

An Bord Pleanála Oral Hearing

Irish Water

Greater Dublin Drainage

Brief of Evidence

Agronomy

Philip Farrelly

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Qualifications and role on the Proposed Project

- 1 My name is Philip Farrelly. I am a principal of Philip Farrelly & Co, Agricultural Consultants. I hold a degree in Agricultural Science from University College Dublin. I have over 30 years' experience in the provision of specialist agricultural consultancy services including the assessment of agricultural impacts on infrastructural schemes. I have acted as Expert Witness on many occasions at both High Court and Circuit Court and at public inquiries and oral hearings.
- 2 In particular I have been employed to assess the impact on agriculture of major infrastructural developments including the Boherboy Water Supply Project, N5 Westport to Turlough Scheme, N69 Listowel Bypass, N4 Collooney to Castlebaldwin and the M11 Gorey to Enniscorthy Scheme.
- 3 With respect to the Greater Dublin Drainage Project - (hereinafter referred to as the Proposed Project) I was responsible for the completion of an Impact Assessment on affected agricultural properties. This involved carrying out the following tasks:
 - Assessing the impact on each of the individual farms directly affected by the Proposed Project;
 - Desktop reviews and consultation with the design team; and
 - An assessment of the Macro effect of the Proposed Project on Agriculture.
- 4 The area covered in the Agricultural Impact Assessment can be found in Chapter 19 Agronomy, Volume 3 A of the EIAR My brief of evidence will provide a brief summary of the impacts of the Proposed Project and proceed to outline the main predicted impacts before and after mitigation. I will also address some of the individual concerns raised in the submissions from the public to the planning application. Topics such as methodology, baseline environment, mitigation measures and residual impacts are described in detail in Chapter 19 Agronomy, Volume 3A of the Environmental Impact Assessment Report.

Summary of Likely Significant Impacts & Mitigation Measures

- 5 The Proposed Project will directly affect 26 farms. The assessment methodology to determine the significance of impacts is described in section 19.2.3 of Chapter 19 Agronomy, Volume 3 A of the Environmental Impact Assessment Report. The evaluation of sensitivity of farms, magnitude of impacts and significance of impact is subject to professional judgement and experience. The individual farm assessments are summarised in Appendix A 19.1 in Volume 3 Part B of the Environmental Impact Assessment Report.

Impact Assessment

- 6 During the assessment process, the predicted construction and operational impacts on each land holding were reviewed.

Construction Phase Impacts

- 7 The total Construction Phase will be approximately 36 months. Construction Phase impacts are described in Section 19.4.1 of Chapter 19 Agronomy, Volume 3 A of the Environmental Impact Assessment Report. During the Construction Phase the day to day operations of farms will be disturbed due to construction activity and traffic. Construction phase impacts might include noise from additional traffic or construction activity, interruption to access for livestock, interruption to water supply, interruption to power supply, disruption to cropping programme. Mitigation measures during the Construction Phase will reduce or eliminate the impacts. The Construction Phase mitigation measures are included in Section 19.6 of

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Chapter 19 Agronomy, Volume 3 Part A of the Environmental Impact Assessment Report. and in Appendix A19.1 in Volume 3 Part B of the Environmental Impact Assessment Report.

Operational Phase Impacts

- 8 Lands will be permanently acquired from four farm holdings for the Proposed Abbotstown pumping station and the Proposed Wastewater Treatment Plant. The land take consists of the following.
- Proposed Abbotstown pumping station site permanent acquisition of 0.4 ha; (see Appendix A19.1 Parcel Ref. No. 1)
 - Proposed Wastewater Treatment Plant: permanent acquisition of 18.03ha (see Appendix A19.1 Parcel Ref. No. 14);
 - Proposed Wastewater Treatment Plant: permanent acquisition of 5.119ha (see Appendix A19.1 Parcel Ref. No. 15);
 - Proposed Wastewater Treatment Plant: permanent acquisition of 6.61ha (see Appendix A19.1 Parcel Ref No. 16);
 - In addition, there will be a further permanent acquisition of 2.3 ha of land for Access and Egress roads to the WwTP from 5 land holdings. Three of these land holdings (Parcel ref 15, 16 and 26) are in agricultural use. A further 0.681 ha will be acquired from (Parcel ref 15) and a further 0.659 ha will be acquired from (Parcel ref 16). 0.666 ha will be acquired from (Parcel ref 26) the remaining 0.3207ha is being acquired from two holdings not in agricultural use.
 - In summary the total land acquisition for the WwTP is 32.1 ha of which 29.8 ha is for the WwTP Site acquisition and 2.3 ha will be acquired for access and egress roads to the WwTP site.
- 9 In addition, there will be acquisition by way of a proposed 20m wayleave (permanent) for 19.1km length of pipeline (proposed orbital sewer route, North Fringe Sewer diversion sewer and proposed outfall pipeline route (land-based section). 13.7km will be routed through privately owned land.
- 10 The construction of the Proposed Project involves the acquisition of a proposed up to 20m permanent wayleave through the affected landholdings and a temporary acquisition of the proposed construction corridor (up to 40m wide inclusive of the proposed 20m wayleave). The existing farm enterprises can continue in the post scheme because all lands within the proposed construction corridor will be reinstated to pre-construction condition.

