

APPENDIX 3

PROJECT CONSULTANCY LIST

of

**Professor Roger A. Falconer
FREng, CEng, CEnv**

PROJECT CONSULTANCY LIST

	DETAILS OF PROJECT	CLIENT	NATURE OF SUPPORT
1.	Assess and review evidence submitted to Hendry Review – an independent review of the role of tidal lagoons (2017)	ITPEnergised (ITPE) (Mr Gino Bawn)	Review of 200 items of evidence as consultant to ITPE, contracted to provide report and assessment of evidence submitted to the Hendry Review.
2.	Regional Coastal Model studies for entire Welsh coast (2016-17) Hydro-bacteriological models of region using Delft 3D	Dwr Cymru Welsh Water (DCWW) and Mott MacDonald (Mr Mark Dives)	Provide audit of hydro-environmental impact assessment modelling work of Mott MacDonald, Intertek, Arcadis and Arup on range of coarse and fine grid models for Welsh coast for DCWW
3.	Regional Coastal Model studies for Liverpool Bay and North West coast (2014-16) Hydrodynamic and bacterial quality models of region using MIKE21	United Utilities plc (Mr Graeme Forrester)	Provide audit of Intertek’s hydro-environmental impact assessment modelling work of range of coarse and fine grid models for the whole of United Utilities coastal bathing waters
4.	Jamaica Bay Wetland Creation Model Study (2013-14) Hydrodynamic and flushing model study for different topographies using DIVAST	Buro Happold (Mr M. Vaughan-Shaw)	Oversee and advise on modelling studies undertaken to assess hydraulic design aspects of tidal bay
5.	Three Rivers Environmental Impact Assessment (2007-08) Hydrodynamic and bacterial quality model of Three Rivers using MIKE21	Metoc Consulting Ltd (Dr N Barcock)	Provide audit of Metoc Consulting’s hydro-environmental impact assessment modelling work of three river basins and estuaries
6.	Dee Estuary Environmental Impact Assessment (2007-08) Hydrodynamic and bacterial quality model of Dee Estuary using MIKE21	Metoc Consulting Ltd (Dr N Barcock)	Provide audit of Metoc Consulting’s hydro-environmental impact assessment modelling work of the Dee estuary and catchment
7.	Menai Straits Environmental Impact Assessment (2007-08) Hydrodynamic and bacterial quality model of Menai Straits using MIKE21	Metoc Consulting Ltd (Mr S Wright)	Provide audit of Metoc Consulting’s hydro-environmental impact assessment modelling work of Menai Straits and coastal basin
8.	Proposed Thames Waster Abingdon Reservoir Modelling Studies (2006-07) Hydrodynamic and full water quality models of reservoir and River Thames	Cascade Consulting and Thames Water (Dr Kieran Conlan)	Oversee and advise on wide range of modelling studies undertaken by several companies for design of reservoir, inlet/outlet works and impact on River Thames

9.	Cardiff Bay Environmental Impact Assessment (2006-07) Hydrodynamic and bacterial quality model of Cardiff Bay using Delft 3-D	Hyder Consulting Ltd (Dr N Barcock)	Provide audit of Hyder Consulting's hydro-environmental impact assessment modelling work of Cardiff Bay
10.	Loughor Estuary Faecal Coliform Contamination Assessment (2005) Hydrodynamic and faecal coliform model of Carmarthen Bay using DJI Mike 21	Metoc Ltd Dr Stewart Wright	Provide audit of Hyder Consulting's hydro-environmental impact assessment modelling work of Loughor Estuary for EA Wales
11.	Swansea Coastal Environmental Model (2005) Hydrodynamic and water quality model of Swansea Bay using Delft 3-D	Hyder Consulting Ltd (Dr N Barcock)	Provide audit of Hyder Consulting's hydro-environmental impact assessment modelling work of Swansea Bay
12.	International Tribunal for the Law of the Sea Court Case (2004-05) Land Reclamation Case (Malaysia v. Singapore)	Ministry of Foreign Affairs, Malaysia (Ms Wan Napsiah Salleh)	Expert Witness on hydro-environmental implications of land reclamation by Singapore in and around Straits of Johor
13.	Co-Chair of Group of Experts (GOE) Established by ITLOS Tribunal for EIA Study for Singapore Land Reclamation (2004-05)	Ministry of Foreign Affairs, Malaysia and ITLOS (Mr Rajah Nazrin)	Expert Advisor overseeing DHI hydroenvironmental impact assessment study of Singapore reclamations
14.	Straits of Johor, Malaysia (2003) Hydro-environmental model study of impact of reclamation	Department of Irrigation and Drainage (DID), Malaysia (Ir Saw Hin Seang)	Provide Expert Review of hydro-environmental model study undertaken by DID for Royal Malaysian Navy
15.	Cardiff Coastal Model (2003) Hydrodynamic and water quality model of the Bristol Channel using Delft 3-D	Hyder Consulting Ltd (Dr N Barcock)	Provide Engineer's Review of the quality of the model work undertaken by Hyder
16.	Amwaj Marina Design, Bahrain (2002) Hydrodynamic and water quality study	Buro Happold (Mr T Ealey)	Provide Technical Advice on Environmental Design of Marina Development for Waterfront Village
17.	DEFRA / EA Flood and Coastal Defence Research and Development Programme (2002)	DEFRA / EA (Dr R Maddrell)	Provide Technical Advice on prioritising research plans for five year plan
18.	Tees Estuary Submerged Tunnel (2001) Impact of Construction Dredging on Salmonoid Migration	Environment Agency (Dr J Stoner)	Technical Assessment on Eco-Hydraulics Modelling and Aquaculture Study

