Submission to the EPA Oral Hearing
on a Proposed Landfill at Nevitt for Fingal County Council

By
Commandant Patrick Boyle (Ret), BE (Mech.), MPhil (Early Irish)

This Brief of Evidence is presented by Patrick Boyle, a resident of Fingal on behalf of the Nevitt Lusk Action Group. Patrick Boyle graduated from UCD with a BE in Mechanical Engineering and joined the Irish Army Ordnance Corps in 1970. He has held various appointments in that Corps but principally, Officer in Charge Ordnance Base Workshops, and Chief Instructor Army Ordnance School. He retired from the Army in 1996, and together with John Murray, a horticultural grower now sadly deceased, constructed a microbrewery at Ballymaguire, Lusk, which used the artesian well on the premises as a source of brewing water. From 2002-2004 he took a postgraduate MPhil in Early Irish at Trinity College, is the author of a book on the Iron age in Fingal, and an article in Archaeology Ireland on the Nevitt townland. His particular area of academic interest is Celtic ritual sites and places of assembly.

Archaeology:

My involvement with Nevitt Lusk Action Group was a direct consequence of the Fingal Landfill Siting Study failure to recognize the townland of Nevitt as potentially a most rare and nationally significant Celtic ritual site - what Professor Barry Raftery of UCD at the An Bord Pleanala Oral Hearing has termed a "Royal site"-, and the only potential Celtic Nemeton ever found in Ireland. I cannot add much more to the evidence also presented to that Bord and to this hearing by Dr. Richard Warner, formerly of The Ulster Museum, except that which is contained in Archaeology Ireland, and to say
a. An EPA guideline document on EIS recommends that for such a rare site "the site must be avoided", and that
b. Surviving field names such as The Chapel Bank, Bile Manus and The Wrestling Field all indicate the presence of an ecclesiastical site, a royal inauguration site and a place of assembly respectively. Ref 1-8.

The reason the Nevitt Lusk Action group failed to submit archaeological evidence to the EPA inspector is that we were given to understand that such matters were outside the EPA remit, but earlier in this hearing it was indicated that this may not in fact be the correct statutory position.
Geotechnical:

1. Maintaining inward hydraulic pressure on the liners.

The stated objective of maintaining an inward hydraulic pressure in the perched groundwater level, 1 meter above the level of leachate, appears to be unattainable for the following reasons.

a. The 57 hectare footprint will be divided into 20+ cells, each approximately 2.5 hectares in area and sides measuring 150 m +or-.

   The water level minimum is 2m above the liner but because of the requirement to maintain a fall of 1/50 for leacate drainage or 3m in 150m, there will be some side slopes where the water level will need to be at least 5m above the liner in every cell. If even two cells are interconnected across the site at the same base level this figure would double - a practical impossibility without overflowing the liner sides.

b. Arising from that I cannot see how adjacent downgradient cells could have hydraulically connected drainage blankets as stated during questioning.

c. In addition there is the problem of adjacent cells being at different stages of completion i.e. a cell under construction requiring dry foundations and an adjoining one requiring inward water pressure – a situation which will exist for the working 30 year life of the landfill.

d. With 20+ cells, all at differing water levels, the complexity of assuring no cross spillage over or beneath adjacent liners appears impractical.

e. A blanket drain, which should be emptied of contaminant as soon as possible, now becomes a reservoir and distribution system to the soil.

2. Maintaining adequate friction at the liner sidewalls.

Unless friction is maintained between the liner sidewalls and the retaining medium, the liner will fail due to tearing, as it is anchored at the top. The lower 2m to 5m of the liner sidewall in any cell will be below the retained water table, and therefore not drained by the herringbone system as described. In this area the liner is subject to differential sidewall pressures and will fail. This differential pressure is caused by the phenomenon whereby saturated clay when subjected to pressure can lose its friction properties entirely, and is compared to wet ice. Instances of liner and slope failure in modern landfills in the USA have been attributed to this phenomenon. The implications for existing landfills constructed using this technique is obvious.
3. Perched gravels.

The geophysical investigations indicate numerous locations where perched gravels are suspected. These areas have not been to my knowledge investigated as to their lateral or vertical extent as recommended in the GIS Guidelines.

One borehole only, AGB4, encountered gravel at a very shallow depth - 0.7m, but drilling terminated at 4.5m. The lateral and vertical extent of this positively identified deposit is not known, although one up-gradient nearby borehole encountered no gravel. The presence of a very steep bedrock gradient underlying this area may be significant.