Assessment of Impact at Individual Farm Level Prior to Mitigation

Proposed Orbital Sewer Route, North Fringe Sewer Diversion Sewer and Outfall Pipeline Route (Land Based Section)

- 11 Appendix A19.1 in Volume 3 Part B of the Environmental Impact Assessment Report summary of individual farm impacts gives a summary table in which it details the overall impacts on all farms and gives a breakdown of the farming enterprise. One farm (Parcel Ref. No.14) will experience a Very Significant Construction Phase impact because of the size of the land take and construction activities and twenty -five farms will experience Significant Construction Phase impact, because of construction activities without taking into account proposed mitigation.

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- 12 One farm (Plot Ref. No. 14) will experience a Significant Operational Impact because of the size of the land take and the remaining farms will experience a Not Significant Operational Impact because the lands will be restored to agricultural use. Refer to Appendix A19.1 for full details.

Proposed Abbotstown Pumping Station

- 13 One farm (Plot Ref No. 1) will experience a Significant Construction Phase Impact, and the same farm will experience a Not Significant Operational Phase impact.

Proposed Wastewater Treatment Plant

- 14 One farm (Plot Ref No. 14) will experience a Very Significant Construction phase impact and two farms (Plot Ref. No's 15 & 16) will experience Significant Construction Phase impacts. One farm (Plot Ref No 14) will experience a Significant Operational Phase impact, and two farms (Plot Ref No 15 & 16) will experience a Not Significant Operational Phase impact.

Mitigation Measures

- 15 Mitigation Measures are described in Section 19.6 of Chapter 19 Agronomy, Volume 3 Part A of the Environmental Impact Assessment Report. Mitigation measures generally relate to the restoration of drainage, the provision of fencing, and restoration of services such as water supply and power supply. Further measures to compensate farmers due to land acquisition, and crop loss will be agreed at a later stage subject to approval for the Proposed Project being granted.

Residual Impact

- 16 Residual impacts assume that mitigation measures have been implemented. The residual impacts are described in Sections 19.7.2. and 19.7.3 of Chapter 19 Agronomy, Volume 3 Part A of the Environmental Impact Assessment Report.

Residual Impacts at Individual Farm Level at the Proposed Orbital Sewer Route, North Fringe Sewer Diversion Sewer and Outfall Pipeline Route (Land Based Section)

- 17 Appendix A19.1 details the residual impacts that the Proposed Project will result in for each of the individual farm holdings.
- 18 In summary, 54.8ha will be temporarily taken out of agricultural production during the Construction Phase of the proposed orbital sewer route, outfall pipeline route (land-based section) and NFS diversion sewer. It is predicted that the residual Impact will be Not Significant on 25 farms holdings, this is because when construction work is complete the lands will be reinstated and will be suitable for the same land use and cropping as that engaged in prior to the project. For example, after mitigation the lands currently used for grass production can return to grass production and lands currently used for crops can return to growing the same crops. Pre-Mitigation the impact on these 25 farm holdings was Significant. On one farm (Plot Ref No14.) where the WwTP will be located the residual impact will be Significant. Pre- Mitigation the impact on this farm was Very Significant.

Proposed Abbotstown Pumping Station

- 19 Approximately 0.4ha of land will be acquired and taken out of production permanently for the construction of the proposed Abbotstown pumping station from one farm holding. There will be a Not Significant residual impact on this landholding. Prior to mitigation there was a Significant Impact on this farm holding.