19.	Al Khiran Pearl City, Kuwait (1999) Hydrodynamic and water quality study	Buro Happold (Mr T Ealey)	Numerical Model Mounting, Support and Training
20.	St Aubin's Bay, Jersey (1997) Hydrodynamic and water quality model study	States of Jersey (Mr G Jackson)	Numerical Model Predictions of Flow and Faecal Streptococci and Assessment
21.	Shannon Bridge Power Station (2000) Hydrodynamic and thermal environmental study	Electricity Supply Board Ireland (Mr A Buckley)	Technical Assessment of Hydro-Environmental Study
22.	Bohai Bay and Sea Environmental Impact Assessment (2000-04)	Tianjin Municipal Government	Technical Advice on Environmental Studies
23.	Anglian Region (1998) Flow Forecast Modelling System	Environment Agency Anglian Region (Mr D Cadman)	Technical Assessment of Tender Submissions
24.	Jersey Coast, Jersey (1998) Hydrodynamic and water quality study	States of Jersey (Dr C Swinnerton)	Numerical Model Mounting and Support
25.	Hull Sewage Treatment Works (1996) Water quality model study	CES Ltd (Dr K Conlan)	Technical Review of Water Quality Model Studies
26.	Point Mugu Lagoon (1995) Hydrodynamic model study	US Navy - Environment Division (Dr P Goodwin - Philip Williams & Associates)	Numerical Model Mounting Support and Assessment
27.	Danish Hydraulic Institute (1995)	Danish Agency for Trade and Development (Mr M King)	Expert Evaluation of Danish Hydraulic Institute
28.	Sandown Bay, Hampshire (1995) Hydrodynamic model study	Southern Science (Dr G Li)	Assessment of Hydrodynamic Model Studies
29.	Klang Port, Malaysia (1995) Port dredging study	Intergroup/Bullen Consultants (Mr L Bangah)	Short Course and Assessment of Model Studies
30.	Furzey Island, Dorset (1994) Coastal erosion model study	BP Exploration (Mr M Mason)	Model Predictions of Suspended Sediment Fluxes
31.	Saltburn, Northumbria (1994) Coastal water quality modelling	Entec Europe Ltd (Mr P Deakin)	Numerical Model Mounting and Support
32.	Humber, Estuary, Humber-side (1993)	BP Chemical (Dr P McLoughlin)	Assessment Requirements

