

## **Appendix 15.9 Archaeological Testing Report: Ringfort and Souterrain (CSS 0303 and 0304) at Burnfort, Co. Cork**

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**M20 CORK-LIMERICK MOTORWAY EIS**

ARCHAEOLOGICAL ASSESSMENT  
 OF RINGFORT (CO042-051001)  
 BURNFORT TOWNLAND, CO. CORK

EXCAVATION LICENCE: 09E006

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**PROJECT DETAILS**

<b>Project</b>	Archaeological Assessment
<b>Road Scheme</b>	M20 Cork to Limerick Motorway
<b>Archaeologist</b>	Deborah Sutton
<b>Client</b>	Arup Consulting Engineers
<b>Townland</b>	Burnfort
<b>Parish</b>	Mourneabbey
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<b>RMP No.</b>	CO042-051001-
<b>Registration no.</b>	
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## 1 Executive Summary

This report presents the results of archaeological test trenching within a ringfort (CO042-051001-) in Burnfort townland, Co. Cork. This project was carried out by Deborah Sutton (Sheila Lane & Associates) as part of the EIS for the M20 Cork to Limerick Motorway. The ringfort and associated souterrains have been given Constraint Study Site (CSS) Numbers 303 and 304 in the EIS report. In order to investigate a tradition, reported by the landowner, that the ringfort may have been used as 'the burial place of children', it was proposed by the Project Archaeologist that the site should be investigated as part of the ongoing Environmental Impact Assessment for the M20 Cork Limerick Motorway Scheme, so as to inform the design process. The initial investigations involved a high resolution topographical survey of the ringfort ground surface, in an attempt to check for any evidence of depressions arising from possible grave subsidence. No such evidence was noticed in the survey results. The second phase of investigation involved high resolution geophysical (magnetometry and earth resistance) surveys. While these did not reveal any evidence of intensive burial they did reveal a few dispersed pit-like features that could conceivably derive from grave cuts. The third phase of works involved archaeological test trenching and is the subject of this report. Test trenching involved the excavation of two 15 m-long trenches within the interior of the ringfort at locations determined by the results of a geophysical survey carried out on the site. The aim of the testing was primarily to investigate a sample of the candidate grave-cut features identified by the geophysical surveys, but also to note any other archaeological features identified during testing. Test trenching found no evidence to corroborate the tradition of human burials within the site. Testing did expose two stake holes, and a possible pit, believed to have been related to the occupation of the ringfort presumably in the Early Medieval period, and a number of furrows of suspected late 18<sup>th</sup> or early 19<sup>th</sup> century date.

## 2 Introduction

- 2.1 Sheila Lane & Associates have been appointed to carry out an Archaeological and Cultural Heritage assessment as part of the EIS for the proposed M20 Cork to Limerick Motorway Scheme, which will extend from Blarney in County Cork to Patrickswell in County Limerick.
- 2.2 A ringfort (RMP No. CO-042-051-01), located in Burnfort townland (Figs 1-3), will be partially impacted by the current proposed road design. The ringfort is located at the east side of the existing N20, at the western end of a pasture field that slopes gently down to the west. There is an east-west hedgerow field boundary adjacent to the north side of the ringfort and a second east-west boundary a short distance to the south of the ringfort.
- 2.3 The ringfort (CO-042-051-01) contains a souterrain (CO-042-051-02) within the enclosed area. An approx 15 m wide section of the west side of the ringfort (at Chainage 19+000) will be included in the road take of the current road design for the motorway, although the final design is pending. The western line of the ringfort ditch was previously impacted by the construction of the existing N20 Cork to Mallow road (Fig. 3). Landowners are being consulted for information on local traditions as part of the compilation of the EIS for the M20 and the owner of the lands at Burnfort containing the ringfort made reference to an otherwise unrecorded local tradition that the site was at some stage used as a children's burial ground.
- 2.4 The initial investigations at the ringfort involved the carrying out of a high resolution topographical survey of the ringfort ground surface, in an attempt to check for any evidence of depressions arising from possible grave subsidence. No such evidence was noticed in the survey results (Fig. 4). However, south-west/ north-east linear trends were noted crossing the ringfort interior and these mirror similar linear anomalies noted in the geophysical survey (Fig. 8).
- 2.5 A geophysical survey was carried out prior to archaeological testing in order to help determine where such burials might exist and to inform the location of the excavation of test trenches. The survey identified several anomalies in the area of the ringfort, both within the enclosure and outside the ringfort banks. Of these, some consisted of pit-like anomalies that were interpreted as having the potential of being related to grave cuts. Two archaeological test trenches were subsequently excavated to investigate the anomalies noted within the ringfort in the area to be impacted by the current road design.

