

Archaeological Assessment

Charlestown Walking Trail

Lowpark, Charlestown Country Mayo



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Figure 1: Location of Charlestown in North-East Co. Mayo

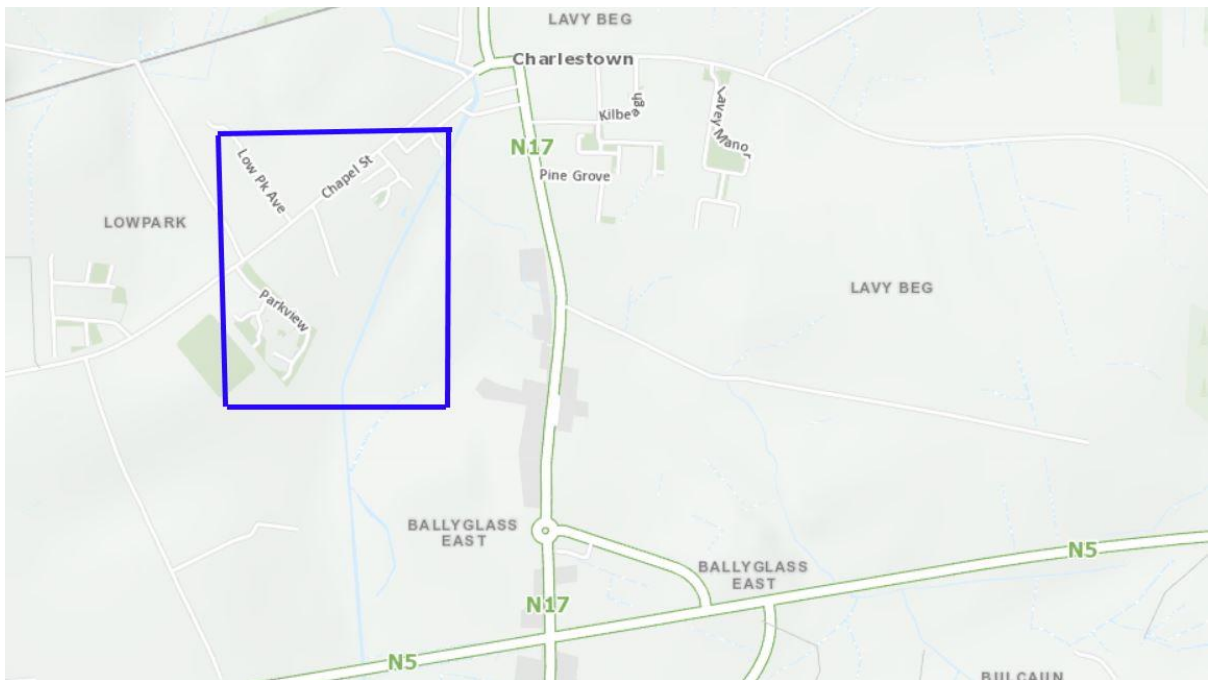


Figure 2: Charlestown Co. Mayo – General Location of Proposed Development South-West of Charlestown

Introduction

This archaeological report was commissioned by Mayo County Council to assess the impact, on the local archaeological environment, of a proposed walking trail, henceforth referred to as the '*Charlestown Walking Trail*' in Charlestown in north-east Co. Mayo (Figure 1). The development is being designed by engineering staff in Mayo County Council and is subject to Part VIII planning. On foot of this, an archaeological assessment of the proposed development site was undertaken by the author. Cartographic analysis, a literature survey and an extensive walkover field survey and a fly over drone survey have been undertaken over the proposed walking trail route, as part of this archaeological assessment of the proposed development. This work was designed to gauge the archaeological significance of the area under consideration and thereby avoid any negative impacts on the archaeological resource by the proposed development.

Local Authorities were requested (July 2020), by the Department of Transport, Tourism and Sport to make funding applications under the heading of '**Active Travel Measures Allocations**'. Mayo County Council together with Charlestown District Association put forward the '*Charlestown Walking Trail*' as concept under the brief. The trail proposed a walking route to the south-west of the town (Figure 2).

The starting point for this proposed trail is the existing open-air swimming pool located to the south-west of Charlestown. From here the trail is intended to be laid along the western bank of the Mullaghanoë River. This area is located to the rear of Saint Attrachta's National School and Saint Joseph's Secondary School (Figure 3). As proposed, the trail will connect with footpaths in the Park View housing estate. The proposed trail leads to Charlestown Sarsfield's GAA club, where separate proposals exist to develop a public walkway within the GAA grounds to link up with the proposed *Charlestown Walking Trail* at Park View estate in the future.



Figure 3: South-West Charlestown showing key urban landmarks within the area of the proposed *Charlestown Walking Trail* (after Brogan 2021, 3)

