Christian Period

1090	D'Loughtane	Circular enclosure	Early Christian Period
1242	Ballyknock	Souterrain	Early Christian Period
1294	Castlemiles	Moated site	Late Medieval?
	Ballynatray		
1326	Demesne	Abbey	Late Medieval?
1421	Prospect Hall	Parish church	Post-medieval
1425	Rincrew	Templar site	Late Medieval?
1433	Templemichael	Church	Post-medieval
1503	Ardsallagh	St. Brigid's Well	Early Christian Period
1531	Moord	St. Bart's Well	Early Christian Period
1588	Pilltown	Castle (tower house?)	Late Medieval?
1621	Templemichael	Tower house	Late Medieval?
	Ballynatray		
1628	Demesne	Mansion	Late Medieval?

# County Cork (Power 1994)

Inventory No.	Townland	Site Type	Provisional Period
3957	Cornaveigh	Fulacht fiadh	Bronze Age?
3958	Cornaveigh	Fulacht fiadh	Bronze Age?
		Hilltop enclosure; Raftery's	
4251	Rath	Class 2b	LBA/early Iron Age
4299	Gortaroo	Earthwork	Early Christian Period?
4382	Ballyglavin	Ringfort	Early Christian Period
4383	Ballyglavin	Ringfort	Early Christian Period
4568	Knockmonalea	Ringfort	Early Christian Period
4610	Rath	Ringfort	Early Christian Period
4717	Ballykilty	Ringfort	Early Christian Period
4720	Ballymacask	Ringfort	Early Christian Period
4802	Coolowen	Ringfort	Early Christian Period
4825	Cornaveigh	Possible ringfort	Early Christian Period
4926	Kyle	Possible ringfort	Early Christian Period
4927	Kyle	Possible ringfort	Early Christian Period
4928	Kyle	Possible ringfort	Early Christian Period
4929	Kyle	Possible ringfort	Early Christian Period
5041	Ballykilty	Souterrain	Early Christian Period
5050	Cornaveigh	Souterrain	Early Christian Period
5068	Rath	Souterrain	Early Christian Period
5080	Ballyglavin	Souterrain	Early Christian Period
5205	Cornaveigh	Holy well	Early Christian Period
5228	Knocknacally	Holy well	Early Christian Period
5236	Seafield	Holy well	Early Christian Period
5289	Coolnacloghafinna	Enclosure	Early Christian Period
5428	Ballykilty	Enclosure	Early Christian Period
5434	Ballyvergan West	Enclosure	Early Christian Period
5465	Kyle	Enclosure	Early Christian Period
5482	Kyle	Enclosure	Early Christian Period
5554	Inchiquin	Castle	Late Medieval
5576	Cornaveigh	Tower house	Late Medieval
5580	Kilnatoora	Tower house	Late Medieval
5690	Ballyneague	Graveyard	Post-medieval

Inventory No.	Townland	Site Type	Provisional Period
5833	Youghal-Lands	Historic town	Anglo-Norman
5837	Youghal-Lands	Abbey	Anglo-Norman
5839	Knockaverry	Nunnery	Anglo-Norman
5848	Youghal-Lands	Friend's burial ground	Post-medieval
5893	Ballyneague	Church of Ireland church	Post-medieval
6068	Muckridge	Country house (Heathfield Towers)	Post-medieval
6082	Youghal-Lands	Country house (Rock Lodge)	Post-medieval
6086	Dysart	Icehouse?	Post-medieval
6120	Ballydaniel	Limekiln	Post-medieval
6126	Ballykilty	Limekiln	Post-medieval
6193	Ballyclamasy	One-storey vernacular house	Post-medieval
6204	Ballyneague	One-storey vernacular house	Post-medieval
6232	Greencloyne	One-storey vernacular house	Post-medieval
6239	Knockmonalea West	One-storey vernacular house	Post-medieval
6240	Knockmonalea West	One-storey vernacular house	Post-medieval
6266	Cornaveigh	Corn-mill	Post-medieval
6287	Kilnatoora	Tuck mill	Post-medieval
6296	Curraghboy	Pottery works	Post-medieval
6297	Kilmagner	Pottery works	Post-medieval
6298	Muckridge	Pottery works	Post-medieval
6300	Muckridge	Brick works	Post-medieval
6303	Youghal-Lands	Gas works	Post-medieval

# **APPENDIX 3: WORKING SITE REGISTER**

AR	Chainage	Townland	Site Type	Road	Position	NGR
1	5150	Muckridge	brickwork's feature	main line	centre of road	E208693.354, N79945.042
2	4900	Muckridge	fulacht fiadh	main line	centre of road	E 208572.273, N 79760.202
3	4600	Muckridge	standing building	main line	centre of road	E208432.177, N79481.737
4	4500	Muckridge	isolated pit	main line	centre of road	E208407.529, N79405.148
5	4510	Muckridge	isolated pit	main line	centre of road	E208371.667, N79419.161
6	4575	Muckridge	settlement site	main line	centre of road	E 208370.589, N 79356.863
7	4575	Muckridge	possible pit	main line	east edge of road	E208339.688, N79381.638
8	4365	Muckridge	number of pits	main line	centre of road	E208350.315, N79267.963
9	4310	Muckridge	number of pits	main line	centre of road	E208307.324, N79228.160
10	4200	Ballynacarriga	linear feature	main line	centre of road	E208290.353, N79110.689
11	4180	Ballynacarriga	two pits	main line	centre of road	E208288.825, N79106.905
12	4150	Ballynacarriga	possible settlement	main line	centre of road	E 208273.812, N 79034.539
13	4090	Ballynacarriga	linear feature	main line	east edge of road	E208197.955, N79030.222
14	3470	Clashadunna West	possible pit	main line	centre of road	E208243.106, N78397.204
15	3451	Clashadunna West	possible pit	main line	centre of road	E208253.520, N78367.537
16	3450	Clashadunna West	possible firespot	main line	centre of road	E208254.097, N78366.237
17	3320	Clashadunna West	area of burning	main line	centre of road	E208301.619, N78259.690
18	3090	Propoge	possible pit	main line	centre of road	E208345.976, N78031.581
19	3070	Propoge	pit	main line	centre of road	E208348.253, N78010.456
20	2550	Clashadunna East	pit	main line	centre of road	E208255.002, N77535.995
21	2510	Clashadunna East	pit/pos. hearth	main line	west edge of road	E208206.740, N77493.920
22	2350	Clashadunna East	possible pit	main line	centre of road	E208161.804, N77393.174
23	2120	Ballyvergan West	two pits	main line	centre of road	E207960.981, N77180.080
24	2105	Ballyvergan West	pit	main line	centre of road	E207974.524, N77202.473
25	1530	Ballyvergan West	possible corn-dryer	main line	centre of road	E207522.552, N76798.958
26	1400	Ballyvergan West	settlement site	main line	north edge of road	E 207415.735, N 76734.803
27	700	Ballyvergan West	standing building	main line	centre of road	E206805.892, N76380.403
28	480	Clashadunna East	fulacht fiadh	Old Killeagh Rd. Realign.	centre of road	E208502.892, N77248.260
29	320	Clashadunna East	fulacht fiadh	Old Killeagh Rd. Realign.	north edge of road	E 208297.591, N77332.8175
30	230	Clashadunna East	pit	Old Killeagh Rd. Realign.	north edge of road	E208223.916, N77274.820
31	3960	Knockattigan/ Ballymacask	Bridge	main line	centre of road	E208233.095, N78887.929
32	5960	Rincrew	standing building	main line	centre of road	E209341.603, N80454.988
33	427	Ballynacarriga	corn dryer	Ballynacarriga Access Rd.	west edge of road	E208214.752, N79039.753
34	220	Propoge	fulacht fiadh	Kirk's Farm Access Rd.	centre of road	E208520.097, N77974.806
35	6100	Rincrew	limekiln	main line	centre of road	E209419.530, N80478.094

 $AR = Area \ for \ Resolution \quad All \ sites \ were \ uncovered \ under \ testing \ licence \ 01 \ E \ 0224 \quad * \ Assessment \ of \ damaged \ site$ 