Perched gravels from around 10m below the surface and below that depth could have the following effects

a. They could offer a vertical and/or lateral pathway, and either lower the local vulnerability beneath that particular cell, or present a horizontal high permeability escape route for contaminant.

b. They could cause blowout or heavy springs emanating from the confined aquifer, and possibly necessitate permanent dewatering of the entire aquifer beneath the site.

c. They could cause slow base heave during the operations.

d. If not detected during the construction phase they could be responsible for a subsequent upwards leakage from the aquifer, increasing the hydraulic pressures on the liner interfaces and ultimately slope failure.

I fully recognize my own limitations both in the specialized engineering topics involved and in my previous lack of experience in this field. I unreservedly apologise for any errors, but these are the real and serious unresolved problems as I perceive them to be.

Conclusion
Given the complex and serious nature of the technical problems which have gone unanswered to date, the planning process places no further onus on the applicant to engage in public debate on the issues arising unless the Oral Hearing now requires them to do so. It would be a pity if this opportunity to put these issues to rest was missed, and they dragged on into the EU. It would certainly put a very onerous and unfair burden on the local community represented by the Nevitt Lusk Action Group.
### Classification Table (for EIS and archaeological appraisal purposes only)

<table>
<thead>
<tr>
<th>EP Impacts</th>
<th>Impact Level</th>
<th>Criteria for EIS</th>
<th>Category</th>
<th>Status</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predominant or significant (negative effect only)</td>
<td>Severe</td>
<td>Rating not adverse effect only. Appropriate mitigation would be unlikely to remove such effects. The effects are generally but not exclusively associated with sites and features of archaeological significance.</td>
<td>National Monument</td>
<td>Sites must be avoided</td>
<td></td>
</tr>
<tr>
<td>Significant impact (positive or negative)</td>
<td>Major</td>
<td>Important considerations at a national to regional level. If adverse, it has the potential to become a key component in the structuring of the project. Mitigation measures are unlikely to remove all effects upon the affected archaeological features.</td>
<td>Nationally important site or very rare in the archaeological record</td>
<td>Sites must be avoided</td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td></td>
<td>Represents issues where comprehensive analysis and detailed design work may ameliorate adverse effects and the consequences upon affected interests. If adverse, they are important but not likely in key decision making on the EIS. The effects can be mitigated against.</td>
<td>Extensive, well-preserved sites, urban areas, churches, graveyards, burial mounds, and not necessarily rare in the archaeological record</td>
<td>Sites should be avoided to prevent all archaeological investigation work. Should take place prior to construction.</td>
<td></td>
</tr>
<tr>
<td>Minor</td>
<td></td>
<td></td>
<td>Low visibility of features or industrial structures.</td>
<td>Monitoring prior to construction phase if archaeological material is found during excavation or avoidance can then be cited</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
<td></td>
<td>Sites of potential archaeological potential but of unquantified extent and significance.</td>
<td>Monitoring prior to construction phase if archaeological material is found during excavation or avoidance can then be cited</td>
<td></td>
</tr>
<tr>
<td>Neutral or slight impact</td>
<td></td>
<td>The forecasting framework cannot envisage any effect on the environment.</td>
<td>NA</td>
<td>NA</td>
<td>An area of archaeological potential must be observed around all sites</td>
</tr>
</tbody>
</table>
### APPENDIX 6 SIGNIFICANCE CRITERIA

The following table is taken from the National Roads Authority (NRA) Guidelines for the assessment of archaeological heritage impacts of National Road Schemes (2005).