Proposed Wastewater Treatment Plant

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- 20 Approximately 29.8ha of land will be acquired for the proposed WwTP from three landholdings. One intensive horticultural enterprise (Parcel Ref. No. 14) will suffer a Significant residual Impact because 18.03ha will be acquired from the land holding which will necessitate a complete reorganisation of the existing farm operation and crop rotation practices. Prior to mitigation the impact was Very Significant on this land holding. Post mitigation the impact be Significant because other farmed land will have been restored and reorganised and the landowner will have had the opportunity to replace acquired land. Two land holdings (Parcel Ref. No. 15 and 16) will have a Not Significant residual impact. Prior to Mitigation the impact on two of these farm holdings was Significant

Submissions/Objections Received and Responses

- 21 Twenty- six submissions received from the public to the planning application queried agronomy related issues.¹
- 22 Several queried the land which has been selected for the proposed Wastewater Treatment Plant is better suited to agriculture.
- 23 The submissions received queried the disturbance that will be caused to farming operations. The disturbance referred to will occur only during the construction phase and when mitigation measures have been implemented it is predicted that farming practices can and will continue. There will be short to medium term impacts due to soil disturbance and possible interruption to drainage systems. The creation of the permanent proposed 20m wayleave may affect the residual sale value of the lands. There will be no significant change in land use along the Proposed Project
- 24 The impact of the Proposed Project has been assessed in Chapter 19 Agronomy in Volume 3 Part A of the Environmental Impact Assessment Report
- 25 It is acknowledged that there will be disturbance to the farming operations during the Construction Phase, however land will be returned to its pre-disturbance condition and crop suitability, provided that the correct methodologies are followed during reinstatement. The affected landholdings are those on which the Proposed Project elements are due to be constructed and operated. While these lands will be reinstated post-construction for agricultural use, they will be subject to the proposed 20m wayleave during the Operational Phase. For the majority of landholdings, the proposed 20m wayleave should not affect the day-to-day agricultural use or cropping of the lands during the Operational Phase but would have implications with regard to land use changes (e.g. forestry) or for the construction of farm facilities.
- 26 All mitigation measures to reduce the impact of the Proposed Project on agronomy are presented in Section 19.6 of Chapter 19 Agronomy in the Environmental Impact Assessment Report. An assessment of each individual farm and farm specific mitigation measures are included in Appendix A19.1 in Volume 3 Part B of the Environmental Impact Assessment Report.

Conclusion

- 27 It is acknowledged the Proposed Project will impact on 26 farm units. The impact of the Proposed Project would be felt by individual farmers and farm units rather than nationally or regionally.
- 28 Before reaching conclusions, as part of this assessment, a detailed examination of each individual land holdings was carried out. In addition to walk over surveys individual interviews were conducted with landowners where possible, during which present and future cropping regime and future plans were

¹ Councillor Alison Gilland, Ashling & Others, Barbara & Niall Connolly, Carol Kamtoh, Caroline Purdy, Chris Byrne, Clare Hall Residents Association, Coolock Residents Association, Darragh O'Brien TD, Louise Foley Cusack, Marie Dunne, Margaret Furlong, Michelle & David O'Connor, Niamh Dunne, Paul & Paula Fegan, Rachel Wynne, Sandra Whelan, Vanessa Hoare, Michelle Burnett/Conor O'Malley, Marie Dunne, Niamh Dunne, Eamonn Hart, Riversdale Association, Senator Lorraine Clifford Lee, Therese Doyle, Councillor Tom Brabazon

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discussed. The proposed protocols and methodologies to be employed during the construction and reinstatement were also examined. Apart from the lands with are subject to acquisition the remainder of the lands will be restored to agricultural use.

- 29 Agricultural lands are often disturbed and reinstated in a manner similar to that proposed for this project. For example, when drainage works are carried out topsoil is removed and stored, subsoil is removed to facilitate placing the drains and reinstatement is then carried out. While the proposed project is on a larger scale it is concluded that when the reinstatement is completed all of the lands can be returned to the former use and cropping
- 30 Land-take for the Proposed Project will involve the permanent acquisition of 32.5 hectares of land. The area of land being acquired for the Proposed Project is not significant in terms of the national area or the agricultural area in County Dublin. There are no impacts on farm buildings.
- 31 We also conclude that the matters identified have been dealt with adequately in the detailed responses provided to landowners by Irish Water.