# APPENDIX 4: ARCHAEOLOGICAL SITE REGISTER

AR	Chainage	Townland	Site Type	Licence Number	National Grid Reference
1	5150	Muckridge	brickwork's feature	01 E 0543	E208693.354, N79945.042
2	4900	Muckridge	fulacht fiadh	01 E 0430	E 208572.273, N 79760.202
3	4600	Muckridge	standing building	01 E 0543	E208432.177, N79481.737
4	4500	Muckridge	isolated pit	01 E 0543	E208407.529, N79405.148
6	4575	Muckridge	settlement site	01 E 0429	E 208370.589, N 79356.863
10	4200	Ballynacarriga	linear feature	01 E 0543	E208290.353, N79110.689
11	4180	Ballynacarriga	two pits	01 E 0543	E208288.825, N79106.905
12	4150	Ballynacarriga	settlement site	01 E 0567	E 208273.812, N 79034.539
19	3070	Propoge	pit	01 E 0543	E208348.253, N78010.456
20	2550	Clashadunna East	pit	01 E 0543	E208255.002, N77535.995
21	2510	Clashadunna East	pit/pos. hearth	01 E 0543	E208206.740, N77493.920
22	2350	Clashadunna East	possible pit	01 E 0543	E208161.804, N77393.174
23	2120	Ballyvergan West	two pits	01 E 0543	E207960.981, N77180.080
24	2105	Ballyvergan West	pit	01 E 0543	E207974.524, N77202.473
25	1530	Ballyvergan West	possible corn-dryer	01 E 0543	E207522.552, N76798.958
26	1400	Ballyvergan West	settlement site	01 E 0549	E 207415.735, N 76734.803
27	700	Ballyvergan West	standing building	01 E 0543	E206805.892, N76380.403
28	480	Clashadunna East	fulacht fiadh	01 E 0543	E208502.892, N77248.260
29	320	Clashadunna East	fulacht fiadh	01 E 0728	E 208297.591, N77332.8175
30	230	Clashadunna East	pit	01 E 0543	E208223.916, N77274.820
31	3960	Knockattigan/ Ballymacask	Bridge	01 E 0543	E208233.095, N78887.929
32	5960	Rincrew	standing building	01 E 0543	E209341.603, N80454.988
33	427	Ballynacarriga	corn dryer	01 E 0751	E208214.752, N79039.753
34	220	Propoge	fulacht fiadh	01 E 0861	E208520.097, N77974.806
35	6100	Rincrew	limekiln	01 E 0543	E209419.530, N80478.094

### **APPENDIX 5: PLATES**

### Section A



Plate 1, AR19, looking southeast



Plate 2, AR23, looking southwest



Plate 3, AR25, Hearth



Plate 4, AR28, spread of burning, looking southwest



Plate 5, AR28, Truncated Pit, looking southwest



Plate 6, AR30, pre-excavation

# Section B



Plate 7, AR1, Brick Paved Area, looking southwest



Plate 8, AR1, Disturbed Area, looking northwest



Plate 9, AR3, Labourers Cottage, east elevation



Plate 10, AR3, Labourers Cottage, west and south elevations



Plate 11, AR27, Timber Built House, looking north

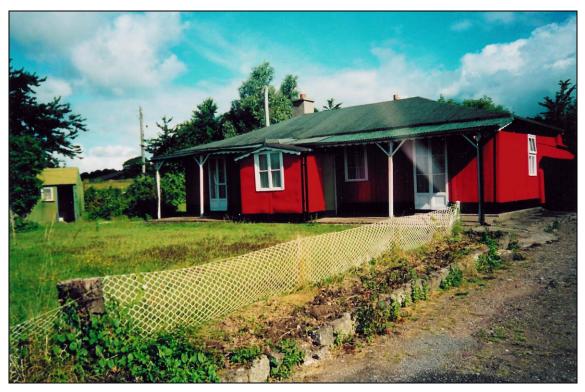


Plate 12, AR27, Timber Built House



Plate 13, AR31, Western run in to Knockattigan/Ballymacask Bridge, north elevation



Plate 14, AR31, Western run in to Knockattigan/Ballymacask Bridge, south elevation



Plate 15, AR32, Stone Bridge Complex, Aerial View



Plate 16, AR32, Stone Bridge Complex, looking north

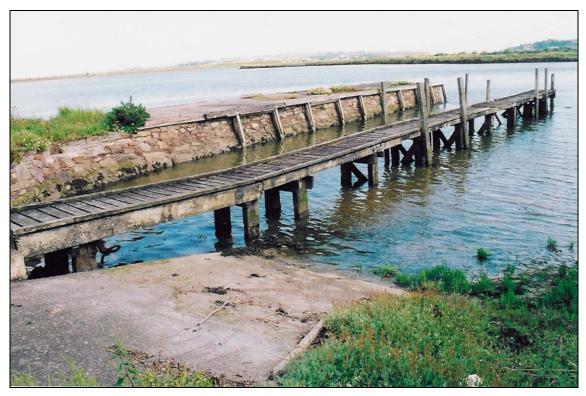


Plate 17,  $\mathbf{AR32}$ , Stone Bridge Complex, Slipway, Jetty and Pier, looking southeast



Plate 18, AR32, Stone Bridge Cottage, vegetation removed prior to demolition.



Plate 19, AR35 Limekiln elevation



Plate 20, AR35 Limekiln looking to west



Plate 21, AR35 Setting of limekiln



Plate 22, AR35 Detail of drawhole



Plate 23, AR35 Rim of combustion chamber

# APPENDIX 6: DETAILED DESCRIPTIONS OF STRUCTURES AT STONE BRIDGE COMPLEX

# **Exterior Elevations of Stone Bridge Cottage**

Southern Elevation	The southern elevation contains the main entranceway into the cottage. This elevation contains six windows, three
(Excluding additions)	at first floor level and three at ground floor level. Each window varies in size, with only the two windows in the
	western end of the elevation being similar in size and shape. The stone built wall is approximately 0.62 m in
	average width. The wall finish consisted of whitewashed pebble dashing. Slight battering of this wall was evident
	just to the east of the doorway.
Northern Elevation	The northern elevation contains one doorway which is possibly the original back door way. This elevation contains
(Excluding additions)	two windows, both of which are located on the first floor of the building in the eastern end of the elevation. Both
_	windows are rectangular in shape. This wall is stone built of 0.7 m in maximum width. The wall finish consisted of
	whitewashed pebble dashing.
Eastern Elevation	The lower half of the eastern elevation as it stands is actually located within the house itself due to the addition of
(Excluding additions)	the L-shaped extension built onto this end of the house. The first floor level wall however is external and contains
	no doorways or windows. This wall is stone built and is 0.4 m in average width. The wall finish consisted of
	whitewashed pebble dashing. This wall was originally the external eastern gable wall and contained one
	chimneystack with two chimney pots.
Western Elevation	The stone built western elevation contains no doorways or windows. The ground floor wall measured approximately
(Excluding additions)	1 m in maximum depth whilst the first floor wall was approximately 0.4 m in maximum width. The wall finish
	consisted of whitewashed pebble dashing. This formed one of the gable walls of the house and contained one
	chimneystack with no visible chimney pots. In the northern end of this wall, beginning at a height of 1.50 m above
	ground level, the wall is battered.
Additions External	
Southern Elevation	Roughly 5.85 m from the western end of this elevation a porch was added onto the front of the building. It runs
	along the length of the wall and down along the eastern elevation. The porch contains one door, which is in line
	with the original, now internal, main front door. The porch is a glazed wall in this elevation. This wall is constructed
	of brick and mortar and measured approximately 0.4 m in average width. The wall finish consisted of whitewashed
	pebble dashing.
Eastern Elevation	This wall contained no doorways. It contained four windows, all varying in size and shape, the largest of which
	measured 1.62 m north to south by 1.00 m east to west. This wall is constructed using three different construction
	methods. The southern end of the wall is constructed of brick and mortar, whilst an area around the northern end
	was constructed of stone and mortar with the northern most ends being constructed entirely of concrete cement
	block.
Northern Elevation	This wall has had three different additions attached to it. The first abuts the eastern end of the wall and appears to be
	a boiler house constructed entirely out of concrete cement blocks. It contains one door and no windows. The second
	addition is an extension to the living space of the main cottage. It functions as a utility area and its walls are
	constructed of concrete cement block. It contains three windows of varying size and shape and one doorway. The
	third building attached to the north elevation of the house is an outhouse, which is constructed of concrete cement
	blocks. This building contains six small windows just below its roof level and has a doorway in its western wall,
	which is almost flush with the western wall of the house itself.