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing Status</strong></td>
<td>The level of protection associated with a monument or complex is an important consideration.</td>
</tr>
<tr>
<td><strong>Condition/Preservation</strong></td>
<td>The survival of a monument's archaeological potential both above and below ground is an important consideration and should be assessed in relation to its present condition and surviving features. Well preserved sites should be highlighted; this assessment can only be based on a field inspection.</td>
</tr>
<tr>
<td><strong>Documentation/Historical Significance</strong></td>
<td>The significance of a monument may be enhanced by the existence of records of previous investigations, or contemporary documentation supported by written evidence or historic maps. Sites with a definite historical association, or an example notable event or person should be highlighted.</td>
</tr>
<tr>
<td><strong>Group Value</strong></td>
<td>The value of a single monument may be greatly enhanced by its association with related contemporary monuments or with monuments from different periods indicating an extended time presence in any specific area. In some cases it may be preferable to protect the complete group, including associated and adjacent land, rather than to protect isolated monuments within that group.</td>
</tr>
<tr>
<td><strong>Rarity</strong></td>
<td>The rarity of some monument types can be a central factor affecting response strategies for development, whatever the condition of the individual feature. It is important to recognise sites that have a limited distribution.</td>
</tr>
<tr>
<td><strong>Visibility in the landscape</strong></td>
<td>Monuments that are highly visible in the landscape have a heightened physical presence. The inter-visibility between monuments may also be explored in this category.</td>
</tr>
<tr>
<td><strong>Fragility/vulnerability</strong></td>
<td>It is important to assess the level of threat to archaeological monuments from erosion, natural degradation, agricultural activity, land clearance, neglect, careless treatment or development.</td>
</tr>
<tr>
<td></td>
<td>The nature of the archaeological evidence cannot always be specified precisely, but it may still be possible to document reasons to justify the significance of the feature. This category relates to the probability of monuments producing material of archaeological significance as a result of future investigative work. It is usually confined to sites of rather than upstanding monuments.</td>
</tr>
</tbody>
</table>
AREA 10: XY-TRACE, DOT DENSITY PLOT & INTERPRETATION

SITE 'B' - "POSSIBLE SHRINE"
- OR. RICHARD WARNER

NOTE: ANNEX TO RECTANGLE AT 'A'
'PIT' AT 'B'. TYPICAL OF CELTIC SHRINE

9/3/08
Area 36B Interpretation

Site 'J'

To be retained
outside footprint
Fingal's sacred grove?
The wreck of the Tayleur
Tara and the M3
The dance of the Fer Cengail?

PATRICK BOYLE R680
Paddy Boyle reflects on the placename evidence for a Celtic ritual landscape in north County Dublin, an area soon to become a landfill site.

Since at least as far back as Viking times, that part of County Dublin lying north of the city has been called Fingal, probably deriving from the Irish fine gall, meaning 'foreign people'. The southern part of Fingal, once the home of the Vikings of Dublin, is a flat plain of rich farmland, much given to tillage. It is thought that before Viking times this land was the territory of the Celtic tribe called the Gailenga. The northern half of Fingal is very different. The terrain is hilly and much more suited to pasture. It was the ancient Celtic kingdom of Saithne, held by the O’Caseys, who may have been the tribe referred to as the Cauci by Ptolemy on his map of Ireland of c. AD 150. The O’Caseys successfully defended the hills of Saithne for hundreds of years against frequent incursions by the Vikings. But the ancient Viking and Celtic kingdoms were not to survive the Norman invasions of the twelfth century, and all the rich land of Fingal became the prize of the conquering knights of King Henry II of England.

Just where Gailenga ended and Saithne began, on the southern slopes of the hill of Knockbrack, we find the townland of Nevitt,
described in the Civil Survey of 1651 as consisting of 157 acres of meadow and three acres of arable—the property of the lord of Howth by inheritance. The hills behind Nevitt still bear the ancient placenames of Celtic Saithne—Knockbrack, Mallahow, Beldarragh, Belgee, Loughmain, Clonany. Townlands on the richer land to the immediate south have purely English names—Parnelstown, Knightstown, Bettyville, Wimbletown, Broomfield, Annsbrook, etc. The southern slope of Knockbrack directly overlooking Nevitt is called Hollywood, an ancient parish but without a village as such. The townland of Nevitt today is much the same as shown on Rocque's map of 1760, i.e. a small cluster of farm buildings at the centre, surrounded by green fields, well watered by a number of streams trickling down from the hill of Knockbrack. Apart from the inevitable addition of a few modest new houses, nothing much has changed in this rural idyll for many hundreds of years.

But then the bombshell! The townland of Nevitt has been selected by a process of elimination as the preferred site for a new super-dump, serving Dublin city and county. The local community has been devastated by the news. A Fingal County Council publication gave the relevant figures—proximity to the new M1 motorway, underground hydrology, low population density, low environmental impact, no recorded archaeological features, etc. All other things being equal, it seems
RITUAL LANDSCAPE

'Irish citizen as resembling a common Irish word. There is a surname Nevitt, but this would give rise to a Nevittstown and not simply Nevitt or 'the Nevitt', as the locals call it. It is spelt Neavett in the Civil Survey of 1651. If we replace the 'v' with an Irish equivalent 'mh' we get Neamhett, and checking Dineen's Irish-English dictionary we find 'Neimheadh—a sacred or privileged person, place or thing—a sanctuary, a sacred grove, churchland, glebe, name of an ancient chapel at Armagh'.