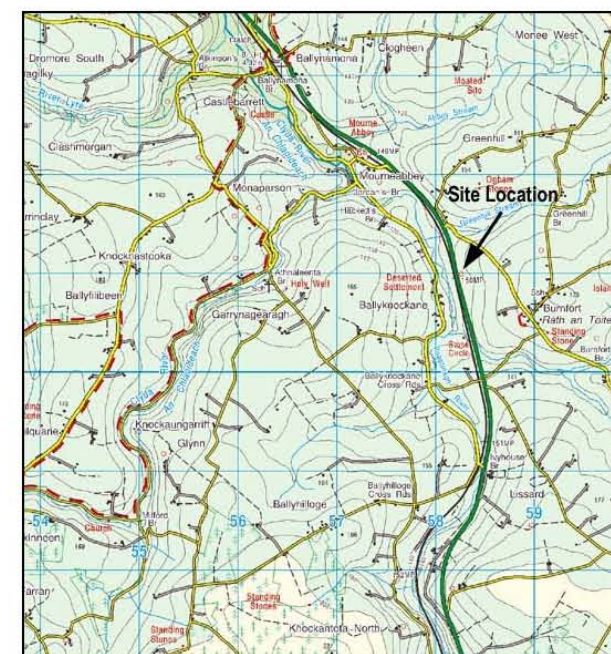


Figure 1: Location Map (extract from OS Discovery Series 1:50,000, Sheet 80)

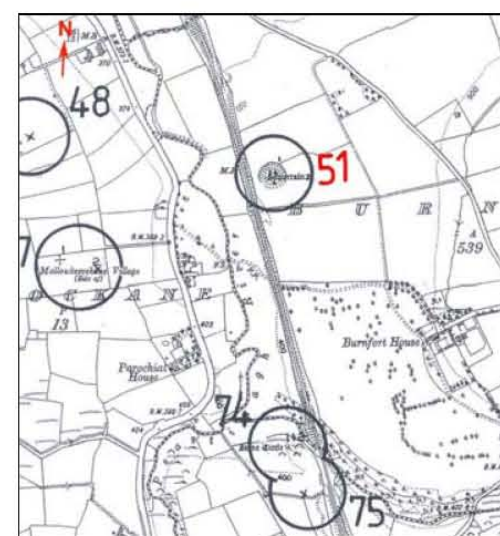


Figure 2: Extract from RMP sheet CO42 (1935 OS detail) with ringfort numbered in red.



Figure 3: Aerial view of CO042-05101

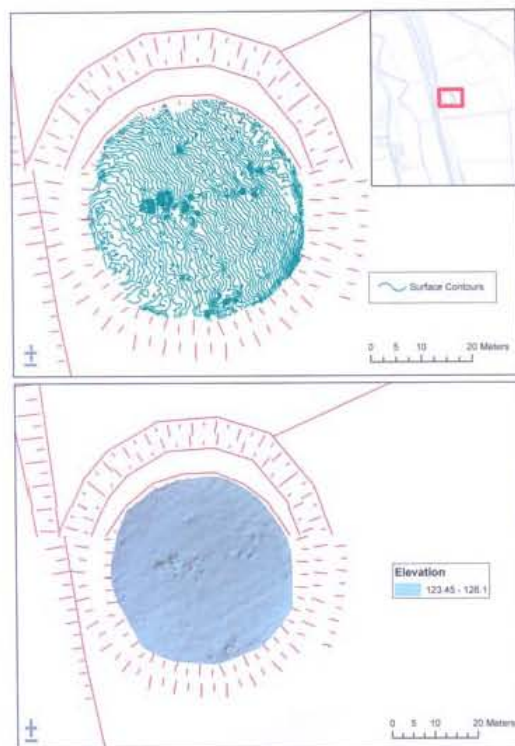


Figure 4. Topographical survey of ringfort.