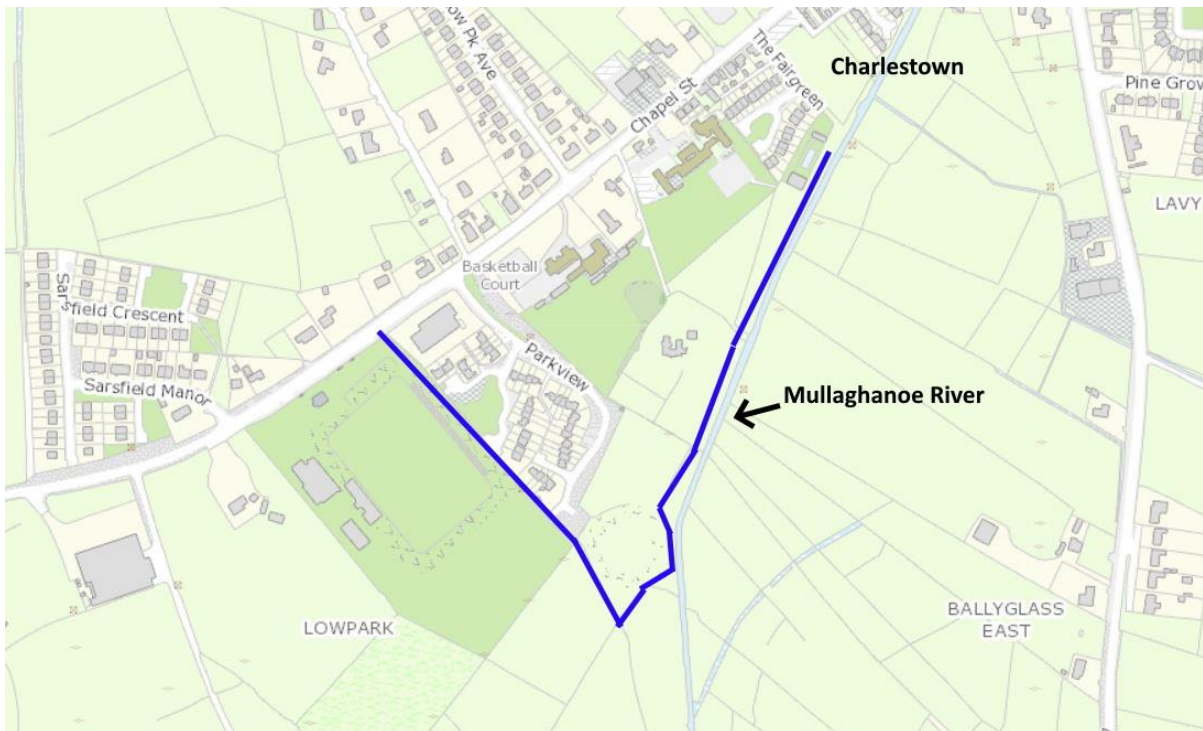


Figure 4: General Route of the Proposed *Charlestown Walking Trail* (Blue) to the South-West of Charlestown

Nature of the proposed works

It is proposed to develop the *Charlestown Walking Trail* to follow the route of a lightly defined, overgrown greenfield path along the Mullaghanoe riverbank. The proposed route of the trail has previously been the subject of an *Appropriate Assessment Report* to examine its effects on a Natura 2000 site (EC Habitats Directive 92/43/EEC), in view of the site's conservation objectives (Brogan 2020). The Natura 2000 Network comprises *Special Protection Areas for Birds (SPA)* and *Special Conservation Areas (SAC) for habitats and species* (Brogan 2021, 1).

The trail will be c. 500m in length, with approx. 320m laid along the Mullaghanoe riverbank. It is proposed to follow the contour of the existing land with the trail being 2-3m wide (Figure 4). The constructed surface of the trail will be laid on top to the existing landscape/field surfaces minimising ground excavations to the greatest possible extent. The proposed construction methodology is detailed below.

Proposed construction Details and Methodology

The proposed walkway will be 500m long and approximately 2-3 m wide and will, for most of its route, follow the course of the Mullaghanoe River (Figure 4). It is proposed to clear the proposed route of vegetation and scrub to achieve a reasonably level profile. Timber edging will be pegged in place on both sides of the walkway. 50-100mm broken stone and Clause 804 material or similar will be laid and compacted to form a solid base layer with a fine limestone dust laid to provide a smooth surface. It is proposed to have a minimum setback distance of 2m from the top of the riverbank. An existing post and wire fencing which runs along the top of the riverbank will be removed and replaced to ensure the safety of users due to the steep sided nature of the riverbank along the majority of the route. A 1.3m high timber post and rail fence (posts driven approx. 700mm into ground), is to be erected along the land side of the

proposed walkway to provide security for the landowners. Timber seating will be provided at intervals along the route.

It is anticipated that the walkway will take approximately 1-2 months to construct. A small excavator will be used to remove the vegetation and create a smooth profile. Some earthworks will be required at the southern end of the proposed trail to provide a smooth transition through the differing ground levels. Terram T1000 Geogrid will be laid down, followed by broken stone, Clause 804 and limestone dust. Small dumpers will be used to transport materials along the route and all fencing works will be undertaken using hand operated equipment and/or tractor with post driver. Timber edging will also be laid by hand. Excavated soils will be used to create small earthen banks adjacent to the walkway. Waste fencing material will be transported to a licenced facility for recycling. Minimal surface water drainage works are anticipated.

It is anticipated that low level LED lantern style lighting will be installed as part of the project to facilitate use of the walkway during hours of darkness (Source: P. Higgins, *pers. comm.* 2022, Executive Engineer, Mayo County Council).

Archaeological Background and Impact

The wider environs around Charlestown are rich in archaeological sites. Prehistoric and medieval settlement evidence is particularly strong to the south of Charlestown, where more than 40 archaeological excavations were carried out from 2004-2007 ahead of the construction of the N5 Charlestown Bypass. This archaeological work uncovered data from circa 6 millennia of human activity in the region (Gillespie and Kerrigan 2010). The proposed *Charlestown Walking Trail* will have an impact on a specific cluster of recorded archaeological monuments located to the south-west of the town (Figures 5,6 and 7). These sites are listed below

- MA063-005 (Ringfort);
- MA063-005001 (Souterrain);
- MA063-005002 (Children’s Burial Ground);
- MA063-064 Burnt Mound
- MA063-065 Burnt Spread

Note: Other monuments in the immediate area, but outside the proposed development zone include a ringfort MA063-004001 (Lowpark), located close to the northern end of the trail. Ringforts are also located to the west of the town at MA063-003 (Lowpark) and to the south-west at MA063-003 (Lowpark). These sites lie outside the *Charlestown Walking Trail* development zone and are unaffected by the proposed works (Figure 5).

