# Appendix 1.1: Author Qualifications and Experience

EIA Chapter	Contributor & Qualifications	Years of Experience
Chapter 1: Introduction	Mr. David Kiely, B.E., M.Sc., Eur.Ing., C.Eng., FIEI, MICE, F.RConsEI, Director, Jennings O'Donovan & Partners Limited	41
	Ms. Shirley Holton, BSc., Environmental Scientist, Jennings O'Donovan & Partners Limited	3
	Kathlyn Feeney, Graduate Environmental Scientist, Jennings O'Donovan & Partners Limited	1
	Mr. Andrew O'Grady, BSc., MSc. AIEMA, Senior Environmental Consultant, Jennings O'Donovan & Partners Limited	17
Chapter 2: Project Description	Ms. Shirley Holton, BSc., Environmental Scientist, Jennings O'Donovan & Partners Limited	3
	Mr. David Kiely, B.E., M.Sc., Eur.Ing., C.Eng., FIEI, MICE, F.RConsEI, Director, Jennings O'Donovan & Partners Limited	41
Chapter 3: Alternatives Considered	Ms. Shirley Holton, BSc., Environmental Scientist, Jennings O'Donovan & Partners Limited	3
	Mr. David Kiely, B.E., M.Sc., Eur.Ing., C.Eng., FIEI, MICE, F.RConsEI, Director, Jennings O'Donovan & Partners Limited	41
Chapter 4: Planning Policy Context	Mr. David Kiely, B.E., M.Sc., Eur.Ing., C.Eng., FIEI, MICE, F.RConsEI, Director, Jennings O'Donovan & Partners Limited	41
	Ms. Shirley Holton, BSc., Environmental Scientist, Jennings O'Donovan & Partners Limited	3
	Kathlyn Feeney, Graduate Environmental Scientist, Jennings O'Donovan & Partners Limited	1
Chapter 5: Population and Human Health	Mr. David Kiely, BSc MSc, Director, Jennings O'Donovan & Partners Limited	41
	Ms. Shirley Holton, BSc., Environmental Scientist, Jennings O'Donovan & Partners Limited	3
	Kathlyn Feeney, Graduate Environmental Scientist, Jennings O'Donovan & Partners Limited	1
Chapter 6: Biodiversity	Mr. Pat Doherty, MSc., BSc., CIEEM, Director, Doherty Environmental Services	17
Chapter 7: Ornithology	Mr. Ben O'Dwyer (FT Ecologist, BSc (Hons) Wildlife Biology),	8
	Ms. Éimear Stephenson (FT Ecologist, BSc (Hons) Marine Science, MSc (Hons) Biodiversity and Conservation),	3
	Ms. Kate O'Regan (BSc (Hons) Zoology; MSc (Hons) Marine Biology),	2
	Ms. Rebecca Furlong (FT GIS Technician; BSc Earth and Ocean Sciences, Cert. Geographic Information Systems, MEngSc Civil and Environmental Engineering),	9
	and Environmental Engineering),	2