# **Interior Rooms of Stone Bridge Cottage**

	Ţ
Room 1-	This room measured 3.50 m NS by 3.20 EW. There is one large rectangular window situated in the south wall. The
Parlour Room	window is double glazed with an aluminium frame. The windowsill consists of painted wooden slats. The window
	aperture splays inwards at either side making the internal window area larger than the external area. There is an
	inbuilt cupboard contained in the northern wall. The cupboard measured 0.30 m in depth and was timber lined with
	five timber shelves. The timber lining was placed in situ with the slats vertically aligned. The cupboard has a
	timber frame. The doorway into this room lies in the eastern wall in the corner where the east wall joins the south
	wall. The door itself opens inwards into the room and is hinged on the right hand side. A fireplace, measuring 1.05
	m (H) by 0.87 m (W) by 0.30 m (D), is situated in the west wall of the room. The fireplace surround is constructed

of blue and black painted iron with a floral decorative motif. The grate area is built in an arch-like form. There is tiled flooring, 1.20 m (L) by 0.87 m (W), directly in front of the grate with a metal trim all around it. The flooring appears to be constructed of timber, possibly laid over concrete/stone floor, and arranged in a tongue and groove fashion. Parts of the floor have been painted dark brown. There are wooden skirting boards all around the base of the walls. The roof in this room is low, measuring 2.19 m ceiling to floor, and is constructed of painted plasterboard affixed to wooden beams. The wall finish is of painted plaster.

#### Room 2-Main Lobby Area

This room measured 3.70 m NS by 6.90 m EW. There are two windows in the southern wall, both varying in size and shape. The smaller of the two windows is constructed in an embrasure style with the walls either side splaying inwards making the internal window area larger than the external window area. The ceiling of the embrasure is lined with timber slats in a possible tongue-and-groove-like fashion and painted the same colour as the walls. The wooden framed, double panelled glass is set into the window aperture at a depth of 0.42 m. The larger window. situated in the eastern end of the south wall, is timber framed and contains eight panels of wooden framed glass set back into the wall at a depth of 0.34 m. The windows are hinged and open outwards into the porch area, rather than inwards. The main front doorway consists of a wooden framed, two panelled glass door, which opens inwards. It is clear from the window embrasures in the south wall that the walls are constructed sloping outwards slightly towards the base. There is another doorway located in the western end of the north wall. The doorway leads into two rooms, which were later additions (see plans). There is a step up into the doorway which is timber framed with timber lintels and doorjamb. The door consists of two timber doors of four panels, which are painted white. The doors open outward from the lobby room into the added rooms. There is another doorway situated in the eastern wall of the room which is unframed and which has no evidence of there ever being an actual door hung there. The doorway is set into the wall at a height of 0.23 m above the floor level and measures 1.93 m (H) by 0.80 m (W) by 0.66 m (D). The top of the doorway contains a timber plank lintelling. There is an aperture in the east wall, measuring 0.82 m (H) by 0.67 m (W) by 0.71 m (D), with timber plank lintelling, which may have been a window at one stage, prior to the construction of the L-shaped extension to the original house, or which may have been a storage recess. There is a fireplace located in the eastern wall of this room, which has an approximate depth of 0.23 m. The chimneybreast is constructed of red brick and cement, with the top, just below ceiling level, being decorated with varnished wood. The fire surround is constructed of possible cast iron painted black. The floor of the hearth and the area directly in front of the hearth are both tiled areas. The main staircase leading to the first floor is located in this room in a parallel with/abutting the northern wall and lies opposite the main entranceway in the south wall. The stairwell is constructed of painted wood board, with a varnished Deal wooden frame. There is a wooden shelf attached to the stairwell and beneath the stairwell there is a doorway leading into storage space. The floor is wooden lined with timber skirting boards present in only the western end of the room. The ceiling is lined with varnished tongue-and-groove timber boards and is probably a modern feature. There is a thin undecorated ceiling border.

#### Room 3-Kitchen and dining room area

The kitchen-dining room is located in the eastern end of the house. They are contained within the L-shaped extension to the original vernacular house. The room, measuring 5.70 m NS by 3.00 m EW, is an open plan, splitlevel room with the higher level containing the kitchen/cooking area and the lower area being used as a dining/living area. There are four windows, each similar in size and shape, in the southern wall of this area and three windows, each varying in size, in the eastern wall. There are three doorways in this room. The first is located in the north wall, the second in the northern end of the west wall and the third located in the southern end of the west wall. The north wall doorway, measuring 0.80 m (H) by 0.12 m (W), bears no signs of ever having had a door hung in it but has a timber plank lined lintel (with the planks running N-S). The doorway in the west wall, measuring 1.94 m (H) by 0.84 m (W) by 0.63 m (D), bears no sign of a door ever having been hung in it. The door in the southern end of the west wall consists of timber framed glass panelling and divides the dining room area from the porch area. There is an aperture in the west wall, measuring 0.76 m (H) by 0.66 m (W) by 0.71 m (D), which has a timber plank lined lintel (planks running E-W) and a timber sill. There is a fireplace located in the west wall. The fire surround is of black, cast iron and measures 0.94 m (H) by 0.60 m (W). The walls vary in construction fabric. The south wall is constructed of plastered cement block; the north wall is constructed of stone and mortar. The west wall consists of two different building fabrics. The area around the southern end of the wall is constructed of plastered cement block whilst the rest of the wall is constructed of stone and mortar covered in plaster. The east wall is constructed of plastered brick and when the plaster was removed it revealed another layer of blue painted plaster underneath, suggesting possible re-plastering. The north and east walls in the kitchen area are tiled. The floor in both areas is tiled with imitation red terracotta tiles. The roof is done in varnished wooden tongue and groove effect, and contains an attic entrance in the northern end.

Room 4-

This room measures 2.50 m NS (at widest axis) by 3.00 m EW. The room contains one window, located in the east

Utility area	wall, and two doorways, one located in the south wall and the other located in the west wall, measuring 1.90 m (H)
•	by 0.98 m (W) by 0.12 m (D). The doorways bear no signs of ever having had doors hung in them. The south wall
	and the west wall were constructed of plastered stonework, the north wall and the east wall were constructed using
	plastered concrete block. The room has poured cement flooring with plasterboard ceiling.
Room 5-	This room measures 0.60 m NS by 1.00 m EW and is located in the north east corner of the utility area. There is
Toilet	one window in the east wall and one doorway in the south wall. The door opens inwards into the room.
Room 6-	This room measures 1.00 m NS by 4.00 m EW and is located in the north addition to the house. There is one
Utility area 2	window located in the eastern end of the north wall and a doorway, measuring 1.87 m (H) by 0.83 m (W), located
-	in the western end of the north wall. Both the door and the window are aluminium glazed. The doorframe is flush
	with the wall on the eastern side and is set in at a depth of 0.05 m from the wall at the western side. There are wall-
	to-wall (N-S) wooden shelves attached to the west wall. The room has poured cement style flooring with
	plasterboard ceiling.
Room 7-	This room measures 0.90m NS by 1.30 EW and is located in the north addition to the house. The room contains
Small Box room	one window, located in the top eastern corner of the north wall, and one door, located in the southern corner of the
	west wall. The walls were constructed of plastered cement blocks and finished in paint. Access to this room gained
	only via room 8.
Room 8-	This room measures 1.00 m NS by 2.40 m EW and is located in the north addition to the house, to the west of
Small bedroom	room 7. (See plan). The room contains one large window located in the north wall and two doorways, one located
	in the east wall and the other located in the south wall, leading into the main parlour room. The walls were
	constructed of plastered cement blocks and finished in paint.
	Internal descriptions-First floor
Room 1-	This room measures 4.25 m NS by 4.50 EW .It contained one large window, measuring 1.20 m (H) by 2.50 m (W),
Western gable bedroom	in the southern wall. The window was three-panelled, double-glazed, aluminium. The timber framed doorway,
	located in the north corner of the east wall measured 1.89 m (H) by 0.78 m (W). The door itself, constructed of
	four wooden panels, was hinged on the left hand side and opened into the room. There was wooden skirting board
	all around the base of the walls. The ceiling to floor height of the room was 2.43 m. The fabric of the walls varied.
	The south, west and north walls were constructed of brick and mortar. The east wall is a partition wall and was
	constructed of brick and mortar in the north end with plasterboard being used in the south end.
Room 2-	This room measures 2.20 m NS by 3. 25 m EW and is located in the southern side of the house, between room 1
Bathroom	and room 3. There was one window, measuring 1.10 m (H) by 0.90 m (W), located in the southern wall. There was
	one doorway which was located in the north wall of the room and which led out into the landing area. The southern
	wall was possibly constructed of concrete block or of brick and mortar. The western wall was composed of
	plasterboard and of bricks and mortar in the northwest end. The north and east walls were constructed of
	plasterboard with timber panelling affixed.
Room 3-	This room measures 4.25 m NS by 3.25 EW and is located in the eastern end of the first floor. It contained one
Eastern gable bedroom	window, measuring 1.30 m (H) by 0.92 m (W), located in the south wall and another window, measuring the same,
	located in the north wall. There is one doorway located in the northern end of the west wall. The south, east and
	north walls are constructed of brick and mortar, finished with paint. The west wall is constructed of timber
Y 1'	panelling, possibly attached to plasterboard underneath.
Landing area	This area measures 3.10 m (L) by 0.87 m (W) and is located in the centre of the first floor and is aligned EW.
	There is a window located in the north wall of the landing area. The landing is partitioned from the stairwell by a
	wooden banister. The stairwell measures 0.75 m (W), with each step measuring 0.18 m (H) by 0.75 m (W) by 0.15 m (D).
Outhouse Description	
Outhouse Description	This addition measured externally, 2.95 m (L) EW by 1.55 m (W) NS and was located in the west end of the north wall of the house. It contained six windows, all measuring 0.18 m (H) by 0.60 m (W) and all located in the top of
	the north wall below roof level. There was one timber door, located in the west wall. The walls were constructed of
	concrete block, not rendered and were 0.12 m in depth. The roof was made of corrugated iron.
	Control block, not rendered and were 0.12 in in depth. The foot was made of corrugated from

