

Brief of Evidence

Archaeology, Architectural Heritage and Cultural Heritage

Corrib Onshore Pipeline: Oral Hearing

Margaret Gowen & Co Ltd

Qualifications and Professional Experience

Archaeological, Architectural Heritage & Cultural Heritage Brief of Evidence

Qualifications and Professional Experience

- 1 My name is Lisa Courtney and for the duration of this project I was employed as a senior archaeologist with Margaret Gowen & Company Ltd., a cultural heritage and project management consultancy. I have worked on numerous large-scale infrastructural projects and small-scale developments alike including the production of archaeological constraints studies, routing studies and environmental impact statements for pipeline, road and landfill developments.

- 2 I graduated with a Bachelor of Arts, Honours Degree in Archaeology and a Masters of Science (Ag) in Environmental Resource Management from University College Dublin (UCD). Since 1992 I have been employed as a professional archaeologist and I am a member of the Institute of Archaeologists of Ireland (MIAI). As a post graduate I specialised in Irish wetland archaeology with the archaeological department and the Irish wetland unit at UCD. I accumulated skills to address archaeological assessment in a bogland environment. These skills included field survey, excavation, planning, surveying, recording and sampling of features and artefacts and post excavation work.

Knowledge of the Area

- 3 I have ten years experience on this project, having managed the cultural heritage component for the Mayo to Galway Pipeline EIS (Bellanaboy Bridge to Cappagh South) and the previously approved Corrib Onshore Pipeline Route and Gas Terminal at Bellanaboy Bridge. Work for these projects included overseeing documentary and cartographic research, review of aerial photographic survey, field inspection, advising on rerouting to avoid archaeological sites and complexes and attendance at oral hearing.

- 4 Today, in my brief I will discuss our approach to the study, our findings and the proposed mitigation measures.

Assessment Approach

- 5 The purpose of the architectural, archaeological and cultural heritage impact assessment (Vol. 1, Chapter 16 & Vol., 2, Book 5 of 6, Appendix N) for the proposed Corrib Onshore Gas Pipeline is to:
 - assess and describe the receiving architectural, archaeological and cultural heritage environment,

- identify and evaluate the significance of the impact of the scheme on this environment,
 - propose appropriate measures for the avoidance or mitigation of these impacts within the design of the proposed pipeline development.
- 6 The assessment methodology (Vol. 1, Section 16.2 and Vol. 2, Appendix N, Section 3) for this project included:
- desktop assessment including documentary and cartographic sources
 - field inspection
 - an examination of aerial photographs
 - test excavation
 - consultation
- 7 The entire length of the land based pipeline route, the proposed temporary working areas and the pipe stringing areas and associated ancillary works were inspected by Margaret Gowen & Co. Ltd.

Assessment Summary

- 8 In this section, I will first discuss the architectural heritage, followed by the cultural heritage and archaeological findings.

Architectural Heritage (Vol. 1, Section 16.3.2.1 and Vol. 2, Appendix N, Section 4.5)

- 9 As stated in the 2009 statement (section 4.1) no upstanding historic structures, no items of architectural heritage significance or their surrounds, curtilage or attendant grounds will be affected by the construction of the proposed pipeline route or associated development. No architectural heritage structures will be impacted by the proposed revised route.

Cultural Heritage (Vol. 1, Section 16.3.2.2 and Vol. 2, Appendix N, Section 4.5.2)

- 10 The townland names along the route of the proposed pipeline are discussed in Volume 1 section 16.3.2.2 and were described at paragraph 4.2 of my 2009 statement. No new townlands will be impacted by the proposed revised route.
- 11 A commemorative mass site (ID A4), which is a site of cultural heritage interest, is located immediately east of the Leenamore stream. This stream forms the townland boundary between Bellagelly South and Aghoos. As can be seen from the visual, the site is located on low ground, cut into a west-facing slope. It is naturally sheltered and protected from the elements (Visual 1). The site consists of stone foundations in a rectangular form (c. 11m north-south c. 5m east-west). There is a local tradition of practising mass at this site every Easter Sunday.