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EIA Chapter	Contributor & Qualifications	Years of Experience
	Mr. Jack Glennon (MSc Marine Biology from University College Cork and a first-class BSc in Wildlife Biology from Munster Technological University) Mr. Jon Kearney (FT Director Ecologist; BSc. Applied Ecology MSc. Ecological Management and Biological Conservation),	19
	Ms. Orla Cummins (Graduate Ecologist first-class BSc Ecology and Environmental Biology)	
Chapter 8: Soils and Geology	Mr. Andrew Garne, PGeo, BSc., MSc., MIGI, MIAH, Geologist, EcoQuest Environmental Limited	30
Chapter 9: Hydrology and Hydrogeology	Mr. David Parkinson, BSc., MIEMA, CEnv, Principal Environmental Consultant, EcoQuest Environmental Limited	10
Chapter 10: Noise	Mr. Brendan O'Reilly, MPhil., Director, Noise & Vibration Consultants Limited	40
Chapter 11: Landscape and Visual Amenity	Mr. Richard Barker, MLA, BA Env. PG Dip For MILI, Director, Macro Works Limited	25
Chapter 12: Material Assets and Other Issues	Mr. Andrew O'Grady, BSc., MSc. AIEMA, Senior Environmental Consultant, Jennings O'Donovan & Partners Limited	17
	Ms. Shirley Holton, BSc., Environmental Scientist, Jennings O'Donovan & Partners Limited	3
	Kathlyn Feeney, Graduate Environmental Scientist, Jennings O'Donovan & Partners Limited	1
Chapter 13: Cultural Heritage	Mr. Tony Cummins, BA., MA., Senior Archaeologist, John Cronin & Associates	25
Chapter 14: Traffic and Transport	Mr. David Kiely, BSc., MSc., Director, Jennings O'Donovan & Partners Limited	41
	Mr. John Doogan, NDip. CEng. (HND), Senior Roads Technician, Jennings O'Donovan & Partners Limited	35
Chapter 15: Air and Climate	Mr. David Kiely, BSc., MSc., Director, Jennings O'Donovan & Partners Limited	41
	Ms. Shirley Holton, BSc., Environmental Scientist, Jennings O'Donovan & Partners Limited	3
	Kathlyn Feeney, Graduate Environmental Scientist, Jennings O'Donovan & Partners Limited	1
Chapter 16: Major Accidents and Natural Disasters	Ms. Shirley Holton, BSc., Environmental Scientist, Jennings O'Donovan & Partners Limited	3
Chapter 17: Interactions of the Foregoing	Ms. Shirley Holton, BSc., Environmental Scientist, Jennings O'Donovan & Partners Limited	3
	Kathlyn Feeney, Graduate Environmental Scientist, Jennings O'Donovan & Partners Limited	1

# David Kiely B.E., M.Sc., Eur.Ing., C.Eng., FIEI, MICE, F.RConsEI

David Kiely is Managing Director of JOD who holds a BE in Civil Engineering from University College Dublin and MSc in Environmental Protection from IT Sligo. He is a Fellow of Engineers Ireland, a Chartered Member of the Institution of Civil Engineers (UK) and has over 40 years' experience. He has extensive experience in the preparation of EIARs and EISs for environmental projects including Wind Farms, Solar Farms, Wastewater Projects, and various commercial developments. David has also been involved in the construction of over 60 wind farms since 1997. David is the key technical reviewer in the preparation of this EIAR.

#### Andrew O'Grady MSc, BSc

Andrew O'Grady is a Senior Environmental Consultant at JOD and holds a Bachelor (Hons.) Degree in Geography from University of Coventry and a MSc. in Environmental Resources Management from the Free University, Amsterdam. He has worked in environmental consultancy for over seventeen years and has prepared various Environmental Reports and EIARs. Andrew is the Project Manager and lead coordinator in the preparation of this EIAR.

#### Shirley Holton, BSc (Hons) Env

Shirley Holton is an Environmental Scientist at JOD with over 3 years' experience in coordinating EIARs for renewable energy developments. She graduated with a First-Class Honours Degree (BSc. Hons) in Environmental Science from the Institute of Technology, Sligo. She was also awarded with the Governing Body award for a BSc in Environmental Protection. Shirley's key capabilities include project management; using software such as WindPRO 4.1 and ArcGIS Pro; and the preparation of planning applications, Environmental Impact Assessment Reports, Feasibility Studies, Construction & Environmental Management Plans and management plans relating to surface water, peat, spoil and waste.

#### Kathlyn Feeney, BSc (Hons) Env

Kathlyn Feeney is a Graduate Environmental Scientist at JOD with a First-Class Honours Degree (BSc. Hons) in Environmental Science from Atlantic Technological University, Sligo. She forms part of the Environmental team responsible for preparing the EIARs. Kathlyn's main responsibilities include supporting more senior consultants in report writing, GIS Feasibility Studies and Shadow Flicker analysis.

