Jacobs

Greater Dublin Drainage Project Addendum

Environmental Impact Assessment Report Addendum: Volume 2A Part B of 6

Appendix A1.1 – Details of Competent Experts

Uisce Éireann

October 2023

Table 1:	Details	of Com	petent	Experts
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EIAR Chapter	Responsible Competent Expert – Competency Details
Chapter 1A (Introduction)	Jillian Bolton, BA, BAI, CEng, Jacobs Jillian is the Director of Operations for Water in Ireland for Jacobs and a Chartered Engineer. She has over 20 years' professional experience in the delivery and management of multi-disciplinary projects in both the water and transportation sectors across feasibility, planning, design, procurement and construction phases. Jillian holds an Honour's degree in Civil, Structural and Environmental Engineering from Trinity College Dublin. She has also completed a Diploma in Environmental Engineering from Trinity College Dublin and a Diploma in Project Management from iBAT College. Jillian has excellent experience in all aspects of project delivery and management for key infrastructure projects including Navan & Mid Meath / East Meath Water Supply Scheme, N71 / N72 Flood Alleviation Project, M17 / N18 Gort to Tuam PPP Scheme and N4 The Downs Scheme. Jillian was previously involved in the planning stages of the Greater Dublin Drainage Project remittal application with overall responsibility for co-ordinating all services relating to the preparation and delivery of the submission.
	Sarah Kiernan BSc, MSc, MCIWEM C.WEM CEnv, Jacobs Sarah Kiernan is a Director of Environmental Assessment with Jacobs and has over 17 years' experience as an Environmental Consultant. She holds an honours degree in Geography from Lancaster University as well as a Master of Science in Environmental Consultancy from Newcastle University. She is a Chartered Environmentalist (CEnv) with the Society of the Environment and is a Chartered Water and Environmental Manager (C.WEM) with the Chartered Institute of Water and Environmental Management (CIWEM). Sarah has managed the preparation of Environmental Impacts Assessments for a number of road and linear infrastructure schemes including BusConnects Dublin Core Bus Corridors, Dunkettle Interchange Improvement Scheme, N69 Listowel Bypass and has presented expert witness evidence at Oral Hearings. Sarah is the lead co-ordinator for the EIAR Addendum.
Chapter 2A (The Environmental Impact Assessment Process)	Jillian Bolton See above Sarah Kiernan See above
Chapter 3A (The Need for the Proposed Project)	Jillian Bolton See above
Chapter 4A (Description of the Proposed Project)	Jillian Bolton See above
Chapter 5A (Consideration of Alternatives)	Jillian Bolton See above
Chapter 6A (Population and Human Health: Population)	Maria Rochford. BSc Hons MRUP. KPMG Future Analytics Maria is an Associate Director (Town Planning) at KPMG Future Analytics. Maria has over 12 years' experience in spatial planning and applied research. Her expertise spans the fields of strategic planning, development management, socio-economic analysis, tourism, housing, policy development, environmental planning, Environmental Impact Assessment, infrastructure planning, and community and stakeholder consultation. Maria has extensive experience in the consenting process for a range of projects, including Environmental Impact Assessment coordination and preparation of the Population and Human Health chapters for large residential schemes and infrastructure schemes including MetroLink. Maria also worked as an Environmental Consultant for several years combining the disciplines of planning, environmental management, and assessment. Maria is a member of the Irish Planning Institute (MIPI) and Royal Town Planning Institute (RTPI).