# Workshop/Retail Area

Room 1	Measures 4.00 m NS by 3.50 EW. The east wall was constructed of ceiling to floor aluminium glass windows and		
	door. There was one window in the south wall and another doorway into room 2.		
Room 2	Measures 4.00 m NS by 2.30 m EW and contains one window in the south wall and doorways in the east and west		

	walls.
Room 3	Measures 2.10 NS by 1.00m EW and is located within the south west corner of room 2. This room is a bathroom and contains one window in the south wall and one doorway in the north wall, which leads into room 2.
Room 4	Measures 4.00 m NS by 3.00 m EW and is located in the west end of the building. The room contains one window located in the south wall and one doorway located in the north corner of the east wall.
Walls-	All walls in this building are constructed of concrete block.
Roof	The roof of the entire building is constructed of corrugated iron. It slopes in an EW direction. Internally there is a false roof of thin air board.
Floor	The floor consists of poured concrete

### **Boathouse**

Room 1	Measures 9.00m NS (longest axis) by 3.50 m EW. It contains two windows in the east wall, each containing a
	wooden frame and four panels of glass, and one window in the south wall, which contained wooden framing and
	two panels of glass. The room has two doorways, one located in the east wall and the other located in the south end
	of the partition west wall. The door in the east wall is wooden panelled with two panes of glass. The door in the
	west wall is made of solid wood, painted. There is wall-to-wall shelving attached to the north wall in an EW
	direction. A workman's bench is attached to the south wall with peg boards attached to the wall.
Room 2	Measures 9.00 m NS by 3.00 m EW. It contains three windows. There are two windows in the west wall, each
	consisting of six panels of glass in a wooden frame with the window in the southern end of the wall having a
	wooden sill. The window in the west end of the north wall is timber framed and contains three glass panels. This
	room contains three doorways. There is one doorway contained in the east corner of the north wall. The door runs
	from ceiling to floor and is constructed of wood with a glass panel. Another doorway, located in the south end of
	the east wall, is as described in room 1 above. The third doorway is located in the south wall of the room and
	consists of large double doors, timber framed, containing two round glass windows and made entirely of wood.
	There is wooden shelving attached to the northern end of the west wall.
Walls	All the walls in this building are constructed of concrete blocks, put down on top of a levelled foundation of
	concrete. Roof- the roof is sloping in an EW direction. It sits on top of wooden beams which are resting on top of
	the partition wall and which slope from east to west. The roof itself consists of corrugated iron
Floor	The floors in both rooms consist of poured concrete. The floors slope southwards

APPENDIX	7.	LIST	OF	FINDS	FROM	PROPOGUE
APPRINIA	1:	1/1/5/1	()r	T I I I I J S	r R() VI	PRUPULTUR

01E0543:16:1-23	Very small fragments of prehistoric coarseware pottery		
01E0543:16:24	Tiny fragments of prehistoric coarseware pottery collected with		
	01E0543:16:1–23.		
01E0543:16:25	Body sherd of prehistoric coarseware pottery		
01E0543:16:26	Large base sherd of prehistoric coarseware pottery		
01E0543:16:27	Base sherd of prehistoric coarseware pottery		
01E0543:16:28	Sherd (possibly a base sherd) of prehistoric coarseware pottery		
01E0543:16:29-44	Body sherds of prehistoric coarseware pottery		

#### **APPENDIX 8: POTTERY REPORT** by Jon Stirland

This report detail the findings of a pottery assessment carried out on an assemblage of pottery associated with sites under a multiple licence 01E0543. The assemblage of pottery very clearly appears to be of the same fabric. The thickness of the vessel's walls and base as well as the inclusions within the fabric all suggest that all the sherds come from the same vessel. The vessel appears to take the form of a large thick-walled flat-bottomed vessel. Its exterior surface was a reddish orangey colour formed by the application of an iron-rich clay slip. None of the sherds are decorated and the assemblage contains no evidence of any rim sherds. It would appear that the assemblage represents the base and lower portion of a tall vessel of possibly later Bronze Age date.

Find Number: 01E0543:16:1–23

Type: Possible body sherds

Fabric: Coarse-grained, hand made

Inclusion: Frequent inclusions of angular and sub-angular grit

Description: The majority of the sherds in this assemblage are too small for any in

depth diagnostic assessment as very little information can be gained from such small and fragmented sheds. However, the fabric across the whole assemblage appears to be of a similar nature. Because of this very close similarity and the fact that all the sherds come from the some context, it is possible that all the fragments come from the same vessel or a similar type vessel. A number of the sherds have clear evidence of the exterior surface of the vessel/vessels. However, no evidence is present of an interior surface throughout the assemblage. The sherds appear to have two very clear horizons within their profile. The exterior surface in a reddish orangey colour which may have been formed through the application of a fine iron-rich clay-based slip. The interior horizon is a dark grey colour

and contains frequent inclusions of angular and sub-angular grits.

Find Number: 01E0543:16:24

Type: These fragments of pottery are too small for further assessment.

Find Number: 01E0543:16:25

Type: Body sherds

Length: 34mm
Width: 12mm
Thickness: 14mm
Weight: 6g

Fabric: Coarse-grained, hand made.

Inclusion: Frequent inclusions of angular and sub-angular grit

Description: The sherds appear to have two very clear horizons within their profile.

The exterior surface in a reddish orangey colour which may have been formed through the application of a fine iron-rich clay-based slip. The interior horizon is a dark grey colour and contains frequent inclusions of

angular and sub-angular grits. No evidence of an interior surface.

Find Number: 01E0543:16:26

Type: Base sherd
Length: 100.1mm
Width: 63mm
Thickness: 24mm
Weight: 31g

Fabric: Coarse-grained, hand made

Inclusion: Frequent inclusions of angular and sub-angular grit

Description: The base sherd appears to have two very clear horizons within its profile.

The exterior surface is a reddish orangey colour which may have been formed through the application of a fine iron-rich clay-based slip. The interior horizon is a dark grey colour and contains frequent inclusions of angular and sub-angular grits. The interior surface is a dark greyish/black.

The sherd appears to be from a flat-bottomed thick-walled vessel.

Find Number: 01E0543:16:27

Type: Base sherd
Length: 43.5mm
Width: 21mm

Thickness: 15mm Weight: 31g

Fabric: Coarse-grained, hand made.

Inclusion: Frequent inclusion of angular and sub-angular grit

Description: The base sherd appears to have two very clear horizons within its profile.

The exterior surface is a reddish orangey colour which may have been formed through the application of a fine iron-rich clay-based slip. The interior horizon is a dark grey colour and contains frequent inclusions of angular and sub-angular grits. No evidence of an interior surface. The

sherd appears to be from a flat-bottomed thick-walled vessel.

Find Number: 01E0543:16:28

Type: Base sherd
Length: 36.8mm
Width: 32mm
Thickness: 22.1mm
Weight: 23g

Fabric: Coarse-grained, hand made

Inclusion: Frequent inclusions of angular and sub-angular grit and very small

amounts of a quartz-type material.

Description: The base sherd appears to have two very clear horizons within its profile.

The exterior surface in a reddish orangey colour which may have been formed through the application of a fine iron-rich clay-based slip. The interior horizon is a dark grey colour and contains frequent inclusions of angular and sub-angular grits and a very small amount of a quartz-type material. The interior surface is present and is a dark grey colour. Appears

to be from a thick-walled flat-bottomed vessel.