#### Breena Coyle BA, MSc MRTPI HD Planning and Environmental Planning Law

Breena has over 16 years' experience in the private sector and has a thorough knowledge of the planning system. Breena holds a MSc in Environmental Planning from Queens University Belfast and a Bachelor of Arts in History & Geography from NUI Galway. She is a Member of the Irish Planning Institute and a Member of the Royal Town Planning Institute. Since joining JOD, she has developed experience in a range of sectors through various projects and planning issues with a current focus within the environmental and renewable energy sector.

#### John Doogan Dip.Civil.Eng.

John Doogan is a Senior Designer at JOD. He has a National Diploma in Civil Engineering from Bolton Street College of Technology, Dublin and has over 34 years of road design experience. John has worked on over 30 wind farms in Ireland and Sweden.

#### Pat Doherty

Mr. Doherty is a consultant ecologist with over 20 years' experience in completing ecological impact assessments and environmental impact assessments. Pat has been involved in the completion of assessment reports for proposed developments and land use activities under the EIA Directive and Article 6 of the Habitats Directive since 2003 and 2006 respectively. He has extensive experience completing such reporting for projects located in a variety of environments and has a thorough understanding to the biodiversity issues that may arise from proposed land use activities. Pat has completed multiple examinations of both plans and projects in Ireland. He has been responsible for the completion of ecological assessments for multiple wind farm applications as well as other large scale infrastructure projects.

Pat has completed focused certified professional development training in Appropriate Assessment as well as in a range of ecological survey techniques and assessment processes. Training has been completed for National Vegetation Classification (NVC) and Irish Vegetation Classification (IVC) surveying, bryophyte survey for habitat assessment and identification, professional bat survey and assessment training, mammal surveying and specific training for bird and bat survey techniques. Ongoing training has been completed by approved training providers such as CIEEM, British Trust for Ornithology, the Botanic Gardens and the Field Studies Council.

#### Orla Cummins, BSc., Graduate Ecologist, Fehily Timoney

Orla Commins is a Graduate Ecologist with Fehily Timoney and Company. She holds a first-class BSc in Ecology and Environmental Biology from University College Cork. Since joining Fehily Timoney. She has prepared AA screening reports and NIS's for numerous projects and has completed ornithological reports, field work and data management

### Rebecca Furlong, BSc., GIS Analyst, Fehily Timoney

Rebecca is responsible for the co-ordination of all environmental department geographic information systems (GIS) projects. She is experienced in many aspects of environmental risk/impact assessment modelling in GIS including database design, database management, data conversion/projection, raster spatial analysis / Heat Mapping, ArcGIS Story maps and management of ArcGIS online, data modelling and data processing utilising all main GIS software packages (including ArcGIS, QGIS, MapInfo).

Rebecca has experience with various GIS and surveying software packages including Collector, Survey 123.

#### Kate O'Regan, MSc., BSc., Ecologist, Fehily Timoney

Kate O'Regan is a Project Ecologist with Fehily Timoney and Company. She holds a firstclass MSc in Marine Biology and first-class BSc. in Zoology from University College Cork. Since joining Fehily Timoney, she has prepared Appropriate Assessments and Ecological Impact Assessments for waste facilities and road improvement schemes along with ornithological reports and collision risk models for renewable energy projects. Kate has previous experience in data management, statistical analysis, mapping and technical report writing. Kate has also completed a wide range of fieldwork including ornithological, bat, freshwater aquatic, intertidal, subtidal, insect and mammal surveys.

#### Jack Glennon, MSc., Ecologist, Fehily Timoney

Jack Glennon is a Graduate Ecologist with Fehily Timoney and Company and has over 2 years of experience in the environmental sector. He holds an MSc in Marine Biology from University College Cork and a first-class BSc in Wildlife Biology from Munster Technological University. Jack has produced a variety of technical reports, including AA Screening Reports, Natura Impact Statements, Biodiversity Enhancement Management Plans, Invasive Species Management Plans, and Ornithology Reports. His field experience encompasses a wide range of ecological surveys, such as bird, habitat, mammal, otter, marsh fritillary, and bat surveys. Jack is skilled in data analysis and proficient in GIS mapping tools, including QGIS and ArcGIS, for ecological data visualisation.