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	Maria prepared Chapter 6A (Population and Human Health: Population) in Volume 3A Part A of the EIAR Addendum.
Chapter 7A (Population and Human Health: Human Health)	Dr. Martin Hogan, Corporate Health Ireland Dr. Martin Gerard Hogan holds a primary medical degree from University College Cork (1987). Among other qualifications he is a Fellow of the Faculty of Occupational Medicine of the Royal College of Physicians of Ireland and also a Fellow of the Royal College of Physicians of Ireland (FRCPI) since 2008. He is a registered specialist in occupational medicine with the Irish Medical Council and a full time Consultant Occupational and Environmental Physician. He is a past Dean of the Faculty of Occupational Medicine of the Royal College of Physicians of Ireland. He is Vice President of the International Commission of Occupational Health. He has prepared human health impact assessments for multiple projects, including road and linear developments such as the M20, MetroLink, various Luas projects, the N6 Galway Ring Road and M28. Dr. Hogan prepared Chapter 7 (Population and Human Health: Human Health) in Volume 3 Part A of the EIAR in the 2018 planning application
	and Chapter 7A Population and Human Health: Human Health) in Volume 3A Part A of the EIAR Addendum.
Chapter 8A (Marine Water Quality)	Alan Berry, Marcon, BA, BAI, M.Eng.SC, MBA, CEng, Marcon Alan Berry is the Managing Director and Senior Modeller of MarCon Computations. Alan has been with MarCon since its foundation and has worked to date on projects in Ireland, the United Kingdom and Asia. Alan has been involved in the modelling of rivers, estuaries, coasts and open seas for over 20 years, having authored / co-authored over sixty professional reports for various clients and co-authored six peer reviewed articles. Alan is a Chartered Engineer with Engineers Ireland and hold an honours degree (B.A., B.A.I.) in Civil, Structural and Environmental Engineering from the University of Dublin, Trinity College and a Masters degree (M.Eng.Sc.) in Civil Engineering from the National University of Ireland, Galway. Alan prepared Chapter 8 (Marine Water Quality) in Volume 3 Part A of the EIAR in the 2018 planning application and Chapter 8A (Marine Water Quality) in Volume 3A Part A of the EIAR Addendum.
Chapter 9A (Biodiversity (Marine))	Ian Wilson BSc, Benthic Solutions
	Ian Wilson is a Director and Principal Scientist of Benthic Solutions Limited, an independent marine environmental consultancy. Ian has a combined Bachelor of Science degree in marine biology and oceanography from the University of Southampton. Ian has 30 years' experience spanning the fields of marine environmental chemistry, biology, oceanography, geology and shallow geophysics both in Ireland and internationally. This experience includes the assessment of seabed environmental conditions for numerous projects including outfall, pipeline and cable route selection surveys. Ian has extensive experience in environmental surveys for proposed marine infrastructure projects and large field developments. These include outfalls, pipeline and cable route selection surveys for the oil and gas industry, renewables (e.g. offshore wind farms) and utility companies (i.e. electricity, gas, telecommunications and water), throughout the United Kingdom and worldwide.
	Ian has prepared marine biodiversity chapters for Environmental Impact Assessment Reports (EIARs) and Natura Impact Statements (NISs) for a range of projects, including many projects operating in environmentally sensitive areas such as Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Marine Conservation Areas. Ian has been involved in the Greater Dublin Drainage Project since 2011, and has advised on marine ecological constraints, survey planning and data acquisition requirements since the Greater Dublin Drainage Project site selection phase.
	Ian prepared Chapter 9 (Biodiversity (Marine)) in Volume 3 Part A of the EIAR in the 2018 planning application and Chapter 9A (Biodiversity (Marine)) in Volume 3A Part A of the EIAR Addendum, and the relevant marine ecology inputs into the NIS submitted to An Bord Pleanála in June 2018, as well as the Revised NIS in this remittal application.
Chapter 10A (Biodiversity (Marine Ornithology))	Simon Zisman, B.Sc, MSc, Ph.D. Net Zero Ecology Ltd. Simon Zisman is Director of Net Zero Ecology, having established this company in May 2023. Prior to this he was Senior Director and the United Kingdom and Ireland Ornithology lead for RPS, where he worked for 17 years running the Ecology Team for Scotland and Northern England. He has an honours degree in Geography from the University of Edinburgh, a Master of Science degree in Rural Resources and Environmental Policy from Wye College, University of London and also has a Ph.D. in mangrove resource management and conservation from the University of Edinburgh. Simon has managed, contributed and written numerous Environmental Impact Assessments for coastal and other infrastructure developments, including to date contributing on the Greater Dublin Drainage Project, M4 Corridor Around Newport, Scrabster Harbour Expansion, and Seagreen 1A Cable Landfall, and has presented expert witness evidence at Public Inquiries and Oral Hearings. Simon was lead