Find Number: 01E0543:16:29–32

Type: Body sherds

Fabric: Coarse-grained, hand made

Inclusion: Frequent inclusion of angular and sub-angular grit

Description: The body sherds appear to have two very clear horizons within their

profile. The exterior surface is a reddish orangey colour which may have been formed through the application of a fine iron-rich clay-based slip. The interior horizon is a dark grey colour and contains frequent inclusions of angular and sub-angular grits. The interior surface is a dark greyish/black. The sherd appears to be from a thick-walled vessel. Sherd

16:29 may possibly be the start of a base sherd.

Find Number: 01E0543:16:33

Type: Body sherd

Length: 53mm
Width: 31.8mm
Thickness: 14mm

Weight: 26g

Fabric: Coarse-grained, hand made

Inclusion: Frequent inclusion of angular and sub-angular grit

Description: The body sherd appears to have two very clear horizons within its profile.

The exterior surface in a reddish orangey colour which may have been formed through the application of a fine iron-rich clay-based slip. The interior horizon is a dark grey colour and contains frequent inclusions of angular and sub-angular grits. The interior surface is a dark greyish black.

The sherd appears to be from a thick-walled vessel.

Find Number: 01E0543:16:34

Type: Base sherd

Length: 70mm
Width: 32mm
Thickness: 20mm
Weight: 26g

Fabric: Coarse-grained, hand made

Inclusion: Frequent inclusion of angular and sub-angular grit

Description: The base sherd appears to have two very clear horizons within its profile.

The exterior surface in a reddish orangey colour which may have been formed through the application of a fine iron-rich clay-based slip. The interior horizon is a dark grey colour and contains frequent inclusions of angular and sub-angular grits. The interior surface is a dark greyish black. The sherd appears to be from a thick-walled vessel and has a flat base.

Find Number: 01E0543:16:35

Type: Base sherd

Length: 52mm
Width: 22mm
Thickness: 21mm
Weight: 38g

Fabric: Coarse-grained, hand made

Inclusion: Frequent inclusion of angular and sub-angular grit

Description: The base sherd appears to have two very clear horizons within its profile.

The exterior surface in a reddish orangey colour which may have been formed through the application of a fine iron-rich clay-based slip. The interior horizon is a dark grey colour and contains frequent inclusions of angular and sub-angular grits. The interior surface is a dark greyish black. The sherd appears to be from a thick-walled vessel and has a flat base.

Find Number: 01E0543:16:36

Type: Body sherd
Length: 59.5mm
Width: 45mm
Thickness: 15mm
Weight: 52g

Fabric: Coarse-grained, hand made

Inclusion: Frequent inclusion of angular and sub-angular grit

Description: The body sherd appears to have two very clear horizons within its profile.

The exterior surface in a reddish orangey colour which may have been formed through the application of a fine iron-rich clay-based slip. The interior horizon is a dark grey colour and contains frequent inclusions of angular and sub-angular grits. The interior surface is a dark greyish black. The sherd appears to be from a thick walled-vessel and appears to be

slightly convexed.

Find Number: 01E0543:16:37

Type: Body sherd

Length: 62mm
Width: 37mm
Thickness: 14mm
Weight: 37g

Fabric: Coarse-grained, hand made

Inclusion: Frequent inclusion of angular and sub-angular grit

Description: The body sherd appears to have two very clear horizons within its profile.

The exterior surface in a reddish orangey colour which may have been formed through the application of a fine iron-rich clay-based slip. The interior horizon is a dark grey colour and contains frequent inclusions of angular and sub-angular grits. The interior surface is a dark greyish black and may contain carbonised material. The sherd appears to be from a

thick-walled vessel and appears slightly convexed.

Find Number: 01E0543:16:38

Type: Base sherd

Length: 40mm
Width: 36mm
Thickness: 23mm
Weight: 37g

Fabric: Coarse-grained, hand made

Inclusion: Frequent inclusion of angular and sub-angular grit

Description: The base sherd appears to have two very clear horizons within its profile.

The exterior surface in a reddish orangey colour which may have been formed through the application of a fine iron-rich clay-based slip. The interior horizon is a dark grey colour and contains frequent inclusions of angular and sub-angular grits. The interior surface is a dark greyish black and may contain carbonised material. The sherd appears to be from a thick-walled vessel. The sherd appears slightly concaved on its interior

surface.

Find Number: 01E0543:16:39

Type: Base sherd

Length: 31mm
Width: 29mm
Thickness: 21mm
Weight: 37g

Fabric: Coarse-grained, hand made

Inclusion: Frequent inclusion of angular and sub-angular grit

Description: The base sherd appears to have two very clear horizons within its profile.

The exterior surface in a reddish orangey colour which may have been formed through the application of a fine iron-rich clay-based slip. The interior horizon is a dark grey colour and contains frequent inclusions of angular and sub-angular grits. The interior surface is a dark greyish black and may contain carbonised material. The sherd appears to be from a thick-walled vessel and appears slightly concaved on its interior surface.

Find Number: 01E0543:16:40–44

Type: Body sherds

Fabric: Coarse-grained, hand made

Inclusion: Frequent inclusion of angular and sub-angular grit

Description: The base sherds appear to have two very clear horizons within their

profile. The exterior surface in a reddish orangey colour which may have been formed through the application of a fine iron-rich clay-based slip. The interior horizon is a dark grey colour and contains frequent inclusions of angular and sub-angular grits. The interior surface is a dark greyish black and may contain carbonised material. The sherds appear to be from a thick-walled vessel and appear slightly concaved on their interior

surface.

#### APPENDIX 9: ANALYSIS OF SOIL SAMPLES

Soil samples collected under this licence were processed individually. The soil samples were placed onto a 1mm nylon mesh in a flotation tank. The material was washed through a 2mm sieve into a 500 micron sieve to collect the flots. Each of the soil samples was put through this system at least once and if necessary twice to ensure that as much material as possible was recovered from the samples. No environmental material requiring analysis was recovered under this licence.