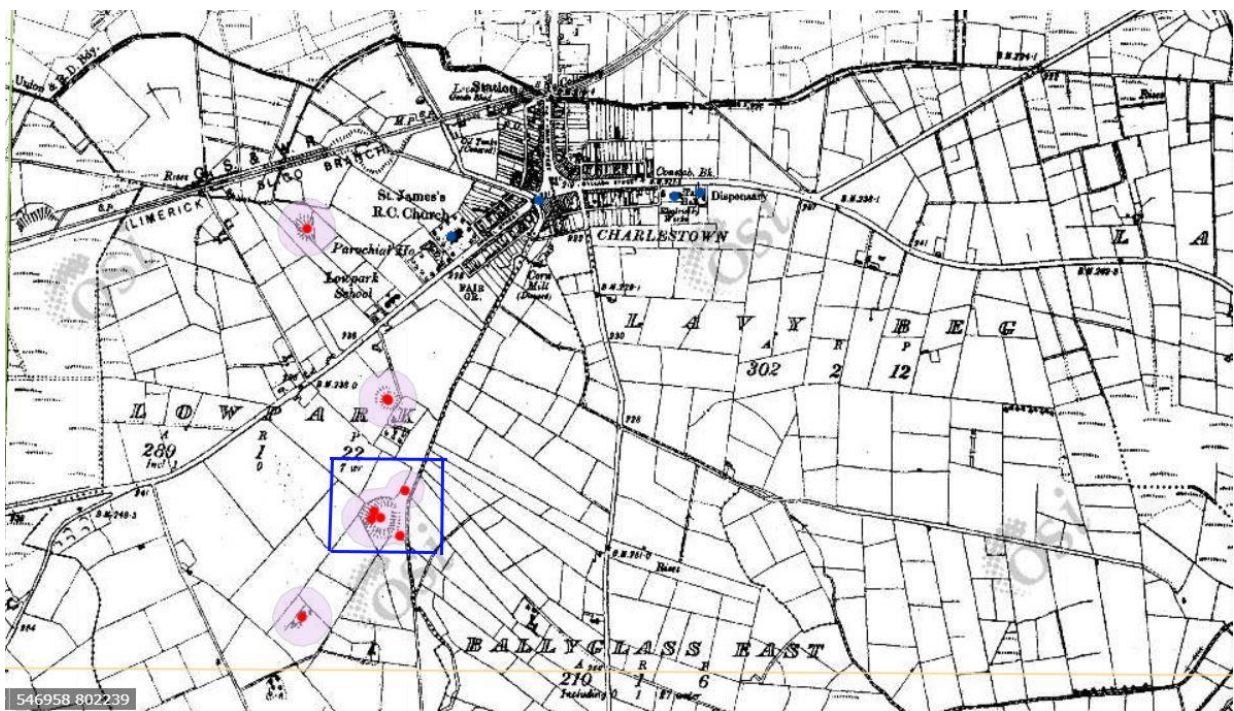


Figure 5: Extract from OSi 6-inch -- Sites and Monuments Record – Archaeological Constraints Map 1914 (<https://maps.archaeology.ie/HistoricEnvironment/>). Showing (Blue Box) cluster of archaeological monuments impacted by the proposed Charlestown Walking Trail development.

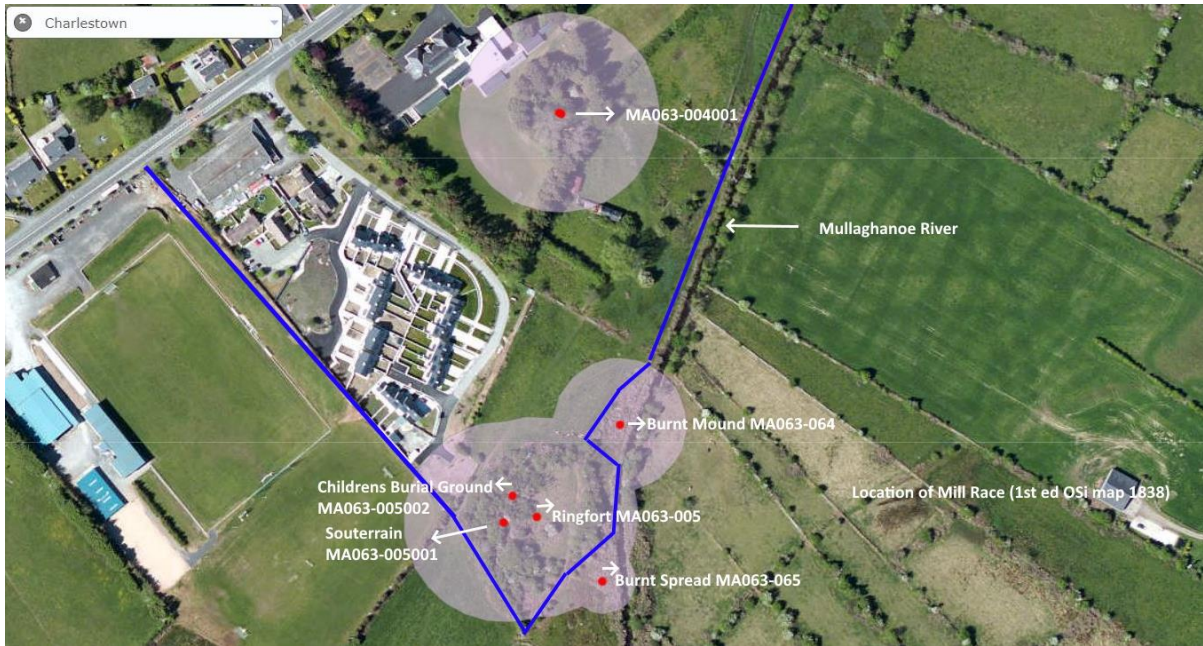


Figure 6: Route of the proposed *Charlestown Walking Trail* (Blue) to the South-West of Charlestown, relative to a cluster of archaeological monuments including a Ringfort-Rath, Souterrain, Children's Burial Ground, a Burnt Mound and a Burnt Spread.