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	contributor on ornithology for Chapter 10 (Biodiversity (Marine Ornithology)) in Volume 3 Part A of the EIAR in the 2018 planning application and Chapter 10A (Biodiversity (Marine Ornithology)) in Volume 3A Part A of the EIAR Addendum.
Chapter 11A (Biodiversity (Terrestrial and Freshwater	James McCrory BA (Mod) MSc CEcol CEnv MCIEEM CBiol MRSB, RPS
Aquatic))	James McCrory is Technical Director of Ecology at RPS with over 20 years of wide-ranging experience as a professional ecologist in managing, coordinating and undertaking ecology surveys and preparing and overseeing preparation of Ecological Impact Assessment (EcIA) reports and Habitats Directive appraisals for terrestrial, coastal and marine projects throughout Ireland. He holds a Bachelors degree in Natural Science from the University of Dublin, Trinity College and a Masters Degree in Habitat Creation and Management from Staffordshire University. James is a Chartered Ecologist, Chartered Biologist and Chartered Environmentalist. He is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and the Royal Society of Biology (RSB). He is a former member of the CIEEM Irish Section Committee and CIEEM Policy Review Group in Ireland. He was a member of the CIEEM technical working group updating the Guidelines for Ecological Impact Assessment in the United Kingdom and Ireland. He currently sits on the CIEEM technical working group for EcIA accreditation across the Institute's practitioner network. He has prepared biodiversity chapters of Environmental Impact Assessment reports to support terrestrial, coastal and marine applications for development consent for ports, harbours, gas and wastewater pipelines, buried electrical cable projects, marine outfall pipelines and marine diffusers, capital and maintenance dredging and disposal at sea, and geophysical and geotechnical surveys for offshore renewable developments in the Irish Sea, Celtic Sea, North Channel and Shannon Estuary. His projects include the Islandmagee Gas Storage Project including a long sea outfall and brine discharge diffuser, Dublin Port capital and maintenance dredging campaigns, Alexandra Basin Redevelopment Project, MP2 Project and other Strategic Infrastructure Development (SID) port capacity expansion projects for Belfast Harbour Commissioners, Shannon Foynes Port Company and Port of Cork Company. James has worked
	James was lead contributor for Chapter 11 (Biodiversity (Terrestrial and Freshwater Aquatic)) in Volume 3 Part A of the EIAR in the 2018 planning application and Chapter 11A (Biodiversity (Terrestrial and Freshwater Aquatic)) in Volume 3A Part A of the EIAR Addendum.
Chapter 12A (Landscape and Visual)	Richard Barker, BA, MA, Macro Works Ltd
	Richard Barker is the Managing Director of Macro Works Ltd, a specialist landscape and visual consultancy that has specialised in the assessment of a broad range of development projects for over 20 years, but with a particular focus on large scale infrastructure. He has a Masters degree in Landscape Architecture from Lincoln University, Post Graduate Diploma in Forestry from Canterbury University and a Bachelors Degree (BA) in Environmental Science from Massey University. Richard has 19 years' experience in the landscape and visual impact
	assessment of major development projects, including associated oral hearings and has been the lead landscape and visual impact assessment (LVIA) consultant on the Greater Dublin Drainage Project since its inception over 10 years ago.
	Richard was lead contributor for Chapter 12 (Landscape and Visual) in Volume 3 Part A of the EIAR in the 2018 planning application and Chapter 12A (Landscape and Visual) in Volume 3A Part A of the EIAR Addendum.
Chapter 13A (Traffic and Transport)	Maria Rooney B.Eng., M.Eng., C.Eng., MIEI, Tobin
	Maria is a Chartered Engineer working in TOBIN's Roads and Transportation section. She has over ten years of work experience in roads and transport engineering and completed a Master of Engineering in Roads and Transport Engineering in IT Sligo in 2019. Maria has undertaken Traffic and Transportation Assessments (TTA) and Workplace Travel Plans (WTP) for various residential, commercial, business, retail, and leisure developments. She is also responsible for drafting Traffic Chapters for Environmental Impact Assessment Reports (EIARs), including for the Drehid Waste Management Facility, Co. Kildare, and for numerous solar energy farms in Kilkenny, Tipperary, Laois, Waterford and Galway.
	Maria prepared Chapter 13A (Traffic and Transport) in Volume 3A Part A of the EIAR Addendum.
Chapter 14A (Air Quality, Odour and Climate)	Imelda Shanahan, BSc, PhD, C Chem FRSC, FICI, TMS Environment Ltd.
	Imelda Shanahan has extensive experience in noise and vibration, air quality, climate and odour impact assessment and control. As Managing Director of TMS Environment Ltd. since 1994, she has led a broad range of projects relating to environmental analysis, monitoring, consultancy and Environmental Impact Assessment and control. Imelda has over 30 years of professional experience in her areas of expertise and has regularly presented expert witness evidence at Oral Hearings and in the Courts. Imelda was Principal Author of Chapter 14 (Air Quality, Odour