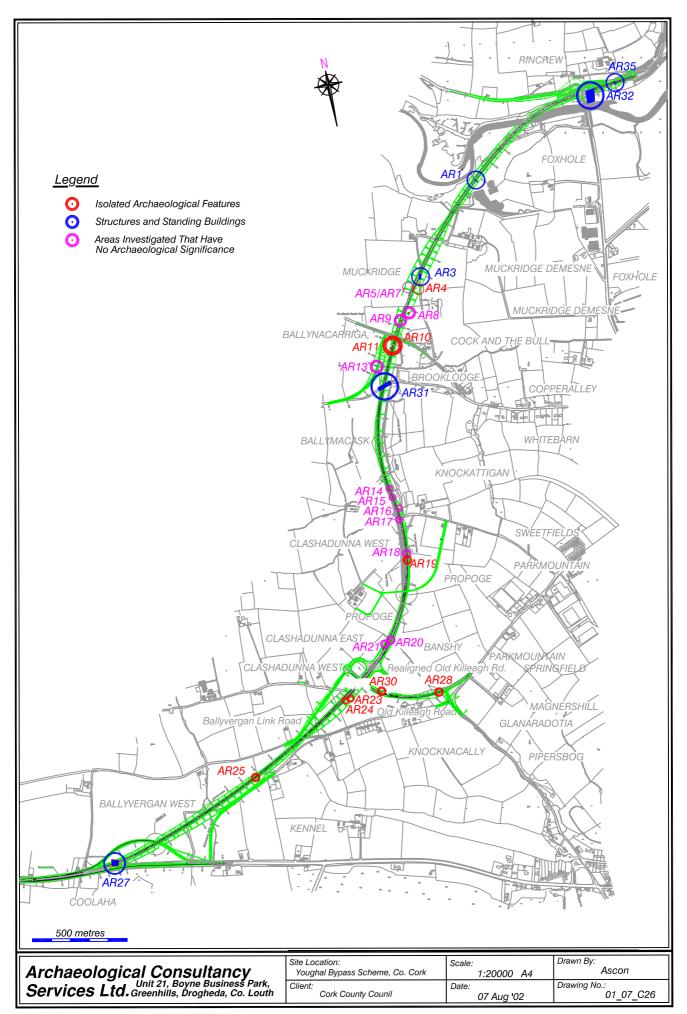


Figure 6: Location of sites within road scheme

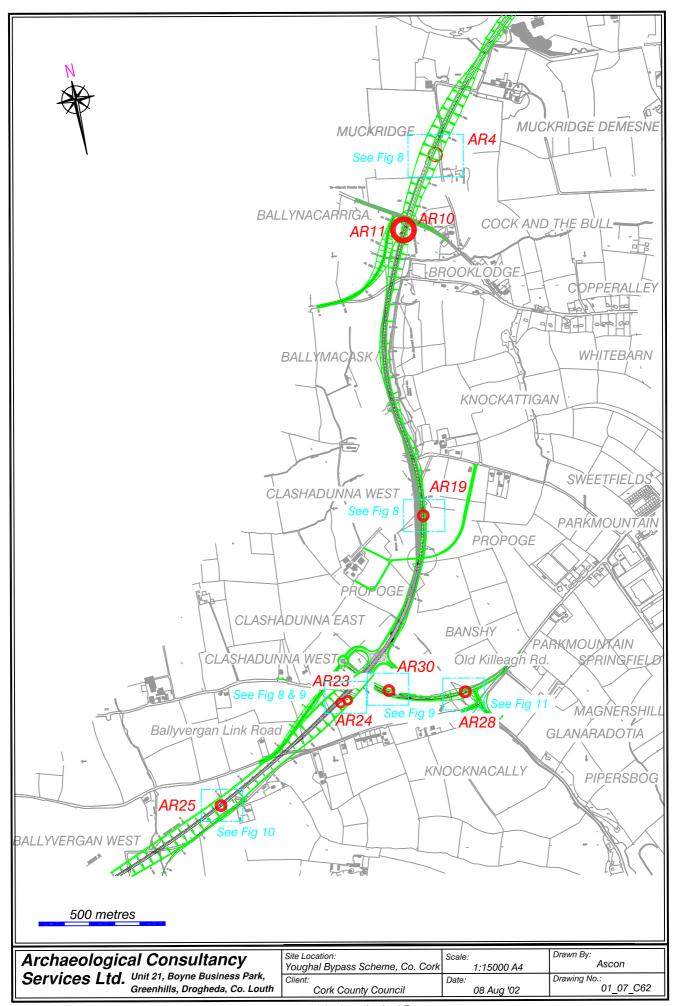
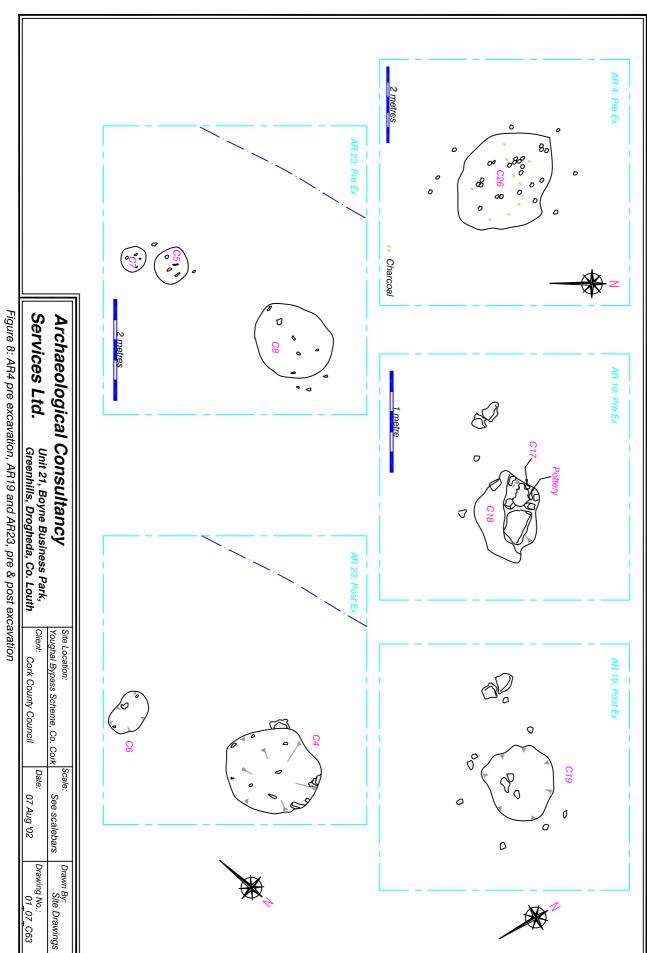