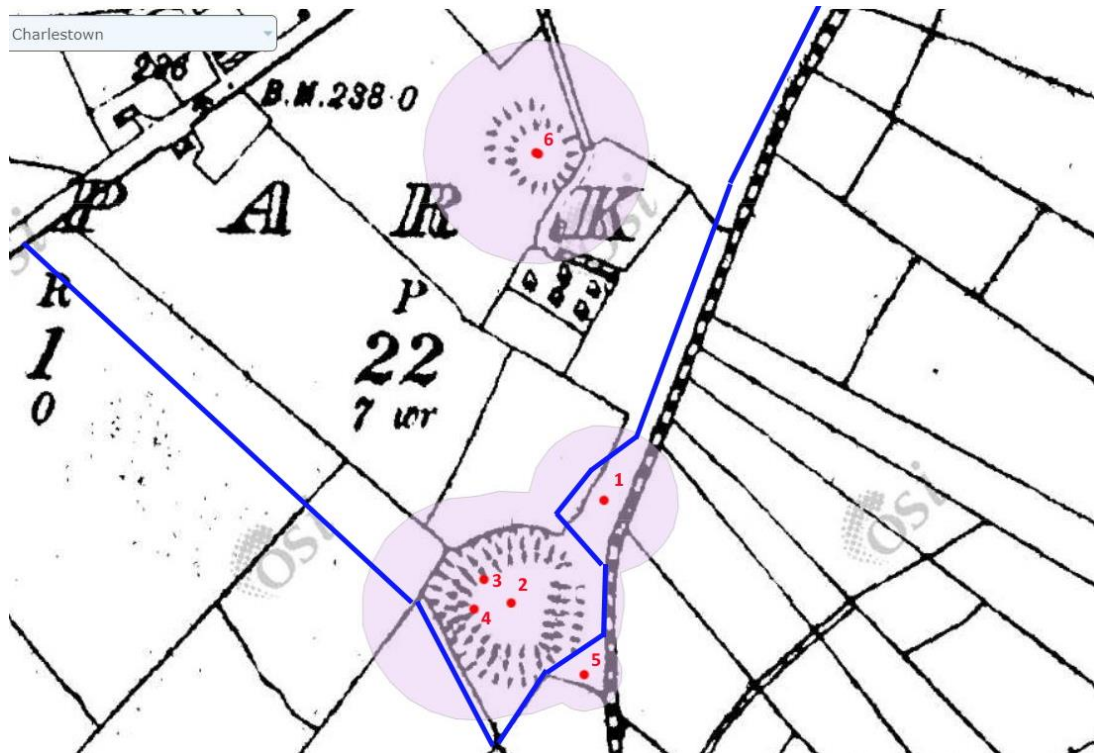


Figure 7: Route of the proposed *Charlestown Walking Trail* (Blue) to the South-West of Charlestown relative to a cluster of archaeological monuments including a Ringfort-Rath (2), Souterrain (4), Children's Burial Ground (3), a Burnt Mound (1), and a Burnt Spread (5). Note: A second Ringfort-Rath (6) to the west of the proposed trail is located on a rise, incorporated into the grounds of a school, on the SW edge of Charlestown.

Ringforts

These sites are Early Medieval farmsteads (400-1200 AD) usually enclosed by a circular bank and ditch or rampart of stones and are the most common field monument in Ireland (Edwards 1990, 11). They are known by a variety of names (rath, lios, caiseal, cathair and dun) and are often situated on high ground with views of the surrounding landscape. It is estimated that there are more than 45,000 ringforts in Ireland, a density of 0.55 sites per square kilometres (Stout 1997, 53). The ringfort impacted by the proposed trail (MA063-005) in Charlestown is situated in Lowpark townland. This townland is 116.04 hectares in area and borders by several other townlands: Ballyglass East, Ballyglass West, Bellaghy, Cloonlaighil, Lavey Beg and Sonnagh.

The Ringfort (MA063-005) and associated monuments (MA063-005001 and MA063-005002) in Lowpark (Figure 8 -11) are described in the scope notes published by the National Monuments Service -

(<https://maps.archaeology.ie/HistoricEnvironment/>) as follows –

Site Description: Ringfort (MA063-005)

In rough, damp pasture, located on a rise the W bank of the Mullaghanoe River, a small N-flowing river/stream. Roughly D-shaped area (c. 51m E-W; 59m N-S) defined by a bank and enclosed by an external fosse. The straight side is at E. and lies parallel to the river, which probably dictated the D-shaped plan. The enclosing bank (Wth 9-10m at W, 5.9m at E; int. 1.1m at W; 0.55m at E; ext. H 2.4m at W, 3m at E) is substantial, particularly on the W half. The fosse (Wth 4.4m at W, 4.8m at E; ext. D 0.7-1.1m at W-SW; 1.2m at E) is broad; the N arc it is less well defined and shallower; at E it is flat-based, and wettish in the base. There is a stone wall on the outer edge of the fosse on the W arc, with remnants also on the N arc –this appears to be a later field wall. The 1838 OS 6-inch map (Figure 8) shows a small looping branch of the river passing directly by the straight E side of the enclosure, and, according to local

information, in the past the stream flowed through the fosse on the straight E side of the rath. By the time of the 1920 edition, the river appears to have been canalised, and its course changed slightly; a flat, dry gap (Wth 5m) now intervenes between the fosse and the stream. At the NE, there is a break (Wth 4m) in the bank and a narrow stony causeway (Wth 1m) across the fosse. There is another break (Wth 2m) in the bank at SE, and outside this the line of the fosse is partly infilled or obliterated. According to local tradition, there is a souterrain (MA063-005001-) in the W half of the interior, and a children's burial ground in the NW quadrant. The rath is densely ringed with blackthorn; interior obscured by ferns. There is another rath (MA063-004001-) 175m to N, and an enclosure (MA063-006----) 190m to SW (O' Shaughnessy 2020).