#### Éimear Stephenson, BSc., MSc., Ecologist, Fehily Timoney

Éimear Stephenson is a Project Ecologist with Fehily Timoney and Company and has ca. 3 years' experience in the environment sector. Éimear's work focuses on the survey and assessment of proposed wind and solar energy development sites. She has been the lead author on a multitude of reports and has carried out a variety of surveys including bat, otter, general mammal, botanical, white-clawed crayfish, freshwater pearl mussel, and habitat surveys. Éimear is highly experienced in the use of QGIS and ArcGIS, and is proficient in analysing bird surveys and writing relevant ornithological reports. She holds a BSc in Marine Science from the University of Galway, where she graduated top of her class with a 1:1. She also received an academic scholarship to attend the University of Dublin, Trinity College Dublin, where she graduated with an MSc in Biodiversity and Conservation.

#### Aidan Duggan, Ornithologist Surveyor, Fehily Timoney

Aidan has been a consultant ecologist specialising in wind farm ornithology surveys from 2006 to present. He has completed Hen Harrier Vantage Point Surveys, Hinterland Surveys, Breeding Merlin Surveys, Red Grouse Surveys, Hen Harrier Nest Monitoring, White-tailed Eagle Roost Watches, Hen Harrier Roost Watches, Breeding Bird Surveys, Wintering Bird Surveys, Countryside Bird Surveys at numerous wind farms site throughout the county. He has also completed bird surveys of proposed routes for power grid and gas pipelines. Aidan is a former voting member of the Irish Rare Bird Committee (IRBC), the recognized national expert group on bird identification.

#### Ben O'Dwyer, BSc., Ecologist, Fehily Timoney

Ben is a Senior Project Ecologist with Fehily Timoney with over 8 years' experience in ecological assessment and holds a BSc (Hons) in Wildlife Biology from Institute of Technology Tralee (now MTU). Ben has prepared EcIAs, EIAR Biodiversity chapters, AA Screening reports and Natura Impact Statements for numerous large scale infrastructure projects in the renewable energy, commercial, waste management and transport sectors. He is an experienced and versatile field surveyor and his experience across a broad range of habitats and projects in Ireland has given him an extensive knowledge of protected sites and species across the country.

# Jon Kearney, MSc., BSc., Principal Ecologist, Fehily Timoney

Jon Kearney is the Technical Director (Ecologist) with FT with over 19 years' experience in both the UK and Ireland. He has extensive experience in Project Management and is a specialist in Ornithological surveys and assessments. His skills include an in-depth knowledge of field survey techniques and methodology, ornithological surveys, mitigation design, water quality assessment, Appropriate Assessment and Ecological Impact Assessment. Jon has extensive experience of ornithological, mammal, reptile and amphibian surveying, habitat surveying, botanical surveying and invertebrate sampling techniques and identification. Jon has completed ecological assessments, biodiversity chapters and Natura Impact Statements for a wide variety of projects in Ireland including numerous solar and wind farm sites. He has considerable experience of EIAR, AA and ecological constraints work, which often includes extensive reference to, and interpretation of, Article 6(3) of 'The Habitats Directive', and to other EU, UK and Irish conservation legislation.

# Mr. Andrew Garne, PGeo, BSc., MSc., MIGI, MIAH, Geologist, EcoQuest Environmental Limited

Andrew Garne (B.Sc., M.Sc., P.Geo) is an independent Engineering Geologist who specialises in hydrogeological, geotechnical and geological impact assessment. Andrew is a Full Member of the Institute of Geologists of Ireland (MIGI) and is a registered professional geologist (P.Geo). Andrew has worked on multiple EIAR impact assessments, including multiple windfarm developments, across the disciplines of hydrogeology, geology and soils. He also has extensive experience of windfarm peat stability assessments, geotechnical earthworks designs, geotechnical inspections and supervision, contaminated land assessments, slope stability assessments, site investigation design, procurement and supervision, soil and rock core logging, laboratory scheduling and writing of geotechnical advisory reports. Andrew has worked in tandem with David throughout the duration of this project, including in the field, at virtual meetings and through extensive collaboration. Andrew has provided and input to and has reviewed this Chapter of the EIAR.