A check on the Royal Irish Academy's Dictionary of the Irish language, which is based mainly on Old and Middle Irish material, gives us a substantial entry under neimed, also spelt neimheadh or neamhth. Passages containing the word are given from the pre-Christian and Early Christian periods with reference to places, e.g. a Nemud slébe Fuaite, line 5353 of Tain Bó Cuailgne, and nior fhathbhide Lochtannagra naomh no neimheadh no ceall usal gan argain. Quotations containing the word are also given from the Brehon Law sources. The opening passage of the reference is worth quoting in full:

'The original sense is probably that of a consecrated place = Gaulish "Nemeton" (cf. Augusto-Nemeton, Ptolemy's name for mod. Clermont-Ferrand), which probably represents an indigenous word used of sacred groves; cf. de sacris silvarum quas nimidas vocant. In Irish literature a sanctuary; in Early Christian literature probably a small chapel or oratory.' (Note the uncertainty with regard to Early Christian times.)

The fact of the matter is that the word nemeton is very well recorded and understood by the Latin historians of the Roman Empire, who were fascinated by the religious practices of the Celts. Today most historians writing about the Celts will include a description of these Celtic sanctuaries. The following passage is taken from The Druids by Professor Stuart Piggott:

'There is a Gallo-Brittonic word nemeton which is used for a shrine or sanctuary in a sense that implies a sacred grove or clearing in a wood. The word is cognate with the Latin nemus, the primary sense of which (like that of locus) is not so much a wood as a wood with a clearing in it, or the clearing itself within a grove. The most famous nemus was that of Diana at Aricia, where

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that the Nevitt as a townland and community will cease to exist. It will be entombed and forgotten under a mountain of refuse to be known as Fingal Landfill Number 2, or some such designation. Local residents will be compensated and moved out, and life will carry on.

But there is a problem with the place-name Nevitt. On the face of it, containing as it does the letter 'v', it would appear English or perhaps even French, and certainly it would not strike the average

Above: Nevitt as shown on Rocque's map of 1762.

Far right: The Hollywood landscape.
The priest who slew the slayer
And shall himself be slain
held, uneasily, the title of Rex Nemiorensis. Strabo records the name of the meeting-place of the council of the Galatians in Asia Minor as Dranemeton, the sacred oak-grove, and Fortunatus writes in the sixth century AD of a place Vernemeto[n] which in the Gaulish language means the great shrine (using here the word fanum). Many nemeton place-names existed in the Celtic world, from Mediomemetum in Southern Scotland, Vernemeton itself between Lincoln and Leicester and in Gaul, Nemetodurum, the modern Nanterre, to Nemetobrign in Spain. Aquae Amemetiae, the modern Buxton, appears to show how the thermal springs there were associated with a sacred grove. In the eighth century "forest sanctuaries which they call ninidne" are listed as heathen abominations, and in the eleventh, a Breton "wood called Nemet" is recorded. The word and idea came through into Old Irish as nemed, a sanctuary, and fidnemed, a forest shrine or sacred grove.

(Note that the word is spelt in various ways depending upon the language used in the original text—Gaulish, Greek, Latin, Old Irish, Middle Irish, Classical Irish, seventeenth-century English or modern English. The spelling can also depend on the case, i.e. a Nenid slehe Fuait, from the Old Irish text of the Táin. Here the word is in the dative case following the preposition a, meaning 'out of', and has what is termed a 'u' inflection. This indicates that the noun in the nominative case would most likely be Nemed, and would be classed in the family of 'o'-stems, e.g. the word for 'law', nominative singular dliged, genitive dligid, dative dligud.)

The archaeology of Celtic religion is not confined to sanctuaries that are merely clearings in woods. Many hundreds of square and round stone and timber temples exist throughout the Celtic world, dating from the Roman period and described as Romano-Celtic. In addition, elongated and square ditched sanctuary enclosures, some containing deep ritual pits or shafts containing votive offerings, are also common, often referred to as the Viererschanzen type. Indeed, the so-called 'Banqueting Hall' at Tara could be something analogous. Piggott makes an interesting observation about the word nemeton in relation to these other sacred sites:

"Whether the Celtic sanctuary-word nemeton included such precincts as well as natural woodland clearings is uncertain, but it could have done."