As noted in the description above the interior of the Ringfort-Rath at Lowpark contains an associated souterrain (MA063-005001) and the monument was later reused as the site of a children's burial ground (MA063-005002). Souterrains and Children's Burial Grounds as general monuments classes are described below:

Souterrains

These sites are underground structures usually containing of one or more chambers connected by narrow passages or creep-ways. These monuments are normally constructed of drystone-walling and have a lintelled roof placed over the passages and a corbelled roof over the chambers. The term souterrain is derived from the French sous (under) terrain (ground) referring to the man-made underground passage and chamber. In Ireland they are of Early Medieval data and are often found inside or close to ringforts and were used as places of refuge (defence) and/or storage (Edwards 1990, 30). Souterrains can be constructed in two ways, either tunnelled out of natural till/bedrock or drystone built within prepared trenches (Clinton 2001, 1). Often simply referred to as 'caves' on O.S. maps they occur in very high numbers in counties Antrim, Louth, Cork and Kerry. Nationally the number of these sites is put at between

3000 and 3500 (Clinton 2001, 33). Within County Mayo the number of souterrains recorded on the archaeological survey data base is currently 458 (Guinan 2015, 123).

Children's Burial Grounds

These are areas of un-consecrated ground for the interment of unbaptised or stillborn children, often known under various Irish names: Cillín, Caldragh, Ceallúnach or Calluragh. The graves were generally marked by simple, low, upright stones or slabs almost invariably without any inscription or other carving. This burial practice may be medieval in origin and continued in Ireland until the 1960s. (<https://webgis.archaeology.ie/NationalMonuments/WebServiceQuery/Lookup.aspx>

Cillíní are a common Irish archaeological monument type that functioned as designated burial places for unbaptized infants within Roman Catholic communities, from the 15th/16th century into the mid-20th century (Guinan 2022, 168-169). The practice revolved around placing human burials into various un-consecrated plots, usually in marginal locations. These were people, who for different reasons (such as being stillborn or unbaptized infants), could not be buried in consecrated ground. As well as infants, a wide range of adults could also be interned in these plots, including people who died by suicide, criminals, those with intellectual disabilities, famine victims, strangers, the shipwrecked and men who died in battle (Nolan 2006, 90; Hamlin and Foley 1983, 43; Murphy 2011, 409). The practice was heavily associated with Catholic theological doctrinal thinking around concepts of Limbo (Latin *limbus* meaning edge or boundary), a temporary stage in the afterlife where the souls, being in a state of sin or 'original sin' (inherited from birth), were unable to immediately transition to heaven. *Cillíní* were often constructed within earlier archaeological monuments, with strong religious or superstitious associations, such as earlier deserted ecclesiastical sites and graveyards, medieval ringforts, earthworks, castles and prehistoric burial mounds (Nolan 2006, 91; Murphy 2011, 409; Finlay 2000).

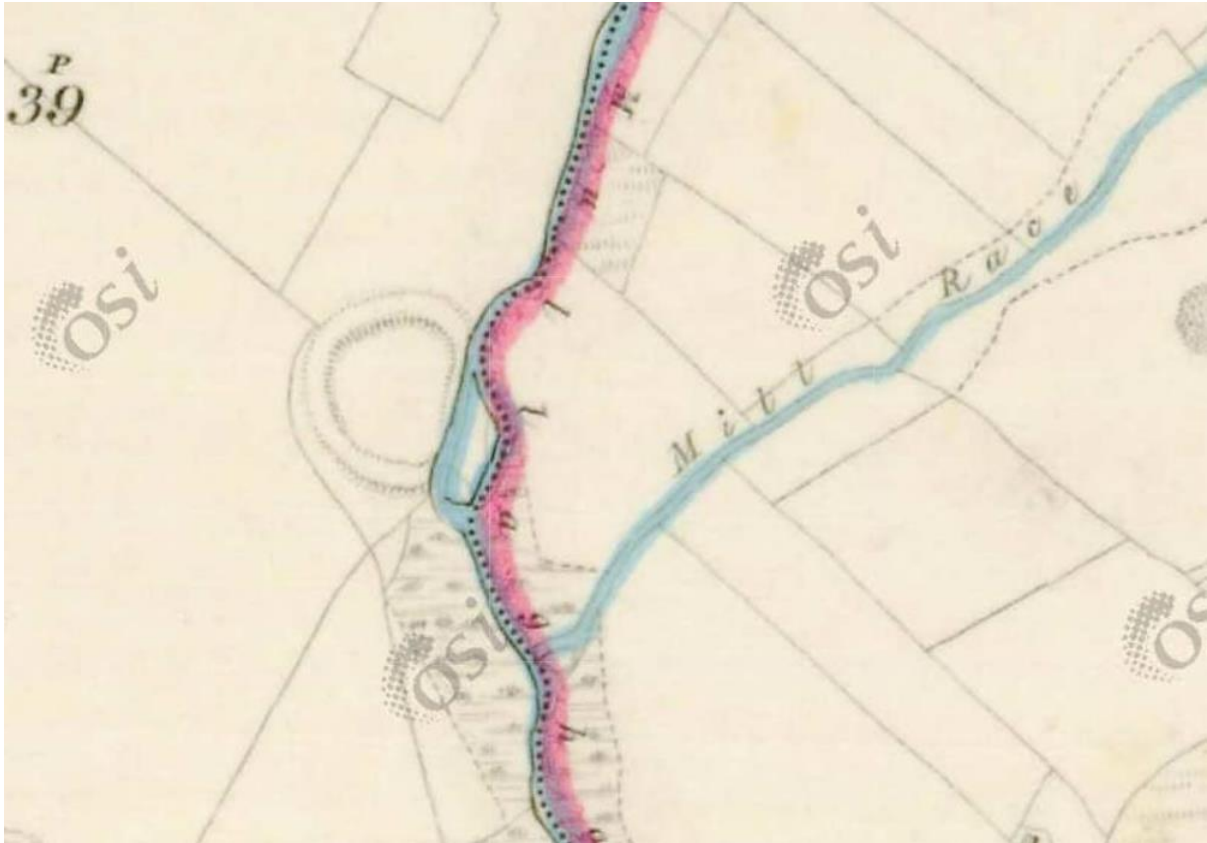


Figure 8: 1838 OSi 6-inch map showing Ringfort-Rath MA063-005 (Ringfort); with a small looping branch of the Mullaghanoe river passing directly by the straight E side of the enclosure