### 3 Archaeological & Historical Background

3.1 Ringforts are one of the most widespread and common monument types in the country. They typically date to the early medieval period (5<sup>th</sup>-12<sup>th</sup> century AD) and form the remains of defended homesteads (Stout 1997, 22). The terms *rath* and *lios* are often used to denote ringforts, which are enclosed by earthen banks and ditches, while stone-built examples are often referred to as *caiseal* or *cathair*. They comprise a circular area that is typically enclosed by a single circular earthen bank (univallate) surrounded by an external ditch although there are also example with two or three enclosing banks and ditches (multivallate). The enclosed area within the banks generally ranges between 15m-60m in diameter, while the external ditches rarely exceed 3m in width by 2m in depth (Edwards 1990, 20). The excavations undertaken within ringforts have identified the remains of dwelling houses, outbuildings and evidence for small-scale craft industry. Intensive agriculture and industrial development in recent centuries has significantly reduced the number of ringforts surviving in the landscape but the sub-surface remains of many levelled examples still survive.

3.2 The ringfort (CO-042-051-01) that will be impacted by the proposed alignment of the motorway has been recorded as follows in the *Archaeological Inventory of Co. Cork Vol. III* (Power 1997):

*Ringfort* In pasture, on W-facing slope. Circular area (51.5m N-S; 50.5m E-W) defined by earthen bank (int. H 1.7m) with external fosse (D 1.2m) and counterscarp bank (H 0.8m). Bank stone-faced externally to SE; gap (Wth 6m) to WSW. Roadway running N-S (existing N20) truncates fosse and counterscarp bank on W side. Souterrain in interior.

*Souterrain* In ringfort. Coleman (1947, 71) noted 'in the western section of the enclosure are the remains of a destroyed souterrain. From the traces remaining, it appears to have had massive lintels and drystone walling'. In N side of ringfort four oval-shaped depressions running roughly E-W (D 0.5m-1m) over a length of c. 9.6m (max Wth 3m) indicated collapsed souterrain; apparently earth-cut although stones are exposed in one depression.

3.3 The Burnfort ringfort site is depicted on the 1<sup>st</sup> (1844), 2<sup>nd</sup> (1903) and 3<sup>rd</sup> (1935) editions of the Ordnance Survey (OS) maps for the area. The 1<sup>st</sup> edition map shows a circular ringfort with a wide bank and a ditch to the south and south-east (Fig. 5). The ringfort interior is filled with trees. The 2<sup>nd</sup> edition and 25" OS map of 1903 show a similarly tree-filled enclosure with a wide bank and a distinct ditch on all but the southern side of the enclosure (Figs 6, 7). The 3<sup>rd</sup> edition OS map shows the hachures of the ringfort bank. The word 'souterrain' is written across the ringfort obscuring the centre of the fort, but three trees are shown within the enclosure indicating that the ringfort was still planted with trees in the 20<sup>th</sup> century (Fig. 2). A field boundary shown extending north and south along the east side of the ringfort on the 1<sup>st</sup> edition of the OS map is no longer visible today. Both 1<sup>st</sup> and 2<sup>nd</sup> edition maps show a curved field boundary extending ENE from the north-east quadrant of the ringfort. This boundary remains in place today.

3.4 The ringfort at Burnfort is currently under rough pasture and the land within the ringfort and in the surrounding fields has not been cultivated for some time (Plate 1). The ringfort is in a similar condition to that described by Power (*ibid*). Subsidence within the ringfort enclosure, indicating the collapse of souterrains, is also as described above.