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	and Climate) in Volume 3 Part A of the EIAR in the 2018 planning application and Chapter 14A (Air Quality, Odour and Climate) in Volume 3A Part A of the EIAR Addendum, and Chapter 15 (Noise & Vibration) in Volume 3 Part A of the Environmental Impact Assessment Report (EIAR) in the 2018 planning application and Chapter 15A (Noise & Vibration) in Volume 3A Part A of the EIAR Addendum. Imelda was lead contributor for Chapter 14 (Air Quality, Odour and Climate) in Volume 3 Part A of the EIAR in the 2018 planning application and Chapter 14A (Air Quality, Odour and Climate) in Volume 3A Part A of the EIAR Addendum. Evelyn McAuliffe BSc, MSc, MCIWEM, C.WEM, Jacobs Evelyn McAuliffe is a Water and Sustainability Consultant with Jacobs and has over 25 years' experience contributing to the development of sustainable solutions for both water and wastewater services. She holds an honours degree in Applied Ecology from University College Cork as well as Master of Science in Applied Environmental Science from Queens University Belfast. She is a Chartered Water and Environment Manager (C.WEM) with the Chartered Institute of Water and Environmental Management (CIWEM). Evelyn has worked with Uisce Éireann to develop actionable strategies to fit with their climate action goals and her responsibilities include: the management of the preparation of carbon accounts for the utilities operational activities, management of the preparation of sustainable energy strategy, development and implementation of embodied and energy-related operational carbon emissions for infrastructural schemes and, supporting the development and implementation of carbon management across the water utility. Evelyn prepared Appendix A14.1 (Greenhouse Gas Assessment) in Volume 3A Part B of the EIAR Addendum.
Chapter 15A (Noise and Vibration)	Imelda Shanahan
	See above
Chapter 16A (Archaeological, Architectural and Cultural Heritage)	Faith Bailey, MA, BA (Hons), MIAI, MCIfA, IAC ArchaeologyFaith is an Associate Director, Project Manager and Senior Archaeologist and Cultural Heritage Consultant with IAC Archaeology. She holds a Masters Degree (MA) in Cultural Landscape Management (archaeology and built heritage) and a Bachelors Degree (BA) in single honours archaeology. She is a licenced eligible archaeologist, a member of the Chartered Institute of for Archaeologists, a member of the Institute of Archaeologists of Ireland and has over 20 years' experience working in the commercial archaeological and cultural heritage sector in Ireland. Faith has worked on the cultural heritage aspects of the Greater Dublin Drainage Project since 2015 and has extensive experience working on other large-scale infrastructure schemes, such as the Dart+ West project, the Limerick-Foynes Road Scheme, MetroLink and the Galway City Ring Road.Faith was lead contributor for Chapter 16 (Archaeological, Architectural and Cultural Heritage) in Volume 3 Part A of the EIAR in the 2018 planning application and Chapter 16A (Archaeological, Architectural and Cultural Heritage) in Volume 3A Part A of the EIAR Addendum.
Chapter 17 (Hydrology and Hydrogeology)	Kieran O'Dwyer, BE, JB Barry Kieran has over 35 years' experience in environmental and hydrogeological consultancy. Kieran has managed the environmental element of numerous infrastructure projects throughout Ireland (including the Ringsend Wastewater Treatment Plant (WwTP) Upgrade Project and the Associated Regional Biosolids Facility, The Lesotho Highlands Water Project, the N81 Route Selection Study and Moville Greencastle Sewerage Scheme Planning Application and Environmental Impact Assessment Report (EIAR). Kieran has been responsible for the groundwater element and hydrological element of numerous Environmental Impact Assessments (including TII Tranche 4 Motorway Service Areas (3 No.), NRA Tranche 2 Motorway Service Areas (5 No. oral hearings) and Ringsend WwTP Upgrade Project) and has presented specialist evidence on hydrogeology /groundwater at numerous oral planning hearings. Kieran has provided expert witness testimony relating to hydrogeology and hydrology in the High Court and District Court and has presented technical papers on hydrogeology to Engineers Ireland and the International Association of Hydrogeologists as well as providing workshops on groundwater vulnerability to various local authorities and the Environmental Protection Agency. Kieran was lead contributor for Chapter 17 (Hydrology and Hydrogeology) in Volume 3 Part A of the EIAR in the 2018 planning application and Chapter 17A (Hydrology and Hydrogeology) in Volume 3A Part A of the EIAR Addendum.