Figure 9: Ringfort-Rath MA063-005 Lowpark Townland, Charlestown (Drone Image John Gallagher MCC 2022)



Figure 10: Looking North: Ringfort-Rath MA063-005 Lowpark Townland, Charlestown (Drone Image John Gallagher MCC 2022)



Figure 11: Looking South: Ringfort-Rath MA063-005 Lowpark Townland, Charlestown (Drone Image John Gallagher MCC 2022)

In addition to the Ringfort-Rath and associated monuments (Souterrain and Children's Burial Ground), in Lowpark two additional monuments are impacted by the proposed works in Charlestown. These are a Burnt Mound (MA063-064) located to the north of the Ringfort-Rath and a Burnt Spread (MA063-065) located to the south (Figures 12, 13 and 14).

These sites are described in the scope notes published by the National Monuments Service -

(<https://maps.archaeology.ie/HistoricEnvironment/>) as follows –

Burnt Mound (MA063-064)

The Burnt Mound is *'in pasture, located on SE-facing slope bordering the W bank of the Mullaghanoe River. A roughly circular surface spread (diam. c. 15m) of heat-shattered stone in a matrix of charcoal-rich soil was visible in August 1998 c. 3m W of the riverbank. The remains were exposed during clearance of scrub from the riverbank. There is another burnt spread (MA063-065) c. 35m to S and a rath (MA063-005) is located 30m to SW' (O' Shaughnessy 2020).*

Burnt Spread (MA063-065)

The Burnt Spread is *'in pasture, located on SE-facing slope bordering the W side of the Mullaghanoe River. A roughly circular surface spread (diam. c. 8m) of heat-shattered stone in a matrix of charcoal-rich soil was visible in August 1998 c. 8m from the river bank in August 1998. It was exposed during clearance of scrub from the riverbank. There is another burnt spread (MA063-064) c. 35m to N and rath (MA063-005----) is located immediately to NW' (O' Shaughnessy 2020).*

Burnt Mounds and Burnt Spreads – General Discussion

Burnt mounds and burnt spreads are among the most common prehistoric sites in the Ireland and Mayo and are associated with prehistoric pyrolithic water-boiling technology. These monuments, together with *Fulachta Fiadh* are defined by concentrations and aggregations of charcoal-enriched soil, mixed with heat-shattered stone, accumulated into spreads and mounds. In their classic undisturbed form, accumulated deposits of burnt stone appear in the Irish landscape as crescent or horseshoe-shaped, grass-covered mounds, traditionally referred to as *fulacht fiadh/fulacht fia* (plural: *fulachta fiadh/fulachtaí fia*). These designations have their linguistic roots in early Irish literary references from the 9th century AD onward (Ó Drisceoil 1990, Guinan 2015, Guinan 2022, 299).

Classification nomenclature used to describe mounds of burnt stone varies across excavation reports, this is particularly the case with some older reports, and certain site types. For example, the term *fulacht fiadh/fulacht fia* (plural: *fulachta fiadh/fulachtaí fia*), based on the early Irish literary references from the 9th century AD, is commonly used in Ireland to describe mounds of burnt stone. However, the precise use of the term is not always specified in reports and is interchangeable with appellations such as burnt mound and burnt spread or deposit, when referencing the same general site type. When recording deposits of fire cracked stone and charcoal-enriched soil, the term *fulacht fiadh* is often used where a trough or possible trough/s was present. Where no evidence of a trough was encountered, burnt mound or burnt spread is appropriate.

The burnt material associated with these sites can seal a variety of associated features, including troughs, hearths, platforms, gullies, water drainage/channels, path/trackways, post-holes and pits. These mounds, represent the discarded residue of pyrolithic firing debris, generated through a process of fire heating stones, for the purpose of trapping heat, before submerging hot stones into troughs and pits filled

with cold water. This form of pyrolithic technology has at its core, the basic primary purpose of generating hot water using stones to capture and transfer heat. These sites are very important components of prehistoric settlement in Mayo. Their form, function, chronology and location, the evidence they contain, their spatial distribution, socio-cultural status and settlement context are fundamental to our understanding of prehistoric life in Mayo. These sites were important communal focal points, fundamental parts of local prehistoric, domestic settlement landscapes (Guinan 2022, 298)