Figure 7: Isolated Archaeological Features



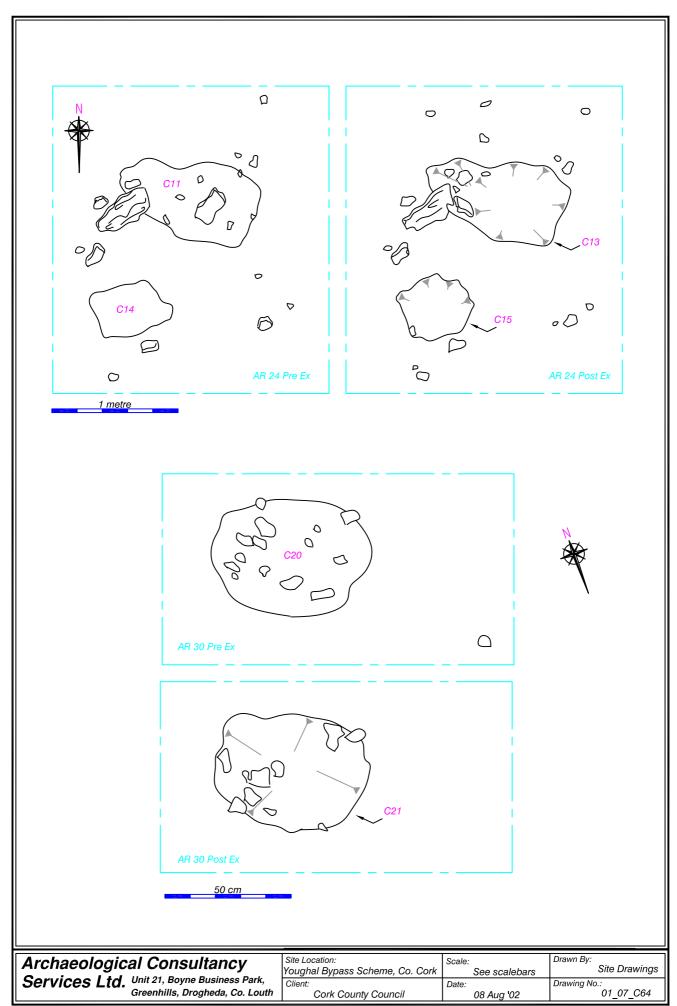


Figure 9: AR23 and AR30, pre & post excavation

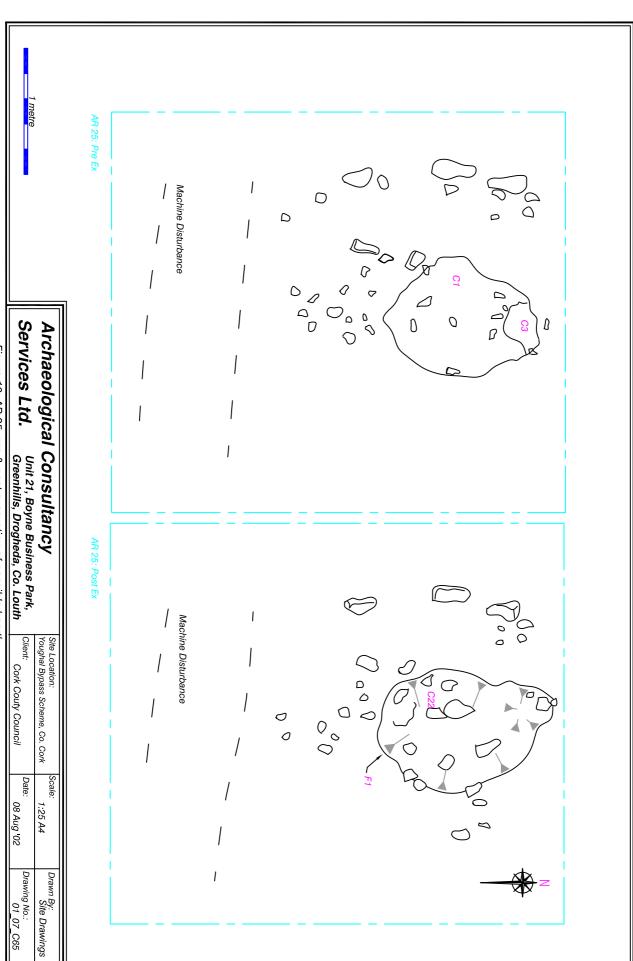


Figure 10: AR 25, pre & post excavation of possible hearth

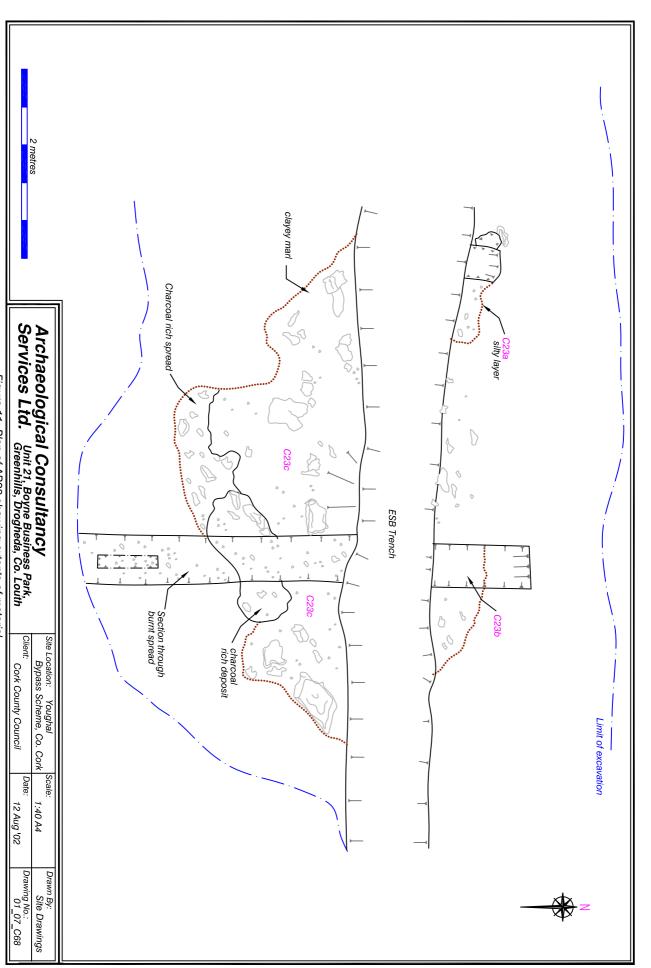


Figure 11: Plan of AR28 showing extents of material

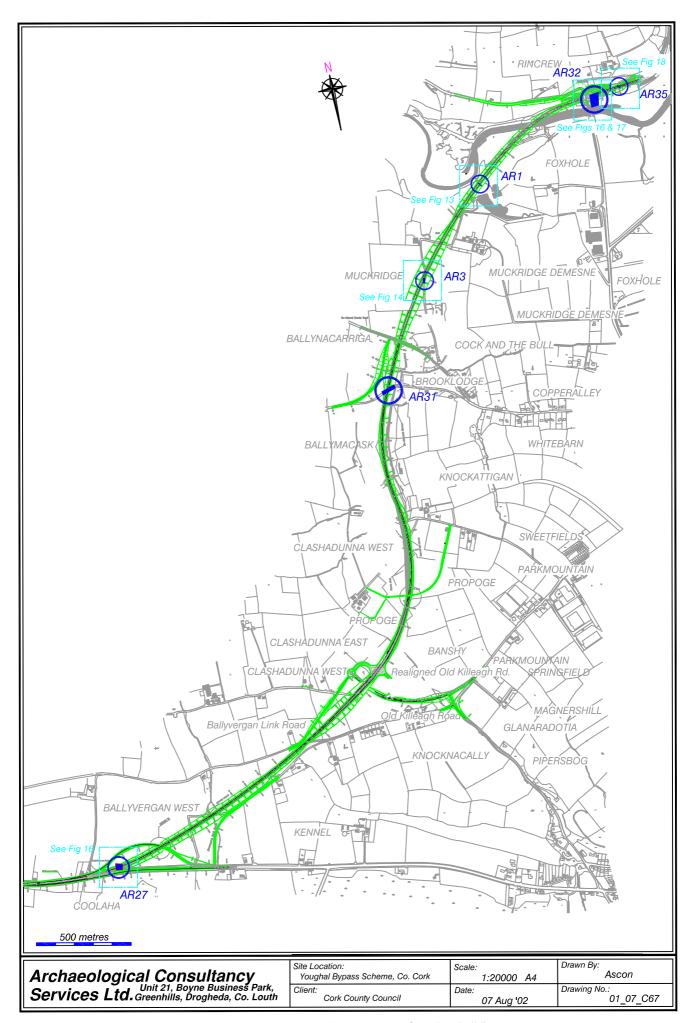
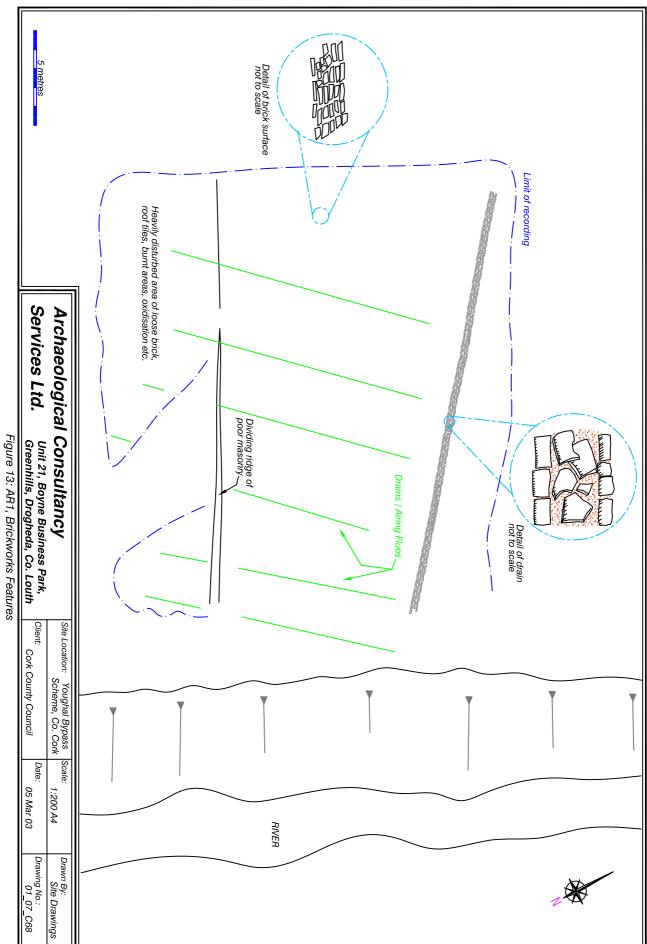