	Hull effluent dispersion model		
33.	Sellafield, Cumbria, (1993) Nuclear generation feasibility study	British Nuclear Fuels plc (Dr A M Adams)	Assessment of EIA and Model Studies
34.	Barmouth Harbour, Wales (1993) Tidal flow for harbour development	Posford Duvivier Ltd (Dr N Beech)	Numerical Model Support
35.	Chapelcross, Solway Firth (1993) Nuclear generation feasibility study	British Nuclear Fuels plc (Dr A M Adams)	Assessment of EIA and Model Studies
36.	Forth Estuary, Scotland (1993) Tidal flow and oil slick predictions	BMT Ceemaid Ltd (Dr J P Hodder)	Numerical Model Support
37.	Tuticorin Bay, India (1993) Tidal flow and toxic waste concentrations for EIA study	Central Water and Power Research Station (Dr P P Vaidyaraman)	Numerical Model Mounting and Support
38.	Dahanu Creek, India (1993) Tidal flow and thermal predictions for power station	Central Water and Power Research Station (Dr P P Vaidyaraman)	Numerical Model Mounting and Support
39.	Cork Harbour, Eire (1992) Tidal flow and thermal predictions for power station	ESB International (Dr T Bree)	Numerical Model Mounting and Support
40.	Malacca Port, Malaysia (1992) Tidal flow and flushing predictions for marina development	Bullen and Partners (Mr G Pomphrey)	Numerical Model Support
41.	Humber Estuary, Humberside (1992) Sediment transport predictions to estimate embankment erosion rate	Bullen and Partners (Mr J R Benn)	Numerical Model Support
42.	Shannon Estuary, Eire (1992) Tidal Flow and water quality indicator predictions for EIA study	MCS International Ltd (Mr M Hartnett)	Numerical Model Support
43.	Cardiff Barrage, Glamorgan (1992)	Bryan Madge Associates (Mr B Madge)	Provision of Specialist Advice

	Assessment of Cardiff Bay barrage implications on Vale of Glamorgan		
44.	Gare Loch, Strathclyde (1992) Prediction of water levels for extreme tides and winds	Babtie Shaw and Morton (Mr R H Falconer)	Numerical Model Support and Desk Study
45.	Humber Estuary, Humberside (1992) Provision of flow and water quality model of estuary for EIA studies	Yorkshire Water plc (Mr E Bramley)	Numerical Model Mounting and Support
46.	River Dee, North Wales (1992) Inclusion of water quality indicators for EIA study	Rendel Palmer and Tritton (Mr M Oliver)	Numerical Model Support
47.	Johar Port, Malaysia (1991) Tidal flow and sediment transport predictions for port operation	Posford Duvivier Ltd (Dr G Li)	Numerical Model Support
48.	Whitby Bay, North Yorks (1991) Tidal flow and coliform prediction distributions for long sea outfall	Bullen and Partners (Dr M W Horner)	Numerical Model Mounting and Support
49.	River Orwell, Essex 1991) Tidal flow predictions for wetland management	DTI Warren Spring Laboratory (Ms K Wild)	Numerical Model Mounting and Support
50.	Aberdour Bay, Fife (1991) Tidal flow and water quality indicator predictions for long sea outfall	BMT Ceemaid Ltd (Dr J P Hodder)	Numerical Model Support
51.	Bristol Channel, Wales (1991) Model Severn Estuary for tidal currents and suspended sediment transport	Bryan Madge Associates (Mr B Madge)	Numerical Model Mounting and Support
52.	Mersey Barrage, Merseyside (1991) Modelling of eight water quality indicators for EIA study for barrage	Mersey Barrage Company (Mr E A Wilson)	Numerical Model Support
53.	Weston Bay, Somerset (1991) Water quality model for sea outfall design	Wessex Water plc (Ms E Aristodemou)	Numerical Model Support
54.	Killary Bay, Eire (1991)	MCS International Ltd	Numerical Model Support

	Modelling of suspended solids and faecal waste for fish farm management	(Mr M Hartnett)	
55.	Royal Dock, Hants (1990) Tidal flow and sediment transport predictions for dredging study	ABP Research & Consultancy Ltd (Mr N E Denman)	Numerical Model Support
56.	North Devon Coast, Devon (1990) Provision of water quality model for EIA studies	Babtie Shaw and Morton (Mr R H Falconer)	Numerical Model Support
57.	Lamma Island, Hong Kong (1990) EIA study for thermal discharge from power station	Binnie and Partners (Mr G Thompson)	Numerical Model Support
58.	Beirtreach Bui Bay, Eire (1990) EIA study for fish farm management programme	MCS International Ltd (Mr M Hartnett)	Numerical Model Support
59.	Shanghai Sewerage, China (1990) Planning, design and operation of Shanghai outfall	NEPA - Research Institute (Tongji) (Professor Gu Guowei)	Research Project Adviser
60.	Frazerburgh Bay, Grampian (1990) Tidal flow and water quality indicator predictions for long sea outfall	Binnie and Partners (Mr G Thompson)	Numerical Model Support
61.	Casheen Bay, Eire (1990) EIA study for fish farm siting and operation	MCS International Ltd (Mr M Hartnett)	Numerical Model Support
62.	Dubai Study, Dubai (1990) Tidal flow and flushing predictions for artificial island	Balfour Maunsell Ltd (Dr R V Farraday)	Numerical Model Support
63.	Ribadesella Bay, Spain (1989) Tidal flow and solute transport predictions for long sea outfall	Wessex Water plc (Ms E Aristodemou)	Numerical Model Support
64.	Portsmouth Harbour, Devon (1989) Tidal flow and solute transport predictions for siting of marina	Posford Duvivier (Mr J Mumford)	Numerical Model Support
65.	Humber Barrage, Humber-side (1989)	Binnie and Partners (Mr G Thompson)	Numerical Model Support