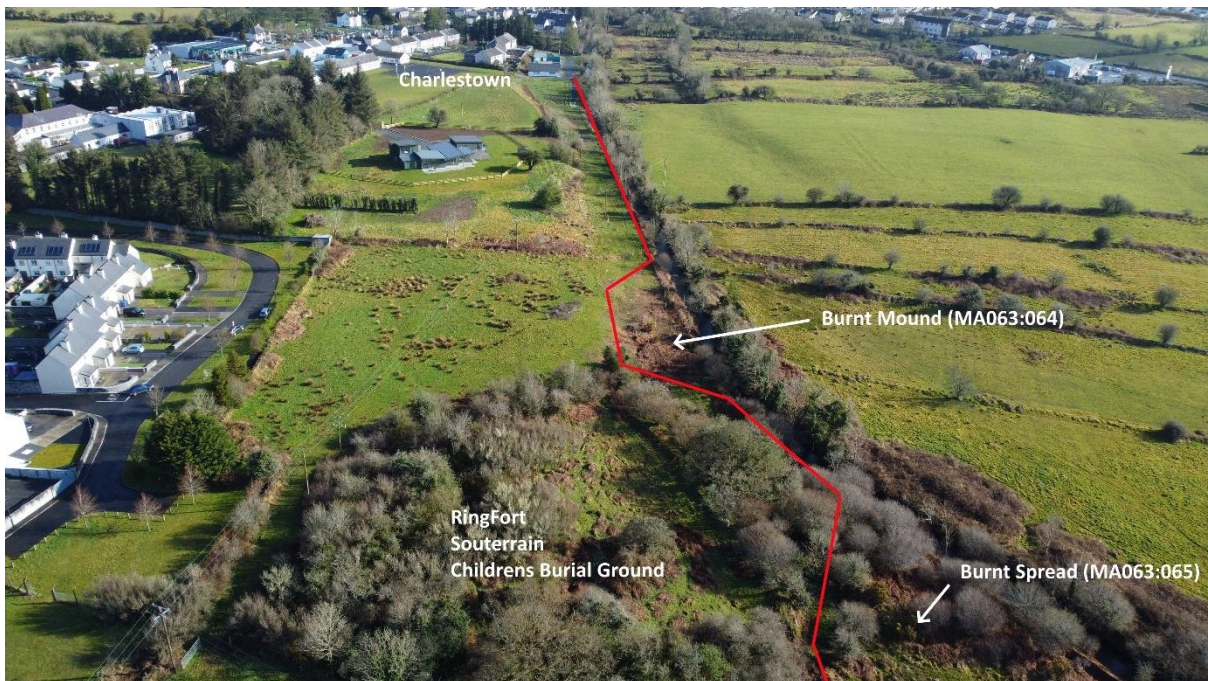


Figure 12: Looking North: Burnt Mound (MA063-064) and Burnt Spread (MA063-065) relative to Ringfort-Rath MA063-005 Lowpark Townland, Charlestown. Proposed line of the Charlestown Walking Trail relative to these recorded Monuments is marked in red. (modified from Drone Image: John Gallagher, MCC 2022).

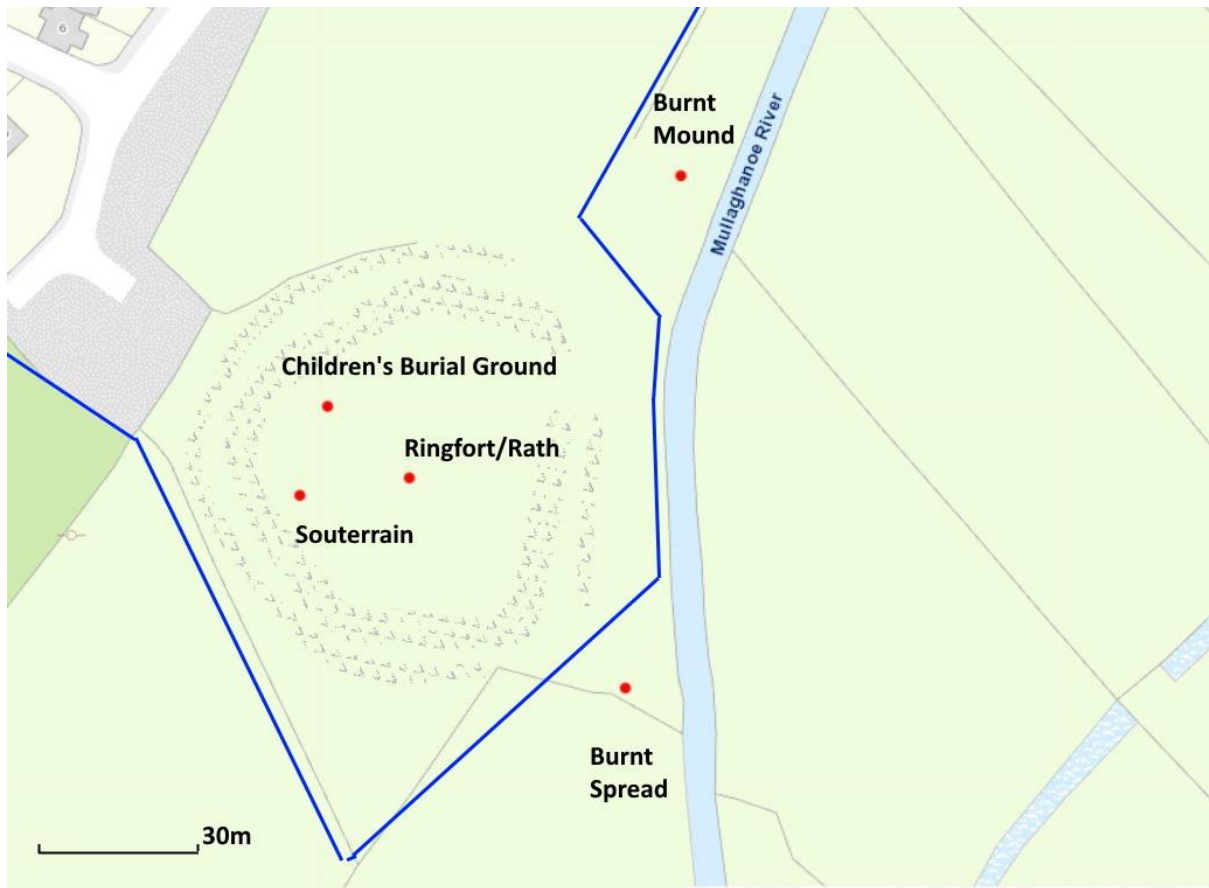


Figure 13: Line of *Charlestown Walking Trail* route (Blue) within the zones of archaeological consent of Burnt Mound (MA063-064), Burnt Spread (MA063-065) and the Ringfort-Rath (MA063-0050) and associated Souterrain and Children's Burial mound, Lowpark Townland, Charlestown. Proposed line of the Charlestown Walking Trail relative to these recorded Monuments is marked in red. (modified from Drone Image: John Gallagher, MCC, 2022).



Figure 14: Looking North: From Ringfort-Rath MA063-005 Lowpark, towards Charlestown – Line of proposed *Charlestown Walking Trail* marked red along bank of Mullaghanoë River (modified from Drone Image: John Gallagher, MCC, 2022).