A map of County Dublin c. 1650 by William Petty is reproduced in Michael Herity's edition of the Ordnance Survey Letters for Dublin. It shows the adjoining townlands of Tooman/Nevitt as Hollywoodnevet. The townland of Hollywood itself is shown separately immediately to the west. However, the Civil Survey of the same period lists the townland of Nevitt as separate from Tooman and places both in the parish of Lusk, with no apparent connection to the parish of Hollywood. Similarly, whilst Hollywoodnevet was in the ownership of the lord of Howth, Hollywood was not. So, if it was neither civil nor religious, what was the nature of the connection between Hollywood and Hollywoodnevet?

If we look at the adjoining Irish place-names again we find Beldarragh and the crossroads still called Cross na Coille—the 'Valley of the Oaks' and the 'Cross of the Wood'. John D'Alton’s History of County Dublin and Marie Therese Flanagan’s article on the origins of Balrothery both refer to charters issued by Archbishop Cumin of Dublin and Geoffrey, prior of Llantony in Wales, c. 1190, which refer to the mother-church of Hollywood as Ecclesiam de Santo Nenore, the 'Church of the Holy Wood'. If we compare this name with the present-day Bois de Nevet near Locronan in Brittany, we can see that the former means 'the church of the holy wood' whilst the latter means 'the wood of the holy church', and indeed still contains the oratory of the early Irish missionary St
Ronan. It would appear from the evidence above that there was an extensive wood covering a number of townlands in this area in pre-Norman, i.e. Early Christian, times and that for some reason the wood itself was considered holy.

Let us now consider the possibilities. Firstly, if the wood was considered holy in pre-Christian times then it would have been called Nemned, as in Nemned slebe Fuait. It may have contained a sacred meeting-place, as in Druminet in Galatia, or an oak-grove with associated springs, well, stream or pond, possibly a place where votive offerings were deposited. Recent archaeological evidence from nearby Drummanagh promontory fort at Loughshinny strengthens the possibility of Romano-Belgic influence on the coast during the Roman occupation of Britain. We therefore cannot rule out entirely the possibility of a Romano-Celtic sacred site. There is a folklore tradition in the area that the Nevitt was once the meeting-place of the legendary Celtic warriors called the Fianna, and a field name in the locality still bears the name ‘the wrestling field’. Was this place perhaps the site of ancient gatherings in the Celtic tradition such as those recorded at Tailten and Carmun in pre-Christian times?

Moving forward in time to the Early Christian period, a Christian Neimheadh, the nature of which is not fully understood, is a possibility—perhaps an oratory adjacent to a holy well. There is a field with the intriguing name ‘the chapel bank’ and a local tradition that it was the location of an ancient church, no longer visible.

Moving on into the Viking era, the destruction of churches by the marauding invaders might have left very little standing of an earlier religious foundation. Nor can we place the blame for such sacrilegious acts entirely at the feet of the Vikings. The Annals tell us that in 1089 ‘Lusk was burned by the men of Munster and 180 people burned in the stone church’, and Lusk and Swords were burned by the Meathmen in 1135.

The arrival of the Normans had the side-effect of strengthening the position of the Church in the area, and indeed a great nunnery was established by Archbishop Cumin at Grace Dieu, just a few miles south of the Nevitt, with extensive lands being granted to it in the area. Did the Nevitt take its name from being attached to this institution? Personally I think we have to rule out a post-Norman origin for the name, because the holy wood would have been called Nemned or Neimheadh in pre-Norman times.

So we see that there are many questions still to be answered on the exact location, nature, origin, history and archaeology of this highly significant place. If we were still in the times of the Brehon Law there would be no question of the destruction of the Nevitt, for in the archaic legal poem known as Ma be ri rofessere—‘If thou be king thou shouldst know’—we find the line Esnill bes dithemair dile fisuined naire, i.e. ‘a hell from which there is no escape is the penalty for destroying a sacred Nemned’.

But perhaps the most important aspect of this little townland is simply that the old Celtic placename Nemned is recorded here. It is unique in the Republic of Ireland, and it says so much about our Celtic past. For me personally its pending destruction by a local authority in such an undignified way is unthinkable, and it is certain to add another black mark internationally to our country’s reputation for heritage conservation.

Perhaps there is a better way forward. Just recently Drogheda Port Authority announced plans for the construction of a new deep-sea ferry and container port at Bremore, just two miles north of Balbriggan and with no local inhabitants. An artist’s impression of the new facility shows extensive offshore landfill. Let me ask the obvious question. Why not construct the new landfill site at this offshore location? Singapore does it, and so does Manila. The technology used is modern, well tried and tested. But, not being a politician, perhaps I am missing something here. I suppose the argument could be made that if we fill in the Irish Sea we risk another invasion by the English! ■

References

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