	EIA and feasibility study for barrage siting		
66.	Mersey Barrage, Merseyside (1989) Tidal flow field predictions and water quality indications for barrage siting	Mersey Barrage Company (Mr E A Wilson)	Numerical Model Support
67.	Southampton Docks, Hants (1989) Tidal flow and solute transport predictions for land reclamation study	ABP Research & Consultancy Ltd (Mr N E Denman)	Numerical Model Support
68.	Minehead Bay, Somerset (1989) Flow and water quality indicator predictions for long outfall design	Wessex Water plc (Mr D V Smith)	Numerical Model Support
69.	Mersey Barrage, Merseyside (1989) Tidal flow predictions for siting and operation of barrage	Rendel Palmer and Tritton (Mr N Reilly)	Numerical Model Support
70.	St Fergus Bay, Grampian (1988) EIA study for design of long sea outfall	Binnie and Partners (Mr G Thompson)	Numerical Model Support
71.	Taw-Torridge Estuary, Devon (1988) Flow and water quality indicator distributions for EIA study	Sir William Halcrow and Partners (Dr C A Flemming)	Numerical Model Support
72.	Lyme Bay, Dorset (1987) Tidal flow and coliform distribution predictions for long sea outfall	Wessex Water plc (Mr D V Smith)	Numerical Model Support
73.	Hong Kong Island, Hong Kong (1987) Tidal velocities and suspended sediment predictions for EIA study	British Maritime Technology (Mr J Graf)	Numerical Model Support
74.	Exe Estuary, Devon (1987) Tidal velocity and solute distributions for EIA study	WS Atkins Engineering Services (Mr A G Hooper)	Numerical Model Support
75.	Poole Harbour, Dorset (1986) Velocity field predictions for marina design	Binnie and Partners (Mr G Thompson)	Numerical Model Support
76.	Ma Wan, Hong Kong (1986)	British Maritime Technology	Numerical Model Support

	Tidal velocity field predictions for oil terminal siting	(Mr P Barber)	
77.	Morecambe Bay, Lancashire (1986) Tidal velocity field predictions for gas pipeline	British Maritime Technology (Mr P Barber)	Numerical Model Support
78.	Fleetwood Docks, Lancashire (1986) Tidal velocity field predictions for gas pipeline	ABP Research & Consultancy Ltd (Mr N E Denman)	Numerical Model Support
79.	Castle Peak, Hong Kong (1985) Flow and temperature distribution predictions from power station	BHRA Fluid Engineering (Mr J Bird)	Numerical Model Support
80.	Persian Gulf, Saudi Arabia (1985) Predicting flooding and drying of coastal waters	Sir William Halcrow and Partners (Dr G Copeland)	Numerical Model Support
81.	Tame Lakes, West Midlands (1985) Flow and suspended solute distributions for lake design	Binnie and Partners (Mr G Thompson)	Numerical Model Support
82.	Elan Contact Tank, Midlands (1984) Hydraulic design and operation of contact tanks	Severn Trent Water Authority (Mr E S Kain)	Hydraulic Model Study
83.	Holes Bay Bridge, Dorset (1984) Sediment transport predictions for road bridge and embankment	Dorset County Council (Mr G L Vizard)	Desk Top Study
84.	Poole Harbour, Dorset (1984) Provision of tidal flow patterns	Hydraulics Research Limited (Mr N V M Odd)	Numerical Model Support
85.	Poole Harbour, Dorset (1984) Flow and nitrate level predictions from three sewage treatment works	Wessex Water Authority (Mr R S Toms)	Numerical Model Study
86.	Persian Gulf, Bahrain (1984) Flow and salinity distribution predictions for proposed fertiliser plant	W S Atkins Services Ltd (Dr R B Dean)	Numerical Model Support
87.	Southern North Sea, UK (1984) 3-D modelling study	Sir William Halcrow and Partners (Dr C A Flemming)	Specialist Advice

88.	Holes Bay, Dorset (1983) Flow and flushing study for land reclamation	Wessex Water Author- ity (Mr E S Hodges)	Numerical Model Study
------------	---	--	-----------------------