Archaeological Mitigation - Recommendations & Requirements

The proposed design of the *Charlestown Walking Trail* will have significant impact on the areas of archaeological constraints of a cluster of recorded monuments focused on the Ringfort-Rath MA063-005 and an associated Souterrain (MA063-005001) and Children's Burial Ground (MA063-005002) which are situated inside its interior. In addition, the areas of archaeological constraints of two pyrolithic sites (Burnt Mound MA063-064 and Burnt Spread MA063-065), located to the north-east and to the south-east are impacted. These archaeological sites are located very close to the Mullaghanoë River, a natural riverine topographical feature which is also the focus of the proposed walking trail. The Ringfort-Rath (MA063-005) is unusually - D-shaped in plan, with the straight eastern side running roughly parallel to the Mullaghanoë River. The 1ST edition OSi map of the area (1838), shown the river flowing directly parallel to the ditch/fosse of the Ringfort-Rath. By the time the second edition OSi map was published (1914), the Mullaghanoë River would appear to have been canalised and

the river moved/diverted away from the ditch of the ringfort leaving an area of dry ground (5 and 10m wide) between the ditch and the western bank of the river.

Mindful of how close the proposed trail will be, relative to archaeological monuments in the area (10-15m), the route of the *Charlestown Walking Trail* has been designed to minimise any ground disturbance by mounting the trail walking surface on top of the existing fields and keeping it as far as possible from known edges of each site.

Based on the high degree of archaeological importance of the area, the density of sites, and the close proximity of the proposed works to the monuments under discussion, as highlighted in this document, key recommendations are detailed below.

- Given the sensitivity of the area, together with the fact that work associated with the project will take place within the area of a number of archaeological constraint zones and close to a number of archaeological monuments – all works associated with the programme, including all machine work **must** be subject to archaeological monitoring, conducted under an **archaeological licence**, issued by a National Monuments Service, Department of Dept. of Housing, Local Government and Heritage. An archaeological license application, together with a detailed method statement is made by a qualified, licence eligible archaeologist, to the National Monuments Service, Department of Dept. of Housing, Local Government and Heritage. It takes c. 4 week for an archaeological licence to be processed.

- No works can commence on site until an archaeological licence has been issued.
- The new trail walking surface should (as designed) rest on top of the existing fields thereby minimising ground disturbance.
- Every effort must be made to stick to the original design which is focused on surface mounting the trail surface. Any divergence from this that required de-sodding the field surfaces etc should be limited and must be closely monitored.
- Any clearance of vegetation/scrub land along the route of the walking trail needs to be closely monitored.
- It may be necessary to undertake some scrub clearing and or minor exploratory works to clearly identify the limits of the two pyrolithic sites (Burnt Mound MA063-064 and Burnt Spread MA063-065), impacted by the trail. Any work near these sites should only take place within the constraints of an archaeological licence granted for the project. Any work of this nature should be clearly outlined in an associated archaeological licence methodology.
- An appropriate archaeological monitoring programme will have to be agreed with the National Monuments Service, Department of Dept. of Housing, Local Government and Heritage.
- During construction no machinery, construction material etc should encroach on the various monuments.
- All monuments should be clearly marked and temporarily fenced off in order to prevent inadvertent construction related encroachment.

- Any permanent fencing, lighting which requires ground excavations should be very closely monitored

Another aspect of archaeological mitigation in the context of this project is the opportunity it presents to help protect and present the impacted sites. At present the ringfort interior is being used to shelter cattle, with a significant degree of land poaching evident. This becomes especially impactful during the wetter winter months when cattle gather for shelter inside the ringfort and the ground is softer. In places the bank of the ringfort has been damaged by cattle hoofs. It is recommended that access to the ringfort by cattle be prevented, as part of this project, by fencing off the ringfort preventing damage to its interior.

- It is recommended that the ringfort is fenced off in places to prevent cattle accessing its interior.
- It is recommended that heritage signage is incorporated into the development design providing interpretative and informative for future walkers on Ringforts, Souterrains, Children's Burial Grounds and Burnt Mounds/Pyrolithic sites.

Given the large linear nature of the proposed development it is possible that unrecorded, surface and/or sub-surface archaeological remains/artefacts may be encountered throughout the project. Should archaeological material be found during monitoring the archaeologist licenced on the project may have work on the site stopped, while the nature and extent of the archaeological remains are assessed, recorded, sampled and mitigation measures – such as excavation, preservation *in-situ*, re-routing of works etc – are considered and agreed and sanctioned by the National Monuments Service (Dept. of Housing, Local Government and Heritage) and the National Museum of Ireland. The developer shall be prepared to be advised by the

National Monuments Service and the National Museum of Ireland regarding any necessary mitigation action (eg. preservation *in-situ* and or excavation).

As noted, all work in the proposed development area needs to be carried out under archaeological licence. The archaeological licence application process involves the preparation of a method statement, by a suitably qualified archaeologist and can take up to four weeks to be issued by the National Monuments Service. No ground works can commence until the archaeological licence is in place and an archaeological mitigation strategy has been agreed with the statutory authorities. Archaeological licences are legal documents, granted under the National Monuments Acts (1930-2004) and are subject to strict conditions. The developer should be aware of these conditions.

Post-excavation analysis of archaeological material uncovered during monitoring is an integral part of the archaeological process. Post excavation work may involve sample processing; find analysis, radiocarbon dating etc. Post excavation work generally requires the input of outside archaeological specialists. Post excavation must be completed. The developer must guarantee that funding is available for monitoring, testing, excavation and post-excavation works. The archaeologist/s attached to the development needs to be informed of any changes to the proposed site layout or any additional works not included in the original specifications. Any additions to the original specifications will have to be archaeologically assessed.

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25-May-2022

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Other Sources

National Inventory of Architectural Heritage

National Museum of Ireland Topographical files

National Monuments Service RMP monument files

Ordnance Survey Field Name Books

Ordnance Survey of Ireland 1st (1838) and 2nd (1914) edition maps.

Record of Monuments and Places, sheet 63

William Bald's Map of Mayo 1830

Archaeology.ie (<https://www.archaeology.ie/>)

Excavations.ie (covering all excavations on the island from 1969 to 2018) -
<https://excavations.ie/>