Archaeological Heritage (Vol.1, Section 16.3.1)

- 12 The proposed pipeline route avoids all Recorded Monuments (RMPs). To date archaeological monitoring and test excavation at Glengad and at Aghoos townlands has revealed no features of an archaeological nature.
- 13 A recorded enclosure (RMP MA004-015) (ID A1) is described in Volume 1, Section 16.3.1.1 of the EIS and paragraph 4.3 of my 2009 statement.
- 14 In Aghoos townland, a mound (ID A3) was identified during field inspection, north of the pipe stringing area. This site was subjected to test excavation under licence to the Department of Environment, Heritage, Local Government (DEHLG). Testing established that the mound was a natural feature formed of peat and that it was of no archaeological significance. As the feature was proven to be natural in origin and not archaeological in nature, there is no predicted impact. Visual 2 provides a before and after test excavation photograph of the potential site. The extent of the excavation is recorded in Figure 7, Appendix N, Vol. 2. Archaeological work carried out in bogland environments has proven that features noted on the surface of the bog do not necessarily equate with a buried archaeological site. Mounds may simply reflect a rise in mineral soil, a rock or tree stump which lies beneath the peat.
- 15 A description of an oblong irregular mounded area (ID A5) (previously identified as ID A20) in Bellagelly townland is described in Vol. 1, Section 16.4.1 and Table 16.5 of the EIS and paragraph 4.3 of my 2009 statement.
- 16 Areas of archaeological potential, identified as greenfield/coastal (Glengad) and blanket bog (Aghoos and Bellagelly South) will also be impacted by the extended construction working area. In these areas there is a possibility that previously undiscovered features or sites of archaeological and cultural heritage could be revealed. This will be mitigated by the archaeological monitoring of all earthmoving work.

Mitigation Measures

- 17 Cumulative and indirect impacts and interactions are discussed in Chapter 17 (section E, Vol.1). Suitable mitigation measures will eliminate the possibility of temporary effects during the construction phase and the following interactions have been considered-
Peat plugs will be used within the stone road to maintain the hydrology of the area and prevent the road acting as a preferential drainage channel within bogland area and inadvertently affecting the organic content of an archaeological site.
Permission will be sought from the National Parks & Wildlife Section of the DoEHLG in advance of any archaeological investigation taking place in ecologically sensitive environments. No indirect or cumulative impacts are expected as a result of the project.

Architectural Heritage

- 18 No structure or building will be removed as a result of the development of this project and no protected structure or structure of an architectural heritage merit will be subject to a direct impact. Therefore, no mitigation measures are necessary (Vol. 1, Section 16.5.3).

Cultural Heritage

- 19 It is recommended that fencing located adjacent to the pedestrian access route at the commemorative mass site (ID A4), could display information in relation to archaeology and the cultural heritage of the area during the construction period.
- 20 Field boundaries will be appropriately reinstated during the post construction stage of the proposed development where appropriate.

Archaeological Heritage

- 21 Having discussed the proposed pipeline development and the matter of archaeological mitigation with the National Monuments Section of the DoEHLG, it is recommended by that authority that archaeological monitoring by a licensed archaeologist be undertaken during the earthmoving works of the construction stage. This will ensure that any potential archaeological feature or discovery of an isolated stray find is identified, recorded and fully resolved under licence to the statutory authorities (Vol. 1, Section 16.5.1).
- 22 As specified in correspondence from the DEHLG dated 28th July 2010, archaeological monitoring shall consist of -
- ‘The applicant is required to engage the services of a suitably qualified archaeologist to monitor all ground disturbance works associated with the development. This should include all areas outlined for archaeological monitoring in the submitted EIS. The mitigation in Table 16.7 (Vol. 1) should be implemented in liaison with this Department’.

Conclusion

- 23 This assessment had regard to the principal statutes which provide protection to the archaeological and architectural heritage and guidance notes which advise on good practice. All archaeological work will be conducted in accordance to the requirements of the DEHLG in consultation with the National Museum of Ireland.
- 24 In my professional opinion, based on the results of this completed archaeological impact assessment, and with the implementation of the suggested mitigation measures there will be no significant impact on archaeology or features of cultural heritage.