# Mr. David Parkinson, BSc., MIEMA, CEnv, Principal Environmental Consultant, EcoQuest Environmental Limited

David is the Principal Environmental Consultant of EcoQuest Environmental with over a decade of environmental consultancy experience in Ireland and Australia. David has completed numerous hydrological and hydrogeological impact assessments, is a Full Member of the Institute of Environmental Management and Assessment (MIEMA) and is a Chartered Environmentalist (CEnv). David's experience spans multiple industry sectors or disciplines, including numerous windfarm projects, flood alleviation schemes, infrastructure projects, transport, aviation, wastewater schemes, contaminated land and advisory on emerging contaminants. He has extensive experience in carrying out water quality assessments on major Irish rivers or their tributaries such as the Shannon, Dodder, Morell, Corrib, Broadmeadow, Finisk, Bandon and Garavogue rivers. In addition to nationwide

water quality assessment experience, David has also assisted with water quality management of sensitive wetlands of international significance in Australia. David also has a background in water and wastewater chemistry laboratory analytical roles which help form the scientific basis of his environmental assessment expertise.

#### Brendan O'Reilly MPhil ISEE SFA EAA

Brendan has obtained a Master of Philosophy (MPhil) science degree in noise & vibration from the University of Liverpool, (2000). He was a Member of the International Society of Explosives Engineers (ISEE) for over 20 years, a Member of IMQS and Committee member for over 20 years and a member of French Society of Acoustic (FSA) for a number of years.

Brendan has compiled numerous Environmental Noise Impact Statements (EIS) since 1985 for projects ranging from wind farms/sewage treatment plants to mines/quarries and retail development. He successfully completed noise EIS's for over 100 wind farms throughout Ireland ranging in size from 0.65 MW to over 100 MW and has provided expert evidence in An Bord Pleanála oral hearings on large wind farm proposals (Straboy Energy in Co. Donegal and Doonbeg Wind Farm in Co. Clare).

Large wind farm projects, in which Brendan was the noise consultant, with a successful conclusion included Yellow River in Co. Offaly and Sliabh Bawn in Co. Roscommon. Brendan has also completed compliance monitoring on over 20 wind farms including Sliabh Bawn and acted as expert noise witness provided for Drehid Landfill, Fountain Cross Quarry and extension of the Boliden Tara Mines Tailing Storage Facility (2017) and on behalf of residents in EirGrid North/South overhead line.

Brendan has experience in many projects including Europe's largest Zn/Pb mine dealing with a variety of noise and vibration issues over a 35-year period. Other projects in which Brendan has been involved with include the development of the first continuous noise and vibration monitoring system in Europe for an industrial enterprise including the change from an analogue system to a digital integrated noise and wind monitoring system.

Brendan has experience in the investigation of complaints and specification for ameliorative noise and vibration control measures for numerous companies North and South, Consultancies and Local Authorities.

Brendan has been an expert witness as a vibration specialist in the High Court for Meath County Council relating to road construction (vibratory rollers to rock breaking). As well as this, Brendan has been an expert witness as vibration specialist in Belfast High Court regarding blasting vibration. He is an acknowledged contributor to the Irish EPA Integrated Pollution Control Licensing, 'Guidance Note for Noise in Relation to Scheduled Activities', 1995.

Brendan is also a co-author and project partner (as a senior noise consultant) in 'Environmental Quality Objectives Noise in Quiet Areas administered by the Environmental Protection Agency on behalf of the Dept. of Environment., Heritage and local Government.

#### Shane Carr BSc (Hons), MIA, CIEH

Shane is a Director in Irwin Carr Consulting, primarily responsible for environmental noise and noise modelling. He has over 22 years' experience working in both the public and private sectors having previously obtained a BSc (Hons) Degree in Environmental Health and a Post-Graduate Diploma in Acoustics. He is a Member of the Institute of Acoustics and a Chartered Member of the Chartered Institute of Environmental Health.

Shane has carried noise assessments for various wind farm development schemes throughout Ireland in line with the ETSU standard, been responsible for designing the assessment schemes to assess the noise impact for major wind farm redevelopments within Ireland as well as assessing the suitability of proposed sites for residential or commercial/industrial development.