Figure 5: Extract from 1<sup>st</sup> edition OS map (1844)

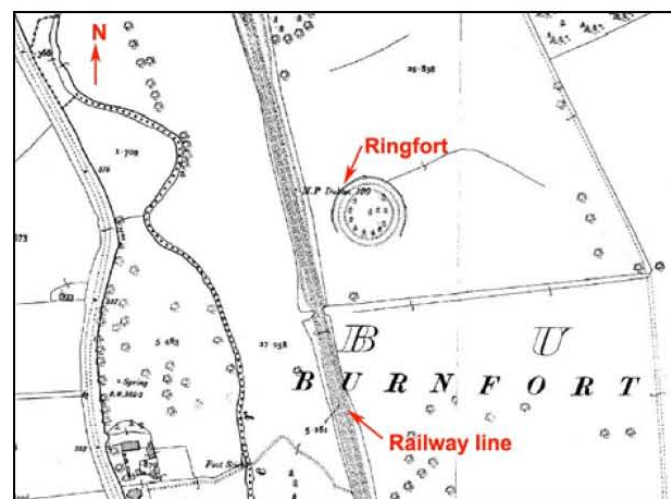


Figure 6: Extract from 25<sup>th</sup> OS map (1903)

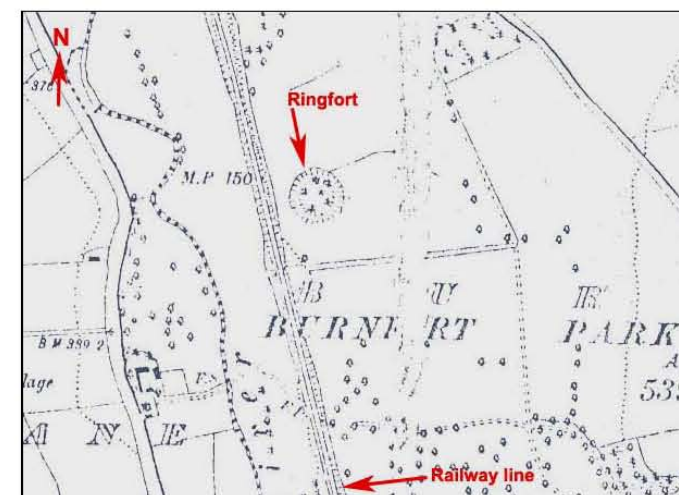


Figure 7: Extract from 2<sup>nd</sup> edition OS map (1903).

#### 4 Test Trenching

4.1 A geophysical survey of the ringfort was carried out in February 2009 by Earthsound Archaeological Geophysics in order to determine the possible location of burials on the site and therefore to inform the design of the trench layout for archaeological testing. The magnetic gradiometer data identified several small circular anomalies and a single linear anomaly in the north-west part of the ringfort interior (Fig. 8). The earth resistance data identified a possible pit and some linear anomalies at the western side of the ringfort enclosure (Fig. 9). Two archaeological test trenches were excavated in the western part of the ringfort enclosure, within the area of the proposed road take, in order to examine the nature of the features identified during the geophysical survey (Fig. 10). Test Trench 1, orientated SSW-NNE, was 15m long and 3m wide and was designed to include three possible pits and a linear feature. Test Trench 2, orientated SSE-NNW, was 15m long and 1.5m wide and was designed to include a possible pit and a linear feature.

#### 4.2 Test Trench 1(Plates 2-4).

The grass sod and underlying topsoil were removed to a depth of c. 0.4m over the total area of the trench. The topsoil was a dark brown, friable and largely stoneless soil, although there was a greater concentration of stones in the soil at the northern end of the trench. Topsoil depths varied only slightly over the length of the trench with the greatest depth (0.45m) at the southern end of the trench. The soils at the base of the trench were trowelled to the underlying sub-soil which was an orange sandy boulder clay. Redeposited sub-soil was noted at both the southern and northern extremities of the trench and in patches along the eastern side of the trench and this appears to represent the redeposition of soils from the original excavation of the souterrain.