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Chapter 18A (Soils and Geology)	Eoin Wyse, BSc, PGeo. EurGeol., Arup
	Eoin Wyse is a senior engineering geologist and Professional Geologist with almost 20 years of experience in contaminated land and geotechnics, working in the Arup Ground Engineering Team. Eoin has a degree in Environmental Geochemistry from UCD and is a national expert in both unbound aggregates and contaminated land, sitting on the management panel for both Institute of Geologists of Ireland (IGI's) Registers for competent persons (Contaminated land and pyrite). Eoin is a Professional Geologist (PGeo) and holds the title of EurGeol. He is also the current sitting president of the IGI. Eoin has extensive experience in the preparation of Environmental Impact Assessments on a number of infrastructure projects such as the Uisce Eireann Wastewater Treatment Plant in Arklow and has presented evidence at Oral Hearings. Eoin was lead contributor for Chapter 18 (Soils and Geology) in Volume 3 Part A of the EIAR in the 2018 planning application and Chapter 18A (Soils and Geology) in Volume 3A Part A of the EIAR Addendum.
Chapter 19A (Agronomy)	Philip Farrelly B.Agr.Sc, MACA, Philip Farrelly & Co.
	Philip Farrelly is a company Director at Philip Farrelly & Co and has over 40 years' experience as an Agricultural Consultant. He holds a Bachelor of Agricultural Science degree from University College Dublin. Hi is a current Full Member of the Agricultural Consultants Association (MACA) and former President as well being a Full Member of the Agricultural Science Association (ASA) and former Council Member. Philip has extensive experience of assessing the impacts of major infrastructure projects on agriculture including Road, Rail, Energy, Water and Waste Management projects. Philip has managed agronomy assessments on projects including M3 Clonee to North of Kells, N7 Castletown to Nenagh, M17 Galway to Tuam, MetroLink and Boherboy Water Supply Scheme. Philip has provided expert witness evidence at Oral Hearings on multiple occasions. Philip was the Principal Consultant responsible for the production of Chapter 19 (Agronomy) in Volume 3 Part A of the EIAR in the 2018 planning application and Chapter 19A (Agronomy) in Volume 3A Part A of the EIAR Addendum.
	John Gallogly is a Senior Agronomist with Philip Farrelly & Co and has over 8 years' experience as a Consultant working on major infrastructure projects. He holds an honours degree in Environmental Biology in addition to Master of Science in Ecological Management and Conservation Biology both from Queen's University Belfast. John is also qualified in Agricultural Business Operations from Open College Network Northern Ireland (OCN). John is a current Full Member of the Agricultural Consultants Association (MACA) and a Full Member of the Institution of Environmental Sciences (MIEnvSc). John has undertaken assessments of the impacts on land and agriculture on a number of significant infrastructure projects including N2 Ardee to Castleblaney, Dungarvan to Mallow Greenway, Water Supply Project – Eastern and Midlands Region and the Laois to Kilkenny Grid Reinforcement Project. John was a lead contributor on Chapter 19A (Agronomy) in Volume 3A Part A of the EIAR Addendum.
Chapter 20A (Waste)	Damien Grehan, Tobin
	Damien Grehan is a Director in TOBIN and has over 28 years' experience in the planning, detailed design and project management of large infrastructural projects primarily in the fields of waste management, energy and extractive industries. Damien holds an honours Degree in Engineering and also a Masters Degree in Engineering Science, both from University College Dublin. He is a Chartered Engineer, a Fellow of Engineers Ireland and currently is the Chief Sustainability Officer in TOBIN. He has worked on numerous Environmental Impact Assessments, Planning Applications, Waste Licence Applications, Feasibility Studies, Waste Management Plans and the preparation of contract documents for large infrastructural projects. He has been an expert witness at a number of Environmental Protection Agency and An Bord Pleanála Oral Hearings and also has led the multidisciplinary teams of experts at these hearings. Damien has presented papers at numerous conferences and has had technical papers presented in a number of waste management journals. Damien authored the Waste Chapter for the Greater Dublin Drainage Project Environmental Impact Assessment Report.
	Damien was lead contributor for Chapter 20 (Waste) in Volume 3 Part A of the EIAR in the 2018 planning application and Chapter 20A (Waste) in Volume 3A Part A of the EIAR Addendum.