Response to Submissions

- 25 Shell E & P Ireland Limited (SEPIL) agree to implement the proposed schedule of archaeological conditions (No. 29a-d) as put forward by Mayo County Council in order to conserve the archaeological heritage of the site and to secure the preservation of any remains which may exist within the site.
- 26 SEPIL agrees with the assessment of the Senior Archaeologist of Mayo County Council with respect to Appendix N and Chapter 16 of the EIS in that the reports are satisfactory.
- 27 One submission comments on ID A1 and ID A2. ID A1, is a recorded enclosure site (RMP MA 004-015) in Glengad that lies c.10m from the existing access road to the proposed LVI and 235m from the proposed pipeline. All previous work conducted in this area was archaeologically monitored and did not reveal any finds or features of an archaeological nature. Any further work in this area will be monitored by a licenced archaeologist.
- 28 ID A2 is a mound that was identified during field inspection in Aghoos townland as a potential archaeological site. It is located c.106m to the north of the pipeline and the working area is located 31m northwest and 51m southwest of the feature. Recent test excavation findings of ID A3, another mound, identified by field inspection in Aghoos townland revealed that the feature was natural in origin. There will be no affect to ID A2 as a result of the proposed development.
- 29 Gradiometer survey can be used to detect and map buried archaeological features. Under the right soil and geological conditions archaeological deposits exhibit a contrast in magnetic susceptibilities due to burning and deposition activities undertaken during site occupation. The suitability of geophysical survey techniques depends on a number of site specific factors, for example, interference from modern surfaces, ground conditions on site and prevailing weather conditions.
- 30 At Aghoos, due to the eroded bogland, other methodologies were undertaken in order to assess the potential to reveal archaeological features. These included documentary research, cartographic and aerial survey analysis, field inspection and test excavation. These methodologies were agreed with the National Monuments section of the DEHLG.
- 31 The land at Glengad was also assessed in relation to the suitability for geophysical survey. However, given the schist bedrock and sand subsoil, both containing magnetic properties and the parallel, strip field pattern divided by wire fencing it was considered that other methodologies of assessment would be more successful in determining the likely and significant archaeological potential of the land. To date, both monitoring and test excavation in both areas has revealed no archaeological features.

- 32 In relation to comments made by other parties suggesting 'poor archaeological surveying of area and monuments not recorded', and referring to the 'Archaeology of Kilcommon' and 'Local Expert Consultants', I would like to reiterate that no recorded archaeological feature will be affected or impacted as a result of this proposed pipeline. The nature of the archaeology, in that, blanket bog can and does mask evidence of pre-bog settlement has been explored in the Existing Environment section of the Archaeology Chapter, and it was recognised from the outset of this project that under-recording due to the remoteness and topography of the area could be a factor influencing the archaeological record. Simply put, just because nothing is recorded does not mean that nothing is there. That is why ongoing archaeological monitoring is specified during the site preparation stage of the proposed project.
- 33 For the purpose of this study, as well as work completed by the Archaeological Survey of Ireland, we have reviewed other surveys and investigations undertaken in proximity to the proposed development. However, no further archaeological features have been identified from the survey work or from field inspection, archaeological monitoring and test excavation in relation to the proposed pipeline and scheme. The recognised archaeological significance of the parish of Kilcommon is detailed and recorded in Chapter 16 of the EIS and Appendix N, however the proposed project will not affect any monument.
- 34 As stated in the EIS (Vol. 1 section 16.2.2 and Vol.2, Appendix N, section 3.6), various parties were consulted, they did not act as consultants to Shell at any stage of the process as has been suggested in the submission.

Corrib Onshore Pipeline

Terrestrial Archaeology

By Lisa Courtney

(Bord Pleanála Application Reference No.: 16.GA0004)



Chapel Site at Aghoos



ID A3 before excavation



**ID A3 after
excavation**