A number of features were exposed in the trench (Figs 10, 11; Plates 2-4):

- A stake hole (F1), 0.14m diameter, was exposed in the centre of the southern half of the trench (Plate 2).
- A second stake hole (F2), 0.1m diameter, was exposed towards the southern end of the trench on the east side (Plate 2).
- A possible pit (F3) was exposed extending from the eastern section at the southern end of the trench. This was a semi-circular feature (0.5m diameter) up to 0.3m in depth filled with small stones.
- Two furrows (0.05m deep) extended across the trench in a SW-NE direction (Plate 4). The northernmost furrow (F5) was 0.7m wide and that to the south (F4) was 0.53m wide.

#### Test Trench 2 (Plate 5).

The grass sod and underlying topsoil were removed to a depth of c. 0.45m over the total area of the trench. As before the topsoil was a dark brown, friable and largely stoneless soil. The soils at the base of the trench were trowelled to the underlying sub-soil which was an orange sandy boulder clay. Seven furrows (F6-12) were noted crossing the trench (Figs 10, 11; Plate 5). Five of the furrows crossed the trench in a SW-NE direction and varied in width from 0.46m-0.63m. The furrows averaged 0.05m in depth. There was a large boulder in one of the furrows (F7). Two EW furrows at the southern end of the trench were narrower at 0.3m wide and were 0.15m in depth.



Figure 8: Geophysical survey: magnetic gradiometer interpretation.

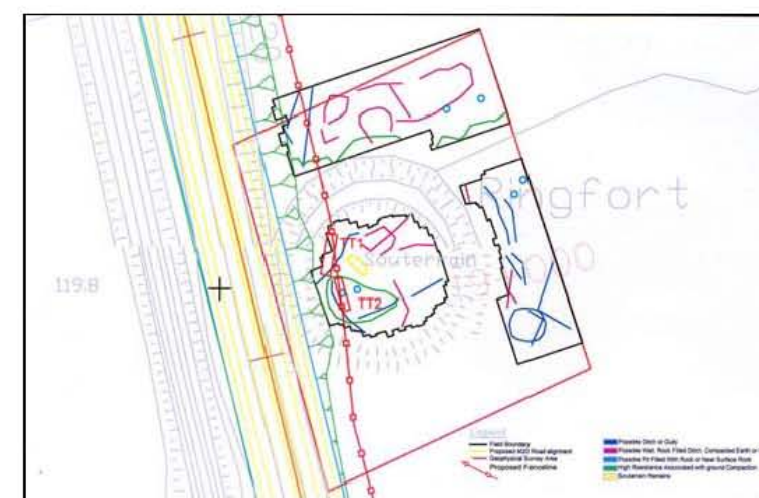


Figure 9: Geophysical survey: Earth resistance data.

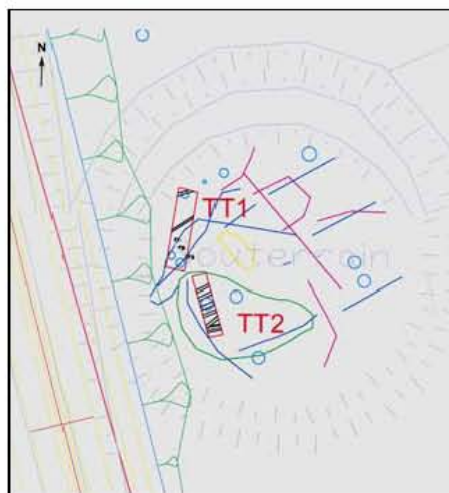


Figure 10: Location of test trenches with features overlaid on geophysical survey results.

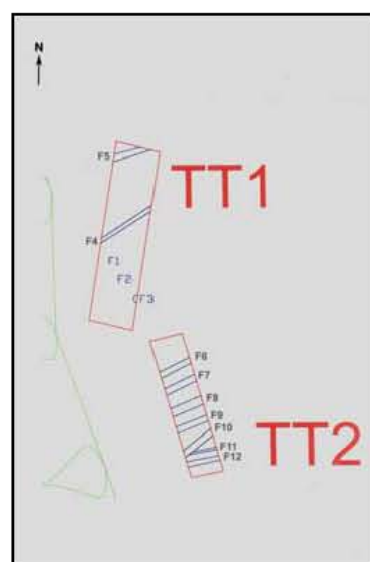


Figure 11: Test trench features.