Figure 12: Structures and Standing Buildings



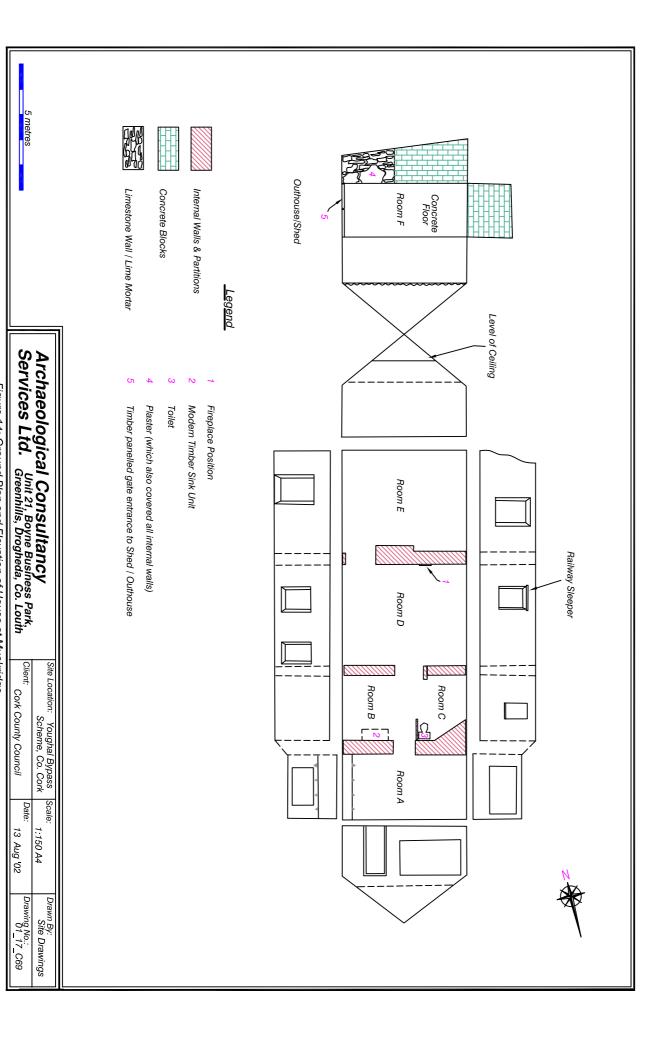


Figure 14: Ground Plan and Elevation of House at Muckridge

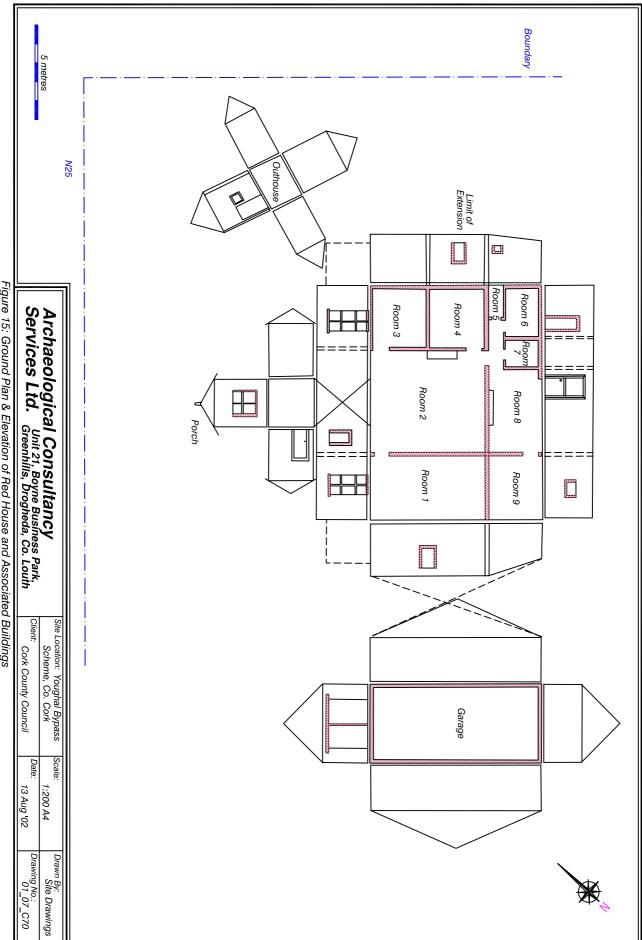


Figure 15: Ground Plan & Elevation of Red House and Associated Buildings

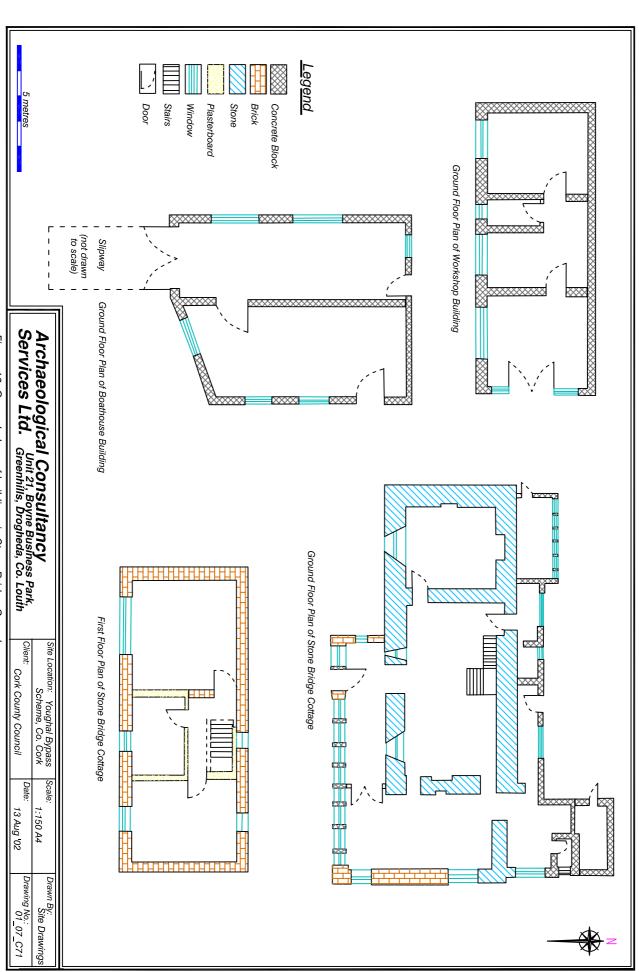


Figure 16: Ground plans of buildings in Stone Bridge Complex

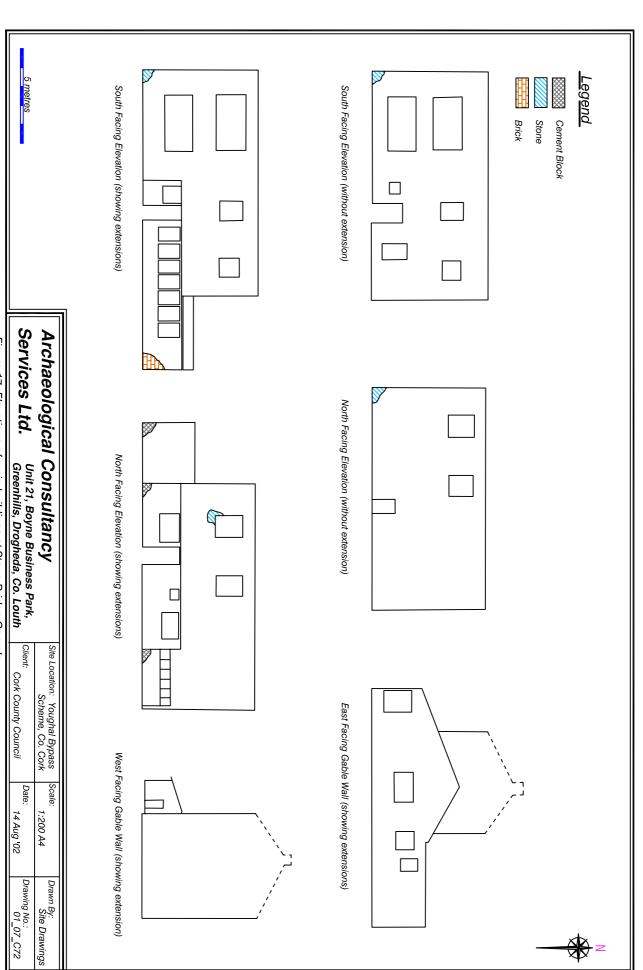


Figure 17: Elevations of main buildings at Stone Bridge Complex

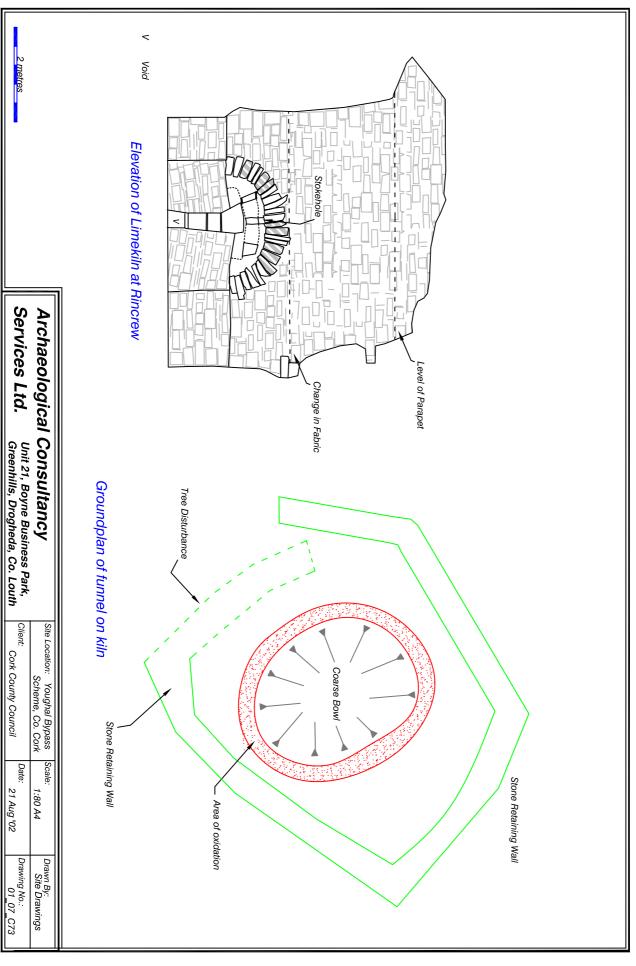


Figure 18: Elevation & Ground Plan of Limekiln AR35