He has a broad range of experience in all aspects of noise including environmental noise assessment and control. He has presented expert evidence on a number of occasions for a range of planning issues and environmental noise assessments.

Shane has contributed to numerous EIA in relation to significant developments in both Northern Ireland and the Republic of Ireland and where the Air Quality or Noise element of assessment is deemed key. He has been responsible for co-ordinating and preparation of the assessment for submission to the appropriate authority. This has included significant renewable energy schemes.

# Richard Barker MLA. BA Env. PG Dip for. MILI. – Principal Landscape Architect

Richard formerly worked as a Town Planner in New Zealand, London and Dublin before moving into the field of Landscape Architecture. He has spent the last 16 years working as a Landscape Architect in Ireland and has considerable experience in the fields of both Landscape and Visual Impact Assessment (LVIA) and landscape design, covering all stages from project feasibility through to construction. This cross-over of expertise is invaluable in determining and designing the most appropriate and effective form of landscape and visual mitigation for infrastructural development projects.

Richard manages the LVIA department in Macro Works undertaking assessment work on a broad spectrum of projects from wind and solar energy to roads and large-scale industrial and infrastructural development. Richard has personally completed the landscape and visual assessment of over 90 wind farms and 80 solar farms including nine SID projects. Consequently, he has considerable oral hearing expert witness experience. This extends to more than 15 oral hearings over the past 12 years with four of these being for large SID wind farm projects.

Richard has presented a number of conference papers relating to sustainable landscape design and LVIA as well as delivering the inaugural workshop on the landscape and visual effects of wind energy developments on behalf of the Irish Wind Energy Association. He has presented a paper to members of the Irish Landscape Institute on the application of the Guidelines for Landscape and Visual Impact Assessment (2013) using a wind energy case study. Richard has also delivered guest lectures to the University College Dublin professional course in EIA Management in relation to LVIA.

#### Tony Cummins BA MA – Senior Archaeologist & EIA Consultant

Tony Cummins has been a Senior Archaeologist with John Cronin & Associates since 2009. He holds B.A. and M.A. degrees in archaeology (University College Cork (UCC) 1992/1994) and has accumulated twenty-seven years industry experience. Tony has been a licenceeligible archaeologist since 1998 and has directed numerous excavations in Ireland. He also has a number of years' experience as an archaeological project manager responsible for assessing and supervising large-scale infrastructure projects, including the Limerick Southern Ring Road, the Waterford City Bypass, Killaloe Bypass, County Clare and the Clashavoon-Dunmanway 110 kV transmission, County Cork. He has extensive experience in preparing cultural heritage impact assessments for wind farm projects and his inputs to these have included liaising with project design teams and LVA specialists, as well as consulting with relevant local and national authority specialists. Examples of some of these wind farm projects include: Derrybrien rEIAR (Co. Galway), Coom, Glentane and Knockeenboy (Co. Cork), Shragh (Co. Clare) and Croaghaun Hill (Co. Carlow). Tony carried out desktop research and field inspections for the Inchamore project and was the principal author of the EIAR chapter.

#### David Murphy BA – Senior Project Archaeologist

David Murphy joined John Cronin & Associates in 2014 as a licence-eligible archaeologist. He holds a B.A. degree in archaeology (UCC 2003) and has accumulated eighteen years industry experience. Since becoming a licence-eligible archaeologist in 2012, David has overseen the completion of a large number of field surveys, monitoring, testing and excavation projects, while also authoring numerous archaeological impact assessments and screening reports for a variety of large infrastructure schemes, including wind farm developments. Between 2016 and 2021, David fulfilled the role of Project Archaeologist at a large-scale ESB wind farm development at Grousemount, Kilgarvan, Co. Kerry. During the course of the Grousemount project, David developed a comprehensive programme of mitigation measures for a range of previously unrecorded archaeological and cultural heritage sites which were identified within lands in the environs of construction areas. David contributed to the desktop research, field inspections and drone surveys carried out as part of the assessment of the Inchamore project.