Plate 1: Ringfort interior. Looking SE.

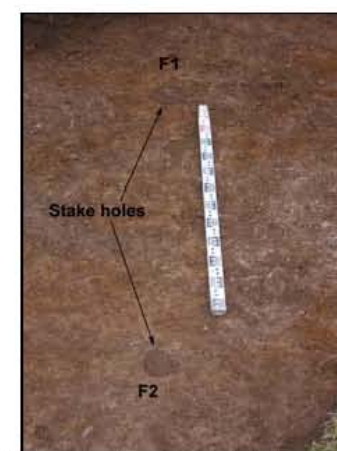


Plate 2: Test Trench 1. Stake holes, from S.



Plate 3: Test Trench 1, from SSW.



Plate 4: Test Trench 1, Furrows, from NNE.



Plate 5: Test Trench 2, Furrows, from NNW.

## 5 Summary and Discussion

- 5.1 Two test trenches were excavated within the proposed road take for the M20 in the ringfort enclosure at Burnfort, Co. Cork in order to determine the presence or otherwise of buried human remains in this area. The trenches were deliberately located to further examine possible features noted during a geophysical survey of the ringfort. Topsoil in the excavated trenches was up to 0.45m deep and was friable and almost stoneless, suggesting that the ground was well tilled in the past. The re-deposited sub-soil, stake holes and possible pit exposed in Test Trench 1 are all likely to be features associated with the primary occupation of the ringfort. The furrows exposed in both test trenches are evidence of more recent land use. The majority of furrows are orientated south-west/north-east and mirror the linear trends identified during both the topographical and geophysical surveys of the ringfort interior. Intercut furrows indicate that there was more than one phase of agricultural activity. The current landowner, now in his eighties, has apparently never interfered with the ringfort suggesting that the ground was ploughed quite some time ago, probably in the 19<sup>th</sup> century when all available land was cultivated for food. The 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> editions of the OS maps for the area show that the ringfort interior was wooded from at least the mid 19<sup>th</sup> to the first half of the 20<sup>th</sup> century. This is further indication that cultivation of this area pre-dates the planting of trees.
- 5.2 There was no evidence of burials in the excavated trenches nor was there any evidence of the pit-like anomalies identified during the geophysical survey. Test Trench 1 was designed to include three circular anomalies and two linear features (Fig. 8). There was a larger amount of stone in the lower levels of the topsoil at the northern end of Test Trench 1 but no definitive feature was identified here to match the circular anomaly at this location. Test Trench 2 was designed to include a single circular anomaly. A small boulder embedded in the soil of one of the furrows (F7) exposed in this trench is close to the area of the circular anomaly. The pre-dominantly south-west/north-east orientation of the furrows identified in both trenches mirrors the linear trends noted in both the topographical and, to a lesser extent, the geophysical surveys. The clear indication of the furrows, and the lack of evidence for burial disturbance in the topographical survey suggests that there may never have been burials within the ringfort interior.
- 5.3 Since the purpose of the excavation of the test trenches was to determine the presence or otherwise of buried human remains, the possible features associated with the ringfort occupation (stake holes, possible pit) were preserved *in-situ*. These features were recorded and covered with plastic before backfilling the trench. The only indication of possible burials were the pit-like features, identified by the geophysical surveys as potentially deriving from grave cuts. However, of those features investigated by the subsequent test trenching none were shown to be related to human burials. There was no other evidence noted to suggest that the ringfort enclosure had ever been used as a burial ground.

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## 6. Recommendations

- 6.1 It is recommended that full excavation of such areas of the ringfort as are likely to be impacted by the proposed route of the M20 Cork Limerick Motorway Scheme should take place prior to road construction.

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