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Chapter 21A (Material Assets)	Brian Downes BE., MProjMan., MBA, CEng, MIEI, Tobin
	Brian Downes is a Chartered Engineer and holds the position of Director within TOBIN. He has over 30 years' experience related to the design and construction management of water services and other large civil engineering projects. Brian has been with TOBIN for over 32 years during which time he has prepared preliminary reports, design review reports, feasibility studies, design and supervision of civil engineering watermains and reservoir contracts, watermain rehabilitation and mechanical and engineering (M&E) works projects for the water services sector. From 2013 to 2016 Brian was the lead consultant project manager for the €240m Grid West project, which proposed the construction of a 400 kilovolt connector from renewable energy plants in North Mayo to the national grid. In 2016-2017 he was project director for the National Indoor Arena Phase 1.
	Brian was lead contributor for Chapter 21 (Material Assets) in Volume 3 Part A of the EIAR in the 2018 planning application and Chapter 21A (Material Assets) in Volume 3A Part A of the EIAR Addendum.
Chapter 22A (Risk of Major Accidents and / or Disasters)	Jillian Bolton
	See above
	Sarah Kiernan
	See above
Chapter 23A (Cumulative Impacts and Environmental	Sarah Kiernan
Interactions)	See above
Chapter 24A (Summary of Mitigation Measures)	Sarah Kiernan
	See above
Chapter 25A (Summary of Residual Impacts)	Sarah Kiernan
	See above